

EAC No. 00_6

TABLE of CONTENTS

| ITEM | TITLE |
|-----------------|------------------------------|
| EAC 00-6 | RECORD KEEPING |
| SECTION 1 | General |
| SECTION 2 | Approval/Acceptance Process |
| SECTION 3 | Currency Periods |
| SECTION 4 | Computer Based Recordkeeping |

RECORD KEEPING

SECTION 1

(a) General

This Egyptian Advisory Circular (EAC) contains information and guidance to be used by ECAR Part 121, 141, and 142 certificate holders when developing a record keeping system for acceptance or approval. The ECAA will grant written approval for acceptable systems.

(b) Regulatory Requirements

- (1) Part 121 Air Carrier and Air Taxis are required to maintain current records certifying that each crewmember and dispatcher complies with qualification and proficiency requirements. It also requires operators to record each action taken concerning the release from employment, regarding physical or professional disqualification, of any crewmember or dispatcher and retains that record for six months. This AC also provides for ECAA approval of computer record keeping systems. Part 121 specifies retention periods for load manifests, flight or dispatch releases, and flight plans. Part 121 specifies the retention period of en-route radio contact between the operator and the pilots.
- (2) Operators are required to maintain and establish retention periods for certain records at either the principal business office or another place approved by the ECAA.
- (3) In order for an operator to demonstrate regulatory compliance and allow the ECAA to conduct surveillance, the operator may elect to maintain other types of records, such as ETOPS, and LORAN navigation records, even though they are not specifically mentioned in the ECARs.

(c) Definitions

- (1) Calendar Month: The first through the last day of a particular month.
- (2) Computer Based Record keeping System: A system in which records are entered, stored, and retrieved electronically by a computer system rather than in traditional hard copy form.
- (3) Computer Hardware: A computer and the associated physical equipment directly involved with data processing functions.
- (4) Computer Software: Data (operating systems, programs and disks) essential to the operation of computers.
- (5) Data Backup: Use of a secondary means for storing records. Backup systems are used when the primary system is inoperable.
- (6) Data Base Management System (DBMS): A computer software program capable of maintaining manipulating and retrieving stored information.
- (7) Data Entry: Entering of data into a computer memory or storage medium.
- (8) Data Verification: A process of assuring data accuracy by systematically or randomly comparing electronic records with manually updated documents.
- (9) Electronic Mail: The transmittal of messages or documents between computer systems.
- (10) Electronic Signature: Any of several generally recognized techniques for electronically identifying individuals entering, verifying, or auditing computer-based records.
- (11) Eligibility Period: Three calendar months: the calendar month before the training/checking month, the training/checking month (base month), and the calendar month after the training/checking month (grace period). During this period, a crewmember or dispatcher must receive their required training and checks to remain qualified. Training or checking completed during the eligibility period is considered to be completed during the training/checking month (base month). In order to satisfy this requirement the pilot (PIC and SIC if required) proficiency check and proficiency training must occur in the same year and be separated by a period greater than four consecutive calendar months and less than eight consecutive calendar months.
- (12) Modem: A device that uses telephone circuits to transfer information between

two or more computer systems.

- (13) Password: An identification code required accessing stored material and preventing unauthorized access.
- (14) Proprietary Information: Data or records which re the private property of the operator.
- (15) Records: Information in a predetermined format demonstrating that the operator or its personnel have accomplished specific requirements prescribed by the ECARs.
- (16) System Security: Policies, procedures, and system structures designed to prevent unauthorized users from gaining access to a database.

SECTION 2 APPROVAL/ACCEPTANCE PROCESS

(a) Regulatory Requirements

ECAR 121.68 (b) requires that the ECAA approve a Part 121 operator's computer based record keeping system. All other record keeping systems must be acceptable to the ECAA.

(b) Guidelines for Approval/Acceptance

During initial certification, the operator should ensure that the initial compliance statement describes procedures for the generation and maintenance of required records. After certification, FSSS Inspectors will conduct surveillance of an operator's records on a routine basis to ensure that they are being properly maintained with the required information. The operator shall develop a section in its General Operations Manual (GOM) that provides detailed instruction on the use of the record keeping system.

SECTION 3: CURRENCY PERIODS

(a) ECAA Inspectors will determine if an operator's record keeping system provides the necessary documentation to demonstrate compliance with the ECARs. Adequate historical data must be maintained by the operator to enable the ECAA inspectors to determine compliance at any time. This section contains information and guidance to be used by ECAA inspectors when determining the necessary currency periods for records.

Categories: Training and qualification records are required to be maintained to demonstrate regulatory compliance.

- (b) Permanent Records: Documentation of the successful completion of training or qualification events. These records must be retained for the duration of the individual's employment to substantiate qualifications. Examples:
 - (1) Basic indoctrination records;
 - (2) Initial qualification records;
 - (3) Transition and upgrade training records; and
 - (4) Initial Operating Experience (IOE).
- (c) Currency Records: Documentation of training or qualification events required to be re-accomplished at scheduled intervals. In order to show continuity of qualification, this type of record must be retained until superseded by a record of similar training or qualification.
- (d) Records of Action: The ECARs require an operator to record each action taken concerning the release from employment, for physical or professional disqualification, of any crewmember or dispatcher. These records may be destroyed after 6 months.
- (e) Additional Records: Each operator may need to keep additional records to demonstrate compliance with special operational authorizations, such as ETOPS or MNPS training.
- (f) Currency Periods: Each record keeping system must have the capability of entry, storage, retrieval, and archiving of all required records.

SECTION 4: COMPUTER BASED RECORDKEEPING

Many operators are developing computer-based record keeping systems. Some of these

systems offer electronic communications capabilities, which benefit both the operator and the ECAA.

- (a) Regulatory Requirements: Part 121 requires that computer based record keeping systems be approved by the ECAA.
- (b) Approval and Evaluation Process: The operator must demonstrate to the ECAA that the proposed system provides a means of maintaining accurate, timely, and reliable records.
- (c) Application Letter: Operators must apply for approval of computer based record keeping systems, in writing, with the following information:
 - (1) A general description of the proposed computer based record keeping system, including hardware, software and backup system;
 - (2) Access and security procedures for the operator and ECAA personnel;
 - (3) Basic procedures for data entry;
 - (4) A general description of any special procedures and capabilities; and
 - (5) Types of records to be maintained, such as, training records, flight/duty times, medical certificates, special qualifications, IOE, dispatch paperwork and communication records.
- (d) Parallel Record keeping System: The operator must maintain non-electronic records while the computer system is being installed, tested, and evaluated.
- (e) System Capabilities: The operator should ensure that the computer system is capable of providing accurate, timely, and reliable records. The operator's proposed transition plan and user manual will be reviewed by the ECAA. Additionally, an ECAA Inspector will observe operation of the existing record keeping system in parallel with the proposed computer based system. The extent of this evaluation depends on the complexity of the proposed system and its intended use. Deficiencies must be corrected prior to approval.
- (f) Authorized Access: To maintain integrity of the information and records, the operator should identify which employees and ECAA Inspectors will have access to the data base.
- (g) Monitoring User Access: A representative designated by the operator should actively monitor user access and periodically review access control requirements. This representative shall be specifically identified and authorized in the operator's proposal and user manual.
- (h) Electronic Signature: The operator should establish a procedure for permitting designated personnel, such as, flight instructors/check airmen, ground instructors, etc, to electronically certify all record entries for which they are responsible. This certification may take one of many forms such as full name, initials, or a unique identification number. Each designated person shall be issued a unique individual access code and password.
- (i) Unrestricted Data Retrieval: Appropriate ECAA Inspectors should be provided with an access level, which allows unrestricted data retrieval.
- (j) Data Backup Capability and Storage: The operator must establish a backup system capable of generating a complete set of duplicate records, either electronic or nonelectronic. Backup records re to be stored in a location separate from the main information storage facility. These records may be stored in any form including magnetic tape, magnetic or optical disk, microfiche, or printed records. The operator shall backup data as frequently as appropriate to the operator's level of operations and system complexity.
- (k) User Manual: The operator develops a procedure manual for day to day guidance and training of its employees. This manual should also be provided as a reference document for ECAA users and should address in detail the operator's system.
- (l) Audit Procedures: The operator must develop an audit system that will ensure the accuracy of the database.
- (m) ECAA Approval: The ECAA may either grant approval for the entire computer based record keeping system or any part of the system. This approval will be a nonstandard paragraph in the Operations Specifications and will reference the operator's user manual.