REVIEW

on the activities of the International Committee on Aeronautical Fatigue (ICAF) during the period May 1983 to April 1985

The 18th ICAF meeting in Toulouse in May 1983

The meeting in Toulouse started with the 12th ICAF symposium, which covered three days (25 to 27 May). After the weekend it was followed by the 18th ICAF conference on 30 and 31 May.

The two main topics of the symposium were:

- Industrial application of damage tolerance concepts (10 papers)
- Structures of high fatigue performances (9 papers)

The symposium was opened by the Plantema Memorial Lecture, presented by Mr. J.Y.Mann of the Aeronautical Research Laboratories in Melbourne. The title of his lecture was: Aircraft Fatigue - with particular reference to its impact on Australian operations and research. Mr. Mann received the Plantema Memorial Lecture Medal.

The programme also included a technical visit to the laboratories of the Centre d'Essais Aéronautique de Toulouse. The symposium was concluded by a general discussion on three subjects suggested by the participants:

- strain-history at the notch root as a basis for life predictions,
- load measurements in service and
- certification of aircraft.

At the conference 13 National Reviews were presented in two days. Each National Delegate gave a survey of aeronautical faigue activities in his country. The number of participants was 183 and it was generally felt that Mr. Labourdette, Mr. Herteman and their associates had organized a most efficient and pleasant meeting. Some 8 months later the Transactions of the Symposium and the Minutes of the Conference were available in two impressive volumes. A wealth of information is documented again.

William Barrois

The ICAF meeting in Toulouse was the second one in France. The first one was organized by Ms. Barrois in 1961 in Paris. The Transactions of that symposium were published as a book by Pergamon under the title Fatigue of Aircraft Structures. The tragedy is that we lost Mr. Barrois last year. He was the first French National Delegate in the period from 1957 to 1976, and he compiled and presented the French national reviews. Mr. Barrois was known for a broad knowledge about fatigue in aircraft materials and structures. This is illustrated by the Manual on Fatigue of Structures which he wrote for AGARD. Mr. Barrois was a clever man with a critical mind, who easily recognized the essence of problems and put forward original ideas. He was truly dedicated to his work. Mr. Barrois died at the age of 75. The last IGAF

meeting attended by him was in 1979 in Brussels.

National Delegates of Canada and Sweden

Mr. Campbell was the Canadian national delegate for a rather short time. Due to a change of his position he had to retire from ICAF. The new delegate is Mr. D.L.Simpson, also from the National Aeronautical Establishment in Ottawa. He already attended the meeting in Toulouse.

Professor Eggwertz retired from FFA and he also retired as the Swedish national delegate, which he was since 1978. Sigge Eggwertz has attended ICAF meetings since 1956 in Zurich, and in Darmstadt in 1975 he presented the Plantema Memorial Lecture. His contributions to ICAF were highly cooperative. I can not resist to quote from his last letter, where he says: "The cooperation with ICAF has brought me much valuable technical information, but also much pleasure".

The new Swedish national delegate is Dr. Anders Blom from FFA.

Both new delegates are actively engaged in various aeronautical fatigue problems.

ICAF documents distribution

The number of documents distributed during the past two years (or to be distributed soon) is 163, which includes 89 reports, memoranda and books, and 74 reprints from Journals and symposium books. The first category is most useful, because the information will reach the open literature much later.

In the present period 2 ICAF Quarterly Bulletins (Nos. 79 and 80) were issued.

ICAF status

ICAF is a international organization with informal rules, which are to be found in a 1-page document called the ICAF principles. It explains that there are two main objectives:

- (1) to stimulate personal contacts between people, actively engaged in aircraft fatigue problems, and
- (2) to exchange information, experience, opinions and ideas concerning aircraft fatigue problems.

The objectives are primarily realized by meetings like the present one, and by an exchange of ICAF documents between the member countries.

There is another document of 2 pages, which refers to the tasks of the ICAF national delegates. The national delegates are responsible for the circulation of ICAF information and documents. Last and not least, each national delegate prepares and presents a review of the aeronautical fatigue investigations carried out in his own country. Those reviews are most informative reports, and all the work involved should be highly appreciated by all of us.

J. Schijve General Secretary of ICAF

Survey of numbers of ICAF documents circulated in the period May 1983 - April 1985 (document Nos. 1319 to 1482)

	Number of	documents	circulated	
Country	Reports	Reprints	Books	Total
Netherlands	12			12
U.K.	14	4		18
Sweden	13			13
Belgium				_
Switzerland				_
West Germany	7	34	2	43
France			2(*)	2
Italy		5		5
Australia	17	1		18
U.S.A.	3	13		16
Canada	12	1	:	13
Israel	7	6		13
Japan		10		10
Total	85	74	4	. 163

^(*) Proceedings and Minutes of the Toulouse meeting