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# Annual Report of the Council

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2001



The 33rd  
Session of  
the Assembly

International Civil Aviation Organization

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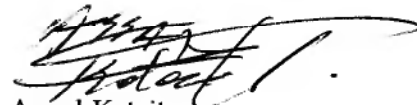
TO THE ASSEMBLY  
OF THE  
INTERNATIONAL CIVIL AVIATION ORGANIZATION

*I have the honour to transmit, at the direction of the Council, its Report for the year 2001 prepared in compliance with Article 54(a) of the Convention on International Civil Aviation. It constitutes documentation for the next ordinary Session of the Assembly, which will be convened in 2004, but it is being circulated to Contracting States now for their information. It will also be sent to the Economic and Social Council of the United Nations in pursuance of Article VI, paragraph 2 (a) of the Agreement between the United Nations and ICAO.*

*The Report was prepared by the Secretariat and circulated in draft form to the Representatives of Council Member States for their suggestions. The Council, as a body, did not formally examine or adopt it but, as in the past, delegated to its President authority to approve the final text after considering all the suggestions received.*

*Chapter I summarizes the principal trends and developments in civil aviation and the work of the Organization during the year; the activities of ICAO itself are described in Chapters II to X.*

*The Council held three sessions in 2001. These were the One hundred and sixty-second Session from 19 February to 16 March, with a total of thirteen meetings; the One hundred and sixty-third Session from 28 May to 28 June and on 12 and 13 September, with a total of twenty-two meetings, two of which were held outside the Council phase; and the One hundred and sixty-fourth Session from 22 October to 12 December, with a total of twelve meetings, one of which was held outside the Council phase. Authority was delegated to the President to act on a number of matters, as necessary, when the Council was not in session.*



Assad Kotaite  
President of the Council

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# Glossary

- ACAS.** Airborne collision avoidance systems  
**ACC.** Area control centre  
**ACDB.** Airport Characteristics Data Bank  
**ACNA.** Agencia Centroamericana de Navegación Aérea  
**ACSA.** Central American Safety Oversight Agency  
**ADB.** Asian Development Bank  
**ADIZ.** Air defence identification zone  
**ADREP.** Accident and incident reporting data  
**ADS.** Automatic dependent surveillance  
**ADS-B.** Automatic dependent surveillance-broadcast  
**AENA.** Spanish Airports Authority  
**AFDD.** Audit findings and differences database  
**AFIS.** Aerodrome flight information services  
**AFS.** Aeronautical fixed service  
**AFTN.** Aeronautical fixed telecommunication network  
**AHRMIO.** Association of Human Resource Management in International Organizations  
**AIC.** Aeronautical information circular  
**AIPs.** Aeronautical Information Publications  
**AIS.** Aeronautical information services  
**AITAL.** Latin American International Air Transport Association  
**ALA.** Approach and landing accidents  
**ALAR.** Approach and landing accident reduction  
**ALCIE.** Assets Liabilities Capital Income Expenses  
**AMHS.** Aeronautical message handling system  
**AMO.** Approved maintenance organization  
**AMS.** Aeronautical mobile service  
**ANS.** Air navigation services  
**AOR.** Area of responsibility  
**AOSC.** Administrative and operational services costs  
**AOSCE.** Administrative and operational services cost fund  
**APT.** Asia-Pacific telecommunity  
**APV.** Approach with vertical guidance  
**ARNS.** Aeronautical radio navigation service  
**ASAS.** Airborne separation assurance system  
**ATFM.** Air traffic flow management  
**ATN.** Aeronautical telecommunication network  
**ATO.** Air transportation office  
**ATS.** Air traffic services  
**BUFR.** Binary Universal Form for the Representation of meteorological data  
**CAA-PC.** Civil aviation adviser/project coordinator  
**CACAS.** Civil Aviation Caretaker Authority in Somalia  
**CAIDPE.** Civil Aviation Infrastructure Development of Policy Framework  
**CAST.** Commercial aviation safety team  
**CATC.** Civil Aviation Technology College  
**CATC.** Civil Aviation Training Centre  
**CEATS.** Central European Air Traffic Services  
**CEB.** United Nations System Chief Executives Board  
**CEMAC.** Economic and Monetary Community of Central Africa  
**CIDIN.** Common ICAO data interchange network  
**CIS.** Commonwealth of Independent States  
**CITEL.** Inter-American Telecommunication  
**COCESNA.** Central American Corporation for Air Navigation Services  
**COMESA.** Common market for Eastern and Southern Africa  
**COSCAP.** The Cooperative Development of Operational Safety and Continuing Airworthiness Project  
**CPDLC.** Controller-pilot data link communications  
**CTS.** Council on Trade in Services  
**CVR.** Cockpit voice recorder  
**D-FIS.** Data link — flight information services  
**DAC.** Development Assistance Committee  
**DAGMAR.** Database of Aeronautical Agreements and Arrangements  
**DCME.** Diplomatic Conference on Mobile Equipment  
**DEPV.** Department of Electronics and Flight Protection  
**DME.** Distance measuring equipment  
**DOJ.** Department of Justice  
**DOT.** Department of Transportation  
**DPI.** Document production improvement  
**DPKO.** Department of Peacekeeping Operations  
**EAC.** East African Community

- EANPG.** EUR Air Navigation Planning Group  
**EC.** Economic Commission  
**EC.** European Community  
**ECA.** Economic Commission for Africa  
**ECAC.** European Civil Aviation Conference  
**ECE.** Economic Commission for Europe  
**ECLAC.** Economic Commission for Latin America and Caribbean  
**ECOWAS.** Economic Community of West African States  
**ELT.** Emergency locator beacon  
**ESCWA.** Economic and Social Commission for Western Asia  
**FASID.** Facilities and Services Implementation Document  
**FDR.** Flight data recorder  
**GASP.** Global aviation safety plan  
**GATS.** General Agreement on Trade in Services  
**GBAS.** Ground-based augmentation system  
**GDP.** Gross domestic product  
**GEOSAR.** Geostationary satellites  
**GEPEJTA.** Group of Experts on Policies, Economics and Legal Matters in Air Transport  
**GNSS.** Global navigation satellite systems  
**GPS.** Global position system  
**GREPECAS.** CAR/SAM Regional Planning and Implementation Group  
**GRIB.** Gridded binary  
**IAC.** Interstate Aviation Committee  
**IAVW.** International airways volcano watch  
**IBIS.** ICAO bird strike information system  
**ICPO/INTERPOL.** International Criminal Police Organization  
**ITMP.** Information Technology Master Plan  
**JAA.** Joint Aviation Authority  
**LEOSAR.** Low altitude earth orbiting constellation of satellites  
**LOSA.** Line Operations Safety Audit  
**METAR.** Aviation routine weather report (in aeronautical meteorological code)  
**METLINKSG.** Meteorological Information Data Link Study Group  
**MLS.** Microwave landing system  
**MNT.** Mach number technique  
**MoU.** Memorandum of Understanding  
**MSA.** Management service agreement  
**NAT SPG.** NAT Systems Planning Group  
**NLA.** New larger aeroplanes  
**NPA.** Non-precision approach  
**OCHA.** Office for Coordination of Humanitarian Affairs  
**OECD.** Organization for Economic Co-operation and Development  
**OHR.** Office of the High Representative  
**OPAS.** Operational assignment  
**OPMET.** Operational meteorological information  
**PAAST.** Panamerican Aviation Safety Team  
**PC.** Project Coordinator  
**PIRGs.** Planning and implementation regional groups  
**PROMET.** Provision of Meteorological Information Required by Civil Aviation  
**RAFC.** Regional area forecast centre  
**REDDIG.** SAM digital network  
**RF.** Radio frequency  
**RNAV.** Area navigation  
**RNP.** Required navigation performance  
**RPRO.** Regular Programme Procurement Section  
**RVR.** Runway visual range  
**RVSM.** Reduced vertical separation minima  
**SADC.** Southern African Development Community  
**SADIS.** Satellite distribution system  
**SAFA.** Safety assessment of foreign aircraft  
**SARSAT.** Search and rescue satellite-aided tracking  
**SBAS.** Satellite-based augmentation systems  
**SCRAG.** SADIS Cost Recovery Administrative Group  
**SFOR.** Stabilization force  
**SIGMET.** Information concerning en-route weather phenomena which may affect the safety of aircraft operations  
**SIGWX.** Significant weather  
**SIP.** Special implementation project  
**SPPD.** Support Services for Policy and Programme Development  
**STP.** Standardized Training Package  
**STS.** Support for technical services  
**TAF.** Terminal aerodrome forecast  
**TF.** Trust Funds  
**TMA.** Terminal management area  
**UAT.** Universal access transceiver  
**UNDCP.** United Nations Drug Control Programme  
**UNFCCC.** United Nations Framework Convention on Climate Change  
**UNIDROIT.** International Institute for the Unification of Private Law  
**VAAC.** Volcanic ash advisory centre  
**VHF.** Very high frequency  
**VOR.** VHF omnidirectional radio range  
**VSAT.** Very small aperture terminal  
**WAFC.** World area forecast centre  
**WAFS.** World area forecast system  
**WGS-84.** World Geodetic System — 1984  
**WRC-2003.** World Radiocommunication Conference (2003)

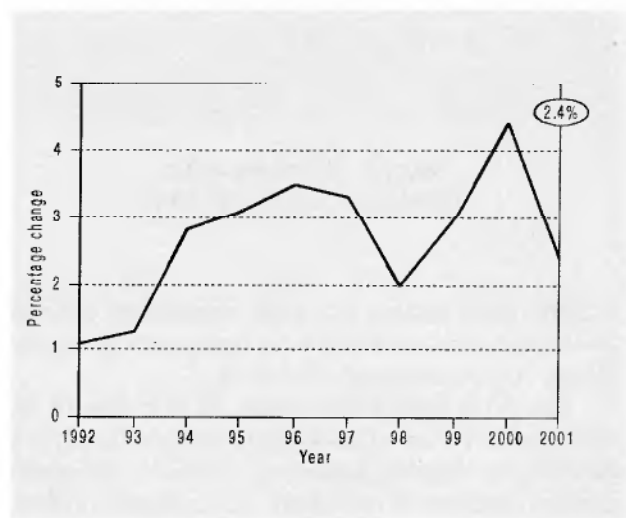
# Chapter I

## The Year in Summary

*This chapter summarizes the principal trends and developments in civil aviation and the work of ICAO in 2001. Tables in Appendix 12 provide detailed statistics on the data presented in this chapter.*



In 2001, the world economy witnessed a sharp slowdown in growth in almost all major regions. The world gross domestic product (GDP) grew approximately 2.5 per cent in real terms (Figure 1). For the industrialized countries, GDP grew only by 1.2 per cent; the North American economy showing economic growth of about 1.2 per cent, almost 3 percentage points lower than the previous



**Figure 1.** Development in world GDP in constant prices  
year-on-year changes, 1992-2001

year. GDP growth for developing countries amounted to about 4 per cent, some 1.7 per cent lower than in the year 2000.

Africa's economy achieved a 3.7 per cent GDP increase. The aggregate economy of the region with the largest share of the world economy, Asia and the Pacific, grew at some 3.6 per cent in 2001, above the world average. Developing countries in the Asia and the Pacific Region contributed significantly as their average GDP grew 5.6 per cent. China's GDP again showed a strong growth of 7.3 per cent. Japan's GDP contracted by almost 0.4 per cent during 2001, while Asia's newly industrialized economies averaged almost 0.8 per cent GDP growth. The Australian and New Zealand economies grew at about 2.4 per cent, similar to the world average.

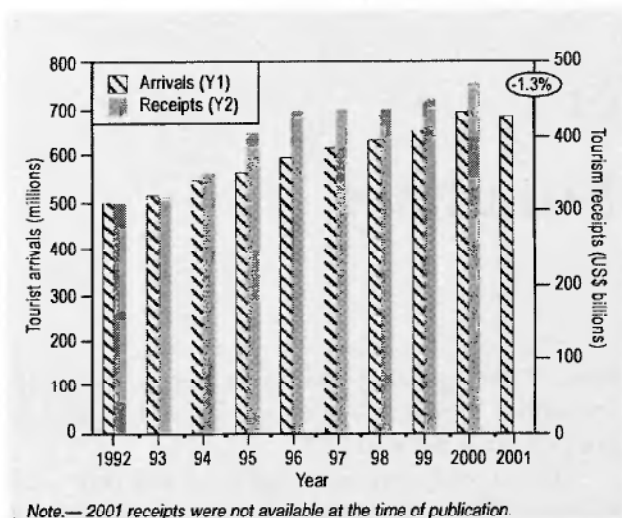
Europe achieved an average GDP growth of 1.9 per cent, almost half of the growth rate of the previous year. The Central and Eastern European economies grew around 3 per cent. The countries of the Commonwealth of Independent States (CIS) showed a significant GDP growth, averaging about 6.2 per cent, but about 2 per cent lower than the previous year.

The Latin America and the Caribbean Region was adversely affected both by the slowdown in the global economy and by the financial crisis in Argentina. As a result, the Region's GDP growth slowed down to 0.7 per cent, about 3 percentage points lower than the previous year.

Linked to the fall in oil prices, the Middle East Region's economy grew only by about 4.5 per cent, down almost 1 percentage point from the previous year.

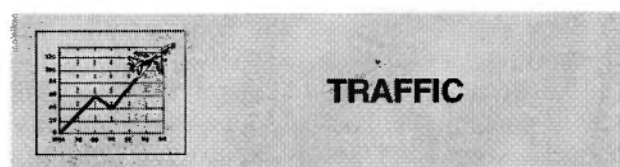
The world trade volume in goods and services is estimated to have decreased by approximately 0.2 per cent in 2001, the only decline experienced in the last decade.

International tourism decreased in 2001 by an estimated 1.3 per cent, due to the events of 11 September and the weakening of the economies

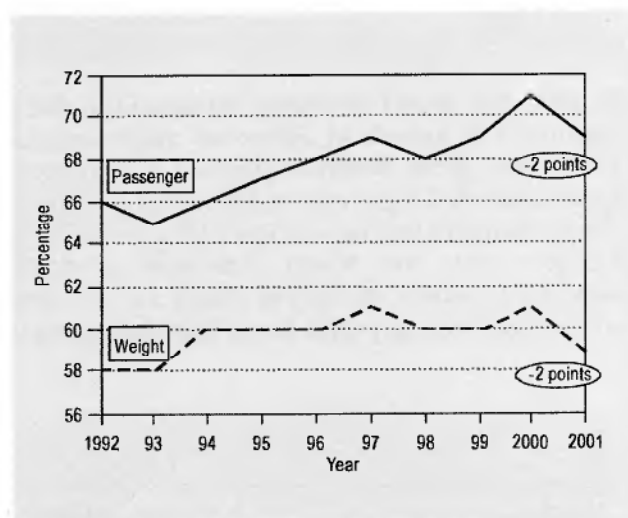


**Figure 2. International tourism receipts and arrivals**  
U.S. dollars, 1992-2001

of the major tourism generating markets (Figure 2). The World Tourism Organization (WTO) estimates that almost 690 million tourists traveled to foreign countries in 2001.



**Figure 3. Scheduled traffic**  
tonne-kilometres performed, 1992-2001



**Figure 4. Scheduled traffic**  
achieved load factors, 1992-2001

In 2001, the total scheduled traffic carried by the airlines of the 187 Contracting States of ICAO amounted to a total of about 1 621 million passengers and some 29 million tonnes of freight. Reported monthly figures suggest that up to September 2001 there had been little change in overall passenger/freight/mail tonne-kilometres performed over the same period in 2000, a small growth in passenger traffic being countered by a significant decrease in freight traffic. However, following the events of 11 September, data for the entire year 2001 indicate that total traffic decreased some 4 per cent over 2000 and international tonne-kilometres by some 5 per cent (Tables 1 and 2), the first annual decrease in these figures since 1991. Figure 3 shows the trend from 1992 to 2001.

In 2001, the overall capacity was reduced, but at a lower rate than the decrease in traffic (Figure 4). Hence, the average passenger and

weight load factors on total scheduled services (domestic plus international) decreased to 69 and 59 per cent respectively (Table 3).

On a regional basis, some 35 per cent of the total traffic volume (passengers/freight/mail) was carried by North American airlines. European airlines carried 28 per cent, Asia/Pacific airlines 27 per cent, Latin American and the Caribbean airlines 4 per cent each and African airlines 2 per cent (Table 4).



Data for individual countries (Tables 5 and 6) show that in 2001 about 43 per cent of the total volume of scheduled passenger, freight and mail traffic was accounted for by the airlines of the United States, Japan and the United Kingdom (32, 6 and 5 per cent respectively). On international services, almost 37 per cent of all traffic was carried by the airlines of the United States, the United Kingdom, Germany and Japan (17, 7, 7 and 6 per cent respectively).

### Non-scheduled Commercial Operations

It is estimated that in 2001 total international non-scheduled passenger-kilometres showed little change compared with 2000, with the non-scheduled share of overall international air passenger traffic increasing marginally to about 13.5 per cent (Figure 5 and Table 7). Domestic non-scheduled passenger traffic represents only about 6 per cent of total non-scheduled passenger traffic and just over 1 per cent of total domestic passenger traffic worldwide.

### Airport Operations

In 2001, the 25 largest airports in the world handled some 1 030 million passengers, according to preliminary estimates (Table 8). During the same period, the airports concerned (16 of which are located in North America, 6 in Europe and 3 in Asia) also handled some 11 million commercial air transport movements.



### Airlines

Preliminary estimates for 2001 indicate that the world's scheduled airlines as a whole experienced a significant operating loss after 8 successive years of operating profits (Table 9 and Figure 6).

The operating revenues of scheduled airlines of ICAO Contracting States are tentatively

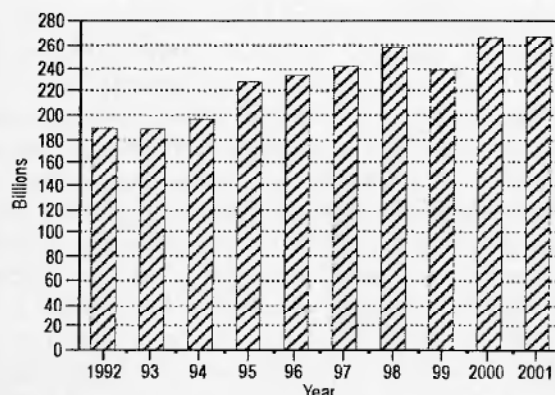


Figure 5. International non-scheduled traffic passenger-kilometres performed, 1992-2001

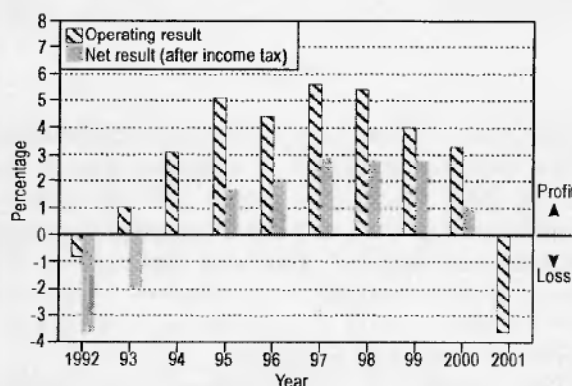


Figure 6. Scheduled airlines operating and net, 1992-2001

estimated at \$305 300 million<sup>1</sup> in 2001 and operating expenses for the same airlines at \$316 200 million, giving an operating loss of 3.6 per cent of operating revenues. This follows an operating profit of 3.3 per cent in 2000.

Per tonne-kilometre, operating revenues decreased from 77.0 cents in 2000 to an estimated 74.6 cents in 2001, while operating expenses increased from 74.5 cents to an estimated 77.3 cents.

1. All amounts listed in this chapter are in U.S. dollars.

### Airports and Air Navigation Services

The overall financial situation of airports and air navigation services providers was negatively affected by the 11 September events and the ensuing reduction in air traffic activity. While major operators were still in a relatively healthy situation at year's end, primarily due to the contribution of non-aeronautical revenues, smaller operators that were unable to benefit from such diversity in their income experienced greater difficulties. A number of remedial measures were taken by airports and air navigation services providers, which varied widely, however, depending on the degree and level of direct impact on the provider and their autonomy in setting user charges.



#### Carriers

On the basis of schedules published in multilateral airline schedule guides, it is estimated that at the end of 2001 there were some 781 air carriers worldwide providing scheduled passenger services (international and/or domestic) and about 113 operating scheduled all-freight services. Compared with the same period in 2000, this represents a net overall increase of 87 air carriers.

The trend of privatization of government-owned airlines continued in 2001. Two airlines achieved their privatization aims. Another 40 government-owned carriers were reported to be in various stages of plans for partial or full privatization. In several cases, however, privatization plans were deferred or postponed because of the complexities encountered in the process or the economic situation of the airlines concerned, or owing to other circumstances. In contrast to the general trend, government shareholdings in several privatized carriers were increased in order to rescue the carriers from imminent collapse.

### Airports and Air Navigation Services

The increase in the autonomy of airports and air navigation services continued during the year. The

involvement of private interests also continued, notably with the award of some airport management contracts. However, because of the consequences of the 11 September events, a number of privatization projects were suspended.

### Aircraft

Between 1992 and 2001, the reported number of commercial air transport aircraft in service increased by about 39 per cent from 14 919 to 20 771 (excluding aircraft with a maximum take-off mass of less than 9 000 kg). Within these totals, turbojet aircraft numbers increased by about 35 per cent, from 12 008 to 16 229, over the same period (Figure 7 and Table 10).

In 2001, 990 jet aircraft were ordered (compared with 1 553 in 2000) and 1 219 aircraft were delivered (compared with 1 009 in 2000). The backlog of unfilled orders at the end of 2001 was 3 799 aircraft compared with 3 649 at the end of 2000.

The financial commitment in terms of jet aircraft orders placed with the major aircraft manufacturers in 2001 is estimated to be about 69 billion.

The number of turboprop and piston aircraft ordered in 2001 was 89, and 109 aircraft were delivered during the year.

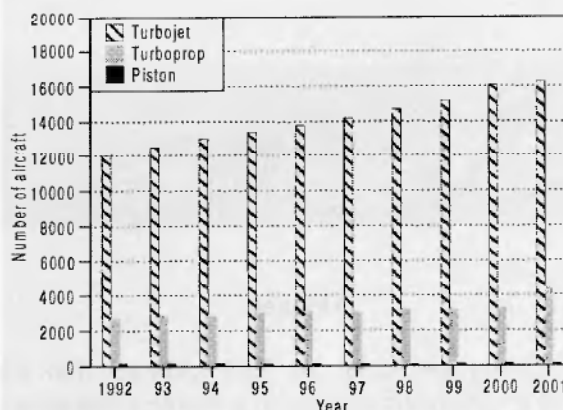


Figure 7. Total commercial air transport fleet 1992-2001

**Most active aircraft type transactions, 2001**

<i>Aircraft</i>	<i>Orders</i>	<i>Deliveries</i>	<i>Backlog</i>
Canadair RJ	230	152	562
Boeing 737	124	298	752
Airbus 320	101	120	492
Airbus 380	78	—	78
Embraer RJ	62	166	516

**ECONOMIC  
REGULATION**

States continued to expand the international air transport network using bilateral air service agreements. During the year, a total of 80 bilateral air service agreements were reportedly concluded or amended by 65 States. Continuing a trend, over 70 per cent of these agreements and amendments contained some form of liberalized regulatory arrangements. For example, 4 "open skies" agreements were concluded among 5 countries; these agreements provide for full-market access without restrictions on designations, route rights, capacity, frequencies, code sharing and tariffs. By December 2001, about 85 open skies bilateral agreements had been concluded since 1995 (about 30 in the last 3 years) between approximately 70 countries. These agreements involved not only developed countries, but also an increasing number of developing countries (about 60 per cent).

Air transport liberalization activity also continued at the regional level. In Africa, the Economic and Monetary Community of Central Africa (CEMAC) and the Economic Community of West African States (ECOWAS) agreed, in March, to move forward with the liberalization of air transport in the regions concerned, with the aim of achieving full implementation by June 2004. In the Asia and the Pacific Region, 5 members of the Asia Pacific Economic Cooperation (APEC) (Brunei, Chile, New Zealand, Singapore and the United States), in May, officially signed the plurilateral open skies agreement, which had been agreed upon in November 2000. This agreement entered into force in December. In Latin America, the States that are parties to the Fortaleza Agreement (signed in 1997 by 6 countries in the Region) discussed, in

March, ways of progressing their liberalization initiatives; they agreed to a 2-year phased plan of liberalization of market access, capacity and frequencies amongst the member States. In the Middle East, the Arab Civil Aviation Commission (ACAC) discussed, in April, a Draft Agreement on the Liberalization of the Exchange of Traffic Rights, proposing a phased approach ultimately leading to the full liberalization of the traffic rights among the member States of the ACAC.

Another significant development was the continued involvement of other organizations in air transport matters, most notably the World Trade Organization (WTO-OMC). In 2001, the WTO-OMC resumed its mandated review of the Annex on Air Transport Services of the General Agreements on Trade in Services (GATS) and adopted the guidelines, procedures and work programme for the negotiations on services, including a number of air transport and tourism proposals. Proposals for additions to the Annex on Air Transport Services submitted to the Council on Trade in Services (CTS) included multilateralization of first and second freedoms of the air; ground-handling services; airport management services; leasing or rental services of aircraft without operator; and services auxiliary to all modes of transport when delivered in an air transport context. With respect to the draft GATS Annex on Tourism, a new proposal was discussed at the CTS that envisages access to air transport infrastructure and related services on a non-discriminatory basis in addition to concerns for potential regulatory overlap on certain aspects of air transport. The CTS also addressed a request by ICAO to develop a Memorandum of Understanding (MoU) to strengthen cooperation between ICAO and the WTO-OMC and to help define their respective roles. ICAO actively participated in the ongoing review and attended several meetings of the CTS at which presentations were made, including providing clarification on the need for an MoU between ICAO and the WTO-OMC, as well as ICAO's concerns with respect to the proposed Annex on Tourism. In view of the lack of consensus on the development of the MoU, the subject was retained as a standing item on the agenda for a subsequent meeting so that the matter could be studied further. At the fourth Ministerial Conference of the WTO-OMC held in Doha, Qatar, from 9 to 14 November, objectives and timetables for the negotiations initiated in January 2000 were elaborated with a view to

promoting the economic growth of all trading partners and the development of developing and least-developed countries. It was also decided that Members of the WTO-OMC shall submit initial requests for specific commitments by 30 June 2002 and initial offers by 31 March 2003.

The Organisation for Economic Co-operation and Development (OECD) continued its work on the liberalization of air cargo transport by proposing a Protocol to existing air service agreements and a draft Multilateral Agreement.

At the national level, the Governments of Canada, Kenya, Philippines, and South Africa initiated a review process of overall air transport policy, which was considered necessary in light of the global trend toward increased liberalization. In August, the Government of Bangladesh allowed private carriers to operate in certain international markets. Also in August, the Government of Brazil removed price controls on all domestic routes following the deregulation of domestic fares on major routes in April. In March, the Government of Cyprus embarked on the liberalization of its regulation on air carrier licensing. In September, the Government of Ecuador authorized an increased access to the country's airports and removed price controls on cargo rates. In April, the Government of Poland announced that, effective 1 January 2004, it would open the air transport market completely.

Along with the liberalization activity, the use of competition laws in dealing with air transport has occurred with more frequency. However, one of the fundamental problems in dealing with anti-competitive behaviour is how to distinguish between anti- and normal competitive behaviours. In January, the United States Department of Transportation (DOT) announced that it would not publish competition guidelines as originally proposed in April 1998; instead, it would publish analyses and develop standards through a case-by-case approach. In May, a United States federal judge dismissed an antitrust lawsuit filed by the United States Department of Justice (DOJ) in May 1999 against American Airlines' alleged predatory activity. The DOJ decided to appeal the case in June.

Airline alliances, particularly those involving major carriers, continued to attract attention from regulatory authorities because of their potential effect on market access, competition and consumer interest, although regulatory treatment on them varied. In Europe, the European Commission

approved the joint venture agreement between BMI British Midland, Lufthansa and SAS for a period of 6 years. In December, the Commission tentatively approved the cooperation agreement between Austrian Airlines and Lufthansa. In the United States, the DOT approved and granted antitrust immunity to cooperation agreements filed by United Airlines, Austrian Airlines, Lauda Air, Lufthansa and SAS in January; by United Airlines and Air New Zealand in April; and, by Continental Airlines and COPA Airlines in May. In addition, the DOT reviewed 4 agreements; 1 agreement, which had been dismissed by the DOT in July 1999, was re-submitted by American Airlines and British Airways in August, with both carriers requesting that antitrust immunity become effective upon achievement of an open skies agreement between the United Kingdom and the United States.

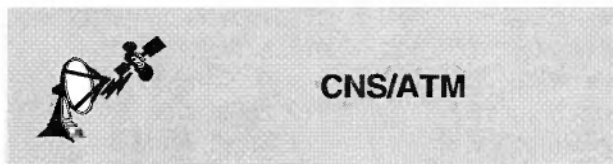
Industry consolidation was one of the principal issues in 2001. In the Asia and the Pacific Region, the Australian Competition and Consumer Commission (ACCC) authorized the proposed acquisition of Hazelton Airlines by Ansett in March and Impulse by Qantas in May after the carriers agreed to significant undertakings. The Civil Aviation Administration of China (CAAC) completed its consolidation plan in June, under which the 10 former CAAC-affiliated airlines would be restructured into 3 groups headed by Air China, China Eastern Airlines and China Southern Airlines. Japan Airlines and Japan Air System announced in November that the 2 companies would merge under a holding company created jointly by them. In Europe, competition authorities approved the proposed acquisition of British Regional Airlines Group by British Airways in April, Eurowings by Lufthansa in September, and Braathens by SAS in October. The Russian authorities approved Sibir's takeover of Vnukovo Airlines in February. In Latin America, the proposed merger of Avianca and Aces was approved by the Colombian civil aviation agency. In North America, the Canadian Competition Bureau cleared Canada 3000's takeover of Royal Aviation in March and CanJet in May, respectively. American Airlines' buyout of the bankrupt TransWorld Airlines was approved by the United States Circuit Court of Appeals in April. Following the DOJ's decision in July that it would take legal action to block the merger of United Airlines and US Airways, proposed in May 2000, both carriers formally abandoned their merger plan.

The issue of State aids re-emerged, with a number of States taking action in response to the impact of the events of 11 September in the United States. A number of countries, foremost amongst them the United States, provided direct or indirect financial assistance to their air transport industries. Such assistance included not only monetary disbursements to compensate air carriers, service providers and some ancillary services for the losses incurred owing to the closure of airports and airspace immediately following the 11 September events, but also indirect support in terms of loan guarantees, liability protection and insurance coverage, restructuring of loans on low interest rates, optimization of taxation, extension of unemployment and health insurance coverage, grants for retraining, bridging loans to avoid immediate collapse, etc. The European Commission permitted Member States to provide liability insurance for their air carriers and to grant compensation, but only under strict and specified conditions.

The air transport industry was affected by the action taken by the insurance industry when, following the events of 11 September and after a 7-day notice, underwriters had cancelled the air carrier third-party liability and war risk insurance coverage globally effective 24 September. Immediately following this action, the President of the ICAO Council addressed a letter to all ICAO Contracting States urging them to ensure that air transport services continue by providing the necessary re-insurance for their carriers at least until the market stabilized. While a number of governments had taken action to indemnify their carriers against such risk, it was pointed out that such action, taken mainly by the governments of developed countries, was also creating competitive distortions in the marketplace. Subsequent action of the insurance industry in providing third-party liability and risk coverage within specified parameters was considered not only too limited but also unaffordable by an industry already burdened with increasing costs. Further, it still left another layer of essential coverage that would need to be addressed.

The economic slowdown had a significant impact on airlines' financial strength. The situation was exacerbated by the events of 11 September. In Africa, the 11 African States concerned decided, in August, to liquidate Air Afrique and set up a new carrier with the financial backing of Air France. In the Asia and the Pacific Region, Ansett was

grounded in September after unsuccessful rescue efforts by its parent company Air New Zealand, which also faced the financial problems but received a rescue package from the government in October. In Europe, the Swissair Group applied for protection from its creditors in October. The Swiss government provided Swissair with an emergency loan to keep flying and subsequently agreed to create a new national airline. Sabena, a minority share of which is owned by Swissair, was forced to suspend all flights and file for liquidation in November. In Latin America, Aerolíneas Argentinas filed for bankruptcy protection in June; Spanish State holding company, SEPI, sold its majority stake in the carrier to Marsans Group in November. In North America, Midway Airlines stopped operations in September. Canada 3000 was declared bankrupt and grounded all flights in November.



Planning and implementation of communications, navigation, surveillance/air traffic management (CNS/ATM) systems continued in 2001 through the individual and combined efforts of Contracting States and the work of several Planning and Implementation Regional Groups (PIRGs). Following the initiative taken by the CAR/SAM/3 RAN meeting in October 1999, specific CNS/ATM system elements and implementation plans continued to be integrated into regional air navigation plans. Since the acceptance of the first edition of the *Global Air Navigation Plan for CNS/ATM Systems* (Global Plan) (Doc 9750) by the Council in 1998, the Secretariat, the Committee on Aviation Environmental Protection (CAEP), several panels of the Air Navigation Commission, and the PIRGs have recognized the increasing utility of the Global Plan in their work. The first amendment to the Global Plan was therefore developed by the Secretariat, taking into account the most recent work of the above-mentioned bodies. The amendment was accepted by the Council in June. Since the first edition of the Global Plan, the PIRGs have made significant progress towards identifying homogeneous ATM areas and



major traffic flows and towards identifying the CNS/ATM requirements of those areas based on the guidance provided in the Global Plan. Part II of the Global Plan was updated to reflect the progress achieved by PIRGs. Additionally, significant efforts were made to conduct cost-benefit analyses in order to facilitate the implementation of new systems.

Substantial progress was made in all Regions toward the implementation of reduced separation minima based on CNS/ATM systems and concepts. In several parts of the Pacific Region, the implementation of required navigation performance (RNP) 10 formed the basis for a reduction of separation minima to 50 nautical miles both longitudinally and laterally. RNP 10 was also implemented in the South Atlantic corridor connecting Europe and South America. Initial steps continued to be taken to implement similar reductions in the African, Caribbean, Latin American and South American Regions. RNP 5 airspace was implemented in parts of the Middle East Region. RNP 5, in conjunction with area navigation (RNAV), allowed States and aircraft operators in the European Region to take advantage of airborne RNAV capabilities within the coverage of existing VOR-based systems. Work continued on the introduction of reduced vertical separation minima (RVSM) in the European Region where it is planned for implementation in January 2002. RVSM was successfully implemented in parts of the Pacific Region and is planned for implementation in the South Atlantic corridor in 2002.

Programmes to implement controller-pilot data link communications (CPDLC), and the ATS message handling system (AMHS) commenced in some ICAO Regions. Also, the automatic dependent surveillance (ADS) trials currently being conducted, together with extensive work on the development of ADS procedures aimed at using ADS for separation purposes, should lead to the application of ADS in oceanic airspace for conformance monitoring and separation purposes. These developments should eventually lead to a more efficient utilization of the airspace while increasing capacity.

### Communications

Standards and Recommended Practices (SARPs) for VDL Mode 3 (integrated voice/data) and VDL

Mode 4 (data link for surveillance applications) became applicable in November 2000. These systems provide for the introduction of digitized voice and enhanced air-ground data communications. VDL Mode 4 was standardized to satisfy surveillance requirements, specifically those for automatic dependent surveillance (ADS) (ADS-contract and ADS-broadcast). Both data links are ATN compatible. Activities on the identification of future enhancements, including assessment of the need for standardization of possible new systems, such as the universal access transceiver (UAT), continued during 2001.

### Navigation

Progress continued in a number of States and international organizations on the development and implementation of global navigation satellite systems (GNSS). The first package of SARPs for GNSS was included in Annex 10, Volume I, and became applicable on 1 November.

Development of satellite-based augmentation systems (SBAS) continued. This form of augmentation is expected to support the use of GNSS for all phases of flight down to Category I precision approach. Ground-based augmentation systems (GBAS), which support Category I operations and have the potential to support Category II/III precision approach applications, also continued to be developed and tested. The latter type of augmentation, with enhancements enabling GBAS positioning service, may be used by some States in support of RNAV operations in terminal areas. A number of States approved the global positioning system (GPS) for supplemental or primary use for some operations and types of airspace.

Implementation of GNSS (mainly GPS) based non-precision approach application (NPA) continued in ICAO regions. These activities were supported by the development of procedures and criteria for approaches with vertical guidance (APV) and Category I operations based on SBAS and GBAS.

### Surveillance

Progress continued during the year on the improvement of surveillance capabilities. This included the further development of the airborne separation assurance system (ASAS) and

automatic dependent surveillance-broadcast (ADS-B) concepts. Discussions continued for the selection of a radio frequency (RF) link for ADS-B. Work was completed on the development of proposed amendments to Annex 10, *Aeronautical Telecommunications*, SARPs for SSR Mode S, the Mode S subnetwork of the aeronautical telecommunication network (ATN) and airborne collision avoidance systems (ACAS II), in order to facilitate the timely implementation of those systems by Contracting States. Plans for implementation of surveillance facilities, including SSR Mode S, ACAS and ADS, were developed in most Regions.

### **Air Traffic Management**

As part of the evolutionary process leading to the implementation of a seamless global air traffic management (ATM) system, air traffic control (ATC) systems around the world continued to be updated with modern equipment capable of supporting advanced ATM concepts.

Progress was made in the development of airspace planning and ATM infrastructure requirements in line with the ICAO Global Plan. Several PIRGs developed ATM implementation plans with associated timelines and evolution tables.

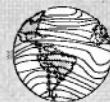
Several concepts for the operation of ATM systems were advanced. The United States progressed work on its "National Airspace System Concept" of operations which encompasses its "Free Flight" concept and several automation capabilities, including conflict resolution and metering software. The ICAO Air Traffic Management Operational Concept Panel (ATMCP) made significant progress in its work toward describing a gate-to-gate ATM operational concept, which will facilitate the evolutionary implementation of a seamless global ATM system. The concept is visionary in scope and is not limited to the present level of technology. Most importantly, the operational concept will lead to the realization of the benefits expected from CNS/ATM systems and will provide the basis for cost-benefit analyses associated with the introduction of ATM systems. A draft version of the operational concept is planned to be presented to the Air Navigation Commission in the second quarter of 2002.



### **AERODROMES**

The ICAO study on airport pavement design and evaluation procedures for analysing complex loading by new larger aeroplanes with 6 or more wheels per main building gear strut (e.g. B777) was progressed. The full-scale pavement testing research projects in 2 States also progressed.

The growing trend towards autonomy in the provision of airports has safety implications. As a result, States need to ensure that appropriate legislation and safety regulations are in place. In this context, Amendment 4 to Annex 14, *Aerodromes*, Volume I, which introduced a new requirement for aerodromes to be certified by States, is both timely and appropriate. A new manual on the certification of aerodromes was published to assist States in meeting their obligations under the *Convention on International Civil Aviation*. This new amendment also includes improved specifications on rescue and fire fighting, particularly on rescue in water and difficult terrain, and emergency response times within the airport boundary.



### **AERONAUTICAL METEOROLOGY**

An increasing use of improved automatic weather observing systems for general meteorological observations in States has prompted requests for a review by ICAO of the role of these systems in the provision of observations for aviation. The use of meteorological information to support measures being taken to increase airport capacity is being studied by States, in particular in the European Region. In this context, the development of a new meteorological report is being examined. Renewed interest has been shown in a number of States in conducting research on improving the quality and timeliness of forecasts of icing and turbulence.

Progress continued in the computer preparation of global forecasts of significant weather (SIGWX) by the world area forecast

centres (WAFCs). As a result, high-level SIGWX charts for global coverage were prepared by means of interactive computer workstations by the WAFCs. Very small aperture terminals to receive data and products from the 3 ICAO satellite broadcasts were installed in more than 140 States. These broadcasts provide global WAFS data, products and operational meteorological (OPMET) information, such as METARs, TAFs and SIGMETs, directly to States. The implementation of the satellite broadcasts and the provision of SIGWX forecasts by the WAFCs have permitted the closure of 10 of the 15 regional area forecast centres (RAFCs), and transition plans for the phased transfer of responsibilities from the remaining RAFCs to the WAFCs were implemented in the Regions concerned.

Work continued in States responsible for Volcanic Ash Advisory Centres (VAACs) to develop and issue graphical volcanic ash advisories for provision to area control centres and meteorological watch offices.



## SEARCH AND RESCUE

The COSPAS-SARSAT alert and detection system was improved. The existing low altitude earth orbiting (LEOSAR) constellation of satellites was complemented with 3 geostationary (GEOSAR) satellites (plus 1 spare) providing almost immediate distress alerts for 406 MHz beacons transmitting in their field of view. To take full advantage of these GEOSAR alerting facilities, some 406 MHz beacons now in production have a built-in satellite navigation receiver or an interface for external navigation data input and are capable of transmitting position data in the 406 MHz digital message. A benefit of 406 MHz emergency locator transmitter (ELT) usage is that, while there is an incidence of false alerts, it is at a much lower rate than occurs on 121.5 MHz. The source of false alerts on 406 MHz is solely the ELTs themselves, as distinct from the false alerts on 121.5 MHz which originate from a variety of interfering sources.

From September 1982 to December 2000, the COSPAS-SARSAT system has contributed to the rescue of more than 12 747 persons in aeronautical,

maritime and terrestrial incidents. The International COSPAS-SARSAT Programme Agreement between Canada, France, the former Union of Soviet Socialist Republics and the United States was signed in Paris on 1 July 1988 and entered into force on 30 August 1988. It allows for the use of the system by all States on a long-term, non-discriminatory basis. States which are not Party to the Agreement can participate in the system either as user-States or ground segment providers. The Secretary General of ICAO is one of the Depositaries of the Agreement.



## CONGESTION

Increasing airspace congestion continued to affect operations in many areas of the world, as traffic increased more rapidly than airport and airspace capacity. The implementation of CNS/ATM systems is expected to substantially contribute to reduce airspace congestion on a worldwide basis.

The third meeting of ICAO's Facilitation Panel recommended a comprehensive amendment to Annex 9, *Facilitation*, that will help prevent or alleviate groundside congestion at airports. The updated SARPs, particularly in Chapter 3 (travel documents and departure and entry provisions for passengers) and Chapter 4 (cargo entry and departures), reflect modern concepts such as the optimal use of automated information systems and risk management in border control systems. Work continued on the refinement of the specifications for machine readable travel documents to promote global interoperability of passenger inspection systems at airports, which in turn are aimed at processing high traffic volumes at peak periods.



## SAFETY

The aircraft accidents covered under the heading "Safety" exclude incidents caused by acts of unlawful interference, which are shown under the section on Security.

### Scheduled Operations

Preliminary information on aircraft accidents involving passenger fatalities in scheduled air services worldwide shows that in 2001 there were 13 aircraft accidents with passenger fatalities involving aircraft with a certificated maximum take-off mass of more than 2 250 kg. The number of passenger fatalities involved was 577. This compares with 18 fatal accidents and 757 passenger fatalities in 2000 (Table 11). Despite the lower passenger traffic volume carried in 2001, due to the lower number of fatalities the number of passenger fatalities per 100 million passenger-kilometres decreased to 0.02 from 0.025 in 2000. Similarly, the number of fatal aircraft accidents per 100 million aircraft-kilometres flown decreased to 0.05 from 0.07 in 2000 and the number of fatal aircraft accidents per 100 000 landings decreased to 0.06 from 0.09 in 2000 (Figure 8).

The safety levels are significantly different for the various types of aircraft operated on scheduled passenger services. For instance, in turbojet aircraft operations, which account for about 98 per cent of the total volume of scheduled traffic (in terms of passenger-kilometres performed), there were 5 accidents in 2001 with 513 passenger fatalities; in turboprop and piston-engined aircraft operations, which account for about 2 per cent of the scheduled traffic volume, there were 8 accidents with 64 passenger fatalities. The fatality rate for turbojet aircraft operations was, therefore, far lower than for propeller-driven aircraft.

### Non-scheduled Commercial Operations

Non-scheduled commercial operations include both the non-scheduled flights of scheduled airlines and all air transport flights of non-scheduled commercial operators. Data available to ICAO on the safety of non-scheduled passenger operations show that there were 29 fatal accidents involving aircraft with a maximum certificated take-off mass of more than 2 250 kg in 2001 (including 5 involving aircraft operating all-cargo services with passengers on board) compared with 21 in 2000. These accidents accounted for 204 passenger fatalities in 2001 compared with 290 in 2000.

In non-scheduled operations performed with aircraft of more than 9 000 kg take-off mass, whether by scheduled airlines or non-scheduled operators, there were 13 fatal accidents with 118 passenger fatalities in 2001.

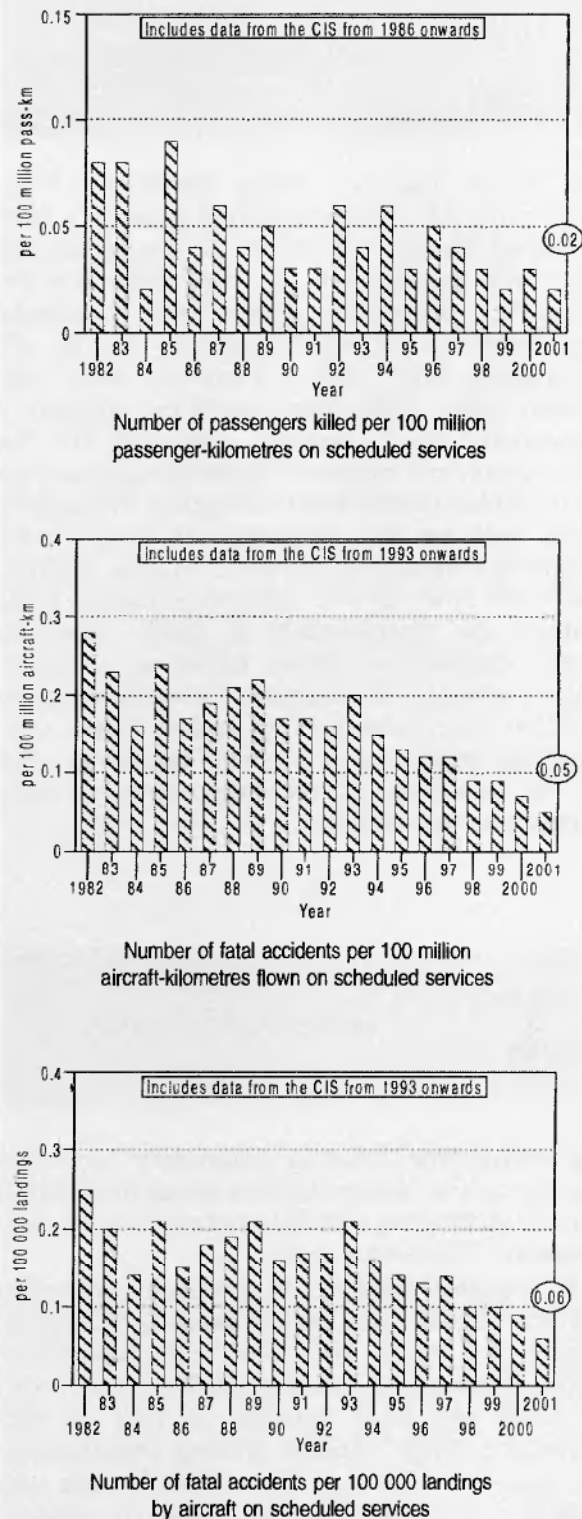
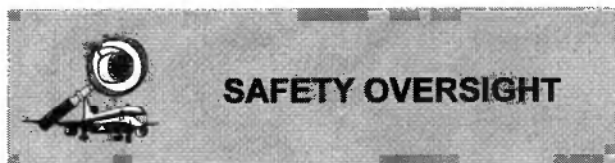


Figure 8. Aircraft accident statistics  
1982-2001



The ICAO Universal Safety Oversight Audit Programme (USOAP), established in January 1999, continued its audit activities. A comprehensive report was presented to the 33rd Session of the Assembly, which recognized the successful implementation of the Programme. In all, 178 Contracting States and 5 territories have been audited since 1999. The Assembly adopted 2 Resolutions which provide, *inter alia*, for the continuation and expansion of the Programme, for the resolution of deficiencies identified through the audits and for the establishment of a quality assurance function for safety oversight projects. The Audit Findings and Differences Database has enabled the identification of safety oversight related deficiencies. Thirty follow-up missions, with the objective of validating the implementation of action plans submitted by audited States, were completed by the end of the year. Preparatory work for the expansion of the Programme to other technical fields continued.

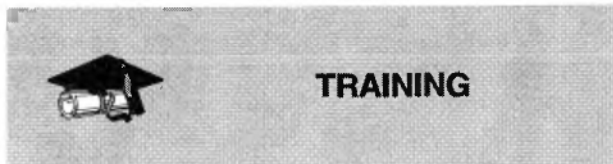


The international aviation community continued to focus on the Human Factors issues involved in runway incursions, with international events held in various Contracting States.

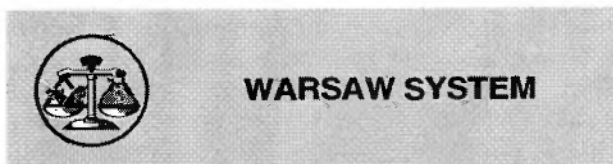
A Regional Seminar on Accident Prevention and Investigation was held in Santa Cruz, Bolivia, from 2 to 6 April. The event was attended by representatives from Contracting States from both the CAR and SAM Regions, as well by representatives from industry, training organizations and academia. One full day of the Seminar was dedicated to Human Factors issues in accident prevention and investigation.

An ICAO regional seminar on the Line Operations Safety Audit (LOSA) was held in Panama from 27 to 29 November. LOSA is an

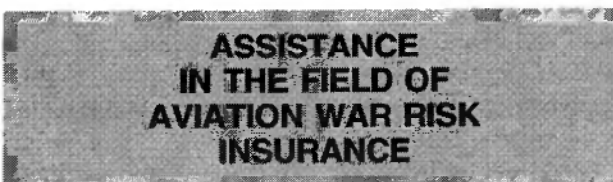
emerging methodology to collect safety information by routine monitoring of normal airline operations.



Four Standardized Training Packages (STPs) designed to provide skills and knowledge needed by Government Safety Inspectors were developed through a cooperative effort between the United States Federal Aviation Administration (FAA) and ICAO. Nine civil aviation training centres were assessed to determine whether they meet the requirements to provide ICAO-endorsed government safety inspectors training on an international basis using the STPs.



By the end of 2001, the Convention for the Unification of Certain Rules for International Carriage by Air, done at Montreal on 28 May 1999, had been signed by 70 States and 1 Regional Economic Integration Organization (the European Community), and had been ratified by 12 States. The Convention requires 30 ratifications to enter into force.



Following the tragic events of 11 September in the United States, the 33rd Session of the Assembly adopted Resolution A33-20: *Coordinated Approach*



in *Providing Assistance in the Field of Aviation War Risk Insurance*. The Assembly urged Contracting States to work together to develop a more enduring and coordinated approach to this important and urgent problem, and directed the ICAO Council to establish a Special Group, with the mandate to report back to the Council with recommendations as soon as possible. Thereafter, the Council of ICAO, during the first meeting of its 164th Session on 22 October, decided to establish such a Special Group on Aviation War Risk Insurance (SGWI).

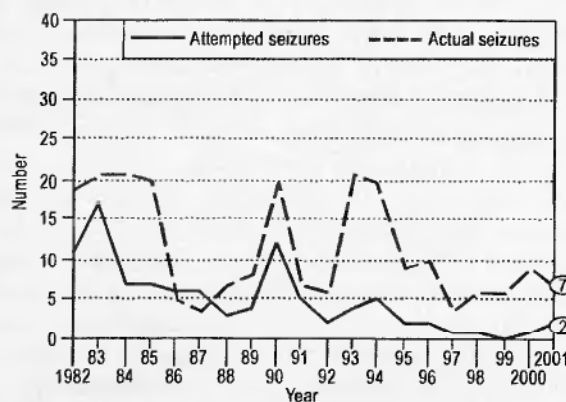
The Special Group held 2 meetings: SGWI/1 (Montreal, 6 to 7 December 2001) and SGWI/2 (Montreal, 28 to 30 January 2002).

As a long-term solution, SGWI recommended that an international convention be developed which would limit the third-party liability of the aviation industry for losses arising from war, hijacking and related perils.

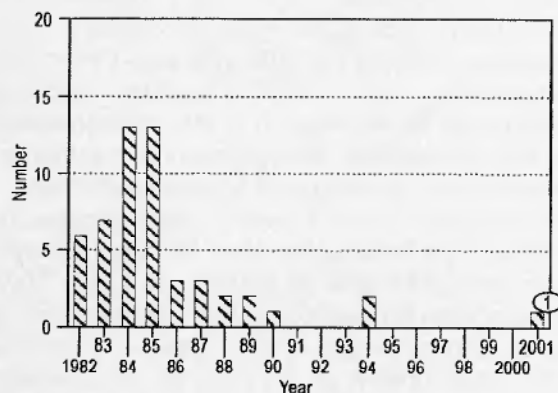
For the short- and medium-term, SGWI recommended the setting up of an international mechanism which would provide aviation war risk coverage with multilateral government backing for the initial years. Pending a decision by the Council in this latter respect, the President of the Council appealed to all Contracting States of ICAO by State Letters dated 21 September, 25 October, 14 December 2001 and 18 March 2002, to cover the risks left open by these developments until the insurance markets stabilize. The States responded positively to the appeal of the President.



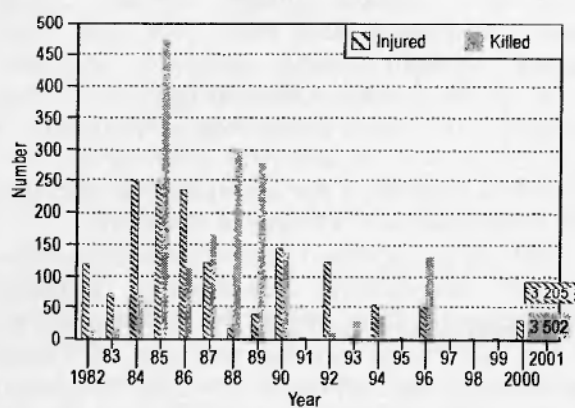
During the reporting period, 21 acts of unlawful interference were recorded. These acts were 7 unlawful seizures, including 4 simultaneous hijackings committed in the United States on 11 September using civil aircraft as weapons of destruction, 2 attempted seizures, 4 facility attacks, 4 attempted facility attacks, 2 in-flight attacks, 1 attempted in-flight attack and 1 attempted sabotage (Table 12). These acts are included in the annual statistics to assist in the analysis of trends and developments (Figure 9).



Acts of unlawful seizure



Incidents of sabotage



Note.— Official reports received regarding the events of 11 September 2001 in the United States did not include the estimated number of deaths and injuries on the ground. Totals were current estimates obtained from media sources.

Number of persons killed or injured

Figure 9. Aviation security statistics  
1982-2001

Pursuant to Assembly Resolution A33-1 — *Declaration on misuse of civil aircraft as weapons of destruction and other terrorist acts involving civil aviation*, the Council agreed to convene, at ICAO Headquarters, a High-level, Ministerial Conference on Aviation Security from 19 to 20 February 2002 with the objectives of preventing, combating and eradicating acts of terrorism involving civil aviation; strengthening of ICAO's role in the adoption of security-related Standards and Recommended Practices (SARPs) and procedures and the audit of their implementation; and ensuring the necessary financial means for urgent actions by ICAO in the field of aviation security.

Resolution A33-1 directed the Council and the Secretary General to review the ICAO aviation security programme and to consider the establishment of an ICAO Aviation Security Audit Programme relating to, *inter alia*, airport security arrangements and civil aviation security programmes. In this regard, it was recommended that the Mechanism should become permanent and mandatory involving all Contracting States.

Amendment 10 to Annex 17 was adopted by the Council on 7 December; it will become effective on 15 April 2002 and applicable on 1 July 2002. This amendment includes the introduction of various definitions and new provisions in relation to the applicability of this Annex to domestic operations, international cooperation relating to threat information, National Aviation Security Committees, national quality control, access control, passengers and their cabin and hold baggage, in-flight security personnel and protection of the cockpit, code-sharing/collaborative arrangements, human factors, and management of response to acts of unlawful interference. The status of a number of specifications was changed from Recommended Practices to Standards.

The Council approved a recommendation made by the International Explosives Technical Commission (IETC) to amend the Technical Annex to the Convention on the Marking of Plastic Explosives for the Purpose of Detection by deletion of ortho-Mononitrotoluene (o-MNT) from the list of detection agents. In accordance with the Council decision, a letter was sent to States parties to the Convention, proposing the amendment pursuant to Article VI, paragraph 4 of the Convention. In accordance with Article VII, paragraph 3 of the Convention, the amendment was adopted on 27 September and will enter into force on 27 March 2002.



## ENVIRONMENTAL PROTECTION

Three major events were held in ICAO during 2001. ICAO's Committee on Aviation Environmental Protection met in January (CAEP/5) and made recommendations to the ICAO Council on both noise and engine emissions. A Colloquium on Environmental Aspects of Aviation was held in April, the principal objectives being to enhance States' awareness of the environmental problems associated with civil aviation, to exchange views on these problems, and to familiarize States with the work of CAEP/5 in preparation for discussion of environmental issues at the 33rd Session of the Assembly. In October, the Assembly reviewed the *Consolidated statement of continuing ICAO policies and practices related to environmental protection* adopted in 1998 (Resolution A32-8) in the light of developments during the past triennium and adopted a substantially revised version (Resolution A33-7).

In June, the Council adopted a new, more stringent noise Standard for jet and large propeller-driven aeroplanes (Annex 16, Environmental Protection, Volume I, Chapter 4) for applicability on 1 January 2006, as well as increased noise stringency limits for helicopters and new provisions relating to re-certification. In October, the Assembly (Resolution A33-7) endorsed the concept of a balanced approach to aircraft noise management developed by CAEP, consisting of 4 principal elements, namely, noise reduction at source (quieter aircraft), land-use planning and management around airports, noise abatement operational procedures, and operating restrictions. The Assembly also resolved the difficult question of operating restrictions on the noisiest Chapter 3 aircraft in that States needing to introduce such restrictions at airports with severe noise problems now have guidance on the process to be followed.

On 14 March 2000, the United States submitted an Application and Memorial pursuant to Article 84 of the *Convention on International Civil Aviation* and the Rules for the Settlement of Differences, seeking a decision by the ICAO Council on a disagreement with 15 European States relating to Regulation (EC) No. 925/1999 ("Hushkits"). During the year, negotiations between the Parties continued, with the President of the Council providing his good offices as

Conciliator. The Parties were able to reach a consensus on the proposed principles of settlement, taking into account Assembly Resolution A33-7, in particular Appendices C, D and E, adopted on 5 October by consensus at the 33rd Session of the Assembly. The Parties expressed satisfaction with this new multilateral framework which they felt represented a significant step toward settlement of the Article 84 dispute between the Parties.

Concerning engine emissions, as requested by the Assembly in 1998, CAEP placed particular emphasis on developing policy options to limit or reduce greenhouse gas emissions from civil aviation. In doing so, it took into account the Special Report on Aviation and the Global Atmosphere prepared by the Intergovernmental Panel on Climate Change and the requirements of the Kyoto Protocol. This work included monitoring advances in technology and exploring the further development of Annex 16 to specifically address emissions of global concern; and developing guidance material on operational measures to reduce emissions as well as a methodology for assessing the environmental benefits of the implementation of CNS/ATM systems. This work also included analysing the potential role of market-based measures, such as emissions trading, emissions-related levies (charges or taxes), and voluntary agreements. In October, the Assembly (Resolution A33-7) requested the Council to continue to develop guidance for States on the application of market-based measures and to develop concrete proposals and provide advice as soon as possible to the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC).

Following the adoption in December 1997 of the Kyoto Protocol to the UNFCCC, in November the Conference of the Parties to the UNFCCC put in place the institutions and detailed procedures of the Protocol, including emissions trading, which could be of relevance to aviation. This is expected to expedite the process of ratifying the Kyoto Protocol. In order for this Protocol to enter into force, it must be ratified by 55 Parties to the Convention, including sufficient Annex I Parties (industrialized countries) to ensure coverage of countries responsible for greenhouse gas emissions. At the end of 2001, of the 46 countries which had ratified the Protocol, there were only 2 Annex I Parties.



## SMOKING RESTRICTIONS

Complete smoking bans are in place by all passenger carriers in Australia, New Zealand, the Nordic countries and North America, while a large majority of all flights in Asia, Europe and the Middle East are also smoke-free. Implementation of Assembly Resolution A29-15 — *Smoking restrictions on international passenger flights*, continues.



## TECHNICAL CO-OPERATION

The ICAO Technical Co-operation Programme for 2001 was valued at \$130.6 million, of which \$100.7 million (or 77 per cent) was implemented.

During the year, the Technical Co-operation Bureau (TCB) executed 125 projects in 88 developing countries and a total of 15 new and revised large-scale projects were approved. The TCB employed 411 experts from 35 countries to work in its field projects. A total of 583 fellowships were awarded and procurement expenditures for field projects totalled \$85.8 million.

The Government of Singapore and ICAO have jointly established an ICAO-Singapore Developing Country Training Programme. Under this programme, which is sponsored by the Singapore Cooperation Programme, administered by ICAO's Technical Co-operation Bureau and conducted by the Singapore Aviation Academy, a total of 100 training awards, the cost of which is estimated at \$600 000, will be provided from 2001 to 2003 in the areas of safety oversight, safety oversight airworthiness inspection and CNS/ATM (including latest developments in GNSS). In addition, and through scholarships provided by the Czech Republic, ICAO provided training for 41 fellows in the area of air navigation services at the training centre in Prague. This scholarship programme has been operative since 1997 under which 120 fellows from 14 countries in the European Region have received training. At the end of 2001, the total cost of this programme was \$588 982.

## THE ORGANIZATION

- ★ *The 33rd Session of the Assembly, held in September/October, had a record 1 130 participants from 169 Contracting States and observers from 32 international organizations. The Assembly, taking place shortly after the events of 11 September in the United States, adopted a Resolution strongly condemning the misuse of civil aircraft as weapons of destruction and calling for strengthened programmes of aviation security measures by States and ICAO. The Assembly also produced a breakthrough on aircraft noise issues as part of a comprehensive resolution on environmental protection and addressed a wide range of other subjects in the fields of air navigation, safety, economics, legal matters, technical cooperation policy, and increasing the effectiveness of ICAO. The Assembly endorsed the concept of an International Financial Facility for Aviation Safety (IFFAS) with the objective of financing safety-related projects for which States cannot otherwise provide or obtain the necessary financial resources. The Assembly elected a new Council for a 3-year term and adopted a programme budget for 2002-2003-2004.*
- ★ *Following a request of the Assembly, the Council decided in November to convene a High-level, Ministerial Conference on Aviation Security from 19 to 20 February 2002, at ICAO Headquarters.*
- ★ *In January, Yugoslavia adhered to the Convention on International Civil Aviation, followed in February by Andorra, bringing the total number of Contracting States to 187.*
- ★ *Also in January, a formal agreement was reached on a new air route structure over the North Pole, which will considerably cut distances on flights linking North America and Europe to the Asia and the Pacific Region. This structure became operational on 1 February 2001.*
- ★ *In August, the President of the Council, Dr. Assad Kotaite, and the Minister for Communications and Information Technology of Singapore, Mr. Yeo Cheow Ton, signed a Memorandum of Understanding on a joint ICAO-Singapore Developing Country Training Programme.*
- ★ *In September, the Council conferred the 35th Edward Warner Award, the highest honour in the world of civil aviation, on Petro Vasilyevich Balabuyev (Ukraine), in recognition of his lifetime achievements as an aircraft designer.*
- ★ *A Diplomatic Conference convened in Cape Town from 29 October to 16 November under the joint auspices of ICAO and the International Institute for the Unification of Private Law (UNIDROIT), and adopted the Convention on International Interests in Mobile Equipment and the Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Aircraft Equipment. The new instruments set up a system of rules designed to facilitate asset-based financing and leasing of aircraft and enhance the availability of credit to air carriers at a lower cost.*
- ★ *In November, the Council elected by acclamation Dr. Assad Kotaite (Lebanon) as its President, for a tenth consecutive term.*
- ★ *International Civil Aviation Day, celebrated annually to mark the creation of ICAO on 7 December 1944, had, as its theme, "Flight Between Nations — Dialogue Between Peoples".*