

INTRODUCTION

1.1 Article 92 of the Air Navigation Order governs the grant of aerodrome licences by the Civil Aviation Authority. The Article together with Schedule 14 sets out the requirements for the Aerodrome Manual within the licensing process. The Authority uses the Manual to assess the suitability of Licensees and their organisations against the safety related requirements set out in Article 92 (1) (a) and (b) of the Order. The assessment is a continuous process; this is particularly relevant when changes likely to affect safety are proposed or made.

2 Any application for an aerodrome licence should be accompanied by an Aerodrome Manual produced in accordance with CAP 168. Once granted a licence, the holder is required to maintain the Manual in conformity with Chapter 2 of CAP 168 and copies are to be available to all aerodrome operating staff. The term 'aerodrome operating staff' means all persons, whether or not the aerodrome licence holder and whether or not employed by the aerodrome licence holder, whose duties are concerned either with ensuring that the aerodrome and airspace within which its visual traffic pattern is normally contained are safe for use by aircraft, or whose duties require them to have access to the aerodrome manoeuvring area or apron. The Manual will be regarded by the Authority as the primary indication of the standards likely to be achieved by the aerodrome operator. A copy is to be lodged with the Aerodrome Standards Department.

2 PURPOSE AND SCOPE OF THE MANUAL

2. An efficient management structure and a systematic approach to aerodrome operation is essential. The Manual should contain all the relevant information to describe this structure satisfactorily. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety. It should describe the aerodrome services and facilities, all operating procedures, and any restrictions on aerodrome availability.

2.2 Accountability for safety must start at the very top of any organisation. One of the key elements in establishing safe working practices is the "top down" approach where all staff should understand the safety aims of the organisation, the chain of command, and their own responsibilities and accountabilities. As safety management principles are applied, the Manual should be expanded to describe clearly how the safety of operations is to be managed at all times. To a reader or user of the Manual there should never be any doubt in "safety accountability" terms about who is responsible, who has the authority, who has the expertise and who actually carries out the tasks described in any section.

2.3 The principle objective of an Aerodrome Manual should be to show how management will discharge its safety responsibilities. The Manual will set out the policy and expected standards of performance and the procedures by which they will be achieved.

3 OWNERSHIP OF AN AERODROME MANUAL

3.1 The Licensee is responsible for providing the Aerodrome Manual. It should reflect the requirements and guidance material contained in Civil Aviation Publications and other documents.

3.2 It is the responsibility of the Licensee to be satisfied as to the appropriateness of each provision of this document to the particular operation, and to make amendments and additions as necessary.

The safety aim and objectives of the Manual and how it is to be used by employees, tenants etc should be stated in a preface by the Licensee.

3.4 In this format and under the signature of the person with overall responsibility for safety in the company, the document demonstrates from the highest level, a commitment to the way in which safety will be managed.

4 AMENDMENT OF THE MANUAL

4. Responsibility for maintaining the accuracy of the manual should be clearly defined. Each copy of the Manual should be numbered and a list of holders maintained by the person responsible for the issue of amendments. In the front of each volume should be an amendment page available for recording the amendment numbers, date of incorporation, signature of the persons amending and the page or paragraph affected.

Manuscript amendments are not acceptable. Changes or additions should always be the subject of an additional or replacement page on which the amended material is clearly identified.

Amendments to the Manual will be needed either because the document needs to be brought up to date or in response to a request by the Authority. Any amendments or additions must be furnished to the Authority by the holder of the licence before or immediately after they come into effect.

5 FORM OF THE MANUAL

The Aerodrome Manual is a key document both for the Licensee and the Authority. The Manual is the source document describing how operational procedures and their safe management will be delivered. It should contain all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties. This must include information and instructions relating to those matters specified in Schedule 14 to the ANO. The Authority will therefore expect the Aerodrome Manual to be an accurate reflection of the aerodrome's visible safety management system and safety culture. It will need to show how the aerodrome intends to measure its performance against safety targets and objectives. A comprehensive Manual should not just satisfy the Authority's requirements. One of the principal objectives should be to create a medium for promulgating all procedures and information relating to the safe management of the aerodrome. The reader of a Manual should be given a clear and unambiguous statement of how safety is developed, managed and maintained on the aerodrome. All safety policies, operational procedures and instructions should be contained in detail or cross-referenced to other formally accepted or recognised publications.

5.2 At larger aerodromes the size and complexity of operations and related procedures may dictate that this information could not easily be included in one single document. In these circumstances it is acceptable to identify and reference within the Manual the procedures

which are not included within it. If this system is to be successful it is essential that any referenced information, documentation and procedures are subjected to exactly the same systems of consultation and promulgation as the Manual itself. For many small aerodromes the Manual can be both simple and brief as long as it covers procedures essential for satisfactory day-to-day operations. Nevertheless it is possible to adopt a common format embracing the essential elements that define a safety management system.

- 5.3 The numbering of pages and paragraphs should be orderly and systematic to facilitate reference. The standard of printing, duplication and binding should allow the manual to be read without difficulty and ensure it remains intact and legible during normal use.

6 CONTENTS OF MANUAL

6. As a general guide, the following sets out the items which should be included in the Manual, although it is recognised that the need to include all items will vary between aerodromes depending on the nature and scale of operations. It is not necessary for all operational procedures to be included in the Manual. However, when these are relevant to achievement of policy their location should be clearly referenced within the Manual.

	YES	NO	N/A
Introduction			
(a) Purposes of the Manual			
Legal position regarding aerodrome licensing as contained in the Air Navigation Order.			
(c) Distribution of the Manual			
(d) Procedures for distributing and amending the Manual and the circumstances in which amendments may be needed.			
(e) Check List of Pages			
(f) Preface by Licensee			
(g) Contents Page			
(h) Glossary of Terms:			

Note: This section will contain a short explanation of the general terms used in the Manual including job titles and abbreviations.

6.1.2 Technical Administration

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|------------------------------------|--|--|--|
| (a) Name and address of aerodrome. | | | |
| (b) Name and address of Licensee. | | | |

YES	NO	N/A
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(c) **Named Persons:**

The name, status and responsibilities of the official in charge of day to day operation;

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The name, status and responsibilities of other senior operating staff;

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Instructions as to the order and circumstances in which the above named staff may be required to act as the official in charge

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(d) **Safety Management Policy**

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(e) **Safety Management and Organisational Structures.**

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Note: This should include an organisational chart supporting the commitment to the safe operation of the aerodrome as well as simple showing the hierarchy of responsibility for safety management.

(f) **Safety related committees.**

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6.3 **Aerodrome Characteristics**

(a) **Details of the following:**

(i) Latitude and Longitude of Aerodrome.

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(ii) WGS 84 reference.

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(iii) Location of Aerodrome Reference Point.

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(iv) Elevations of (i) Aerodrome.

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(ii) Apron.

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- (b) Plans, preferably to a scale of 1:2500, showing the position of the aerodrome reference point, layout of the runways, taxiways and aprons; the aerodrome markings and lighting (including PAPI, VASIS or LITAS and obstruction lighting); the siting of navigational aids within the runway strips, and their degree of frangibility. It will not be necessary for these plans or the information called for in the following sub-paragraphs (b) to (i) to accompany all copies of the Manual, but they must be appended to the Licensee's master copy and to the copy lodged with the Authority. In the case of copies or extracts provided or made available to operating staff, plans of a scale reasonably appropriate to the relevant duties of the said staff

	YES	NO	N/A
should be provided.			
(c) Description, height and location of obstacles which infringe the standard protection surfaces, and whether they are lighted			
(d) Location, reference number and date of the survey plans from which the data at (a) and (b) were derived, and details of the procedures for ensuring they are maintained and updated.			
(e) An up-to-date copy of the survey data related to the surfaces and areas described in Chapters 3 and 4.			
(f) Survey data necessary for the production (when appropriate) of ICAO Type A Charts. (The chart is intended to provide data necessary to enable an aircraft operator to comply with performance limitations. Specifications for the chart are given in CAA Document 232, Aerodrome Survey Information.)			
(g) Data for, and the method of calculation of Declared Distances and elevations at the beginning and end of each declared distance			
(h) Method of calculating reduced Declared Distances when there are temporary objects infringing the runway strip, or the approach and take-off surfaces.			
(i) Details of the surfaces, dimensions, and classification or bearing strengths of runways, taxiways and aprons			
Operational Procedures for:			
(a) The system of Aeronautical Information Service available and the system that the Licensee uses to promulgate his or her AIP requirements;			
(b) Routine aerodrome inspections and reporting including the nature and frequency of these inspections;			
(c) Inspecting the apron, the runways and taxiways following a report of either debris on the movement area or any incident likely to result in debris being left in a hazardous position;			
(d) Sweeping runways, taxiways and aprons;			
(e) Obtaining and disseminating meteorological information, including RVR and meteorological visibility and local area forecasts; (detailed specifications and procedures for RVR assessment in Category I and II weather conditions using human observers are given in Appendix 2A);			
(f) Protection of runways during low visibility if operations are permitted (Appendix 2B);			
Measurement and promulgation of water and slush depths on			

runways
and taxiways;

YES	NO	N/A

(h) Measurement and/or assessment, and promulgation of runway surface friction conditions;

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(i) Promulgating information on the aerodrome operational state, temporary withdrawals of facilities, runway closures etc.;

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(j) The safe integration of other aviation activities such as gliding, parachuting and banner towing;

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(k) Recording aircraft movements;

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(l) The control of works, including trenching and agricultural activity, which may affect the safety of aircraft;

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The control of access to the aerodrome and its operational areas, including the location of notice boards, and the control of vehicles on the operational areas;

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Maintaining apron control, including marshalls instructions,

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(o) The availability of aviation fuel and its storage, handling and quality control (ANO Article 101, CAP 74 and CAP 434);

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(p) Complying with regulatory requirements relating to accidents and Mandatory Occurrence Reporting (ANO Article 106);

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(q) The removal of disabled aircraft

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(r) The aerodrome snow plan;

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(s) The bird hazard control plan.

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6.1.5 Lighting (Reference should be made to Chapter 6)

(a) Responsibilities with respect to the AGL system.

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(b) Lighting Scale of each runway.

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(c) The method of operation and type of fittings

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(d) Arrangements for recording inspection and maintenance.

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(e) Standby and emergency power arrangements.

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- (f) Procedures for routine flight inspection of approach lights, runway lights and PAPIs.

YES	NO	N/A

- (g) The location of and responsibility for obstacle lighting on and off the aerodrome.

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Signals and Markings

- (a) The location of the Signals Area if any, and the arrangements for displaying signals and markings, both permanent and temporary.

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- (b) Location of windsleeves.

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6.7 Rescue and Fire Fighting Services (RFFS)

- (a) Policy statement of the RFF category(s) to be provided.

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- (b) Where the SAFO or designated watch officers have specific safety accountabilities these should be included in the relevant chapter of the Manual.

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- (c) Policy and procedures indicating how depletion of the RFFS is to be managed. This should include the extent to which operations are to be restricted, how pilots are to be notified and the maximum duration of any depletion.

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- (d) A statement indicating whether the RFF remission factor is to be utilised and how it is to be applied. This should include details of how the number of movements relating to the remission are monitored to ensure that they are not exceeded.

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At aerodromes where a higher category is available by prior arrangement the manual should clearly state the actions necessary to upgrade the facility. Where necessary this should include actions to be taken by other departments.

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- (f) The Licensees objectives for each RFF category provided should be defined. This should include a brief description of:

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Amounts of media provided;
Discharge rates;
Number of foam producing appliances;
Manning levels;
Levels of supervision.

Note: When the objectives are higher than those set out in CAP 168, chapters 8 and 9, Licensees may also wish to indicate the minimum levels acceptable under their safety policies.

- (g) Procedures:

	YES	NO	N/A
For monitoring the aircraft movement areas for the purpose of alerting RFF personnel;			
Showing how RFF personnel are alerted throughout the range of functions (training, extraneous duties, etc.) and geographical locations from where they may be expected to respond;			
Indicating how the adequacy of the response time capability throughout their functions and locations is monitored and maintained;			
Indicating how RFF personnel engaged in extraneous duties are managed to ensure that response capability is not affected.			
Where the aerodrome provides specialist equipment such as rescue craft, emergency tenders, hose layers, appliances with aerial capability, etc., details should be included in the Manual. Procedures to be followed if these facilities are temporarily unavailable should also be included.			
Where the aerodrome is reliant upon other organisations to provide equipment which is essential for ensuring safe operation of the aerodrome (perhaps water rescue), policies or letters of agreement should be included in the Manual. Where necessary contingency plans in the event of non-availability should be described.			
(i) A statement describing the process by which Licensees ensure the initial and continued competence of their RFF personnel This should include the following: Realistic fuel fire training Breathing Apparatus training in heat and smoke First Aid; LGV Driving; Low Visibility Procedures CAP 168 Chapter 8 Appendix 8B; CAP 168 Chapter 8 Para 11; Health and Safety policy with regard to training of personnel in RPE and PPE			
(j) Procedures indicating how accidents within 1000 metres of the threshold of each runway are to be accessed. Where other difficult environs exist the Manual should indicate how these are to be accessed.			
(k) Where Licensees expect the RFF facility to respond to domestic fires or special services, procedures for managing the impact of this upon the normal aircraft RFF response should be included.			
(l) Where Licensees expect the RFF facility to respond to aircraft accidents landside, the policy should be clearly described. This should include procedures to manage the effects on continued aircraft operations.			
The availability of additional water supplies following an aircraft accident should be described. Details of the policy to be followed in the event of contractual work which requires isolation or depletion of supplies			

YES	NO	N/A
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should be included (works in progress).

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Where an aerodrome accepts freight aircraft, ambulance flights or movements not required to use a licensed facility, company objectives regarding RFF category should be included.

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Licensees arrangements for ensuring the adequacy of responses in abnormal conditions i.e. Low Visibility Procedures.

Integrated Emergency Planning

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The Licensee's arrangements for determining and implementing plans that ensure the integrated management of response to an aircraft incident/accident. These arrangements should take account of the complexity and size of the aircraft operation.

Medical

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- (a) A policy statement indicating how the Licensee ensures the training and competence of First Aid personnel.

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- (b) An indication of the scale of the medical equipment carried. Where medical equipment is held other than on the RFF vehicles a statement indicating its location and how it is to be transported to an incident should be included.

6.10 Air Traffic Services

Details of the following:

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- (a) The system for the safe management of air traffic operating on the aerodrome or in the airspace associated with it;

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- (b) Procedures for the selection of the runway in use and circuit direction;

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- (c) Procedures for evaluating the suitability for use and availability of the runway(s);

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- (d) Procedures for alerting emergency services; except where these are included in documentation associated with an ATSU established at the aerodrome and approved by the Authority.

6.1.11 Communications and Nav aids

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- (a) Description of and instructions for the use of air/ground and operational ground radio communications where these are not covered in ATC or AFIS manuals.

(b) Description of and operating procedures for navigation aids.

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6.1.12 Bibliography

Cross Referenced Documentation.

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Name

Position:

Signature:

ite:

DRAFT

OPERATIONAL SAFETY CHECKLIST EVALUATION

Name of Airport: _____

Evaluator: _____

Date: _____

Caribbean Airports Project

[illegible]

A. AERODROME FACILITIES (Cont'd)		NOT APPLICABLE	NOT EVALUATED	AGREE	DISAGREE	SEE REMARKS
RUNWAY DATA – MARKING AND MARKERS - Runway designator numbers are displayed clearly and properly. - Runway centerline markings are displayed clearly and properly. - Runways fixed distance markings are displayed clearly and properly. - Runway touchdown markings are displayed clearly and properly. - Runway threshold markings are displayed clearly and properly. - Runway side stripe markings are displayed clearly and properly. - Aerodrome signs are installed, visible, clearly marked and in good condition.						
REMARKS:						

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OPERATIONAL SAFETY CHECKLIST EVALUATION

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OPERATIONAL SAFETY CHECKLIST EVALUATION

	NOT APPLICABLE	NOT EVALUATED	AGREE	DISAGREE	SEE REMARKS
A. AERODROME FACILITIES (Cont'd)					
TAXIWAY DATA					
1. The taxiway surface is in a good and safe condition.					
2. Taxiway centerline markings are displayed clearly and properly.					
3. Taxiway hold/stop lines are displayed clearly and properly.					
4. Taxiway edge lightening is serviceable					
5. Taxiway centerline lightening is serviceable					
6. Taxiway stoplights are serviceable.					
7. The taxiway pavement classification number is established and recorded.					
8. The terrain near the taxiway is properly graded.					
9. Taxiway signs are installed are installed, clearly marked and in good condition.					
10. The taxiway is free of foreign objects.					
REMARKS:					
					Page 4 of 14

A. AERODROME FACILITIES (Cont'd)		NOT APPLICABLE	NOT EVALUATED	AGREE	DISAGREE	SEE REMARKS
OBSTACLES						
1. On airport obstacles are properly marked and lighted.						
2. Off airport obstacles are properly marked and lighted.						
STANDBY POWER						
1. All aerodrome lighting facilities are protected by standby power.						
REMARKS:						

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OPERATIONAL SAFETY CHECKLIST EVALUATION

B. AERODROME SERVICES

Airside Access is protected by adequate fencing, signs or other measures.

2. Aerodrome maintenance vehicles have rotating beacons and 2-way radios.
3. An aerodrome safety inspection is conducted on a daily basis by a component authority.
4. There is an aerodrome safety committee set up and operating.
5. There is an airside safety training program set up and operating.
6. Movement area vehicle traffic control procedures are set up and operating.
7. Bird hazard control measures are set up and operating.

NOT
APPLICABLE

NOT
EVALUATED

AGREE

DISAGREE

SEE REMARKS

REMARKS:

OPERATIONAL SAFETY CHECKLIST EVALUATION

	NOT APPLICABLE	NOT EVALUATED	AGREE	DISAGREE	SEE REMARKS
C. AIRCRAFT FUELLING/DEFUELLING					
Aircraft fuelling/defuelling equipment is properly marked for type of fuel dispensed. 2. Grounding system exists to provide common ground to aircraft and fuelling/defuelling equipment. 3. Aviation fuel is filtered during process of aircraft fuelling. 4. Procedure exists to clean up fuel spills when they occur. 5. Fuel storage facilities meet all safety criteria – i.e. fencing, containment for fuel spills, capability to fight fuel fires.					
REMARKS:					
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OPERATIONAL SAFETY CHECKLIST EVALUATION

D. AERONAUTICAL INFORMATION SERVICES

1. An aeronautical fixed Telecommunication Network (AFTN) is available and serviceable.
2. NOTAMS/ADVISORIES are current and relevant.
3. NOTAMS/ADVISORIES correctly identify the aerodrome hazard(s).
4. NOTAMS/ADVISORIES are issued promptly by a responsible authority.
5. NOTAMS/ADVISORIES are displayed in a prominent place for aircrew use.
6. There is NOTAMS/ADVISORIES Procedures Manual available for use.

NOT
APPLICABLE

NOT
EVALUATED

AGREE

DISAGREE

SEE REMARKS

REMARKS:

OPERATIONAL SAFETY CHECKLIST EVALUATION

E. AVIATION WEATHER SERVICES

- 1 The aviation weather disseminator circuit/system (ANMET) is functioning properly.
2. The hourly aviation weather observations and specials are taken as required.
3. Terminal forecasts are being provided as required.
4. Essential meteorological instruments are properly located, installed and serviceable.
5. The weather office is staffed during business hours.

NOT
APPLICABLE

NOT
EVALUATED

AGREE

DISAGREE

SEE REMARKS

REMARKS:

OPERATIONAL SAFETY CHECKLIST EVALUATION

F. AIR TRAFFIC SERVICES

SERVICE PROVIDED

Air Traffic Control Services provided are safe and efficient and conform with approved standards.

2. Flight information services provided are prompt and comprehensive.
3. Ground Handling Assistance (eg parking, refueling) is provided efficiently.

STATUS OF COMMUNICATIONS & NAVAID EQUIPMENT

Electronic Aids to Air Navigation (eg NDB, VOR, DME) are operating effectively.

2. Anemometer-Derived Data (wind speed and direction) are available and provided.
3. Control Tower VHF radio strength is adequate and easily understood.

REMARKS:

OPERATIONAL SAFETY CHECKLIST EVALUATION

	NOT APPLICABLE	NOT EVALUATED	AGREE	DISAGREE	SEE REMARKS
F. AIR TRAFFIC SERVICES (Cont'd)					
5. There were no unauthorized articles evident (e.g. non aviation magazines, newspapers, radios, TVs etc). 6. Unit equipment was neatly arrayed and console panel equipment was racked appropriately. 7. There were no loose cabling or extensions on floor area. 8. Unit lighting equipment was functional and in service (airfield lighting panel, light gun, flare gun, etc). 9. Nav Aid monitors were existent and functional. 10. ATCO deportment was professional and efficient. 1. Vehicles on the surface movement areas were controlled efficiently. 12. Voice advisories were provided on all temporary unsafe airfield conditions. 13. Inter-unit coordination was conducted smoothly and efficiently. 14. ATC clearances were effective and provided in a timely manner.					
REMARKS:					
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OPERATIONAL SAFETY CHECKLIST EVALUATION

ADDITIONAL COMMENTS:

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