

COLLOQUIUM ON ENVIRONMENTAL ASPECTS OF AVIATION

(Montreal, 9 - 11 April 2001)

BACKGROUND INFORMATION PAPER

ASSEMBLY RESOLUTION A32-8 **Consolidated statement of continuing ICAO policies and practices** **related to environmental protection**

(Presented by the Secretariat)

SUMMARY

In 1995, the Assembly decided to consolidate Assembly resolutions on ICAO's policies and practices related to environmental protection into one single resolution.

This background information paper contains the latest version, Resolution A32-8, which was adopted by the 32nd Session of the Assembly in 1998.

Parts of this Resolution that are likely to be referred to during the Colloquium include:

Appendix D - **Possible operating restrictions on subsonic jet aircraft which exceed the noise levels in Volume I, Chapter 3 of Annex 16**

Appendix F - **Environmental impact of civil aviation on the upper atmosphere**

Appendix H - **Environmental charges and taxes.**

Pursuant to the results of CAEP/5 and other developments, the Council will be considering some revisions to Resolution A32-8 for submission to the 33rd Session of the Assembly.

A32-8: Consolidated statement of continuing ICAO policies and practices related to environmental protection

Whereas it is considered desirable to consolidate Assembly resolutions on the Organization's policies and practices related to environmental protection in order to facilitate their implementation and practical application by making their text more readily available, clearly understandable and logically organized; and

Whereas in Resolution A31-11 the Assembly resolved to continue to adopt at each ordinary Session a consolidated statement of continuing ICAO policies and practices related to environmental protection;

The Assembly:

1. *Resolves* that the Appendices attached to this resolution constitute the consolidated statement of continuing ICAO policies and practices related to environmental protection, up to date as these policies exist at the close of the 32nd Session of the Assembly;
2. *Requests* the Council to submit at each ordinary session of the Assembly for review a consolidated statement of continuing ICAO policies and practices related to environmental protection; and
3. *Declares* that this resolution supersedes Resolution A31-11.

APPENDIX A**General policy**

Whereas the preamble to the *Convention on International Civil Aviation* states that “the future development of international civil aviation can greatly help to create and preserve friendship and understanding among the nations and peoples of the world...” and Article 44 of that Convention states that ICAO should “develop the principles and techniques of international air navigation and ... foster the planning and development of international air transport so as to ... meet the needs of the peoples of the world for safe, regular, efficient and economical air transport”;

Whereas many of the adverse environmental effects of civil aviation activity can be reduced by the application of integrated measures embracing technological improvements, appropriate operating procedures, proper organization of air traffic and the appropriate use of airport planning and land-use control mechanisms;

Whereas other international organizations are becoming involved in activities relating to environmental policies affecting air transport;

Whereas in fulfilling its role, ICAO strives to achieve a balance between the benefit accruing to the world community through civil aviation and the harm caused to the environment in certain areas through the progressive advancement of civil aviation;

Whereas ICAO envisages co-operation with other international organizations, as necessary, including possible participation in projects financed by the United Nations Environment Fund;

The Assembly:

1. *Declares* that ICAO is conscious of and will continue to take into account the adverse environmental impacts that may be related to civil aviation activity and its responsibility and that of its Contracting States to achieve maximum compatibility between the safe and orderly development of civil aviation and the quality of the environment;
2. *Requests* the Council to continue to pursue all aviation matters related to the environment and also maintain the initiative in developing policy guidance on these matters, and not leave such initiatives to other organizations;
3. *Invites* States to continue their active support for ICAO's environment-related activities on all appropriate occasions;
4. *Authorizes* the Council, if and when it deems this desirable to enter into co-operative arrangements with the United Nations Environment Programme for the execution of environmental projects financed by the United Nations Environment Fund; and
5. *Urges* States to refrain from unilateral environmental measures that would be harmful to the development of international civil aviation.

APPENDIX B

Development of Standards, Recommended Practices and Procedures and/or guidance material relating to the quality of the environment

Whereas the *Airport Master Planning Manual* published by ICAO states that in long-range planning for airports, including the expansion of existing airports, planners should assess their proposed plan's potential impact on the airport's environment;

Whereas the compatibility between the airport and its environment is one of the elements to be taken into account in long-term systems planning;

Whereas the problem of aircraft noise in the vicinity of many of the world's airports continues to arouse public concern and requires appropriate action;

Whereas the Council has adopted Annex 16, Volume I – *Aircraft Noise*, which comprises noise certification standards for future subsonic aircraft (except STOL/VTOL) and has notified Contracting States of this action;

Whereas the future development of aviation could increase and aggravate the problem of noise unless action is taken to alleviate the situation;

Whereas the environmental impact of aircraft engine emissions, while not fully understood, is a cause of concern;

Whereas the Council has adopted Annex 16, Volume II – *Aircraft Engine Emissions*, which comprises emissions certification standards for new aircraft engines and has notified States of this action;

Whereas the Council has established a Committee on Aviation Environmental Protection for the purpose of assisting in the further development of Standards, Recommended Practices and Procedures and/or guidance material on aircraft noise and aircraft engine emissions; and

Noting Resolution A32-14 (Appendix Q) on drawing the attention of aircraft manufacturers and operators to the need for future generations of aircraft to be designed so that they are capable of being operated efficiently, and with the least possible environmental disturbance, from aerodromes used for the operation of present-day jet aircraft;

The Assembly:

1. *Requests* the Council, with the assistance and co-operation of other bodies of the Organization and of other international organizations, to continue with vigour the work related to the development of Standards, Recommended Practices and Procedures and/or guidance material dealing with the impact of aviation on the environment;

2. *Requests* the Council to ensure that its Committee on Aviation Environmental Protection (CAEP) pursues its work programme in the noise and emissions fields expeditiously in order that appropriate solutions can be developed as quickly as possible;

3. *Urges* Contracting States from regions of the world that are currently not represented or under-represented in CAEP to participate in the Committee's work; and

4. *Urges* Contracting States to adopt, where appropriate, the ICAO provisions developed pursuant to Clause 1 of this Appendix.

APPENDIX C

National policy and programmes to alleviate the problems of aircraft noise

Whereas the severity of the aircraft noise problem in certain areas, including many busy international airports, has given rise to measures such as the imposition of airport curfews and has provoked stringent opposition to the expansion of existing airports or construction of new airports;

Whereas the development of national policies and programmes for the alleviation of aircraft noise in international civil aviation could give rise to a considerable divergency in schemes;

Whereas ICAO has accepted full responsibility for pursuing a course aimed at achieving maximum compatibility between the safe, economically effective and orderly development of civil aviation and the quality of the environment, and is aggressively pursuing a comprehensive programme to reduce aircraft noise at its source, to promote appropriate land-use planning and to develop effective airport noise abatement strategies; and

Noting the fourth resolving clause of Resolution A27-11 on the possible relaxation of operating restrictions for aircraft meeting the requirements of Chapter 3 of Annex 16;

The Assembly:

1. *Calls upon* all ICAO Contracting States and international organizations to recognize the leading role of ICAO in dealing with the problems of aircraft noise;
2. *Invites* States to keep the Council informed of their policies and programmes to alleviate the problem of aircraft noise in international civil aviation;
3. *Requests* Contracting States to work closely together to ensure the greatest harmonization of programmes, plans and policies; and
4. *Directs* the Council to continue to give vigorous attention to the resolution of this most complex problem.

APPENDIX D

Possible operating restrictions on subsonic jet aircraft which exceed the noise levels in Volume I, Chapter 3 of Annex 16

Whereas certification standards for subsonic jet aircraft noise levels are specified in Volume I, Chapter 2 and Chapter 3 of Annex 16;

Whereas environmental problems due to aircraft noise continue to exist in the neighbourhood of many international airports;

Whereas some States are consequently considering restrictions on the operations of aircraft which exceed the noise levels in Volume I, Chapter 3 of Annex 16;

Recognizing that the noise standards in Annex 16 were not intended to introduce operating restrictions on aircraft;

Recognizing that operating restrictions on existing aircraft would increase the costs of airlines and would impose a heavy economic burden, particularly on those airlines which do not have the financial resources to re-equip their fleets; and

Considering that resolution of problems due to aircraft noise must be based on the mutual recognition of the difficulties encountered by States and a balance among their different concerns;

The Assembly:

1. *Urges* States not to introduce any new operating restrictions on aircraft which exceed the noise levels in Volume I, Chapter 3 of Annex 16 before considering:
 - a) whether the normal attrition of existing fleets of such aircraft will provide the necessary protection of noise climates around their airports;
 - b) whether the necessary protection can be achieved by regulations preventing their operators from adding such aircraft to their fleets through either purchase, or lease/charter/interchange, or alternatively by incentives to accelerate fleet modernization;

- c) whether the necessary protection can be achieved through restrictions limited to airports and runways the use of which has been identified and declared by them as generating noise problems and limited to time periods when greater noise disturbance is caused; and
 - d) the implications of any restrictions for other States concerned, consulting these States and giving them reasonable notice of intention;
2. *Urges* States which, despite the considerations in Resolving Clause 1 above, decide to introduce restrictions on the operations of aircraft which comply with the noise certification standards in Volume I, Chapter 2 of Annex 16 but which exceed the noise levels in Volume I, Chapter 3 of Annex 16:
- a) to frame any restrictions so that Chapter 2 compliant aircraft of an individual operator which are presently operating to their territories may be withdrawn from these operations gradually over a period of not less than 7 years;
 - b) not to begin the above phase-in period for any restrictions before 1 April 1995;
 - c) not to restrict before the end of the phase-in period the operations of any aircraft less than 25 years after the date of issue of its first individual certificate of airworthiness;
 - d) not to restrict before the end of the phase-in period the operations of any presently existing wide-body aircraft or of any fitted with high by-pass ratio engines;
 - e) to apply any restrictions consistently with the non-discrimination principle in Article 15 of the Chicago Convention so as to give foreign operators at least as favourable treatment as their own operators at the same airports; and
 - f) to inform ICAO, as well as the other States concerned, of all restrictions imposed;
3. *Strongly encourages* States to continue to co-operate bilaterally, regionally and inter-regionally with a view to:
- a) alleviating the noise burden on communities around airports without imposing severe economic hardship on aircraft operators; and
 - b) taking into account the problems of operators of developing countries with regard to Chapter 2 aircraft presently on their register, where they cannot be replaced before the end of the phase-in period, provided that there is proof of a purchase order or leasing contract placed for a replacement Chapter 3 compliant aircraft and the first date of delivery of the aircraft has been accepted;
4. *Urges* States, if and when any new noise certification standards are introduced which are more stringent than those in Volume I, Chapter 3 of Annex 16, not to impose any operating restrictions on Chapter 3 compliant aircraft;
5. *Urges* the Council to promote and States to develop an integrated approach to the problem of aircraft noise, including land-use planning procedures around international airports, so that any residential, industrial or other land-use that might be adversely affected by aircraft noise is minimal; and

6. Further *urges* States to assist aircraft operators in their efforts to accelerate fleet modernization and thereby prevent obstacles and permit all States to have access to lease or purchase aircraft compliant with Chapter 3, including the provision of multilateral technical assistance where appropriate.

APPENDIX E

Local operating restrictions based upon aircraft noise and emissions characteristics

Whereas certification Standards for subsonic jet aircraft noise and engine emissions are specified in Volumes I and II of Annex 16;

Whereas these Standards were not intended to introduce operating restrictions on aircraft;

Whereas local operating restrictions are being developed and implemented based upon noise or emissions characteristics;

Recognizing that these largely independent restrictions go beyond the policy framework in Appendix D to this resolution and other relevant policy guidance developed by ICAO;

The Assembly urges States to ensure, wherever possible, that any local operating restrictions based upon aircraft noise or engine emissions characteristics be adopted only where such action is supported by a prior assessment of all possible adverse impacts.

APPENDIX F

Environmental impact of civil aviation on the upper atmosphere

Whereas there are growing concerns about environmental problems in the upper atmosphere such as global warming and depletion of the ozone layer;

Whereas the “Agenda 21” action plan adopted by the 1992 United Nations Conference on Environment and Development calls on governments, with the co-operation of relevant United Nations bodies, to address these problems;

Whereas the extent to which civil aviation contributes to these problems is still being ascertained and policy-making needs to be based on information which is as complete and accurate as possible;

Whereas, due to the multisectoral and global nature of these problems and the many scientific disciplines involved, it is necessary for ICAO to co-operate with other international organizations in defining civil aviation’s contribution to these problems;

Whereas ICAO is recognized as the primary international organization responsible for providing information on civil aviation operations world-wide and developing policy guidance on possible means of minimizing any undesirable effects of international civil aviation on the environment;

Whereas the Kyoto Protocol adopted by the Conference of the Parties to the United Nations Framework Convention on Climate Change in December 1997 calls for developed countries to pursue limitation or reduction of greenhouse gases from “aviation bunker fuels”, working through ICAO; and

Whereas Appendix A to this resolution requests the Council to maintain the initiative in developing policy guidance on all aviation matters related to the environment and not leave such initiatives to other organizations;

The Assembly:

1. *Requests* the Council to co-operate closely with other organizations involved in the definition of environmental problems in the upper atmosphere;

2. *Welcomes* the decision by the Intergovernmental Panel on Climate Change (IPCC), at ICAO’s request, to prepare a special report on Aviation and the Global Atmosphere, in collaboration with the Montreal Protocol’s Scientific Assessment Panel and with ICAO involvement;

3. *Requests* the Council to co-operate closely with other organizations involved in policy-making in this field, notably with the Conference of the Parties to the United Nations Framework Convention on Climate Change;

4. *Requests* the Council, through its Committee on Aviation Environmental Protection (CAEP), to study policy options to limit or reduce the greenhouse gas emissions from civil aviation, taking into account the findings of the IPCC special report and the requirements of the Kyoto Protocol, and to report to the next ordinary session of the Assembly; and

5. *Invites* Contracting States and international organizations to keep ICAO informed of developments in this field.

APPENDIX G

Supersonic aircraft — The problem of sonic boom

Whereas since the introduction of supersonic aircraft in commercial service action has been taken to avoid creating unacceptable situations for the public due to sonic boom, such as interference with sleep and injurious effects to persons and property on land and at sea caused by the magnification of the sonic boom; and

Whereas the States involved in the manufacture of such supersonic aircraft, as well as other States, continue to carry out research into the physical, physiological and sociological effects of sonic boom;

The Assembly:

1. *Reaffirms* the importance it attaches to ensuring that no unacceptable situation for the public is created by sonic boom from supersonic aircraft in commercial service;

2. *Instructs* the Council, in the light of the available information and availing itself of the appropriate machinery, to review the Annexes and other relevant documents, so as to ensure that they take due account of the problems which the operation of supersonic aircraft may create for the public and, in particular, as regards sonic boom, to take action to achieve international agreement on measurement of the sonic boom, the definition

in quantitative or qualitative terms of the expression “unacceptable situations for the public” and the establishment of the corresponding limits; and

3. *Invites* the States involved in the manufacture of supersonic aircraft to furnish ICAO in due course with proposals on the manner in which any specifications established by ICAO could be met.

APPENDIX H

Environmental charges and taxes

Whereas in recent years there has been increasing recognition by governments of the need for each economic sector to pay the full cost of the environmental damage it causes and the subject of environmental charges or taxes on air transport has been raised, for example, in the context of controlling greenhouse gas emissions;

Whereas ICAO policies make a distinction between a charge and a tax, in that they regard charges as levies to defray the costs of providing facilities and services for civil aviation, whereas taxes are levies to raise general national and local governmental revenues that are applied for non-aviation purposes;

Whereas Article 15 of the *Convention on International Civil Aviation* contains provisions regarding airport and similar charges, including the principle of non-discrimination, and ICAO has developed policy guidance for States regarding charges (*Statements by the Council to Contracting States on Charges for Airports and Air Navigation Services*, Doc 9082) including specific guidance on noise-related charges;

Whereas ICAO has developed separate policy guidance to States on taxation (*ICAO's Policies on Taxation in the Field of International Air Transport*, Doc 8632), which recommends *inter alia* the reciprocal exemption from all taxes levied on fuel taken on board by aircraft in connection with international air services, a policy implemented in practice through bilateral air services agreements, and also calls on States to the fullest practicable extent to reduce or eliminate taxes related to the sale or use of international air transport;

Welcoming the Council's adoption on 9 December 1996 of a policy statement of an interim nature in the form of a resolution, in order to make ICAO's position clear on emission-related charges and taxes, wherein the Council strongly recommends that any such levies be in the form of charges rather than taxes; and

Noting that the Council has received an initial report from its Committee on Aviation Environmental Protection (CAEP) on possible options regarding emission-related levies (charges or taxes) and has requested CAEP in its further work on this subject to focus on an en-route levy or a fuel levy to address global emissions, taking into account ICAO's policy regarding reciprocal exemption from taxation of aviation fuel, on an airport levy to address local emissions, and on other market-based options such as emissions trading;

The Assembly:

1. *Requests* the Council to:

- a) ensure that the guidance on noise-related charges contained in Doc 9082 is current and responsive to the requirements of States; and
- b) continue to pursue the question of emission-related levies with a view to reaching a conclusion prior to the next ordinary Session of the Assembly on the guidance to be given to States; and

2. *Urges* States to:

- a) follow the current guidance of the Council on both noise-related charges and emission-related levies;
- b) refrain from unilateral action to introduce emission-related levies inconsistent with the current interim guidance prior to completion of the work referred to in clause 1 b) above; and
- c) keep the Council informed of significant developments in this field.

— END —