

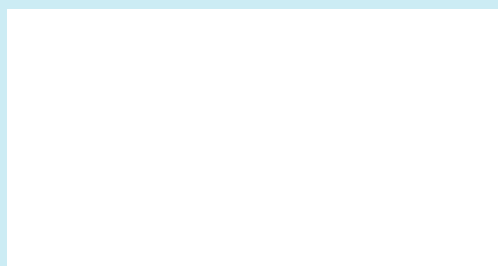
EUROPEAN CIVIL AVIATION CONFERENCE

ECAC

ECAC/JAA
PROGRAMME FOR
SAFETY ASSESSMENT OF
FOREIGN AIRCRAFT

- SAFA -

REPORT 2000



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REPORT

(01 JANUARY 2000 TO 31 DECEMBER 2000)

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1. INTRODUCTION

Safety has always been of prime importance to the development of international air transport. During the last ten years, globalization has had an impact on civil aviation as well as on many other areas. This has increased the need for each State to be able to maintain confidence in the safety oversight provided by other States.

- In 1996, ICAO began a voluntary Programme of assessments of national authorities. As a result of decisions taken during the 32nd Session of the Assembly in 1998, the ICAO Programme is operating on a universal, transparent and mandatory basis. The *Universal Safety Oversight Audit Programme* is now running. All ICAO Contracting States are to be audited before the end of 2001, their ability to conform to the safety-related Standards and Recommended Practices of the Organization is assessed, and the main conclusions are made available to other Contracting States.
- Also in 1996, ECAC launched its own SAFA (*Safety Assessment of Foreign Aircraft*) Programme, as a complement to the ICAO audits. The SAFA Programme is based on a bottom-up approach, taking as its starting point ramp inspections of aircraft landing in ECAC States, and progressing through further steps to the involvement of States of Registry when circumstances so require.
- The linkage between the above two Programmes was framed through a Memorandum of Understanding between ICAO and ECAC, signed in November 1997 at presidential level, to achieve mutual support and co-operation. The MOU was subsequently amended, in May 1999, to take into account the evolution of the ICAO Programme towards its universal application.

2. MAIN FEATURES OF SAFA

The main features of the SAFA Programme are:

- Its application by all 38 ECAC Member States¹, including the sharing of information through an on-line centralized database.
- Its bottom-up approach: the programme is built around ramp inspections of aircraft.
- Its non-discriminatory nature — SAFA applies equally to aircraft from ECAC and non-ECAC States.
- Its close relationship with the ICAO Universal Safety Oversight Audit Programme.

The principles of the Programme are simple: in each ECAC State, foreign aircraft (ECAC or non-ECAC) can be subject to a ramp inspection, chiefly concerned with the aircraft and crew documents, the apparent state of the aircraft and the presence and condition of mandatory cabin equipment. The references for these inspections are contained in the Standards of ICAO Annexes 1, 6 and 8.

These checks are carried out following a procedure which is common to all ECAC Member States and are then the subject of reports which also follow a common format. In the case of significant irregularities, the operator and the Appropriate Authority are contacted in order to arrive at the corrective measures to be taken not only with regard to the aircraft inspected, but also with regard to other aircraft which could be concerned in the case of an irregularity which is of a generic nature. All data from the reports, as well as supplementary information (for example a list of actions undertaken and finalized following an inspection) are centralized in a computerized central database set up by the Joint Aviation Authorities (JAA), the Associated Body of ECAC.

It is to be noted that SAFA ramp inspections are by their nature on-the-spot assessments which cannot substitute or replace safety oversight responsibilities of the State of Registry. Ramp inspections serve as pointers, but they are not intended to and they cannot guarantee the airworthiness of a particular aircraft.

This report presents the results of the programme for the year 2000 in terms of inspections and findings.

¹ Albania, Armenia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom

3. *CENTRAL SAFA DATABASE*

In 2000, the SAFA database became fully operational. The database contains the reports of the ramp inspections performed by ECAC States. Although it is managed and maintained by the JAA, the inclusion of reports in the database remains a responsibility of the individual National Aviation Authorities (NAA) of ECAC States.

Data contained in the database is considered confidential in the sense that it is only shared with other ECAC States and is not available to the general public. It can be accessed via a secure private communication network.

Throughout the year, the number of National Aviation Authorities that have access to the database has gradually increased. Because this process has not been fully completed, the number of reports contained in the database does not fully reflect the actual number of inspections carried out.

This annual report is based upon the reports that are contained in the database.

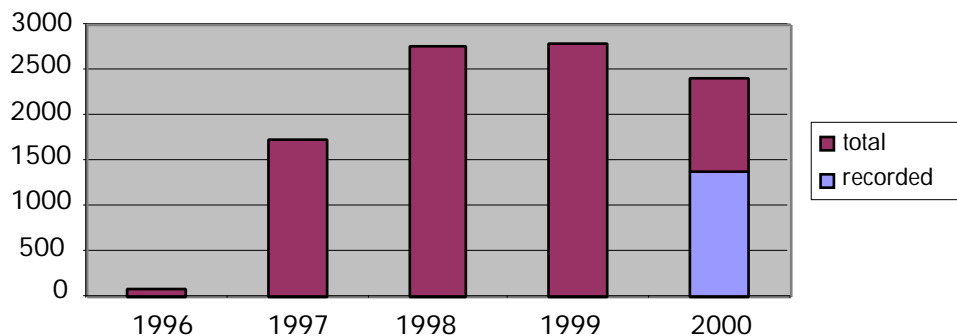
Because of the relatively high number of reports and the many different National Aviation Authorities who have contributed, the outcome will be representative of the complete SAFA Programme.

4. DATA COLLECTION

In general, ECAC States are dedicated to the SAFA Programme, with 29 of them having participated in it — in one form or the other — since 1996, when the Programme was launched. Roughly 9,700 inspections have been carried out amongst which 8,760 reports have been recorded in the database.

During the year 2000, at least twenty States performed some 2,400 inspections. Only 1,380 reports of those inspections from eighteen States have been recorded in the database, this discrepancy being due to the fact that not all States have established a proper connection to the database.

NUMBER OF RAMP INSPECTION REPORTS



The decrease in the total number of ramp inspections performed in 2000 compared to 1999 can be explained as follows: apart from the fact that the database does not yet contain all the reports of inspections performed, some States, which have had major contributions in the past, have decreased their total number of inspections. The reason for this is the fact that their inspections are being focused on those operators that have frequent or serious deficiencies.

Some other States, which have started a positive and substantial contribution to the SAFA Programme, have offset the decrease in total inspections a little. This was possible because dedicated full-time or part-time staff were made available in those National Aviation Authorities to perform inspections.

Some States have increased their inspections according to the experience gained that performing SAFA inspections is a useful tool to control the safety of foreign operators flying to their airports.

The table below indicates Member States which carried out inspections and, for comparison purposes, those which did so in earlier years.

Member State	1996	1997	1998	1999	2000
Albania					
Armenia					
Austria					
Belgium					
Bulgaria					
Croatia					
Cyprus					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
FYROM					
Germany					
Greece					
Hungary					
Iceland					
Ireland					
Italy					
Latvia					
Lithuania					
Luxembourg					
Malta					
Moldova					
Monaco					
Netherlands					
Norway					
Poland					
Portugal					
Romania					
Slovak Republic					
Slovenia					
Spain					
Sweden					
Switzerland					
Turkey					
Ukraine					
United Kingdom					

5. AREAS OF INSPECTION

In nearly all States, the number of flights by foreign operators is far greater than the inspection capability. This means that only spot checks are possible. This can be done at random or a decision can be made to focus the inspection. There are four areas on which the inspections can be focused:

- specific State of Operator (checking operators from a particular State);
- specific aircraft type;
- specific foreign operator; or
- specific aircraft identified by its individual aircraft registration.

This year's report contains a novel feature, the purpose of which is to highlight the wide coverage of the SAFA Programme and, more importantly, its non-discriminatory application. Accordingly, **Appendices A to C** provide the lists of the "State of Operator", of aircraft types and of operators which were inspected in 2000.

The smooth operation of the Programme can also be pictured by the table below, which aggregates the information in the Appendices and provides an overview of activities.

<u>Overview of SAFA Programme in the year 2000</u>	
Inspections	2,400 inspections (1,380 reports recorded)...
Operator	...on 420 different foreign operators...
State of Operator	...from 110 States...
Aircraft type	...operating 116 different (sub)types of aircraft

Because of the non-discriminatory character of the SAFA Programme, aircraft both from ECAC and non-ECAC States are inspected. The following table shows the results:

	ECAC	non-ECAC
1996	49%	51%
1997	58%	42%
1998	58%	42%
1999	59%	41%
2000	59%	41%
Average	57%	43%

6. MAIN FINDINGS

6.1 DEFICIENCIES IN GENERAL

A first starting point regarding the findings, which are deviations from the ICAO Standards, is the quantitative approach. It concerns the total number of findings (F) in relation to the total number of inspections (I) and the items inspected (II).

During the inspection, a checklist is used. It comprises a total of 53 different inspection items. In the majority of cases, not all items are checked during the inspection because the time between the arrival of the aircraft and its departure is not sufficient to perform a complete inspection. Therefore, the relationship between the total number of findings and the total number of items inspected (II) might give a better understanding. The results are presented in the table below.

	1996	1997	1998	1999	2000	Period 1996-2000
Total inspections (I)	75	1,740	2,746	2,791	1,380	8,732
Total items inspected (II)	1,675	30,884	87,633	94,154	51,590	265,936
Total findings (F)	212	1,927	2,557	2,565	1,327	8,588
Findings/inspections (F/I (%))	282.7%	110.7%	93.1%	91.9%	96.2%	98.4%
Findings/items inspected (F/II (%))	12.7%	6.2%	2.9%	2.7%	2.6%	3.2%

As can be seen, the ratio findings/inspections is nearly 100%, based on data from the time period 1996-2000. This means that on average during each inspection a finding was made.

If we relate this to an individual item which is being inspected, for every 100 items inspected, on average three findings were established.

Since the start of the Programme in 1996, the ratio F/II has shown a declining trend. This can be considered as a positive indication of the effectiveness of the SAFA Programme. The performance of ad hoc SAFA ramp checks, the visual presence of inspectors on the airports and the broad implementation of the Programme have contributed to a decline in the number of findings on aircraft of foreign operators.

Other factors which may have contributed are an improvement of the quality of the inspections through training of the inspectors, sharing of experience among the inspectors, and the fact that many States no longer inspect randomly, but focus on operators that had findings in the past.

6.2 SPECIFIC DEFICIENCIES

In **Appendix D** the results are given regarding each individual inspection item (III) that has been inspected. It concerns the number of times that a particular inspection item has been verified, the number of findings and the ratio F/III (%).

Of the inspections performed in the year 2000, the top 10 concerning the highest ratio of findings related to the number of times a specific item has been inspected, is given below:

No.	Inspection item category	Description of inspection item	No. inspections (III)	No. findings (F)	F/III (%)
1	Aircraft Condition	General external condition	1239	96	7.7%
2	Flight Deck/General	Equipment (GPWS)	1043	64	6.1%
3	Aircraft Condition	Leakage	1097	65	5.9%
4	Cargo	Security of cargo on board	594	35	5.9%
5	Safety/Cabin	Emergency exit, lighting and marking, torches	885	51	5.8%
6	Flight Deck/ Flight Data	Weight and balance sheet	781	42	5.4%
7	Flight Deck/ Documentation	Manuals	969	47	4.9%
8	Safety/Cabin	General internal condition	969	45	4.6%
9	Flight Deck/ Journey Log Book/ Technical Log or equivalent	Deferred defect rectification	1046	48	4.6%
10	Flight Deck/ Flight Crew	Flight crew licence	1106	49	4.4%

1. GENERAL EXTERNAL CONDITION

This concerns findings established during the walk-around, the visual inspection of the exterior of the aircraft. It concerned missing rivets, corrosion, dents, etc..

2. EQUIPMENT (GPWS)

ICAO Annex 6 requires aircraft to be equipped with a Ground Proximity Warning System. This system gives a warning to the flight crew when the aircraft comes too close to the ground or terrain below the aircraft. Some CIS built aircraft types (Tupolev, Ilyushin, Antonov, Yakovlev) have a system installed called SSOS, which does not fully meet the ICAO Standard. Many States focused on this inspection item during 2000.

3. LEAKAGE

Leakage of water, oil and hydraulic fluid, coming off the aircraft and visible from the outside.

4. SECURITY OF CARGO ON BOARD

In several cases it was established that cargo in the cargo holds was not properly secured. It was also found that some pieces of baggage in the cabin were not properly stowed, sometimes obstructing emergency exits.

5. EMERGENCY EXITS, LIGHTING AND MARKING, TORCHES

This mainly concerns emergency exits which were not properly marked or lighted, emergency exits blocked by baggage or seats which limited unrestricted access to the emergency exits, and not or inadequately functioning floor proximity (emergency) escape path marking.

6. WEIGHT AND BALANCE SHEET

This concerns cases where inspection teams found that no proper weight and balance sheet had been made as part of the flight preparation.

7. MANUALS

ICAO Annex 6 specifies that there must be an Operations Manual on board. Findings have been that either the Manual was not available, its content was not in accordance with the ICAO Annex, or Manuals were not up-to-date or not properly approved.

8. GENERAL INTERNAL CONDITION

Findings related to the general condition of the passenger cabin including galley and toilet areas.

9. DEFERRED DEFECT RECTIFICATION

In several cases there was no proper administration of aircraft technical defects. These deferred items would be rectified at a later stage, but proper administration is essential.

10. FLIGHT CREW LICENCE

This concerns the cases where the flight crew could not show their licences to the inspectors, the licences had expired, had no proper validation, etc..

In **Appendix E**, the percentage of findings in relation to inspections is given for Flight Deck, Cabin & Safety, Aircraft Condition & Cargo for the years 1998, 1999 and 2000.

7. ACTION TAKEN

7.1 GENERAL

Based on the scope, amount and nature of the findings, several actions may be taken. If the safety of the aircraft and its occupants is impaired, the aircraft may be grounded. Before the aircraft is allowed to resume its flight, a corrective action is required.

In other cases the aircraft may depart, but under operational restrictions. An example is the case where there is a deficiency regarding passenger seats. Operation of the aircraft is possible under the condition that the deficient seats are not occupied.

If there is no sign of any improvement and the findings are considered important, individual ECAC Member States may decide to revoke the entry permit of that particular foreign operator.

Through the database, all ECAC States have access to the inspections performed by other States. When serious findings are established, the frequency of inspections may be increased.

Standard practice is that the Captain of the aircraft which has just been inspected is debriefed about minor findings. Significant and major findings are reported by letter or phone to the responsible Aviation Authority and the home base of the operator with the request to take appropriate action to prevent recurrence.

7.2 LIMITATIONS OF THE PROGRAMME

Based on the SAFA inspections which have been performed over the last years, experience shows that the inspections give an indication of the safety of the foreign operators. This indication is limited in the sense that no overall picture is obtained about the safety of that particular aircraft or operator. This is due to the fact that certain aspects are difficult to assess during an inspection (e.g. Crew Resource Management), the limited time available to perform an inspection, and the limited depth of inspection.

However, the information gained is useful and the inspections make a contribution to the safe operation of the particular aircraft which has been inspected and to aviation safety in general.

The fact that the central database has become operational, is particularly positive as it contributes to a rapid flow of information to the States involved in the SAFA Programme. Information from all inspections performed is shared and contributes to a more complete picture about a certain aircraft, aircraft type or operator.

7.3 FUTURE ACTION

In the year 2001, the training of inspectors from ECAC Member States will continue. Training contributes to a common approach among ECAC States to the way inspections are performed.

The use of and connection to the central SAFA database will be further promoted. Those States which are connected find the database particularly useful as it allows them to review the results of inspections performed by other States.

The database will be adapted to keeping a record of action taken as a result of the inspections. This will also include keeping records of replies received from the responsible Aviation Authority of the State of Operator to a letter sent by the State which has performed the SAFA inspections.

If considered necessary and practical, the inspection checklist may be amended to include additional inspection items.

There will be an ongoing analysis of the database. Results will be communicated to ECAC States. This will allow the States to focus their inspections on a certain aircraft, aircraft type, operator or specific inspection item and will contribute to more effective and efficient inspections. Results may be shared with the States of the foreign operators so that appropriate preventive and corrective measures may be taken.

The database will be accessible to other parties involved in the SAFA Programme, such as the European Commission and the ICAO Safety Oversight Audit Section. It is also envisaged that limited data access will be given to non-ECAC States on the basis of agreements covering bilateral exchange of safety data.

7.4 CO-OPERATION WITH ICAO

Co-operation with ICAO has been pursued, as illustrated by the provision of a lecturer to the SAFA training courses, and by the sharing of information.

7.5 CO-OPERATION WITH THE EUROPEAN COMMUNITY

The European Community participates actively in the SAFA Programme through membership in the SAFA Steering Committee and the provision of funding made available to the JAA by the Commission.

8. APPENDIX A

LIST OF STATES OF INSPECTED OPERATORS			
Operator State	ICAO Code	Operator State	ICAO Code
Albania	LA	Iran	OI
Algeria	DA	Ireland	EI
Armenia	U5	Israel	LL
Australia	Y	Italy	LI
Austria	LO	Japan	RJ
Azerbaijan	UB	Jordan	OJ
Bahrain	OB	Kazakhstan	UA
Bangladesh	VG	Kenya	HK
Belarus	UM	Korea (North)	ZK
Belgium	EB	Korea (South)	RK
Bermuda	TX	Kuwait	OK
Bosnia-Herzegovina	LQ	Kyrgyzstan	U2
Brazil	SB	Latvia	EV
Brunei	WB	Lebanon	OL
Bulgaria	LB	Liberia	GL
Cambodia	VD	Libya	HL
Cameroon	FK	Lithuania	EY
Canada	C	Luxembourg	EL
Cape Verde	GV	Malaysia	WM
China	ZB	Malta	LM
Colombia	SK	Mauritius	FI
Cote d' Ivoire	DI	Mexico	MM
Croatia	LD	Moldova	LU
Cuba	MU	Monaco	LN
Cyprus	LC	Mongolia	ZM
Czech Republic	LK	Morocco	GM
Denmark	EK	Namibia	FY
Ecuatorial Guinea	FG	Nepal	VN
Egypt	HE	Nigeria	DN
Estonia	EE	Norway	EN
Ethiopia	HA	Oman	OO
Finland	EF	Pakistan	OP
France	LF	Poland	EP
Gabon	FO	Portugal	LP
Georgia	UG	Romania	LR
Germany	ED	Russian Federation	U
Ghana	DG	Saudia Arabia	OE
Greece	LG	Seychelles	FS
Hong Kong	VH	Singapore	WS
Hungary	LH	Slovakia	LZ
Iceland	BI	Slovenia	LJ
India	VA	South Africa	FA

Operator State	ICAO Code	Operator State	ICAO Code
Spain	LE	Ukraine	UK
Sri Lanka	VC	United Kingdom	EG
Sudan	HS	United States	K
Swaziland	FD	Uzbekistan	U4
Sweden	ES	Vanuatu	NV
Switzerland	LS	Viet Nam	VV
Syria	OS	Yemen	OY
Tajikistan	UT	Yugoslavia	LY
Taiwan	RC	Zimbabwe	FV
Tanzania	HU		
The FYR of Macedonia	LW		
The Netherlands	EH		
Trinidad and Tobago	TT		
Tunisia	DT		
Turkey	LT		
Turkmenistan	U3		
UAE	OM		

9. APPENDIX B

AIRCRAFT TYPES INSPECTED			
A/C type	ICAO Code	A/C type	ICAO Code
Aerospatale		Boeing 777-200	B772
AS-350/550	AS50	BAC-1-11	BA11
Airbus A300B4-600	A306	BAe 146	BA46
Airbus A300B2/4	A30B	Beech 200	BE20
Airbus A310	A310	Beech 300	BE30
Airbus A319	A319	Beriev A-40 Albatros	BE40
Airbus A320	A320	Short SC-5 Belfast	BELF
Airbus A321	A321	Lockheed C-130	C130
Airbus A330	A330	Cessna 500	C500
Airbus A340	A340	Cessna 525	C525
Antonov AN-12	AN12	Cessna 550	C550
Antonov AN-22	AN22	Cessna 560	C560
Antonov AN-24	AN24	Cessna 650	C650
Antonov AN-26	AN26	Canadair RJ Regional Jet	CARJ
Antonov AN-28	AN28	Canadair CL-600	CL60
Antonov AN-72	AN72	Fairchild-Dornier D228	D228
Antonov AN-124	A124	Fairchild-Dornier D328	D328
ATR42/72	ATR	McDonnell Douglas DC-10	DC10
Bell 206	B06	McDonnell Douglas DC-8	DC8
Beech 190	B190	McDonnell Douglas DC8-50	DC85
Bell 407	B407	McDonnell Douglas DC8-60	DC86
Boeing 707-100	B701	McDonnell Douglas DC9	DC9
Boeing 707-300	B703	De Havilland Canada	
Boeing 717-200	B712	DHC-6	DHC6
Boeing 727-100	B721	De Havilland Canada	
Boeing 727-200	B722	DHC-8	DHC8
Boeing 737-100	B731	Embrear EMB-110	E110
Boeing 737-200	B732	Embrear EMB-120	E120
Boeing 737-300	B733	Embrear EMB-121	E121
Boeing 737-400	B734	Embrear ERJ-145	E145
Boeing 737-500	B735	Fokker F100	F100
Boeing 737-600	B736	Fokker F27	F27
Boeing 737-700	B737	Fokker F28	F28
Boeing 737-800	B738	Cessna F406	F406
Boeing 747-200	B742	Fokker F50	F50
Boeing 747-300	B743	Fokker F70	F70
Boeing 747-400	B744	Dassault Falcon 900	F900
Boeing 747SP	B74S	Dassault Falcon 10	FA10
Boeing 757-200	B752	Dassault Falcon 20	FA20
Boeing 757-300	B753	Gulfstream	GULF
Boeing 767-200	B762	BAe-125 Raytheon Hawker	H25B
Boeing 767-300	B763	Ilyushin IL-18	IL18

A/C type	ICAO Code	A/C type	ICAO Code
Ilyushin IL-62	IL62	Fairchild Swearingen	
Ilyushin IL-76	IL76	Merlin 3	SW3
BAe Jetstream 31	JSTA	Tupolev TU-134	T134
BAe-4100 Jetstream 41	JSTB	Tupolev TU-154	T154
Lockheed L-1011 Tristar	L101	Tupolev TU-204	T204
Lockheed L-188 Electra	L188	Yakovlev YAK-40	YK40
Let L-410	L410	Yakovlev YAK-42	YK42
Learjet 31	LJ31		
Learjet 35	LJ35		
Learjet 45	LJ45		
Learjet 60	LJ60		
McDonnell Douglas/ Boeing MD-11	MD11		
McDonnell Douglas/ Boeing MD-80	MD80		
McDonnell Douglas/ Boeing MD-90	MD90		
Piper PA-28	PA28		
Piper PA-31	PA31		
Piper PA-32	PA32		
Piper PA-34	PA34		
Saab 2000	SB20		
Saab 340	SF34		
Short SD3-30	SH33		
Short SD3-60	SH36		

10. APPENDIX C

OPERATORS INSPECTED			
Operator	ICAO Code	Operator	ICAO Code
AIR ANATOLIA	1AA	AIR GEORGIA	GEO
ABELAG AVIATION	AAB	AIR INDIA	AIC
ACM AIR CHARTER GMBH	BVR	AIR JET	AIJ
ADRIA AIRWAYS	ADR	AIR KAZAKSTAN	KZK
AER LINGUS TEORANTA	EIN	AIR KORYO	KOR
AER TURAS TEORANTA	ATT	AIR LANKA	ALK
AERO LLOYD FLUGREISEN GMBH	AEF	AIR LIBERTE	LIB
AEROFLOT - RUSSIAN INT. AIRL.	AFL	AIR LIETUVA	KLA
AEROFREIGHT AIRLINES	FRT	AIR LITTORAL	LIT
AEROLEASING SA	FPG	AIR MALTA CO. LTD.	AMC
AEROLYON	AEY	AIR MAURITIUS LIMITED	MAU
AERONOVA	OVA	AIR MEMPHIS	MHS
AEROPOSTALE	ARP	AIR MIDI BIGORRE	BIE
AEROSWEET AIRLINES	AEW	AIR MOLDOVA	MLD
AFRICAN INT. AIRWAYS	AIN	AIR MOLDOVA INTERNATIONAL	MLV
AGROAR -		AIR NOSTRUM	2NO
TRABALHOS AEREOS LDA.	GRR	AIR NOVE	NHA
AHK AIR HONG KONG LIMITED	AHK	AIR ONE	ADH
AIGLE AZUR	AAF	AIR SEYCHELLES	SEY
AIR 2000 LTD	AMM	AIR SLOVAKIA BWJ LTD	SVK
AIR AFRIQUE	RKA	AIR TOULOUSE	TLE
AIR ALFA HAVA YOLLARI	LFA	AIR TRANSAT	TSC
AIR ALGERIE	DAH	AIR TRANSPORT ASSOCIATION	ATA
AIR ALPS AVIATION/KLM ALPS	7AA	AIR TRANSPORT, LTD	EAT
AIR ANTALYA	3AN	AIR UKRAINE	UKR
AIR ATLANTIQUE	AAG	AIR VIA	VIM
AIR BALTIC CORPORATION SIA	BTI	AIR ZENA	TGZ
AIR BELGIUM	ABB	AIR ZIMBABWE	AZW
AIR BOSNA	BON	AIRCOMPANY ATI	TII
AIR BOTNIA	KFB	AIRCOMPANY DUNCAN LTD	DUC
AIR CANADA	ACA	AIRCRAFT MAINTENANCE	
AIR CHINA	CCA	COMPANY	AMV
AIR COMET	MPD	AIRFREIGHT EXPRESS LIMITED	AFX
AIR CONTRACTOR	2AC	AIRLINES 400, JSC	VAZ
AIR DOLOMITI	DLA	AIRTOURS INTERNATIONAL	AIH
AIR ENGIADINA	RQX	AIRVENTURE, BVBD	RVE
AIR ENTERPRISE PULKOVO	PLK	ALBANIAN AIRLINES MAK S.H.P.K.	LBC
AIR EUROPA	AEA	ALITALIA	AZA
AIR EUROPE SPA	AEL	ALITALIA EXPRESS	SMX
AIR EXEL NETHERLANDS B.V.	AXL	ALITALIA TEAM	NOV
AIR FOYLE CHARTER AIRWAYS LTD	UPD	ALIVEN	LVN
AIR FRANCE	AFR	ALL NIPPON AIRWAYS CO., LTD.	ANA

Operator	ICAO Code	Operator	ICAO Code
AIR GABON	AGN	CATHAY PACIFIC AIRWAYS LTD.	CPA
ALPI EAGLES SPA	ELG	CENTRAL DISTRICTS AIRLINES	CDS
AMERER AIR	AMK	CENTRE-AVIA AIRLINES, JSC	CVC
AMERICAN AIRLINES INC.	AAL	CHANNEL EXPRESS (AIR SERVICES)	EXS
AMERICAN TRANS AIR, INC.	AMT	CHINA AIRLINES	CAL
ANGUSAVIATION	AAZ	CHINA EASTERN AIRLINES	CES
ANTONOV DESIGN BUREAU	ADB	CHINA SOUTHERN AIRLINES	CSN
AOM-MINERVE S.A.	AOM	CIMBER AIR A/S	CIM
APATAS	LYT	CITY BIRD S.A.	CTB
ARAVCO LTD.	ARV	CITYFLYER EXPRESS	CFE
ARCHANGELSK AIRLINES	AUL	CITYJET	BCY
ARKIA ISRAEL INLAND AIRLINES	AIZ	CONDOR FLUGDIENST GMBH	CFG
ARMENIAN INT. AIRLINES	RME	CONTINENTAL AIR LINES INC.	COA
ASIANA AIRLINES	AAR	CORSE AIR INTERNATIONAL	CRL
ATLANTA	ABD	CROATIA AIRLINES	CTN
ATLAS AIR, INC. (JAMAICA, NY)	GTI	CRONUS AIRLINES	CUS
ATRAN-AVIATRANS CARGO AIRLINES	VAS	CROSS AIR AG	CRX
ATRUVERA	AUV	CUBANA DE AVIACION S.A.	CUB
AUGSBURG-AIRWAYS GMBH	AUB	CYPRUS AIRWAYS LTD.	CYP
AURIGNY AIR SERVICES LTD.	AUR	CZECH AIRLINES J.S.C.	CSA
AUSTRIAN AIRLINES (AUA)	AUA	DAIRO AIR SERVICES,LTD.	DSR
AVIAL (RUSSIAN COMPANY LTD)	RLC	DANISH AIR TRANSPORT	DTR
AVIANCA (COLOMBIA).	AVA	DAS AIR CARGO	DAZ
AVIATION ASSISTANCE	4AS	DASSAULT FALCON SERVICE	DSO
AVIOIMPEX	AXX	DELTA AIR LINES, INC.	DAL
AZALAVIA-AZERBAIJAN HAVA YOL.	AHY	DELTA AIR TRANSPORT	DAT
AZZURRA AIR	AZI	DENIM AIR	DNM
BAC EXPRESS AIRLINES LIMITED	RPX	DEUTSCHE BA	BAG
BALKAN-BULGARIAN AIRLINES	LAZ	DEUTSCHE LUFTHANSA, A.G.	DLH
BANGLADESH BIMAN	BBC	DHL AIRWAYS, INC.	DHL
BARCKLAY FLYING SERVICE	ACH	DJA	DJA
BASE REGIONAL AIRLINES	BRO	DNIEPROAVIA	UDN
BELAVIA	BRU	DON AIRLINES	DNV
BERWORLD	IWD	EAGLE AIR LTD A BERNE	EAB
BLUE PANORAMA	1BP	EAST LINE AIRLINES	ESL
BRAATHENS SOUTH AMERICAN	BRA	EASYJET AIRLINES CO. LTD	EZY
BRITAIR S.A.	BZH	EGYPT AIR	MSR
BRITANNIA AIRWAYS LTD.	BAL	EL AL - ISRAEL AIRLINES LTD.	ELY
BRITISH AIRWAYS	BAW	ELF AIR LTD.	EFR
BRITISH MIDLAND AIRWAYS LTD.	BMA	ELK AIRWAYS ESTONIAN AVIATION	ELK
BRITISH REGIONAL AIRLINES LTD	BRT	EMERALD AIRWAYS LIMITED	JEM
BRITISH WORLD AIRLINES LTD	BWL	EMIRATES	UAE
BRUSSELS INTERNATIONAL AIRL.	BXI	ENIMEX LTD	ENI
BULGARIAN FLYING CARGO	BFB	ERMOLINO FLYING TEST RESEARCH	EFE
BWIA INT. AIRWAYS LTD	BWA	ESTONIAN AIR	ELL
CALEDONIAN AIRWAYS LTD	CKT	ETELEAIR, AIR COMPANY LTD.	ETO
CAMEROON AIRLINES	UYC	ETHIOPIAN AIRLINES	ETH
CANADA 3000 AIRLINES	CMM	EURALAIR	EUL
CARGOLUX AIRLINES INT.	CLX	EURECA SRL.	URE
		EURO SUN AIRLINES	ESN

Operator	ICAO Code	Operator	ICAO Code
EUROCYPRIA AIRLINES LIMITED	ECA	INTER TRANS AIR	ITT
EUROFLY S.P.A.	EEZ	INTERNATIONAL AERADIO PLC.	IAL
EUROLOT S.A.	ELO	INTERNATIONAL AIR TOURS LTD	VGO
EUROPE AIR CHARTER	PTU	INVERSIA	INV
EUROPEAN AIR TRANSPORT	BCS	IRAN NAT. AIRLINES-IRAN AIR	IRA
EUROPEAN AR CHARTER	EAL	ISRAIR	ISR
EUROPEAN AVIATION		ISTANBUL AIRLINES	IST
AIR CHARTER	EAF	JAMAHIRIYA LIBYAN ARAB AIRL.	LAA
EUROPEAN EXECUTIVE EXPRESS	EXC	JAPAN AIR LINES COMPANY, LTD.	JAL
EUROWINGS AG, NURNBERG	EWG	JERSEY EUROPEAN AIRWAYS	JEA
EUROWINGS FLUG GMBH	EWF	JET CONNECTION	JCX
EVA AIRWAYS CORPORATION	EVA	JETFLITE OY, FINLAND	JEF
EXECUTIVE AIR CHARTER	EAC	JUGOSLOVENSKI AEROTRANS.-JAT	JAT
EXECUTIVE AVIATION SERVICES	ESY	KABO AIR TRAVELS	QNK
EXIN	EXN	KALITTA FLYING SERVICE, INC.	KFS
EXPRESS AIRWAYS	EPA	KAMPUCHEA AIRLINES	KMP
EXPRESS ONE INTERNATIONAL	LHN	KAZAKHSTAN AIRLINES (KAZAIR)	KZA
FARNER AIR TRANSPORT	FAH	KENYA AIRWAYS LTD.	KQA
FEDERAL EXPRESS CORPORATION	FDX	KHALIFA AIRWAYS	KZW
FINNAIR O/Y	FIN	KHORS AIRCOMPANY	KHO
FIRMA CIRRUS, SAARBRUCKEN	RUS	KIBRIS TURK HAVA YOLLARI LTD.	KYV
FIRST AIR (BRADLEY SCHEDULED)	FAB	KLM CITYHOPPER BV	KLC
FISCHER AIR LTD	FFR	KLM ROYAL DUTCH AIRLINES	KLM
FLIGHTLINE	FLT	KLM UK (EX AIR UK LTD).	UKA
FLUGDIENST FEHLHABER GMBH	FFG	KOGALYMAVIA	KGL
FLYING COLOURS	FCL	KOREAN AIR LINES CO., LTD.	KAL
FLYING ENTERPRISE AB	FLY	KROONK, AIR AGENCY LTD	KRO
FUTURA	FUA	KRYLA	KRL
GALAXY AIRWAYS (GREECE)	3GA	KUWAIT AIRWAYS CORPORATION	KAC
GANDALF	GNF	KYRGHYZSTAN AIRLINES	KGA
GANDALF AIRLINES	1GA	L T E INTERNATIONAL AIRWAYS	LTE
GARUDA INDONESIA, P.T.	GIA	LATCHARTER	LTC
GATS, S.A.	GTS	LAUDA AIR	LDA
GAZPROMAVIA	GZP	LEAD AIR JET SERVICE	LEA
GHANA AIRWAYS CORPORATION	GHA	LIBERIAN WORLD AIRLINES INC.	LWA
GO FLY LIMITED	GOE	LITHUANIAN AIRLINES	LIL
GOLDEN AIR FLYG AB	GAO	LOT - POLSKIE LINIE LOTNICZE	LOT
GRONLANDSFY LTD	GRL	LOTUS AIRLINE	TAS
GULF AIR	GFA	LUFTHANSA CITYLINE	CLH
GULF AIR BAHRAIN B.S.C.	GBA	LUXAIR	LGL
HEAVYLIFT CARGO AIRLINES LTD.	HLA	MACEDONIAN AIRLINES	MAK
HELI-AIR-MONACO	MCM	MACEDONIAN OLYMPIC	1MA
HEMUS AIR	HMS	MAERSK AIR I/S	DAN
HUNGARIAN-UKRANIAN AIRLINES	HUK	MAERSK AIR LTD.	MSK
HUNTING CARGO AIRLINES LTD	ABR	MAGNITOGORSK AIR ENTERPRISE	MNG
HYDRO AIR LTD.	HYC	MALAYSIAN AIRLINES SYSTEM	MAS
IBERIA	IBE	MALMO AVIATION SCHEDULE AB	SCW
IBERTRANS AEREA S.L.	IBT	MALTA AIR CHARTER	MAC
IBERWORLD	1IW	MANX AIRLINES LTD.	MNX
ICELANDAIR	ICE	MALEV - HUNGARIAN AIRLINES	MAH

Operator	ICAO code	Operator	ICAO code
MARTINAIR HOLLAND N.V.	MPH	RYANAIR	RYP
MEERBLICK, S.A.	MIK	SABENA	SAB
MERIDIANA SPA	ISS	SABRE AIRWAYS LTD	SBE
MIDDLE EAST AIRLINES	MEA	SAFAIR FREIGHTERS PTY LTD.	SFR
MIDWEST	1MI	SARATOV AVIATION DIVISION	SOV
MINERVA AIRLINES	MTC	SAUDI ARABIAN AIRLINES	SVA
MK AIRCARGO	MKA	SAYAKHAT	SAH
MNG HAVAYOLLARI VE TASIMACILIK	MNB	SCANDINAVIAN AIRLINES SYSTEM	SAS
MONARCH AIRLINES LTD.	MON	SCHREINER AIRWAYS B.V.	SCH
MONTENEGRO AIRLINES	MGX	SERVAIR, PRIVATE CHARTER AG	SWZ
MTM AVIATION GMBH, MUNCHEN	MTM	SHOROUK AIR	SHK
MUK AIR TAXI	MUK	SIBERIA AIRLINES	SBI
NAMIB AIR (PTY) LTD.	NMB	SINGAPORE AIRLINES LIMITED	SIA
NEWAIR	NAW	SKYSERVICE F.B.O. INC.	SSV
NIPPON CARGO AIRLINES CO.	NCA	SKYTEAM GMBH, KELSTERBACH	XST
NOR AVIATION A/S	NOO	SKYWAYS AB	SKX
NORDSTRESS (AUSTRALIA) PTY LTD	NDS	SLOVAK AIRLINES	SLL
NORTH AMERICAN AIRLINES	NAO	SOBELAIR	SLR
NORTHWEST AIRLINES INC.	NWA	SOUTH AFRICAN AIRWAYS (SAA)	SAA
NOUVEL AIR TUNISIE	LBT	SOUTHERN AIR TRANSPORT INC.	SJM
NOVAIR - AVIACAO GERAL, S.A.	NOP	SOUTHWEST AIR LINES	SWL
OCCITANIA JET FLEET	OJF	SPANAIR	JKK
OLYMPIC AIRWAYS S.A.	OAL	STERLING EUROPEAN AIRLINES A/S	SNB
OLYMPIC AVIATION S.A.	OLY	STREAMLINE AVIATION LTD	SSW
OMSKAVIA AIRLINE	OMS	SUCKLING AIRWAYS	SAY
ONUR HAVA TASIMACILIK AWMS	OHY	SUN-AIR OF SCANDINAVIA A/S	SUS
PAKISTAN INT. AIRLINES (PIA)	PIA	SUNEXPRESS -GUNES EKSPRES HAV.	SXS
PANAIR	PNR	SWELINK	3SW
PEGASUS HAVA TASIMACILIGI	PGT	SWIFTAIR S.A.	SWT
PETROLAIR SA	PTI	SWISSAIR	SWR
POLAR AIR CARGO, INC.	PAC	SYMBOL S.A.	ANS
PORTUGALIA	PGA	SYRIAN ARAB AIRLINES	SYR
PREMIAIR	VKG	TACV -TRANS. AEREOS	
PRIVATE FLIGHT	ZZZ	CABO VERDE	TCV
PROTEUS AIR SYSTEME	PRB	TAJIKISTAN	TZK
PSKOV STATE AVIATION ENT.	PSW	TAJIKISTAN INTERNATIONAL AIRL.	TIL
QANTAS AIRWAYS LIMITED	QFA	TAROM, ROMANIAN AIR	
RAF-AVIA	MTL	TRANSPORT	ROT
REGION AIR	RGA	TATNEFTAERO	TNF
REGIONAL AIRLINES (FRANCE)	RGI	TEA BASEL AG	EZS
REGIONAL LINEAS AEREAS (SPAIN)	RGN	THAI AIRWAYS INTERNATIONAL	THA
RHEINTALFLUG-ROLF SEEWALD	RTL	TITAN AIRWAYS LTD	AWC
RIGA AIRCLUB	RAK	TJUMENAVIATRANS	TMN
RILA AIRLINES	RAB	TMA -TRANS MEDITERRANEAN AIRL.	TMA
ROYAL AIR MAROC	RAM	TNT AIRWAYS S.A.	TAY
ROYAL AVIATION EXPRESS	RXP	TNT INTERNATIONAL AVIATION	NTR
ROYAL AVIATION INC.	ROY	TOWER AIR, INC.(JAMAICA, NY)	TOW
ROYAL BRUNEI AIRLINES	RBA	TRANS ARABIAN AIR TRANSPORT	TRT
ROYAL JORDANIAN	RJA	TRANS TRAVEL AIRLINES	1TT
RUSS, AIR TRANSPORT COMPANY	RUR	TRANS WORLD AIRLINES INC.	TWA

Operator	ICAO Code	Operator	ICAO Code
TRANSAER (IRELAND)	3TA	VIP AVIA	PAV
TRANSAERO AIRLINES	TSO	VIRGIN EXPRESS	VEX
TRANSAVIA HOLLAND B.V.	TRA	VIRGIN EXPRESS IRELAND	VEI
TRANSAVIAEXPORT	TXC	VLAAMSE	
TRANSLIFT AIRWAYS LTD	TLA	LUCHTTTRANSPORTMAATSCH.	VLM
TRANSLUX INTERNATIONAL AIRL.	TLX	VOLARE (ITALY)	VLE
TRANSPORTES AEREOS		VOLARE (UKRAINE)	VRE
PORTUGUESES	TAP	VOLGA AVIAEXPRESS	
TRAVEL SERVIS	TVS	COMPANY LTD.	WLG
TRISTAR AIR	TSY	VOLGA-DNEPR	VDA
TULIP AIR	TLP	WDL AVIATION (KOLN)	WDL
TULIP AIR CHARTER B.V.	FRN	WELCOME AIR	WLC
TUNINTER	TUI	WIDEROE'S FLYVESELSKAP A/S	WIF
TUNIS AIR	TAR	YEMENIA, YEMEN AIRWAYS	IYE
TURKISH AIRLINES-TURK HAVA YO.	THY	YUZHNOYE STATE OFFICE	UZH
TURKMENISTAN	TUA		
TYROLEAN AIRWAYS	TYR		
TYROLEAN JET SERVICE	TYJ		
TYUMEN AIRLINES	TYM		
U S AIR	USA		
UKRAINE AIRALLIANCE	UKL		
UKRAINE INT. AIRLINES	AUI		
UKRAINE UNIVERSAL	UNV		
UNITED AIR LINES INC.	UAL		
UNITED PARCEL SERVICE COMPANY	UPS		
URAL AIRLINES	SVR		
UZBEKISTAN AIRWAYS-HAVO JUL.	UZB		
VANAIR LTD	1VA		
VARIG - VIACAO AEREA			
RIO-GRAND.	VRG		
VASP -VIACAO AEREA SAO PAULO	VSP		
VEGA AIRLINES	VEA		

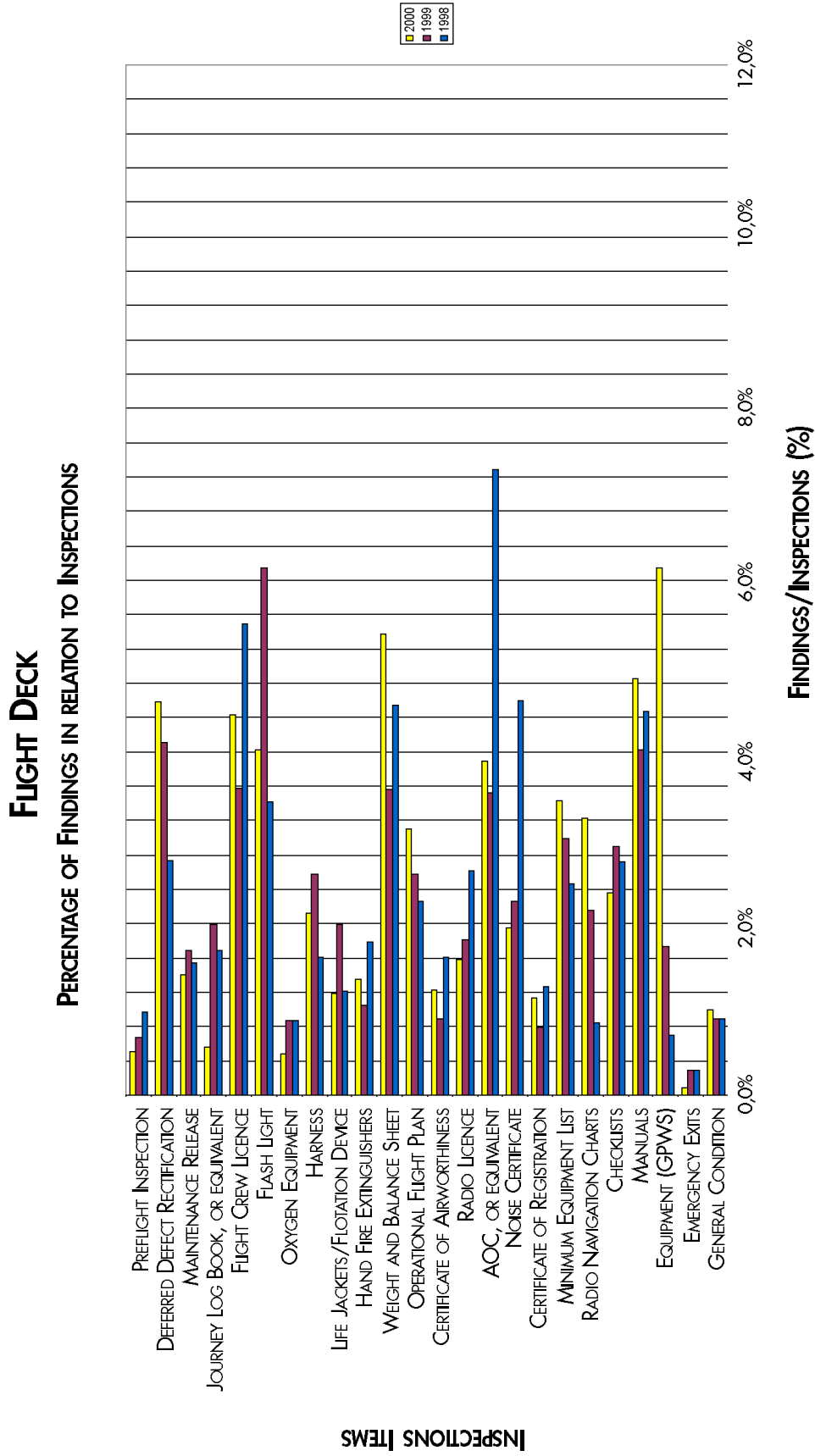
11. APPENDIX D

RESULTS OF INSPECTIONS PER INSPECTION ITEM

Inspection item	Description	No. inspections (III)	No. findings (F)	F/III(%)
A. Flight Deck/ General	General Condition	1110	11	1.0%
	Emergency Exits	1077	1	0.1%
	Equipment (GPWS)	1043	64	6.1%
Documentation	Manuals	969	47	4.9%
	Checklists	973	23	2.4%
	Radio Navigation Charts	991	32	3.2%
	Minimum Equipment List	931	32	3.4%
	Certificate of Registration	1141	13	1.1%
	Noise Certificate (where applicable)	1077	21	1.9%
	AOC or equivalent	1052	41	3.9%
	Radio Licence	1136	18	1.6%
Flight Data	Certificate of Airworthiness	1140	14	1.2%
	Operational Flight Plan	870	27	3.1%
Weight and Balance Sheet	Weight and Balance Sheet	781	42	5.4%
	Safety Equipment	Hand Fire Extinguishers	1035	14
Life Jackets/Flotation Device		1011	12	1.2%
Harness		1036	22	2.1%
Oxygen Equipment		1018	5	0.5%
Flash Light		994	40	4.0%
Flight Crew Journey Log Book/ Technical Log or equivalent	Flight Crew Licence	1106	49	4.4%
	Journey Log Book or equivalent	1066	6	0.6%
	Maintenance Release	1068	15	1.4%
	Deferred Defect Rectification	1046	48	4.6%
B. Safety/Cabin	Preflight Inspection	983	5	0.5%
	General Internal Condition	969	45	4.6%
	Cabin Attendant Seats	896	16	1.8%
	First Aid Kit/Emergency Medical Kit	906	38	4.2%
	Hand Fire Extinguishers	916	22	2.4%
	Life Jackets/Flotation Devices	892	23	2.6%
	Seat Belts	902	6	0.7%
	Emergency Exits, Lighting and Marking, Torches	885	51	5.8%
	Slides/Life-Rafts (as required)	808	10	1.2%
	Oxygen Supply (Cabin Crew and Passengers)	884	22	2.5%
	Safety Instructions	873	18	2.1%

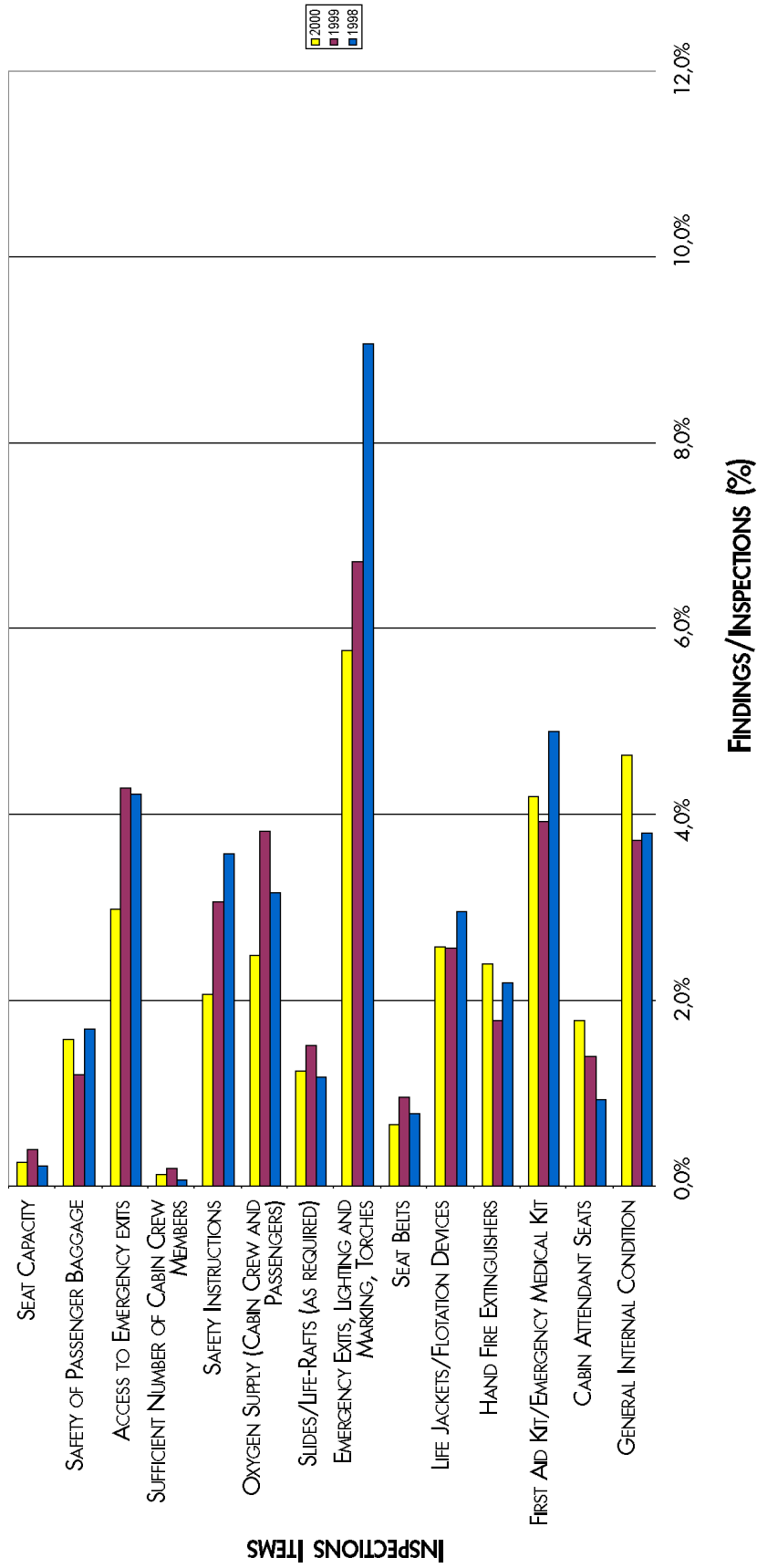
Inspection item	Description	No. inspections (III)	No. findings (F)	F/III(%)
	Sufficient Number of Cabin Crew Members	822	1	0.1%
	Access to Emergency Exits	906	27	3.0%
	Safety of Passenger Baggage	696	11	1.6%
	Seat Capacity	789	2	0.3%
C. Aircraft Condition	General External Condition	1239	96	7.7%
	Doors and Hatches	1231	22	1.8%
	Flight Controls	1190	20	1.7%
	Wheels and Tyres	1234	38	3.1%
	Undercarriage	1231	24	1.9%
	Wheel Well	1212	11	0.9%
	Intake & Exhaust Nozzle	1154	32	2.8%
	Fan Blades	993	15	1.5%
	Propellers	249	2	0.8%
	Obvious Repairs	1086	12	1.1%
	Obvious Unrepaired Damage	1080	29	2.7%
	Leakage	1097	65	5.9%
D. Cargo	General Condition of Cargo Compartment	782	20	2.6%
	Dangerous Goods	494	10	2.0%
	Security of Cargo on Board	594	35	5.9%
E. General	General	57	4	7.0%

12. APPENDIX E



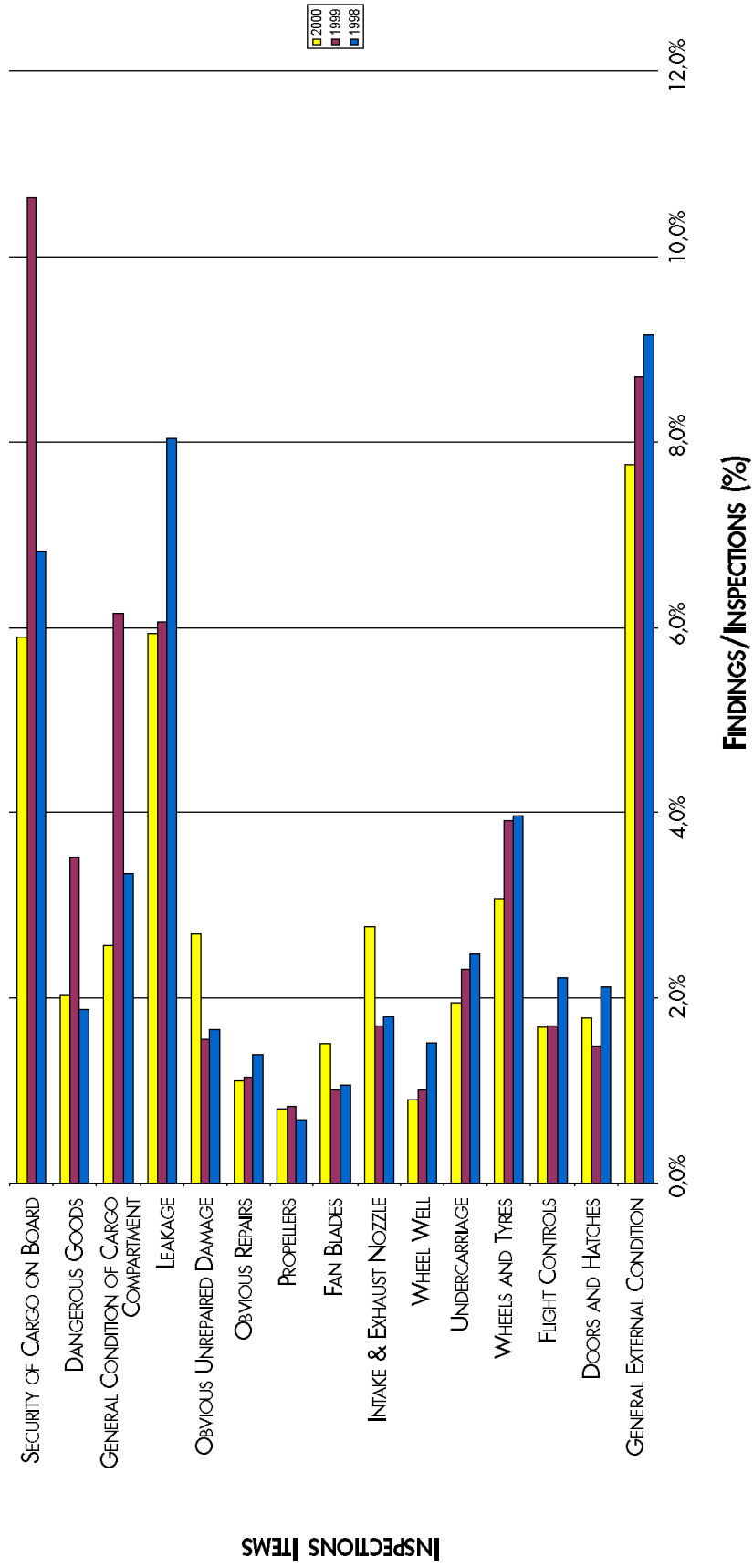
CABIN & SAFETY

PERCENTAGE OF FINDINGS IN RELATION TO INSPECTIONS



AIRCRAFT CONDITION & CARGO

PERCENTAGE OF FINDINGS IN RELATION TO INSPECTIONS



The European Civil Aviation Conference (ECAC) is an intergovernmental organization established in 1955. Its objective is to promote the continued development of a safe, efficient and sustainable European air transport system.

ECAC is composed of the following 38 Member States:

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Armenia	Germany	Monaco	The former Yugoslav Republic of Macedonia
Austria	Greece	Netherlands	Turkey
Belgium	Hungary	Norway	Ukraine
Bulgaria	Iceland	Poland	United Kingdom
Croatia	Ireland	Portugal	
Cyprus	Italy	Romania	
Czech Republic	Latvia	Slovak Republic	
Denmark	Lithuania	Slovenia	
Estonia	Luxembourg	Spain	
Finland	Malta	Sweden	



European Civil Aviation Conference / *Conférence Européenne de l'Aviation Civile*
3 bis, Villa Emile Bergerat
92522 Neuilly-sur-Seine Cedex
France
Tel./Tél. : +33 1 46 41 85 44
Fax : +33 1 46 24 18 18/47 38 13 67
e-mail : ecac@compuserve.com
Web site/site Web : www.ecac-ceac.org