



FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE  
ENVIRONMENTAL COMMISSION - MINUTES OF THE ANNUAL MEETING  
OLYMPIC MUSEUM, LAUSANNE/ SWITZERLAND

2004-01-23/24

Present:

In the chair:	Mr. Chris J. NICHOLAS, President (UNITED KINGDOM)
CANADA	Mr. Robert (Bob) I. CARLSON, Delegate and Secretary
DENMARK	Dr. Ricard MATZEN, Delegate and Vice President
FRANCE	Mr. Gérard FRUH, Delegate Mr. Jean-Michel BIDOT, Alternate Delegate
GERMANY	Dr. Michael GOTH, Delegate and Vice President
NORWAY	Mr. Käre LIASJO, Delegate
SWEDEN	Mr. Rolf BJORKMAN, Delegate Mr. Bengt-Erik FONSELL, Observer
SWITZERLAND	Mr. Leo CAMINADA, Delegate
UNITED STATES OF AMERICA	Mr. Bernald S. SMITH, Delegate and Vice President Mr. Donald KORANDA, Delegate and FAI Executive Director
FAI	Mr. Max BISHOP, Secretary-General Mr. Wolfgang WEINREICH, President Mr. Robert CLIPSHAM, Executive Director Mr. Alvaro de ORLÉANS-BORBON, Executive Director
APOLOGIES	Mr. Wolfgang SCHOLZE, Alternate Delegate, GERMANY Mr. Art GREENFIELD, Delegate, UNITED STATES OF AMERICA

Where appropriate, capitalized member initials are used to denote the source of some comments. Results of votes on motions are unanimously for, unless exception is noted.

**1. Opening Remarks by the President, Chris Nicholas.**

The meeting was called to order at 15h00 by the President, who welcomed those attending.

## **2. Approval of the Minutes of the last Meeting**

The minutes of the 2003 meeting were approved as presented. Moved by Bernald Smith, Seconded by Rolf Bjorkman.

## **3. Commission Presidents' Report**

In addition to the Presidents written report, attached, he expressed his concern that successful introduction and adoption of the principles developed by the FAI ENVIRONMENTAL COMMISSION, by leaders of the individual air sports, is not too likely. A lead NAC is needed to start the adoption at small sites. Coupled with this notion is the question of the degree to which the ENVIRONMENTAL COMMISSION should fulfill a defensive or pro-active role.

## **4. Old Business and "To Do's" from 2003 meeting**

-CN raised the issue of the web site. This is a carry on from the 2003 meeting. Improvements in structure; the Education Commission was cited as a desirable model (e.g. many links and much information), is needed. A Website designer (Thierry?) is desired. Could this be a component of the redesign of the FAI pages that is expected to take place as a result of the image redesign? Should a professional be retained?

-An extended discussion took place on the subject of the measurement of aircraft noise and how the results are actually being used, to sustain sport aviation activities. There seem to be two(2) approaches, measurement of integrated noise, or individual aircraft noise profiles as is practiced in Sweden, using Per Bruels' approach.

Each tells a different story. The UK attitude seems to be, that which is the most simple, may be best. In Sweden, the view is that each discipline needs to develop practical solutions, which are not necessarily driven by technical circumstances. Personal perceptions of noise affect acceptance.

-Denmark, RM notes, is working on the one (1) nautical mile noise model in conjunction with the direction of Chapter X of ICAO, which they may adopt.

RIC advised that Transport Canada had reached an accommodation with residents of the Gulf Islands in British Columbia, Canada, whereby sensitive areas are defined and pilots are asked to avoid these areas as well as operating their aircraft as quietly as possible, with due consideration of airmanship and safety. So far the procedure seems to be working just fine.

The discussion on this subject was extensive and varied. The concentrate seems to be, insofar as sport aviation; in all of its' forms:

**A.** The FAI needs to assert its' leadership, in conjunction with the Sport Commissions, to ensure, nay, demand that all sanctioned FAI activities adhere to the agreed and accepted principles established by the FAI Environmental Commission.

This emphasis on adherence to the Environmental Principles, by the FAI Board, and the General Conference, should be ratified and emphasized by resolution at the next General Conference in Madrid.

**B.** The first venues where this adherence can take place quickly is at World Championships and Games. Since prior commitments may make immediate adoption difficult, exemptions could be made on condition of adherence to a firm, stated, future deadline.

**C.** Each NAC, that does not already have active, comprehensive, Environmental preservation programs in place, should establish one or more "prototypical" sites in their country where they can begin to do, to learn, and to adapt what is applicable and needed in their circumstances. There is much valuable experience already available from the Nordic countries, the UK, US, Germany, and to a degree, Canada.

**D.** It has been the experience in the UK that the seeds of noise discontent sprout as many as 10 years before the problem becomes public and a threat.

**E.** Each Sporting Commission should have an active member at the Environmental Commission meeting(s) who is involved and can speak to the program that her/his commission is following.

**F.** DK challenged commission to "State needs, resources, a budget and a plan" to achieve our minimal goals.

Additional points of interest:

i. ISO Working Group 43 has disbanded. No interest

ii. IOC website is a good source for experience in environmental policy and activity.

iii. Nordic countries consider that the Environmental Commission is the most important of all. RB feels that this Commission has the task to wake up the Sport Commissions, regarding Environmental issues.

**iv. As a "To Do" RIC will contact Ray Woolford regarding a copy of the Environmental Questionnaire/report that was produced in 1995 for the FAI Council meeting in Montréal QC, that year.**

## **5. Discussion of FAI Environmental Policy with EB and Sport Commissions**

President Weinreich stated that he thought that EASA may become a major actor in aviation environmental issues in Europe. Additionally, he believes that Europe Air Sports is still very important because of its relationship to EASA. Additionally, Wolfgang Scholze, has had travel restraints

imposed by the DAeC, thus he could not attend our meeting. Wolfgang Weinreich will endeavour to have the DAeC release W. Scholze for Europe Air Sport meetings.

Executive Director Bob Clipsham asked, rhetorically, "Does the Environmental Commission have the correct terms of reference?" This should be an agenda item for the next meeting in Madrid.

He also asked "Do we have what we need for the next 12 months?"

Bernald Smith reviewed his plans for the presentation, by WG of the DAeC, of the "Blue Flag" Environmental philosophy at the 2004 Annual Meeting of the Soaring Society of America (SSA) in Atlanta GA in 2004-02. Additionally, he suggested that to facilitate the dissemination of Environmental

understanding and knowledge the activity going on in Europe, a fee of 0.05% of each FAI Airport Commission income, should be levied to facilitate the expenses of tending to the needs of collecting and distributing information on Environmental issues to and from the Commissions and each NAC.

Subsequent to this meeting, Bernald advised the immediate interested persons, i.e. the EB and the FAI EC, of the excellence of Michael's presentation at the Atlanta meeting. It was well received. Bernald hopes to have a repeat at the 2005 SSA Convention in Ontario California, on 2005-02-11/12.

## **6. Nordic/Swedish Report - Rolf Bjorkman**

Rolfs' report is attached. It speaks for itself.

One point that came out of the discussion is the latent development time of problems. They, as those in the UK, find that it can take 5 to 10 years until the problem appears.

Frequent effective communication seems to be the only answer. This includes your neighbours.

## **7. German Report - Michael Goth**

Since Wolfgang Scholtze was not able to attend, his report was not available. MGs' written report is attached.

## **8. Nordic/Danish Report - Ricard Matzen**

Ricard presented his report on the use of Cabin Noise as an Indicator of Noise emission from a GA Aircraft. His report is attached.

This report questions the use of ICAO Annex 16 Chapter rules for the assessment of noise without correction due to differences in performance by GA aircraft. His assessment is that the ICAO procedure over estimates the noise of the aircraft. Thus aircraft operations can be expanded.

## **10. Suisse Report - Leo Caminada**

**TO DO: Report at Next Plenary meeting.**

## **11. Other Business and Discussions.**

There was an extended, general discussion of the contents of the reports and general/specific perspectives on Environmental issues and what the Environmental Commission of the FAI should be doing.

All felt that the FAI Environmental Commission had developed or identified the tools that are available and can be provided to Air Sport Organizations to help them achieve environmental acceptance by their neighbours, or better understand their problems, and provide solutions. In short, the tools are here and ready.

How do we distribute and use them most effectively? Could the Education Committee help with their resources? For example, the Education Committee has found that improved neighbour relations tend to follow neighbour visits to airport activity sites. For example, an open house, or, even, visits to schools with a sailplane.

Thus the question that must be addressed at our next meeting is: ARE OUR TERMS OF REFERENCE CORRECT AND/OR APPROPRIATE?

Additionally, rhetorically, we are asked, **'Have we, the Environmental Commission expressed our collective needs and goals to the "EB"?**

The Bureau needs to collate and express the functional and financial needs and intentions of the Commission.

We must also recognize that each member country may have differing sets of legislation that may affect the implementation of what we feel are the basic environmental goals of their airport.

Several felt that we should all meet at the next General Conference in Madrid, this September. Certainly the Bureau will meet. An Environmental Workshop ?

Resources, financial and human are limiting, as a means to undertake tasks, of any kind.

Communication needs to be enhanced and expanded, in all ways and modes to effect understanding throughout the Air Sport Community.

Michael Goths' presentation contained much material, processes and experience. It was felt by all, that this material could be put to much broader use if it could be incorporated into a CD or DVD for "not for profit" sales. Thus, Michael is asked if he could advise on the practicality or the methodology that will be needed to make this happen.

**TO DO: Advise Max of intent to include an operations budget related to income and expenses for specific aspects of the operation of the Environmental Commission.**

## **12. ELECTIONS**

The existing Board was returned unanimously, as follows:

President: Chris Nicholas

V.P's Michael Goth  
Ricard Motzen  
Bernald S. Smith

Secretary Robert (Bob) Carlson

## **13. NEXT PLENARY MEETING: 2005-01-21/22, during Conference Week.**

Thanks to Michael Goth and Bernald Smith for sharing their notes.

Respectfully Submitted,

R. I. Carlson  
Secretary  
ENVIRONMENTAL COMMISSION  
FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE  
2004-03-17

**President's Report to Environmental Commission**  
**23rd January 2004**

**Environmental Codes of Conduct**

FAI has not yet found a way to seek wider acceptance and implementation of the detailed environmental codes of conduct for air sport disciplines. While implementation is in the hands of the ASC's and NAC's, there is as yet no mechanism or concerted attempt to enact them.

A renewed request is to be made to the joint meeting of the ASC Presidents and Executive Board on 24th January, to seek a decision as to whether they wish to attempt a wider level of acceptance and implementation of the codes, or whether they wish to leave things as they are.

**Flying Site Noise Measurement**

This is set to be a very long saga, at least in the European arena. There are European Community directives and initiatives which are likely to reach down through large airports eventually to small flying sites, but there is no firm plan as far as we know for details or timing. One initiative, for example, is to seek to have a noise map for every European country, which would ascertain present noise levels of all sorts. This would become a framework for governments etc. to decide upon plans for future developments with noise implications. The cost, mechanism for obtaining payment, and means of carrying out such schemes, are not yet identified.

In the meantime, an approach has been made to the UK Government for a fairer way forward for small flying sites. This has built on work done by this Commission, and taken forward (on advice from UK officials) by the UK general aviation movement. The aim is to seek first UK Government agreement and then a wider agreement internationally. The hope is to provide an acceptable, affordable, and safe alternative to the increasing tendency of Planning Authorities to restrict flying sites by indirect and unhelpful conditions aimed at noise control. This approach has come at an opportune time for the UK. The UK Government has started an internal review of its planning guidelines, which is proposed to go to public consultation during 2004 and lead to revised guidance (on all planning topics, not just noise) in late 2004 and 2005. We are assured that our points will play a part in the review, though there is of course no promise that we will prevail.

**EASA**

A recent question that has arisen is whether the European Aviation Safety Authority will cause further problems. According to Regulation (EC) No 1592/2002 article 2.2 the first additional objective (after safety of civil aviation) is a high uniform level of environmental protection. So environmental issues are already now within the scope of EASA with respect to their current authority on airworthiness and maintenance. The Regulation provides an extension of authority to flight crew licensing and air operations within one or two years. It is not clear to us if "air operations" will extend to most air sports, but to do anything within two years seems to me to be a challenging prospect in view of the usual rate of progress in international affairs.

I am advised by Harry Schoevers, Secretary-General Europe Air Sports, that the first action would be to comment on the AMC (Acceptable Means of Compliance) 34 and 36 which should be open for consultation (see JAA website [www.jaa.nl](http://www.jaa.nl) , subindex "transition from JAA to EASA"). The position of the Europe Air Sports Board is not to initiate actions in this field, but to remain defensive. Is this what FAI should also do?

### **Environmental Commission Web Site**

A renewed effort continues into setting up web pages to provide a more accessible database of information world-wide. If nobody on the Commission is able to undertake migration of material onto a website, I believe that I have a volunteer from the UK who will provide some help. It would, however, still require some assistance from the FAI Secretariat.

Chris J Nicholas  
President, FAI Environmental Commission

23rd January 2004

The Nordic Environmental Group established between Denmark, Finland, Norway and Sweden has some problems to get in good function. A new meeting in Denmark in February this year will probably solve those problems. This group is meant to be a network between the Nordic countries as we in many ways have the same problems. We often have to deal with authorities in different matters. A problem started in one country often comes to the other after rather short time. We can also learn how to solve problems and how to react to avoid problems. The last is perhaps the most important part. A network using e-mail is still very difficult to run. Information seems not be given. Some sort of annual meeting seems to be necessary.

The Swedish Environmental Group has been working with several projects. In one of those the aim is to get the clubs in starting their own environmental work. Still the most difficult thing has been to encourage the clubs to start this work in the clubs and to let them understand that this is a necessary process. More and more clubs however starts to understand the situation and that there can be big problems in the future if they don't have the knowledge.

An investigation has been done with the purpose to encourage the different airport unions to start their own development in environmental areas. This will probably lead to an Environmental Policy for the Airport in Sweden this spring.

I informed you last year that several cases concerning environmental rules or restrictions for small airfields are up in court at different levels. The most important one has passed the highest court level. The result was better than in lower levels but not good enough as this will be some sort of precedent. Some of the restrictions for this field are as follows: No flying at big holy days as Christmas and midsummer. It is totally around 10 such days. Further more the first weekend in July is closed. During all weekends the flying has to stop earlier in the evening. Those restrictions are most unsuitable for the gliders and especially for training new students. We hope not but are rather sure that this situation will be spread to other places.

Swedish CAA has an organisation dealing with environmental matters since many years. Since two years they also have an Environmental Council for the market. I am a representative in it. Of course this Council is more for the big companies and less for the general aviation. But it is good to make the general aviation known among others and show that we all have problems to solve.

Rolf Björkman  
Sweden



**GERMAN REPORT TO FAI ENVIRONMENTAL COMMISSION MEETING 2004 –  
JANUARY 23 - 24, 2003, LAUSANNE, SWITZERLAND**

Dr. Michael Goth (DAeC Delegate)

Dr. Wolfgang Scholze (DAeC Alternate Delegate), Environmental Officer DAeC, Technical Officer Environment Europe Air Sports

**1.     *FAI Environmental Commission Affairs***

**1.1    *Implementation of the FAI Environmental Policy and Codes of Conduct***

In the context of recent discussions on the adoption and implementation of the FAI Environmental Policy and Codes of Conduct, we would like to point out that a generic check list (in German language) for the organization and performance of environmentally friendly and nature conserving air sports events exists. This list addresses topics such as public relations, travel to and from the air field, environmental friendly behavior on the site and in the nature, restaurants and food supply, waste minimization, and checklist for competition participants and event management. For planning purposes each check item is related to a lead time of up to 100 days prior to the event.

**1.2    *To Do Tasks from year 2003 Meeting of FAI Environmental Commission -  
Web Site Development***

Over the last year the discussion list of aviation environmental issues on the FAI server had 81 visitors. Wolfgang and myself monitored the web site occasionally and did not find any entry or query addressed to the environmental commission.

The web site has yet no links to other sites relating to aviation environmental issues and I accept some lack of commitment. I will provide those references available to me, indicating the location and links to the reference on our web site.

**2.     *Contacts to Europe Air Sports***

Since about 1.5 years Europe Air Sports is heavily involved in establishing a relationship with the European Aviation Safety Agency (EASA), an agency which will take over many responsibilities from European National Air Agencies and will be their directing agency more and more in the future which will limit the duties of the National Air Agencies.

With regard to the environment, EASA will likely gain responsibility over environmental issues such as environmental impact considerations and requirements for aircrafts and aircraft operation, e.g. in the context of regulations on flying personnel. Environmental impact considerations will be a key issue for EASA, e.g. noise. However, the tasks of EASA regarding the environment are not yet defined.

EASA is currently located in Brussels but will be relocated to Cologne (Germany) in 2004 which may imply that German (environmental) standards and practices may be case examples for European wide adoption. European Air Sports utilizing predominantly the resources of DAeC has initiated close liaison with EASA.

The website of EASA is [www.easa.eu.int](http://www.easa.eu.int)

Due to this key issue with EASA, currently no environmental initiative is actively promoted by Europe Air Sports.

### **3. German Activities**

#### **3.1 Handbook “Air Sports & Nature Conservation”**

This book was published in April 2003. During the remainder of the year each member air sports club of DAeC and every environmental agency within Germany received one copy. The book in German language documents the contributions made during a common conference of air sports people and regulatory agency representatives in October 2000 regarding:

- Presentation of air sport types, mode of operation, and key technical and regulatory requirements in context with nature,
- Objectives of nature conservation in relation to air sports activities,
- Common objectives of air sports and nature conservation – conflict case studies, cooperation models, and common principles.

A copy of the book can be made available for each attendee of this meeting of the environmental commission by DAeC. Please notify Wolfgang Scholze.

#### **3.2 Blue Flag Air Sports**

The Blue Flag contest and awarding scheme which was successfully implemented over the past 3 years will not be performed in 2004 due to financial constraints of the organizer. DAeC, other sports associations, and the governmental departments sponsoring this awarding scheme so far were not willing to increase financial contributions. This termination of the award affects not only air sports as represented by DAeC but other sports associations such as yachting.

In cooperation with and under umbrella of the German sports association DSB and the German Ministry of Environment (BMU), an alternative contest scheme which will include air sports is in development by DAeC (and other sports associations) and is likely to be sponsored by BMU. A pilot contest and awarding project is likely to be performed in 2004 to test awarding criteria and methods. The new scheme will be designed in modules to allow the participation of the small sports club as well as the large (commercial) club. The small club will have to demonstrate compliance with low profile requirements while the large (commercial) club has to obtain certification according to different but verifiable standards by a third party certifier. These standards are not yet defined.

Based on partnering/cooperation agreements of a participating German (air sports) club with another European club, the contest and awarding scheme will be open to clubs outside of Germany.

### **3.3 *Naturathlon***

Naturathlon will be an event organized by several German sports associations and the Federal Nature Conservation Agency. It is scheduled to take place in September/October 2004. The idea is that teams of sportsmen/women will cross Germany from south to north by means of running, cycling or flying (gliding, hanggliding, ballooning) etc., all in an environmentally considerate way. The objective is to demonstrate that sports and nature conservation are compatible and make fun. DAeC promotes naturathlon on its web site and seeks for support from the air sports society as it is assumed the sportsmen have no flying experiences. The teams will have to fulfill nature conservation recognition tasks, some of which can only be recognized from the air. The daily stop locations could be on airfields with the opportunity to demonstrate air sports. The event will receive daily television attendance. It is sponsored by the Federal Environmental Ministry and chaired by the German Environmental Secretary.

### **3.4 *Microlight-Goose Project/Aktion Zwerggans***

The “Lesser White-fronted Goose” is a bird species which is seriously threatened of extinguishing due to the low number of life stock and fatal dangers on the traditional flight routes during season transitions. In order to increase the life stock and to adopt the birds to less dangerous season flight routes, several scientific projects were initiated in the past years to train young birds on alternative routes to alternative winter resorts. This is a project supported by DAeC. The German approach is to adapt young birds of this goose species to human beings and microlights, to train them to fly with the microlights, and to teach them to fly from their traditional summer resorts in the Nordic countries (Sweden) to new winter resorts (in Germany).

In 2003, the Swedish Environmental Ministry did not approve to proceed with the long range season re-routing project of the lesser white-fronted goose species to new winter resorts by use of microlights. The reasons were the potentially impacted genetic material of the domesticated small goose parent animals, an alternative Swedish re-routing project using another goose species, and rigorous objections by Norwegian and Finnish groups.

The European Agency on Nature Conservation has a vote in supporting the German project and currently there is a positive attitude to do so. The European Agency on Nature Conservation is likely to support the project and Sweden seems to support it as well so that it may proceed in 2005.

Further delay of the project will potentially risk the financial support of the project by a German environmental fund in the order of magnitude of 500 kEuro. The public attention of news and TV media for this project is still high.

Additional information: A similar project with a bird species behaving quite differently from goose (Waldrapp, a very endangered and in Europe extinct bird species only living domesticated in some Austrian valleys) is underway in Austria and Italy with some promising results.

### **3.5    *The Air Sports Site of the Future***

DAeC developed a concept for a ideas competition about the air sports site of the future which will be launched this spring. In brief such a site will have optimized conditions for flying, will be attractive to air sports people and visitors as well as housing fauna and flora. The future air sports site will be used sustainable in all aspects. The objective of the competition is to show directions and potentials for the future development of air sports sites.

Dr. Michael Goth

January 23, 2004

Report to the FAI Environmental Commission  
Annual Meeting in Lausanne 23-24 January 2004

## **Cabin Noise as Indicator for Noise Emission from GA – Definition of the Noise Source vs Aircraft Configuration**

*By Dr. Ricard Matzen, Royal Danish Aeroclub (KDA)*

In Denmark the work from last year on revision of the guidelines for noise assessment and approval of aerodromes given by the Ministry of Environment, Danish EPA (Miljøstyrelsen - Vejledning 5/1994) has continued.

One of the points is definition of the noise source at the actual position during take off and landing. The present rules are using the noise number from noise certification according to ICAO Annex 16 Chapter 6 without performance correction. It seems that same value is used during all type of operations, and it is overestimating the noise immission to the surroundings of an aerodrome considerably.

We made some preliminary measurement on cabin noise, the noise meter was placed 50 cm in front and above the right seat, in a small aircraft with fixed pitch propeller. The Aircraft was loaded with one pilot and half full fuel tanks. The result is shown in figure 1.

It can be seen that the cabin noise during normal climb is 2,2 dB below the certification value and under approach to landing 11,2 dB lower.

If we accept the noise level reduction in the cabin being the same as on the ground and if we consider this aircraft being representative for fixed pitch propeller aircraft, it means that all landing noise dose could be neglected and the number of take off could be increased by 2,2 dB to reach the calculated level.

## Conclusion

Both issues mentioned indicate that the number of operations could be increased by a factor (2,0 x 1,6) 3,2 before the calculated noise dose immission is reached.

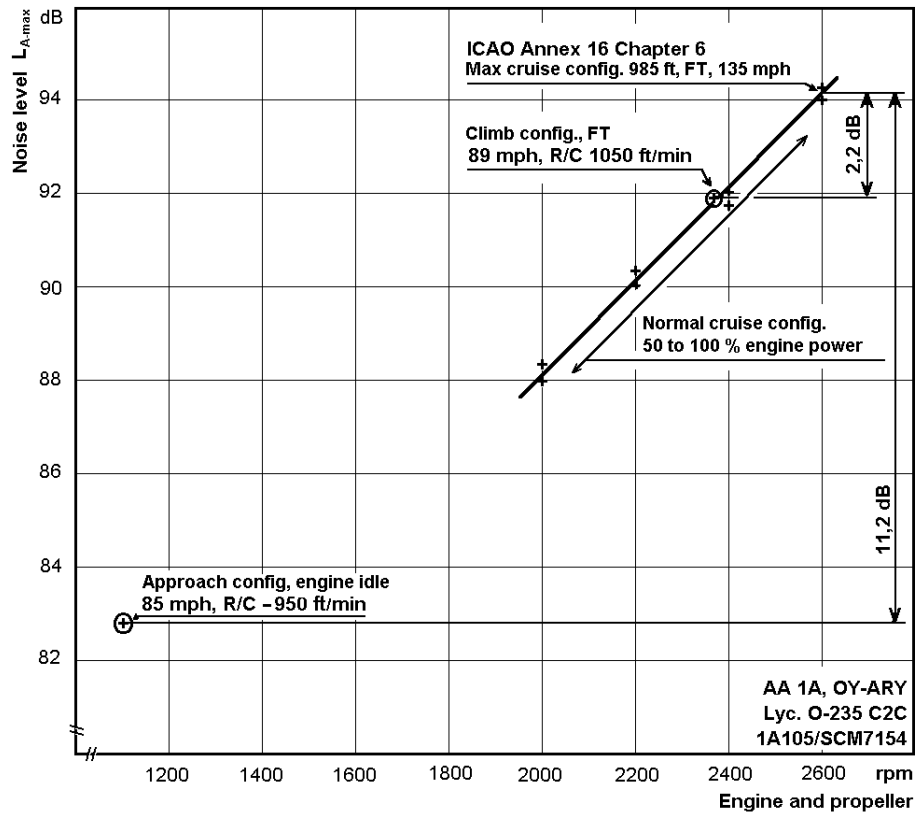


Figure 1. Cabin noise measured under different configurations and engine power settings, Aircraft: American Aviation Co., type AA 1A, MTOM. 680 kg, engine 108 HP at 2600 rpm, Propeller: McCauley 1:1, SLM: Brüel and Kjær 2232, with windscreen, A-filter and slow weighing