



International Civil Aviation Organization

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

**Twenty-Seventh Eastern Caribbean Informal Working Group Meeting
(27TH E/CAR IWG)**

St. John's, Antigua and Barbuda, 21 to 25 July 2003

27TH E/CAR IWG-IP/07

03/07/03

Agenda Item 3:

Specific Air Navigation Activities and Developments

3.5 Air Traffic Management (ATM)

QUALITY ASSURANCE IN AIR TRAFFIC SERVICES COURSE

(Presented by Barbados)

SUMMARY

This Information Paper informs the E/CAR IWG Meeting that Barbados has developed a Quality Assurance in Air Traffic Services course as an element of its ICAO TRAINAIR Project. The course was validated 16 to 27 June 2003.

Introduction

In the 26th E/CAR 1WG Meeting report, Conclusion 26/5 “ATS Quality Assurance Programme,” ICAO has urged Eastern Caribbean States/ Territories to use the CAR/SAM Regional Guidance Material on ATS Quality Assurance approved by GREPECAS/10 for the implementation of ATS Quality Assurance in their corresponding ATS units.

Background

Barbados has taken its civil aviation training institution, “The Barbados School of Air Traffic Services,” into the ICAO TRAINAIR Programme. To become a full member, Barbados was required to develop a Standardised Training Package as one of its project exercises. Considering that the material approved by GREPECAS/10 only provided guidance and that there was no structured course available in Quality Assurance (QA) to prepare ATS personnel to become QA specialist, Barbados decided to develop a Standardised Training Package (Course) on QA, under the strict guidance of the ICAO’s TRAINAIR Central Unit.

The course development commenced in July 2002 after an ICAO TRAINAIR Expert was assigned to Barbados for eighteen (18) months. The course development was completed in April 2003 and the course validated 16 to 27 June 2003.

Barbados and the ICAO NACC Regional Office in Mexico invited a number of States to participate in the QA Course. States taking the course were: Guyana, Grenada, St. Vincent and the Grenadines, St. Lucia, Antigua, Montserrat, Haiti, Cayman Islands, Curaçao and Barbados. The course was delivered by the ICAO NACC Office and Barbados under the supervision of the ICAO TRAINAIR Expert. The course was highly successful and all persons that participated are all qualified to perform the duties of a QA specialist.

The course is now ready to be dispatched to the ICAO TRAINAIR Central Unit to be used around the world by training centres belonging to the TRAINAIR network as the only ICAO TRAINAIR certified training course on QA for ATS personnel.

Action Required

- (a) The meeting is requested to note that the attached forms for aircraft incident assessment as an **Appendix** to this IP have been developed out of the forms provided by guidance material and adapted to be used in Regions around the world including the E/CAR Region.
- (b) The meeting is required to note this paper.

APPENDIX TO IP/07 - AIR TRAFFIC INCIDENT REPORT FORM

AIR TRAFFIC INCIDENT REPORT FORM			
<i>For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.</i>			
A AIRCRAFT IDENTIFICATION	B TYPE OF INCIDENT AIRPROX / PROCEDURE / FACILITY / OE / OD / OTHER*		
C THE INCIDENT			
1. General			
a) Date / time of incident _____ UTC			
b) Position _____			
2. Own aircraft			
a) Heading and route _____			
b) True airspeed _____ Measured in () kt _____ () km/h _____			
c) Level and altimeter setting _____			
d) Aircraft climbing or descending () Level flight () Climbing () Descending			
e) Aircraft bank angle () Wings level () Slight bank () Moderate bank () Steep bank () inverted () Unknown			
f) Aircraft direction of bank () Left () Right () Unknown			
g) Restrictions to visibility (select as many as required) () Sunglare () Windscreen pillar () Dirty Windscreen () Other cockpit structure () None			
h) Use of aircraft lighting (select as many as required) () Navigation lights () Strobe lights () Cabin lights () Red anti-collision lights () Landing / taxi lights () Logo (tail fin) lights () Other () None			
i) Traffic avoidance advice issued by ATS () Yes, based on radar () Yes, based on visual sighting () Yes, based on other information () No			
j) Traffic information issued () Yes, based on radar () Yes, based on visual sighting () Yes, based on other information () No			
k) Airborne collision avoidance system ACAS () Not carried () Type () Traffic advisory issued () Resolution advisory issued () Traffic advisory or resolution advisory not issued			
l) Radar identification () No radar available () Radar identification () No radar identification			
m) Other aircraft sighted () Yes () No () Wrong aircraft sighted			
n) Avoiding action taken () Yes () No			
o) Type of flight plan () IFR () VFR () None			

* *Delete as appropriate / other incidents should be briefly described.*

AIR TRAFFIC INCIDENT REPORT FORM
3. Other aircraft

a) Type and callsign / registration (if known) _____

b) If a) above not known, describe below

☐ High wing

☐ Mid wing

☐ Low wing

☐ Rotorcraft

☐ 1 engine

☐ 2 engines

☐ 3 engines

☐ 4 engines

☐ More than 4 engines

 Marking, colour or other available details

c) Aircraft climbing or descending

☐ Level flight

☐ Climbing

☐ Descending

☐ Unknown

d) Aircraft bank angle

☐ Wings level

☐ Slight bank

☐ Moderate bank

☐ Steep bank

☐ Inverted

☐ Unknown

e) Aircraft direction of bank

☐ Left

☐ Right

☐ Unknown

f) Lights displayed

☐ Navigation lights

☐ Strobe lights

☐ Cabin lights

☐ Red anti-collision lights

☐ Landing / taxi lights

☐ Logo (tail fin) lights

☐ Other

☐ None

☐ Unknown

g) Traffic avoidance advice issued by ATS

☐ Yes, based on radar

☐ Yes, based on visual sighting

☐ Yes, based on other information

☐ No

☐ Unknown

h) Traffic information issued

☐ Yes, based on radar

☐ Yes, based on visual sighting

☐ Yes, based on other information

☐ No

☐ Unknown

i) Avoiding action taken

☐ Yes

☐ No

☐ Unknown

4. Distance

a) Closest horizontal distance _____

b) Closest vertical distance _____

5. Flight weather conditions

a) IMC / VMC*

b) Above / below* clouds / fog / haze or between layers*

c) Distance vertically from cloud _____ m / ft* below _____ m / ft* above

d) In cloud / rain / snow / sleet / fog / haze*

e) Flying into / out of* sun

f) Flight visibility _____ m / km*

6. Any other information considered important by the pilot-in-command

* *Delete as appropriate*

D MISCELLANEOUS

1. Information regarding reporting aircraft

- a) Aircraft registration _____
- b) Aircraft type _____
- c) Operator _____
- d) Aerodrome of departure _____
- e) Aerodrome of first landing _____ destination _____
- f) Reported by radio or other means to _____ (name of ATS unit at time) _____ UTC
- g) Date / time / place of completion of form _____

2. Function, address and signature of person submitting report

- a) Function _____
- b) Address _____
- c) Signature _____
- d) Telephone number _____

3. Function and signature of person receiving report

- a) Function _____
- b) Signature _____

E SUPPLEMENTARY INFORMATION BY ATS UNITS CONCERNED

1. Receipt of report

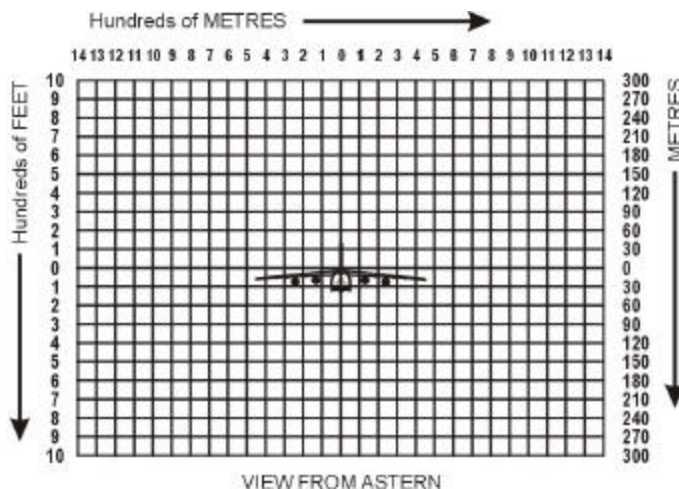
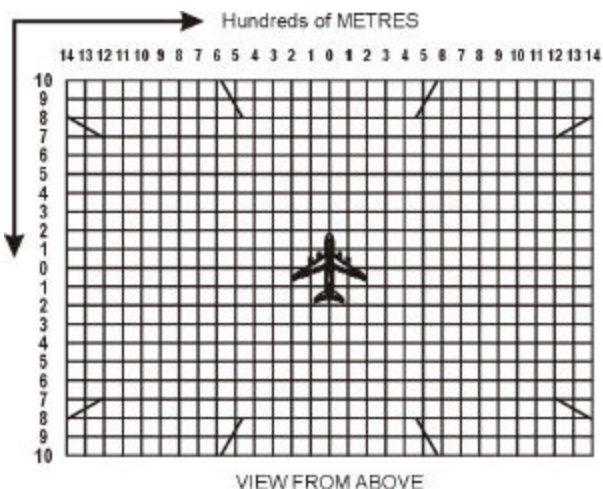
- a) Report received via AFTN / radio / telephone / other* (specify) _____
- b) Report received by _____ (name of ATS unit)

2. Details of ATS action

Clearance, incident seen (radar/visually, warning given, result of local inquiry, etc.)

DIAGRAMS OF AIRPROX

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming you are at the centre of each diagram. Include first sighting and passing distance.



Source: ICAO Doc 4444 ATM/501 Appendix 4

Instructions for the Completion of the Air Traffic Incident Report Form

- A Aircraft identification of the aircraft filing the report.
- B An AIRPROX report should be filed immediately by radio.
- C1 Date/time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
- C2 Information regarding aircraft filing the report, tick as necessary.
- C2 c) E.g. FL 350/1 013 hPa or 2 500 ft/QNH 1 007 hPa or 1 200 ft/QFE 998 hPa.
- C3 Information regarding the other aircraft involved.
- C4 Passing distance state units used.
- C6 Attach additional papers as required. The diagrams may be used to show aircraft's position.
- D1 f) State name of ATS unit and date/time in UTC.
- D1 g) date and time in UTC.
- E2 Include details of ATS unit such as service provided, radiotelephony frequency, SSR codes assigned and altimeter setting. Use diagram to show the aircraft's position and attach additional papers as required.

Definitions of Types of Incidents

1. ***Aircraft proximity***

Designation

AIRPROX

A situation in which, in the opinion of a pilot or air traffic services personnel, the distance between an aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised. An aircraft proximity is classified as:

- a) Risk of collision. The risk classification of an aircraft proximity in which serious risk of collision has existed;
- b) Safety not assured. The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised;
- c) No risk of collision. The risk classification of an aircraft proximity in which no risk of collision has existed;
- d) Risk not determined. The risk classification of an aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence preclude such determination.

2. ***Serious difficulty caused by faulty procedures or lack of compliance with applicable procedures***

Procedural

3. ***Serious difficulty caused by failure of ground facilities***

Facility

4. ***Operational error***

OE

An ATS incident in which ATC did not ensure separation which resulted in one of the following:

- a) the applicable separation minimum was not maintained between two or more aircraft;
- b) the applicable separation minimum was not maintained between an aircraft and terrain or obstacles; or
- c) an aircraft landed or departed on a runway closed to aircraft operations after receiving an air traffic control clearance.

5. ***Operational deviation***

OD

An ATS incident in which ATC did not ensure separation which resulted in one of the following:

- a) less than the applicable separation minimum existed between an aircraft and adjacent airspace without prior approval;
- b) an aircraft penetrated airspace under the responsibility of another controller within the same ATS unit or adjacent ATS unit without prior coordination and approval;
- c) an aircraft, vehicle, equipment or personnel encroached upon a landing area under the responsibility of another controller without prior coordination and approval.

AIR TRAFFIC SERVICES INCIDENT INVESTIGATION WORKSHEET

REPORT NUMBER

1.- CLASSIFICATION <input type="checkbox"/> OPERATIONAL ERROR <input type="checkbox"/> AIRPROX <input type="checkbox"/> OPERATIONAL DEVIATION <input type="checkbox"/> PILOT DEVIATION <input type="checkbox"/> PROCEDURAL <input type="checkbox"/> FACILITY			2.- DATE AND TIME OF THE INCIDENT <div style="display: flex; justify-content: space-between;"> <div> DATE <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">M M D D Y Y</div> </div> <div> TIME <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">UTC LOCAL</div> </div> </div>			
3.- ATS UNIT ORIGINATING THE REPORT <div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">IDENT</div>		4.- OTHER ATS UNITS INVOLVED <input type="checkbox"/> YES (Specify) ⇒ <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <input type="checkbox"/> NO				
5.- REPORT OF CLOSE PROXIMITY (AIRPROX) <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		6.- INCIDENT REPORTED BY: <input type="checkbox"/> CONTROLLER <input type="checkbox"/> SUPERVISOR <input type="checkbox"/> PILOT				
7.- METEOROLOGICAL INFORMATION <input type="checkbox"/> AVAILABLE <input type="checkbox"/> NOT AVAILABLE		8.- ALTITUDE / FLIGHT LEVEL* AT WHICH THE INCIDENT OCCURRED <div style="display: flex; justify-content: flex-end; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>				
9.- LOCATION OF THE INCIDENT	A. IN THE AIR <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">FIX DIRECTION DISTANCE</div>		B. ON THE GROUND <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">INTERSECTION RUNWAY TAXIWAY</div>			
	10.- CLOSEST PROXIMITY <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">VERTICAL HORIZONTAL FEET</div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="text-align: center;">FEET MILES</div>		ON THE GROUND (DESCRIPTION)			
11.- AIRCRAFT INFORMATION			AIRCRAFT No. 1		AIRCRAFT No. 2	
A. IDENTIFICATION			<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>		<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>	
B. TYPE OF AIRCRAFT			<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>		<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>	
C. LEVEL FLIGHT			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
D. CLIMBING			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
E. DESCENDING			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
F. EVASIVE ACTION			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
G. TAKEOFF ROLL			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
H. LANDING ROLL			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
I. UNDER RADAR CONTROL			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	

	N () YES () NO () UNKNOW N	N () YES () NO () UNKNOW N
J. RADAR VECTORED	() YES () NO () UNKNOW N	() YES () NO () UNKNOW N
K. TRANSPONDER FUNCTIONING	() YES () NO () UNKNOW N	() YES () NO () UNKNOW N
L. MODE C FUNCTIONING	() YES () NO () UNKNOW N	() YES () NO () UNKNOW N
M. RECEIVED TCAS/ACAS	() YES () NO () UNKNOW N	() YES () NO () UNKNOW N
O. AIRCRAFT AND OBSTRUCTIONS/OBSTACLES (Select as many as required) () TERRAIN () VEHICLES () PERSONNEL () MANOEUVRE AREA () OBSTRUCTION () EQUIPMENT () CONTROLLED AIRSPACE () NOT APPLICABLE () OTHER (EXPLAIN) _____		

** Delete as appropriate.
See Page 4 for Explanation of terms.*

12.- CONTROLLER INFORMATION

A. AREA OF SPECIALISATION. _____

B. SECTOR/POSITION*. _____

C. TIME (HRS/MIN) ON POSITION WHEN INCIDENT OCCURRED. _____

D. TIME (YEARS/MONTHS) SINCE LAST CERTIFIED ON POSITION. _____

E. NUMBER OF AIRCRAFT CONTROLLER HAD CONTROL RESPONSIBILITY FOR AT TIME OF INCIDENT. _____

F. WAS THE CONTROLLER PREVIOUSLY FAMILIARIZED WITH THE POSITION? () YES () NO (explain) _____

G. WAS THE SECTOR/POSITION* COMBINED? () NO () YES (explain) _____

13.- SUPERVISION

A. WAS A SUPERVISOR ASSIGNED TO THE AREA/CONTROL ROOM?

() YES () NO (explain) _____

B. WHAT WAS THE SUPERVISOR DOING WHEN THE INCIDENT OCCURRED?

14.- WAS TRAINING IN PROGRESS																				
<input type="checkbox"/> YES (explain) _____ <input type="checkbox"/> NO <input type="checkbox"/> OTHER																				
15.- TYPE AND CLASS OF AIRSPACE (Select as many as required)																				
<input type="checkbox"/> TERMINAL AIRSPACE	<input type="checkbox"/> CLASS A	<input type="checkbox"/> CLASS E																		
<input type="checkbox"/> ENROUTE AIRSPACE	<input type="checkbox"/> CLASS 8	<input type="checkbox"/> CLASS F																		
<input type="checkbox"/> AERODROME SURFACE	<input type="checkbox"/> CLASS C	<input type="checkbox"/> CLASS G																		
<input type="checkbox"/> OCEANIC	<input type="checkbox"/> CLASS D	<input type="checkbox"/> OTHER																		
16.- PROCEDURES																				
A. TYPE OF CONTROL	B. SPECIFY THE MINIMUM SEPARATION APPLICABLE																			
<input type="checkbox"/> RADAR <input type="checkbox"/> TOWER <input type="checkbox"/> NON-RADAR <input type="checkbox"/> OCEANIC	DIRECTIVE <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> PARAGRAPH <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																			REQUIRED SEPARATION (SPECIFY) _____

** Delete as appropriate.*

17.- EQUIPMENT					
A. TYPE	GOOD	Normal	POOR	OUT OF SERVIC E	
RADIO COMMUNICATION (AIR-GROUND)	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	REMARKS
COMMUNICATION POINT-TO-POINT (GROUND-GROUND)	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	REMARKS
RADAR	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	REMARKS
DISPLAY	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	<table border="1" style="width: 20px; height: 20px;"></table>	REMARKS
B. SYSTEM(s) IN USE (Select as many as required)					
<input type="checkbox"/> PRIMARY RADAR <input type="checkbox"/> SECONDARY RADAR <input type="checkbox"/> MODES-A&C <input type="checkbox"/> MODE-S					

() BRITE/DBRITE* ^f	() OTHERR
C. WAS THERE A TRANSITION FROM NON-RADAR TO RADAR? () NO () YES (explain) _____	
18.- MSAW / EMSAW (Complete if applicable)* ^f	19.- CONFLICT ALERT (Complete if applicable)
A. AVAILABLE () YES () NO (explain) _____	A. AVAILABLE () YES () NO (explain) _____
B. ACTIVATED () YES () NO (explain) _____	B. ACTIVATED () YES () NO (explain) _____
C. DEACTIVATED () NO () YES (explain) _____	C. DEACTIVATED () NO () YES (explain) _____
20.- WERE NAVAIDS A FACTOR () NO () YES (explain) _____	

* Delete as appropriate.
See Page 4 for Explanation of terms.

21.- SUMMARY OF PERTINENT INFORMATION (DESCRIPTION OF EVENTS)

22.- PERSON MAKING NOTIFICATION																			
NAME AND POSITION	DATE	TIME																	
	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> <tr> <td style="text-align: center;">M</td> <td style="text-align: center;">M</td> <td style="text-align: center;">D</td> <td style="text-align: center;">D</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">Y</td> </tr> </table>							M	M	D	D	Y	Y	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>					
M	M	D	D	Y	Y														
23.- PERSON RECEIVING REPORT	SIGNATURE																		

Explanation of terms

BRITE	Bright radar indicator tower equipment.
DBRITE	Digital bright radar indicator tower equipment.
EMSAW	Enroute minimum safe altitude warning.
MSAW	Minimum safe altitude warning.
Pilot deviation	The action of a pilot that resulted in the violation of an aviation regulation or the non-compliance with an ATC instruction/clearance.

FINAL AIR TRAFFIC INCIDENT INVESTIGATION REPORT FORM

REPORT NUMBER

SECTION A. GENERAL INFORMATION

1.- CLASSIFICATION

- () OPERATIONAL ERROR () AIRPROX
() OPERATIONAL DEVIATION () PILOT DEVIATION
() PROCEDURAL () FACILITY

2.- DATE AND TIME OF THE INCIDENT

DATE						TIME		
M	M	D	D	Y	Y	UTC LOCAL		

3.- ATS UNIT ORIGINATING THE REPORT

A. IDENTIFICATION

--	--	--	--

B. TYPE

- () TOWER () APP
() ACC () FIS

4.- WAS THERE ANOTHER UNIT INVOLVED?

- () YES () NO

A. IDENTIFICATION

--	--	--	--

B. TYPE

- () TOWER () APP
() ACC () FIS

5.- INCIDENT REPORTED BY:

- () CONTROLLER () SUPERVISOR () PILOT

6.- ALTITUDE/FLIGHT LEVEL* WHERE THE INCIDENT OCCURRED

--	--	--	--

A. WAS THE IMMEDIATE UPPER LEVEL AVAILABLE? () YES () NO

B. WAS THE IMMEDIATE LOWER LEVEL AVAILABLE? () YES () NO

7.- WERE THE METEOROLOGICAL CONDITIONS A FACTOR?

- () NO () YES (Explain)

8.- TYPE AND CLASS OF AIRSPACE (Select as many as required)

- () TERMINAL AIRSPACE () CLASS A () CLASS E
() ENROUTE AIRSPACE () CLASS 8 () CLASS F
() AERODROME SURFACE () CLASS C () CLASS G
() OCEANIC () CLASS D () OTHER

9.- LOCATION OF THE INCIDENT

A. IN THE AIR

B. ON THE GROUND

FIX	DIRECTION	DISTANCE	INTERSECTION	RUNWAY	TAXIWAY

* *Delete as appropriate.*

10.- CHRONOLOGICAL SUMMARY OF EVENTS			
TIME (UTC)	TYPE OF DATA	CONTROLLER (A, B, C, ETC.)	EVENT

--	--	--	--

SECTION B. CONTROLLER INVOLVED
(COMPLETE FOR EACH CONTROLLER IF MORE THAN ONE)

1.- PERSONAL DATA

OPERATING
INITIALS

NAME _____

DATE OF BIRTH

M	M	D	D	Y	Y

2.- SENIORITY IN THE POSITION

DATE OF ENTRY
INTO ATS

M	M	Y	Y

CURRENT POSITION

SINCE

M	M	D	D	Y	Y

3.- CERTIFICATION

LICENSE No.

TYPE

LOCATION

111

RATING

4.- CERTIFICATION IN THE POSITION

WAS THE CONTROLLER QUALIFIED IN THE POSITION?

() YES

() NO

NAME OF IMMEDIATE SUPERVISOR

| | | | | | | | | | | | | | | | | | | | |

5.- CONTROLLER PROFICIENCY CHECK

DATE OF LAST
CHECK

--	--	--	--	--	--	--

M M D D Y Y

WAS A DEFICIENCY DETECTED () NO () YES (Explain)

6.- TRAINING OR COURSES

HAS TRAINING BEEN CONDUCTED WITHIN THE LAST 12 MONTHS THAT IS RELEVANT TO THE () NO () YES

INCIDENT?

LIST TYPE OF TRAINING

DATE OF COURSE OR TRAINING

M	M	D	D	Y	Y	

7.- MEDICAL CERTIFICATE*

DATE OF LAST MEDICAL EXAMINATION	<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>M</td><td>M</td><td>D</td><td>D</td><td>Y</td><td>Y</td> </tr> </table>							M	M	D	D	Y	Y	ANY PHYSICAL LIMITATION? () NO () YES (Explain)
M	M	D	D	Y	Y									
<hr/> <hr/>														

8.- WORK SCHEDULE*

LIST THE WORK SCHEDULE OF THE PREVIOUS FOUR WEEKS OF THE INCIDENT BASED ON THE SIGN-ON/OFF SHEET, INCLUDING AREA WORKED (TWR, ACC, ETC.) AND ANY LEAVE TAKEN.

WEEK ENDING	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY

9.- ACTIVITIES DURING THE SHIFT*

DETAIL THE ACTIVITIES OF THE EMPLOYEE DURING THE SHIFT (USE LOCAL TIME)

HOUR	FROM	TO	ACTIVITIES DESCRIPTION
1			
2			
3			
4			

5			
6			
7			
8			

10.- DID THE CONTROLLER REQUIRE ASSISTANCE BEFORE THE INCIDENT?* () YES () NO

a) WAS THE SUPERVISOR AWARE OF THE VOLUME AND COMPLEXITY OF THE TRAFFIC? () YES () NO

b) WAS THE SUPERVISOR AWARE OF ANYTHING INDICATING THAT THE CONTROLLER REQUIRED ASSISTANCE? () YES () NO

c) GIVE DETAILS ON THE KIND OF ASSISTANCE PROVIDED _____

11.- DID THE CONTROLLER ASK FOR ASSISTANCE BEFORE THE INCIDENT?* () YES () NO

** To be filled in only when the controller is implicated in the incident.*

12.- WAS THE CONTROLLER AWARE THAT AN ATS INCIDENT WAS DEVELOPING?

() YES (When) _____

() NO (Why) _____

13.- DID THE CONTROLLER TRY TO TAKE CORRECTIVE ACTION? () YES () NO

EXPLAIN: _____

14.- IN THE CASE OF A NEGATIVE RESPONSE TO QUESTION 13:

DID THE CONTROLLER CONSIDER TAKING CORRECTIVE ACTION? () YES () NO

EXPLAIN: _____

15.- BY WHOM WAS THE CONTROLLER INFORMED OF THE INCIDENT?

16.- DATE AND TIME ON WHICH THE CONTROLLER WAS INFORMED OF THE INCIDENT

HOUR (UTC)					M	M	D	D	Y	Y	

17.- WAS THERE A REASON THAT DISTRACTED THE CONTROLLER BEFORE OR DURING THE DEVELOPMENT OF THE INCIDENT? () YES () NO
S

EXPLAIN: (Consider training, meetings or inter-personal discussions, the presence of visitors, repair or installation of equipment, volume of alarms, disturbing noises, etc.)

SECTION C. AIRCRAFT INFORMATION

(COMPLETE ADDITIONAL INFO., IF MORE THAN TWO)	AIRCRAFT No. 1	AIRCRAFT No. 2																
1.- IDENTIFICATION	<table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>								
2.- TYPE OF AIRCRAFT(S)	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>												
3.- DEPARTURE AIRPORT	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>												
4.- DESTINATION AIRPORT	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>												
5.- STAGE OF FLIGHT WHEN THE INCIDENT OCCURRED	<p><i>IN FLIGHT</i></p> <p>() DESCENDING</p> <p>() CLIMBING</p> <p>() LEVEL FLIGHT</p> <p>() APPROACH</p> <p>() RADAR VECTORS</p>	<p><i>IN FLIGHT</i></p> <p>() DESCENDING</p> <p>() CLIMBING</p> <p>() LEVEL FLIGHT</p> <p>() APPROACH</p> <p>() RADAR VECTORS</p>																

	MANOEUVRING AREA <input type="checkbox"/> LANDING ROLL <input type="checkbox"/> TAKEOFF ROLL <input type="checkbox"/> ON RUNWAY <input type="checkbox"/> ON TAXIWAY <input type="checkbox"/> OTHER	MANOEUVRING AREA <input type="checkbox"/> LANDING ROLL <input type="checkbox"/> TAKEOFF ROLL <input type="checkbox"/> ON RUNWAY <input type="checkbox"/> ON TAXIWAY <input type="checkbox"/> OTHER
6.- ROUTE OF FLIGHT		
7.- EVASIVE ACTION	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
8.- DID THE PILOT MAKE ANY REPORT OF AIRPROX	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
9.- UNDER RADAR CONTROL	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
10.- TRANSPONDER FUNCTIONING	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
11.- MODE C FUNCTIONING	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
12.- RECEIVED TCAS/ACAS	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
13.- AIRCRAFT AND OBSTACLE/OBSTRUCTIONS <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> TERRAIN <input type="checkbox"/> MANOEUVRING AREA <input type="checkbox"/> CONTROLLED AIRSPACE </div> <div> <input type="checkbox"/> VEHICLES <input type="checkbox"/> OBSTRUCTION <input type="checkbox"/> NOT APPLICABLE </div> <div> <input type="checkbox"/> STAFF <input type="checkbox"/> EQUIPMENT <input type="checkbox"/> OTHER </div> </div>		

SECTION D. PROCEDURES																					
1.- TYPE OF CONTROL USED	<input type="checkbox"/> RADAR <input type="checkbox"/> NON-RADAR <input type="checkbox"/> TOWER <input type="checkbox"/> OCEANIC																				
2.- TYPE OF PROCEDURE	<input type="checkbox"/> ICAO <input type="checkbox"/> NATIONAL <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER																				
3.- SPECIFY THE MINIMUM SEPARATION APPLICABLE																					
DIRECTIVE <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> PARAGRAP H <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																					REQUIRED SEPARATION (SPECIFY)

4.- WAS THE SEPARATION APPLIED DIFFERENT FROM ABOVE?

() NO () YES
(explain) _____

5.- DESCRIPTION OF PROCEDURES USED

6.- WERE ANY DEFICIENCIES IN THE PROCEDURES IDENTIFIED?

() NO () YES
(explain) _____

7.- WAS A SPECIAL PROCEDURE IN EFFECT AT THE TIME OF THE INCIDENT?

() NO () YES
(explain) _____

SECTION E. CLOSEST PROXIMITY

1.- IN THE AIR

VERTICAL
[] [] [] [] FEET

HORIZONTAL
[] [] [] [] FEET [] [] [] . [] [] MILES

2.- ON THE GROUND (DESCRIPTION)

SECTION F. WORKLOAD

1.- TRAFFIC COMPLEXITY

A. NUMBER OF AIRCRAFT UNDER
CONTROL

[] []

B. COMPLEXITY OF
TRAFFIC

1	2	3	4	5
()	()	()	()	()
LOW		AVERAGE		HIGH

C. EXPLANATION OF COMPLEXITY OF TRAFFIC

2.- POSITION / SECTOR OF OPERATION

A. ARE DUTIES AND RESPONSIBILITIES OF EACH POSITION CLEARLY DEFINED?

 () NO () YES
 (explain) _____

B. COMBINED SECTORS

(i) WERE SECTORS COMBINED () NO () YES

1.		
2.		
3.		

INITIALS OF THE CONTROLLERS WORKING THE COMBINED SECTORS

 1. 2. 3.

(ii) DID THE SUPERVISOR AUTHORISE THE COMBINATION?

() YES () NO

(iii) DID TRAFFIC JUSTIFY THE COMBINATION?

() YES () NO

C. COMBINED POSITIONS

(i) WERE POSITIONS COMBINED () NO () YES

1.		
2.		
3.		

INITIALS OF THE CONTROLLERS WORKING THE COMBINED POSITIONS

 1. 2. 3.

(ii) DID THE SUPERVISOR AUTHORISE THE COMBINATION?

() YES () NO

(iii) DID TRAFFIC JUSTIFY THE COMBINATION?

() YES () NO

3.- SUPERVISION

A. WAS A SUPERVISOR ASSIGNED TO THE CONTROL ROOM? () YES () NO

B. WAS THE SUPERVISOR PRESENT IN THE OPERATIONAL AREA WHEN THE INCIDENT OCCURRED? () YES () NO

C. WAS THE SUPERVISOR AWARE OF:

TRAFFIC VOLUME? () YES () NO

COMPLEXITY OF WORK? () YES () NO

DISTRACTIONS? () YES () NO

REQUEST FOR ASSISTANCE? () YES () NO

D. WHAT ACTIVITY WAS THE SUPERVISOR CONDUCTING AT THE TIME OF THE INCIDENT?

() SUPERVISION

() COORDINATION

() WORKING POSITION/SECTOR

() ADMINISTRATIVE DUTIES

() TRAINING/BRIEFING

() OTHER (SPECIFY) _____

SECTION G. WORKING ENVIRONMENT

INDICATE IF ANY OF THESE FACTORS HAD AN INFLUENCE ON THE OCCURRENCE

- () ENVIRONMENTAL (AIR/HEATING/COOLING) () LIGHT () CONTROL ROOM LAYOUT
() ERRONEOUS INFORMATION () NOISE () PILOT'S ACTION
() NOT A FACTOR () OTHER (SPECIFY) _____

SECTION H. EQUIPMENT

1.- DID THE DISTRIBUTION OR DESIGN OF THE EQUIPMENT HAVE AN INFLUENCE ON THE INCIDENT?

- () NO () YES
(explain) _____

2.- WAS ANY PERTINENT EQUIPMENT OPERATED BY THE CONTROLLER(S) REPORTED AS FUNCTIONING UNSATISFACTORILY BEFORE THE INCIDENT?

- () YES () NO (PROCEED TO PARAGRAPH 3)

A. DATE OF REPORT

M	M	D	D	Y	Y

B. HOUR OF THE REPORT

UTC			

C. DESCRIBE THE PROBLEM THAT ORIGINATED THE REPORT

D.- WAS ANY ACTION TAKEN TO CORRECT THE PROBLEM?

- () YES () NO
(explain) _____

3.- TYPE

GOOD	NORMAL	POOR	OUT OF SERVICE	OUT FOR MAINTENANCE
------	--------	------	----------------	---------------------

COMMUNICATIONS
AIR-GROUND

REMARKS

COMMUNICATIONS
POINT-TO-POINT
(GROUND-GROUND)

REMARKS

RADAR

REMARKS

DISPLAY

REMARKS

4.- SYSTEM(S) IN USE (Select as many as required)

- () PRIMARY RADAR () SECONDARY RADAR () MODES-A&C () MODE-S
() BRITE/DBRITE () OTHER _____

5.- WAS THERE A TRANSITION FROM NON-RADAR TO RADAR?

() NO () YES
(explain) _____

SECTION I. SUMMARY OF INCIDENT

(To be used, as required, to complement the chronological summary of events given at Section A.10)

SECTION J. SUMMARY OF CAUSAL FACTORS

--

SECTION K. RECOMMENDATIONS

--

SECTION L. LIST OF DOCUMENTS ENCLOSED

<input type="checkbox"/> ATS ROUTES OR AIRPORT CHART	<input type="checkbox"/> STATEMENT(s)	<input type="checkbox"/> NOTAMS
<input type="checkbox"/> CONFIGURATION CHART	<input type="checkbox"/> TRANSCRIPTIONS	<input type="checkbox"/> VOICE RECORDINGS
<input type="checkbox"/> FLIGHT PROGRESS STRIPS	<input type="checkbox"/> LETTERS OF AGREEMENT	<input type="checkbox"/> OTHER (SPECIFY) _____

SECTION M. INVESTIGATORS

DATE <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> <tr> <td>M</td><td>M</td><td>D</td><td>D</td><td>Y</td><td>Y</td><td></td> </tr> </table>								M	M	D	D	Y	Y		NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR
M	M	D	D	Y	Y											
DATE <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> <tr> <td>M</td><td>M</td><td>D</td><td>D</td><td>Y</td><td>Y</td><td></td> </tr> </table>								M	M	D	D	Y	Y		NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR
M	M	D	D	Y	Y											

M M D D Y Y DATE <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y	NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR
M M D D Y Y DATE <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y	NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR
M M D D Y Y DATE <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y	NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR
M M D D Y Y DATE <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y	NAME	SIGNATURE OF ATS INCIDENT INVESTIGATOR IN CHARGE

PART II
ATS UNIT MANAGER'S COMMENTS

DATE <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y	NAME OF ATS UNIT MANAGER	SIGNATURE
--	--------------------------	-----------

PART III
ATS DIRECTOR'S COMMENTS

DATE M M D D Y Y	NAME OF ATS UNIT DIRECTOR	SIGNATURE

- END -