

## COLLOQUIUM ON ENVIRONMENTAL ASPECTS OF AVIATION

(Montreal, 9 - 11 April 2001)

### Summary of the concluding remarks by Dr. Assad Kotaite, President of the Council

When the Council decided to convene this *Colloquium on the Environmental Aspects of Aviation*, it identified the **principal objectives** of the Colloquium:

- a) to enhance States' awareness of the environmental problems associated with civil aviation;
- b) to exchange views on these problems; and
- c) to familiarize States with the work of the Council's Committee on Aviation Environmental Protection, particularly the results of the CAEP/5 meeting in January.

The expectation was that this would help prepare States for a major discussion of environmental issues expected at the next Session of the ICAO Assembly, in September/October 2001. The Council also decided that there would be no formal recommendations or conclusions from the Colloquium.

We have heard some very informative presentations and witnessed some thoughtful exchanges of view. Over 200 participants have taken part from over 50 States and some 20 international organizations. Efforts will be made after the Colloquium to bring the Colloquium's documentation to the attention of those States that have been unable to participate, for example through the Web site and through the ICAO Journal. The Secretariat will make a brief report to the 163<sup>rd</sup> Session of the Council in the form of a working paper identifying the key issues for the Assembly and any other developments at the Colloquium that might be of relevance to the Council in preparing the Assembly's discussions on environmental matters.

Before looking ahead, it is always helpful to remind ourselves where we have already been. ICAO has been involved in environmental activities for some 30 years, starting in 1968 at the 16<sup>th</sup> Session of the ICAO Assembly in Buenos Aires and during all subsequent sessions of the ICAO Assembly.

ICAO participated in the first United Nations Conference on the Human Environment in Stockholm in June 1972 and submitted a paper entitled "The Role of Civil Aviation in the Relationship between Technological Advancement and the Human Environment". It was mentioned in this paper that the entire area of the effect of the aviation on the environment will be continuously watched by ICAO and new Standards, Recommended Practices and Procedures, and guidance material dealing with environmental matters will be provided as necessary". To this paper was attached Assembly Resolution A18-11 on the subject, adopted by the 18<sup>th</sup> Session of the ICAO Assembly in 1971 in Vienna, which "leaves no doubt that ICAO accepts its responsibility".

We have succeeded in establishing internationally accepted certification standards for both noise and emissions, and have kept them under review in the light of changing circumstances. We have also developed policies that meet the need of States worldwide, an important example being the policy developed in 1990 on a phase-out of Chapter 2 aircraft. These have all been built on a basis of worldwide consensus.

Our Colloquium commenced with a **keynote address**, which gave us the "Big Picture". Mr. Olivier Jalbert of the Secretariat of The Convention on Biological Diversity warned us that many world problems were getting worse and that environmental pressures are likely to grow. While he was not specifically addressing aviation, some of the points that he made were recognisable in an aviation context:

- ! The importance of the "precautionary principle".

- ! Progress is easier, when a problem is equally shared amongst States.
- ! It is difficult to make progress when the science is unclear.
- ! It is difficult to attract the attention of States to what he called “evolutionary” problems.

### **Aircraft Noise**

Most of the first two days were devoted to aircraft noise. I noted a number of common themes amongst the presentations and the panel discussion:

- ! There was a general recognition of the need to address aircraft noise issues on a global basis, wherever possible.
- ! There was also a general recognition (and reaffirmation) that ICAO - and particularly CAEP - is the most appropriate forum in which to address noise issues on an international basis.
- ! States appear to be supportive of the new Chapter 4 standard that CAEP/5 recommended. I take this opportunity to remind you that a State letter containing the proposals for amendment of Annex 16, Volume I and the results of the preliminary review of the Air Navigation Commission and Council was sent to States and International Organizations on 19 March 2001. In view of the need for the Council to process the amendments during its next Session (June 2001), comments must reach Montreal no later than 4 June 2001.
- ! There is widespread support for what is being termed a “balanced approach” to noise management, which includes four equally important elements: reduction of noise at source; land-use planning; noise abatement operating procedures and operating restrictions on aircraft.

The Council is required to propose to the Assembly an updated text to replace Assembly Resolution A32-8 - *Consolidated statement of continuing ICAO policies and practices related to environmental protection*. On the basis of what I have heard, I believe that the Council should attempt to somehow reflect the “balanced approach” in the new Assembly Resolution.

There are also calls for the “balanced approach” to be developed within the context of an “international framework” agreed within ICAO. I sense that there may be different interpretations of what is meant here. I can see that individual States would consider it desirable to make use, in a balanced way, of the various noise mitigation methods available to them. But, to what extent are they prepared to have their choices of methods of noise mitigation prescribed to them by ICAO? That is a matter which the Council would need to look at closely.

CAEP has offered some conclusions that the Council could use while drafting the Resolution. Most of the principles contained in these conclusions were identified throughout the presentations such as:

- ! Noise management should be considered only in the context of a balanced programme.
- ! The process for implementation of the programme and decisions between elements would be for Contracting States.
- ! The goal should be to achieve maximum environmental benefit most cost effectively.
- ! Other important considerations in the programme would be: the identification of environmental needs, a transparent process, and consultation of all stakeholders.

There is also the delicate question of possible operating restrictions on Chapter 3 aircraft. In June 1999, in the light of developments taking place in Europe, the ICAO Council established a mandate for CAEP to explore possible technical options for the implementation of operating restrictions on Chapter 3 aircraft. CAEP/5 analysed and reported on a range of technical options. We have heard a wide range of views on this issue. Some States feel the need to restrict certain Chapter 3 aircraft at their airports; at the other extreme, some States are strongly opposed to any restrictions on Chapter 3 aircraft.

I sincerely hope that we can find a solution to this question in time for the Assembly session in September. No clear solution is evident at this moment. However, we had a similar difficult situation in 1990 concerning Chapter 2 aircraft and we eventually managed to find a worldwide approach that all States considered acceptable.

This subject is a complex one and I believe that it might be helpful if I point to some of the key factors that the Council would need to focus on – **IF** operating restrictions on Chapter 3 aircraft were to be incorporated into the updated Assembly Resolution:

- ! Firstly, States would not be obliged to apply operating restrictions on Chapter 3 aircraft.
- ! Secondly, we would need to have provisions that take into account the circumstances of operators from developing countries. The idea of protecting intercontinental flights is interesting and deserves consideration.
- ! Thirdly, we would need to explore how operating restrictions fit in with the “balanced approach” and the “international framework”.
- ! Fourthly, we may need to define some of the parameters of operating restrictions.

These questions will not be easy to resolve. I would therefore urge you, over the coming months, to pay particular attention to this problem, and to work - not only within ICAO, but also on a bilateral and inter-regional basis - to find compromises that will enable the Assembly to resolve this problem on a basis acceptable to all States.

### **Engine emissions**

The remainder of our Colloquium was devoted to the impact of aircraft engine emissions. Our focus at this Colloquium has been primarily on the global concerns regarding emissions.

At ICAO’s request, the Intergovernmental Panel on Climate Change produced its *Special Report on Aviation and the Global Atmosphere* in 1999. Aircraft are estimated to contribute about 3.5 per cent of the total radiative forcing (a measure of change in climate) by all human activities. This proportion is expected to increase, because of aviation’s rapid growth rate.

The responsible UN body for addressing climate change is the Conference of the Parties to the United Nations Framework Convention on Climate Change. Significant information was provided by the Climate Change Secretariat on recent developments in the post-Kyoto process. The COP/6 meeting held in The Hague last November will resume in July. The implications of recent announcements by major players will presumably become clearer at that time. Meanwhile, I believe that we should take a “business as usual” approach to ICAO’s work on Kyoto-related issues.

In the case of international aviation emissions, Article 2, paragraph 2 of the Kyoto Protocol to that Convention calls on developed countries to pursue limitation or reduction of emissions of greenhouse gases, working through ICAO.

In 1998, the Assembly requested the Council (through CAEP) to explore policy options in response to the Kyoto Protocol. We have heard about the work in progress within CAEP:

- ! CAEP is exploring the further development of Annex 16 to specifically address emissions of global concern.
- ! Guidance has been developed on the operational opportunities to reduce fuel consumption and hence emissions; and a methodology has been developed to calculate emissions benefits from the introduction of CNS/ATM systems.
- ! And a large volume of work has been done on the possible use of market-based measures – such as levies (charges and taxes), emissions trading and voluntary measures – to limit or reduce greenhouse gases from aviation, focussing initially on carbon dioxide. This work responds not only to the Assembly’s request to explore policy options in response to Kyoto, but also to an Assembly request for more work on market-based measures in preparation for the Assembly in September. CAEP places a particular emphasis on emissions trading in the long-term, provided that the Kyoto Protocol enters into force.

The Council will be reporting to the Assembly on its work on emissions, and in particular the response to Kyoto. In the light of that report and of developments within the Framework Convention process, the Assembly will need to consider what direction ICAO should take over the next 3 years.

The Council will also be submitting a report on market-based measures to the Assembly with proposals to revise the current Assembly Resolution A32-8, Appendix H on environmental charges and taxes. The Council will take into account specific proposals that CAEP has made, as well as the views expressed at this Colloquium.

I noted a number of common themes amongst the presentations and the panel discussion:

- ! A recognition of the progress being made by CAEP on a very difficult subject.
- ! A recognition of the importance of the use of operational measures for aircraft engine emissions reduction.
- ! A keen interest on how ICAO’s work on market-based options will evolve, in the light of developments in the Kyoto process.

These are the main points that I have retained from this interesting Colloquium.