



INTERNATIONAL COOPERATION ON ACCIDENT INVESTIGATIONS

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ABSTRACT

The historical development of rules governing the conduct of international accident investigations is traced from the Chicago Convention of ICAO in 1944, to the present time.

Highlights of some international investigations conducted by or involving U. S. participation during recent years are reviewed.

Considerations such as the growing complexity of aircraft systems serve to promote international cooperation on accident investigations, whereas factors such as state sovereignty may at times retard such coordination. As a result of the Third Session of the ICAO Accident Investigation Division (January-February 1965), significant steps have been taken to enhance cooperation in accident investigations involving international commercial air transport operations. Action was taken by the ICAO Divisional Meeting with respect to: (1) more rapid, yet comprehensive, notification of accidents; (2) attendance of experts of the State of Manufacture as well as the State of Registry; (3) widespread and expeditious dissemination of information and reports on accident inquiries; and (4) the development of guidance material for use by Contracting States in organizing and conducting effective accident investigations.

On December 7, 1964, a special ceremony was held at ICAO Headquarters in Montreal to commemorate the twentieth anniversary of the signing of the convention on International Aviation. For those individuals who have played a role in the development of ICAO, this twentieth anniversary ceremony should have provided an opportunity to look back with satisfaction at the progress achieved in fostering the growth of international aviation. Irrespective of the yardstick one employs, the rate of progress is phenomenal.

Responding to an invitation issued by the United States, delegates from some 52 countries met in Chicago for five weeks during the late fall of 1944. The ICAO Convention which was drafted at this conference was ultimately ratified

by the required number of 26 countries in 1947. As of that time the Convention became effective and the Headquarters of the Organization was established in Montreal. Today there are more than 100 Contracting States on the membership role of ICAO.

It is interesting to reflect for a moment upon the following figures in assessing the growing importance of the role of ICAO. Since 1947, there has been a 75 percent increase in the number of scheduled International air services. During this same period, there has been approximately a 900 percent increase in the number of passenger miles flown internationally. Concurrently, the speed and range of transport aircraft used in such operations have more than doubled.

It would be a chaotic maze of multi-lateral agreements in international aviation, were it not for the existence of an organization such as ICAO.

Any discussion concerning International cooperation on Aircraft Accident Investigation requires a brief look at the Convention on International Civil Aviation. The Preamble in essence states that the Contracting Governments have agreed on certain principles and arrangements in order that International Civil Aviation may be developed in a safe and orderly manner and that International Air Transport Services may be established on the basis of equality of opportunity and operated soundly and economically.

Article I of the Chicago Convention recognizes that every State has complete and exclusive sovereignty over the airspace above its territory.

Article 26 of the Convention addresses itself directly to the question of accident investigation. It provides for the conduct of an inquiry into the circumstances surrounding an accident whenever an aircraft registered in one Contracting State of ICAO crashes in the territory of another Contracting State. The accidents falling under the provisions of this Article would be those in which death or serious injury occurred or in which serious technical defects were found in the aircraft or air navigational facilities were involved.

Insofar as their laws permit, States are asked to use the recommended ICAO

procedures in conducting such accident investigation. Finally under Article 26 the State in which the aircraft is registered is granted the right to appoint observers to be present at the accident inquiry, and the State conducting the inquiry is called upon to communicate a copy of the accident report and findings to the State of Registry.

Please keep in mind the words "granted the right to appoint observers to be present at the inquiry."

Article 37 provides for the development and maintenance of International Standards and Recommended Practices and Procedures dealing with the various technical aspects of International Air Navigation. Based on Article 37, a total of 15 Annexes to the Convention have been developed including Annex 13 entitled "Aircraft Accident Inquiry."

In February 1946, the first Accident Investigation Division Meeting of ICAO was held in Montreal. Standards and Recommended Practices governing international accident investigations were drafted. These Standards and Practices were further developed at the Second Session of the Division in February 1947. Following the usual processing through ICAO channels these Standards and Recommended Practices came into force as Annex 13 to the ICAO Convention on December 1, 1951.

The word "Standard" as employed in ICAO means a specification, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States must conform or file differences. Recommended Practices on the other hand, are classified as "desirable" rather than necessary.

It is interesting to note that the terms "Inquiry" and "Investigation" are defined in the Foreword, yet there is no mention of these terms in the Annex proper. Further, there is no discussion of the privileges to be accorded the observers entitled to be present at the inquiry.

Consequently when we examine Chapter 5 of the existing Annex 13 we find that paragraph 5.6 permits an accredited representative to participate in the inquiry, but no place do we find a detailed explanation of "Participation." The absence of such a definitive explanation has resulted in many differing practices throughout

the world. Also we find that the preponderance of deviation filed by the various Contracting States to Annex 13 deal with the subject of "Participation" in the inquiry. This tells us then, that any revision of Annex 13 must deal specifically with this matter of participation.

The Foreword of the present Annex states that the Annex may deal with any relevant matter whether or not expressly dealt with by Article 26 or by any other Article of the Convention. For instance, it is not a contravention of the Convention for the Annex to deal with the rights or obligations of States other than the State of Registry and the State of Occurrence: similarly the Annex may deal with the privileges to be accorded to observers entitled by Article 26 to be "present" at the inquiry. These are matters upon which Article 26 is silent.

From the time Annex 13 came into force in 1951 the document had never been amended. However, as aviation technology made rapid strides over the years, it became increasingly clear that major modification of various specifications of Annex 13 was essential. The top policy-making body of ICAO, the Assembly meeting in Rome in 1962, adopted two Resolutions pertaining to aircraft accident investigations.

To give effect to these Assembly Resolutions, it was apparent that extensive changes would have to be made with respect to the provisions of Annex 13. Consequently, on March 2, 1964, the decision was reached by ICAO that a Third Session of the Accident Investigation Division should be convened. Once that decision had been reached, the United States as well as other Contracting States had to devote considerable time to ascertaining what they would like to see accomplished under the various items of the agenda for the Meeting.

The Third Session of the Accident Investigation Division of ICAO convened in Montreal on January 19, 1965, and the final plenary was held on February 12, 1965. A total of seventy representatives were in attendance. Of these, fifty-six came from thirty-one of the Contracting States of ICAO, two were from a non-contracting State (the Soviet Union) and twelve were representatives from three international organizations. The United States was represented by a Delegation of six members which it was my privilege to head.

When the meeting in Montreal convened, it was soon obvious to all delegates that certain areas were quite controversial and not readily resolved. In fact, it became apparent that only through compromise would the Division successfully deal with some of the agenda items.

Agenda Item 1 at the Meeting called for an "Examination of the Material Contained in Annex 13." Four sub-items under Item 1 dealt with specific aspects of Annex 13 which required special attention.

I shall not, at this time, endeavor to cover in detail each of the recommendations resulting from the discussions pertinent to this Item or the recommendations developed under the other four Items on the Agenda. Instead I shall touch briefly upon some of the highlights of the work under the various Agenda Items.

Item 1 led to a recognition of the importance of providing for participation of representatives of the State of Manufacture in many aircraft accidents both international and domestic. The usefulness of participation by operators and pilot groups was also recognized.

Considerable time and effort were spent in defining what the right of participation in an accident inquiry entails. The resultant Recommended Practice makes these rights quite explicit. Such representatives may:

- (1) visit the scene of the accident
- (2) examine the wreckage
- (3) question witnesses
- (4) have full access to all relevant evidence
- (5) be provided with copies of all pertinent documents, and
- (6) make submissions in respect to various elements of the inquiry.

Oftentimes a great deal of valuable information is derived from the investigation of aircraft incidents. Invariably, in such cases, one has the advantage of a live crew and a relatively undamaged aircraft from which to deduce causal factors and facilitate efforts towards accident prevention. The Meeting recognized this fact and framed recommendations designed to promote the exchange and study of information relating to such incidents.

It was agreed by the Meeting that two types of accident notification are

required: the initial notification and the subsequent notification. The initial notification is to be sent immediately after an accident and should be communicated directly from the accident investigation authority in one State to its counterparts in the State of Registry and State of Manufacture. This initial notification would contain only the essential information which was available without delay. The subsequent notification would be forwarded within thirty days to ICAO as well as to the recipients of the initial notification. It would contain much more detailed information including a summary of the progress of the investigation and significant facts established. Standard formats were developed for both the initial and subsequent notifications.

It should be noted that the agreements dealing with initial notification provides for participation by the State of Manufacture in the following language:

"Upon receipt of the initial notification . . . which contains no indication that participation is unnecessary, the State in which the aircraft was manufactured shall inform the State in which the accident occurred, whether it intends to be represented at the inquiry. . . ."

Now, this clearly indicates that the State of Occurrence in the initial notification must indicate that representation of the State of Manufacture is unnecessary otherwise the State of Manufacture has the right to appoint an accredited representative and advisors to participate in the inquiry. True this is a qualified right - but consider the Rome Assembly suggested that the State of Manufacture be present by invitation.

It is also noteworthy that the Meeting developed a mandatory format for submitting summaries of accident reports to ICAO. The purpose of a Summary Report is not to replace the full Accident Report but merely to condense it for purposes of inclusion in the ICAO Aircraft Accident Digest. Additional steps were taken to facilitate the publication of such summaries in that it is required that they be submitted in one of the three working languages of the Organization and that they employ terminology in accordance with the ICAO Lexicon.

With respect to the term "aircraft accident," the definition previously contained in Annex 13 was retained and the U. S. definitions for the terms

"serious injury" and "substantial damage" were approved for inclusion in Annex 13 as guidance material.

The terms "Inquiry" "Investigation", and "Investigator in Charge" were also defined for the first time in the text of the Annex.

Agenda Item 2 at the Third Session of the AIG Division Meeting, dealt with the "Technical Investigation" of aircraft accidents. One recommendation under this Item drew the attention of all States to the special importance to be attached to the construction, positioning and protective installation within the aircraft of flight recorders and the importance of recording parameters essential to aircraft accident investigation.

The Meeting further agreed that the ICAO Manual of Aircraft Accident Investigation should be revised to include guidance with respect to the investigation of accidents involving large modern aircraft and that the material in the manual should be published in a logical and balanced presentation. Responding to urging by the United States Delegation, a decision was also reached to incorporate in Annex 13 guidance material concerning an effective organization of accident investigations.

Under Agenda Item 3 agreement was quickly reached that the ICAO Aircraft Accident Digest served a most useful purpose in accident investigation and accident prevention work and that it should be published at six monthly intervals with statistical data being added on a yearly basis.

Agenda Item 4 resulted in amendments to Annex 9 to the ICAO Convention designed to facilitate the entry of technical experts into ICAO States for purposes of participation in accident inquiries.

Agenda Item 5 was similar to Item 4 but dealt with the facilitation of movement from one State to another of aircraft parts for investigation purposes. This Item is quite interesting since it was added to the Agenda of the Meeting at the request of the Government of Italy. As some of you may recall, a Trans World Airlines jet crashed at Rome, Italy during an aborted takeoff on November 23, 1964. The United States was invited and did send technical experts to assist in the investigation. One of the important facets of the investigation was the transfer

of the flight recorder tape to the United States for purposes of readout.

We feel the Italian Government is to be commended for its action at the recent ICAO Meeting in pressing for procedures designed to facilitate the future exchange of such aircraft parts between countries for accident investigation purposes. This is but one example of many in which excellent cooperation has existed between countries in the investigation of aircraft accidents involving international operations. We have not encountered noteworthy reticence on the part of most countries with respect to the participation of U. S. experts in airline accidents abroad involving aircraft of our registry or manufacture. We in turn, have provided and will continue to provide for the participation of experts from other countries, as appropriate, in international accidents occurring on U. S. soil.

I am certain that time alone will tell the extent to which benefits will be derived from the decisions reached at the meeting. I am convinced, however, that history will reflect the fact that the Third Accident Investigation Division Meeting of ICAO was indeed productive in fostering international cooperation in accident investigations.