

A SURVEY OF ACCIDENT INVESTIGATION
IN INTERNATIONAL AIR LAW

By
RODERICK A. NOEL

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INSTITUTE OF AIR AND SPACE LAW,
MC GILL UNIVERSITY,
MONTREAL, QUEBEC.

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I N T R O D U C T I O N

The aim of this dissertation is to examine and analyse the law pertaining to aircraft accident investigation in the international context, and to indicate areas where it is possible to have further international agreement in this important field of the law pertaining to international civil aviation. Since air navigation is essentially international in character, any approach to a study in this field necessarily involves references to national legal systems, and to that extent, involves a study in comparative law.

The need for international agreement in this field was noted and emphasized by Brig.-Gen. Sir Osborne Mance in his work "International Air Transport" published in 1944, in which he emphasized at that time, that no definite agreement had been arrived at in this important matter. He stated that "there have been legal difficulties in the way of international investigation of accidents. Having regard to the essentially international nature of air traffic in most parts of the world there would appear to be reasonable grounds for international co-operation in the investigation of accidents to aircraft in foreign countries. In view of the great benefits to aviation of publicity in such matters,

it is suggested that every accident investigation should be in public and in the case of accidents involving fatal casualties, the results of the investigation should be published. Some such arrangement might naturally follow if there is to be a measure of international control over aviation".¹ Of course, since these portentous words were written, much has been achieved in international co-operation and agreement in the field of aircraft accident investigation.

Chapter one of this paper deals with the aims of and need for an aircraft accident investigation. An attempt is made to discuss the merits of the relative position of interested groups from both the international and national aspect; to show the various interests involved, and to indicate the possibility of different motivations. A discussion on the definition of aircraft 'accident' and 'incident' is also begun in this chapter. Chapter two attempts an outline of the development prior and leading up to the Chicago Convention of 1944, of the entire question of aircraft accident investigation, including the development of Annex 13, in order to provide the necessary background to a better appreciation of the present

¹Sir Osborne Mance, "International Air Transport (1944)
Oxford University Press, P. 96.

provisions pertaining to the subject. In order to do this effectively, it is necessary to consider the relationship between Article 26 and Annex 13, and also to consider Article 37(k) of the Chicago Convention.

Chapter three deals with the main principles of public international law which govern aircraft accident investigation. In this part, it is sought to make a critical survey of what the law is and not what it ought to be. It was thought desirable to mention in this part, certain other provisions which, to some extent, have a bearing on the subject, and in this connection, a short discussion on the relevant provisions of Annex 9 of the Chicago Convention is included, together with notes pertaining to relations with non-contracting States, accidents occurring over more than one State and accidents over high seas.

Chapter four deals with the problems of implementation involved in the international framework; it involves a discussion of Article 38 of the Chicago Convention and considers reasons given by States for their inability to conform. An appendix containing the reasons given by some States is attached. This chapter is followed by chapter five which surveys national provisions in certain specified areas

where international civil aviation is quite advanced, and in this part, a look is had at the differences, if any, between the national provisions of some of these States and the existing international requirements, and also the extent to which the international requirements are exceeded.

Chapter six considers the use of domestic and foreign accident investigation reports in litigation. Chapter seven looks at areas where closer co-operation may be possible. This involves a more detailed look into questions of notification of accidents and incidents; participation in the inquiry; and preparation of the Report. An attempt is made to deal with the degree of standardization achieved in the matter of the structure and procedure used in accident reporting and the extent of uniformity. The conclusions deal with reasons why more uniformity between States in the matter of aircraft accident investigation is desirable. The possibility of establishing a Central International Bureau of Accident Investigation is also advocated as important.

In presenting the report of his committee on the question of aircraft accident investigation to the International Civil Aviation Conference, held in Chicago in 1944, Air Commodore Vernon Brown of the United Kingdom, Chairman of Subcommittee

9, - Accident Investigation, including Search and Salvage, said: "As regards the investigation of air accidents, we suggest the desirability of much greater standardization of method to this end we have confirmed the existing ICAN arrangements to which certain States have adhered for many years, the effect of which is that the country in which the accident to a foreign aircraft occurs accepts the responsibility for the investigation. But inasmuch as we believe that greater publicity of facts that have come to light and the conclusions reached as to the cause of an accident will both make for safety and allay public anxiety, my Sub-Committee urges the certain publication of the 'findings', and the publication of the report in extenso if it is considered to be in the public interest so to do, and if the State in which the aircraft is registered so wishes. It is recommended that if the financial procedures or regulations of the State permit and if the State of Registration of the aircraft so requests, aircraft accident inquiries should be held in public by some kind of Commission before which witnesses shall give their evidence upon oath and at which proceedings the State of Registration shall be granted the privilege of being represented. We suggest, too, that the proceedings

of such a Commission of Inquiry shall be made available to the State of Registration as well as such parts of the damaged aircraft as it may wish to have. In other words, we suggest that the State in which an accident occurs shall consider itself in the position of a friend and helper and shall do its utmost to assist the other in every way possible".²

It is clear that the necessity for aircraft accident investigation is recognized and accepted as a fundamental requirement in achieving increased safety in international civil aviation.

As may well be expected, there are several appendices attached wherever it is relevant and necessary for the purpose of easy reference. The bibliography is necessarily limited to articles in periodicals and much use is made of documents and other publications of the International Civil Aviation Organization. Considerable use is also made of Joint Research Project No. 4 "Aircraft Accident Investigation", of the Institute of Air and Space Law, McGill University.

²
Proceedings of the International Civil Aviation Conference (hereinafter referred to as 'the Proceedings'), Chicago, November 11 - December 7, 1944. United States Gov't. Printing Office, Washington (1948) Vol. 1. Minutes of Committee 11, Pg. 753.

CHAPTER 1

THE AIMS OF AIRCRAFT ACCIDENT INVESTIGATION

"Accident investigation is recognized to-day as one of the 3
fundamental elements of improved safety and accident prevention".

With the increasing capacity of modern aircraft and the projected increase in the growth of air traffic, the possibility of air disasters can give reasonable cause for alarm. In spite of the great technological advances that have been made in the aviation industry, and the fact that every effort is made to improve air safety, accidents occur and may continue to occur, far into the foreseeable future.

The adage "accidents do not happen, they are caused", holds true in respect to aircraft accidents as well as to others. It is known that certain accidents reveal gaps in technical aviation knowledge. For example, aircraft may be destroyed by being struck by lightning or undue clear turbulence or by coming into contact with large birds at very high altitudes. Comprehensive technical research programmes eventually reduce hazards, but until then, they exist and measures must be taken to enable such problems to be effectively

³ Aircraft accident Digest No. 14 Vol.11; I.C.A.O. Circular 71-AN/63, Vol. 11, 1966.

⁴
tackled.

Since the possibility exists, measures to assist in the determination of the causes of accidents should be standardized and made as uniform as possible, more especially at the international level. The following quote attributed to Dr. Edward Warner, elucidates the point remarkably well. He is quoted as stating that:

"In aeronautics, as in other fields of industry, standardization will neither kill initiative, stifle progress, nor take the variety out of life; but in aeronautics standardization gains a special effect from its relation to regulation; and in aeronautics, more than in almost any other field, every effort must be made to internationalize the standards from the very first".⁵

For the purpose of this paper, the term 'aircraft' is used in its accepted meaning as defined in most national legislative provisions and is accorded the meaning given in

⁴The causes of aircraft accidents', A. Spooner, Chief of Operations, Accident Investigation Section, Air Navigation Commission, International Civil Aviation Organization, Montreal.

⁵I.C.A.O. Bulletin : December 1966, Vol. XXI. No. 12 (see inside back cover)
See also I.C.A.O. Proceedings Vol. 1 P731

Chapter 1 of Annex 13 of the Chicago Convention, which reads as follows:

"Any machine that can derive support in the atmosphere from the reactions of the air".

Aircraft in turn, may fall under many different categorizations. For convenience, aircraft may be classified as follows:

a) Civil aircraft.

In this group falls the majority of aircraft and includes scheduled and non-scheduled international, domestic, and private air transport types.

b) Military aircraft.

This group includes aircraft design and used in a military or state capacity.

c) Prototype aircraft.

This group includes as the name implies, experimental aircraft.

This study is concerned primarily with accidents in which the first group of aircraft are involved, and deals more specifically with aircraft involved in international air transport or air carrier operations. This is necessarily so because organised international air navigation is the main concern of the Chicago Convention which regulates the conduct

between States in the matter of air navigation.

The need for an investigation is fundamental, as the efficient investigation of an aircraft accident is the very essence of future air safety. From a purely aeronautical standpoint, the predominant reasons for an investigation are to discover the true cause in order to take remedial action, to advance knowledge of aeronautical science and to improve flying technically.⁶

The question 'why investigate an accident', has given rise to different answers according to the context. In the international context, it is accurate to state, that the accepted view is that the object of an accident investigation is to discover the cause or causes of an accident and the various factors which may have contributed to it. The main object therefore is accident prevention, or increased air safety. However, this is not always the only reason for an investigation into an aircraft accident on the national level.

Caplan states that "the objective of an ideal accident or incident investigation is to provide scientifically valid data arising from accidents or incidents which shall assist

⁶
Newton, E. 'Aircraft Accident Investigation',
Journal of the Royal Aeronautical Society,
March, 1964, p. 156.

in preventing similar occurrences and generally contribute to safer aviation⁷." However, various groups may share an interest in an accident investigation and each group may be motivated by objectives, in addition to that of air safety.

The groups primarily concerned and their special interest, are discussed below with a view to showing the possibility of contrasting secondary interests.

a) The State of Occurrence

The State of Occurrence may be concerned primarily with ensuring that its own legal responsibilities are fulfilled. Its interests might arise mainly as a matter of public policy, that is, it may be concerned in the first instance, with ensuring the internal security and safety of its citizens. The national laws governing accidents or inquests may have to be satisfied, or for political reasons, it may be deemed expedient to conduct an inquiry into the circumstances of an aircraft accident

b) The State of Registry

Every accident concerns the State of Registry of

⁷Caplan, H. "The Investigation of Aircraft Accidents and Incidents", 59 J. R. Ae. S. (1955) 45.

the aircraft. The State is required to ensure that certain obligations are fulfilled by operators. Such a State is deeply involved in regulating matters of airworthiness, maintenance, personnel and other statutory requirements.

c) The Operator

The operator is of the group most intimately affected. He must seek a detailed and thorough investigation. He is concerned more than any other group, because, he is directly responsible to ensure the safety of the operations of his airline. He wants to be sure of the safety and airworthiness of the aircraft, the competence of the aircrew and ground personnel; that maintenance and air traffic control facilities were reliable, and the several other relevant data that would enable him to maintain his reputation.

d) The manufacturer and/or designer

This group includes those persons who are responsible for the design and manufacture of the aircraft, including component parts. It is clear that this group will have special expertise and will be interested in discovering the cause or causes of an accident, with a view to effecting remedial measures in design or manufacture in order to prevent or avoid a

recurrence of a similar accident. This group is also a potential defendant in the event of litigation and will be directly involved in protecting its product and other vital interests.

e) Insurers

This group is concerned in the discovery of the cause of an accident, because it has the responsibility of covering the economic loss of the operator. It is their job to make sure that the accident represents the risk insured, and that the amount of loss is ascertainable. Insurers also want to assess the continuing and future risks, if any; and will be concerned with the cause of the accident, for this reason if no other.

f) Passengers and/or legal representatives

Passengers are concerned, because of injury suffered in many cases, or in the case of fatalities, their personal representatives would be interested to know the cause of the accident in order to determine their stand in any subsequent litigation which might ensue.

g) The public

Aviation enthusiasts, the air travelling public,

and persons at large may be interested in an accident inquiry, for reasons chiefly of safety. This group will require reassurance that everything is being done to make air navigation safer. It must not be forgotten however, that the determination of criminal guilt and economic loss play an important role in the underlying interests of other groups; for example, airline pilots may regard investigations as the inevitable prologue to disciplinary action, and the same applies to maintenance crews, air traffic control officers, and meteorological personnel.

It can be seen therefore, that while the overall consideration in an accident inquiry by the aeronautical authorities of a State is the assurance of more safety in air transportation, certain groups may have other equally important and valid motivations.

Not all types of accidents are required to be investigated under the relevant provisions of the Chicago Convention. The types of accidents required to be investigated are clearly defined in Article 26 of that Convention. However, for the purpose of Annex 13, aircraft accident is defined as:

"An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all persons have disembarked, in which:

a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto; or

b) the aircraft receives substantial damage."

This definition is considered at greater length in a more appropriate section of this paper.

In spite of the limitations suggested by the definition and provisions of Annex 13, it will be shown that many States, in their national Regulations providing for aeronautical law, go beyond these requirements.

It is worth noting at this point that the question of aircraft "incidents" and its definition is relevant. In several States where the aviation industry has progressed, close attention is given to aircraft 'incidents'. It has been proven that the use of incident reporting is a very effective means of preventing the recurrence of accidents.

An incident has been defined as "any unexpected event arising out of aircraft operations which might threaten harm to any person"⁸. Other definitions are far more complete and precise, and will be considered later in this paper.

The importance of this aspect of accident investigation has been noted at the highest international level. The Accident Investigation Division of the Air Navigation Commission of the International Civil Aviation Organization at its Second Session in February 1947, recommended that the Secretariat study the possibility of obtaining reports of aircraft incidents from States. At that time, many States objected to the implementation of a system which would have made it obligatory upon them to forward such reports, and the entire idea was shelved. There is reason to believe however that there will be a change of heart to-day, especially with the rapid increase of modern aircraft and the greater awareness for air safety now prevalent and which will continue to grow. The matter was again raised at the Third Session of the Accident Investigation Division, held in Montreal between January 19 - February 11, 1965. At this session, a request submitted by the delegate of Australia recommended that matters concerning the notification, investigation and

and dissemination of aircraft incidents reports, be considered.⁹ Australia has successfully developed procedures for the reporting and investigation of air safety incidents, and Australian experience is that the investigation of incidents contributed more to safety than the investigation of accidents. The Australian delegate advocated that it was now opportune to initiate uniform action between States. It seemed clear that an ounce of prevention is better than a pound of cure, and it was recognised that the reporting and dissemination of information pertaining to incidents should be adopted at an international level. As a result of this recognition, two recommendations followed, namely:

"1. Exchange of information concerning aircraft incidents

That the attention of States be drawn to the importance, for the prevention of accidents, of information obtainable from occurrences, other than accidents, which are associated with the operation of aircraft and in which the safety of an aircraft has been seriously endangered; and that States be requested to take the following action in respect to such incidents.

⁹I.C.A.O. DOC 8486 AIG/111. Report of the Third Session, Montreal 19 Jan.-11 Feb. 1965. P.1-7

- a) Any Contracting State having been informed of the details of an incident under investigation, should, on request by the State in which the incident occurred or the State of Registry, furnish all the relevant information available to it.
- b) When an incident investigation has provided material for the enhancement of safety in future aircraft operations the State which has developed this information should ensure that it is made available with the minimum of delay to the State in which the incident occurred, the State of Registry, and any other affected State.

2. Further study in the field of aircraft incidents

That I.C.A.O. undertake further study of the ways in which incident material may be more adequately used for the prevention of accidents for further consideration by the Member States".¹⁰

It is interesting to note that several States in areas where Civil Aviation is well developed have already made provisions in their national legislation for the reporting

of incidents, and, it is hoped that in the near future, States would arrive at some accord in this important matter in the interest of air safety.

C H A P T E R I I

BACKGROUND TO DEVELOPMENT

Prior to the Chicago Conference on International Civil Aviation of 1944, there is little on record to suggest accord on the subject of aircraft accident investigation in the international context. There is little to show that aircraft accident investigation was given any special treatment. Before, and for many years after World War I, aviation was confined to military, postal and stunt flying, thus it is certain that in this early period, there was a relatively high incidence of accidents. However, the Paris Conference of 1910 was the first Conference held on the regulation of aerial navigation on an international basis of any significance.¹¹ This Conference proved abortive because of the lack of accord between the participating States on the question of the rights of States to sovereignty in national airspace and other factors. It is significant that at this Conference, no mention was made of the subject of aircraft accident investigation. Aircraft accidents in general were dealt with in whatever usual manner in existence as provided for

¹¹An Historical Survey of the Law of Flight; Sands, Pratt, Lyons; Institute of Air and Space Law, McGill University, Montreal, 1961. - P.10

by the national laws applicable to all vehicular accidents, and it is reasonable to assume that this total absence of special provisions resulted from the thinking current at the time.

The Paris Conference on Air Navigation of 1919, was the first effective international Conference on Civil Aviation, and was the result of the awareness by the participants, of the commercial possibilities involved in civil aviation.¹² The Paris Convention which resulted from this Conference was the forerunner of the Madrid Convention of 1926 and the Havana Convention of 1928. It must be observed that in none of these Conventions was the question of aircraft accident investigation specifically mentioned. There was no single international Convention which had universal support. The Convention for the Regulation of Air Navigation (the Paris Convention) of 1919 was ratified by 33 states, but the United States, the U.S.S.R. and China were not parties to it, while the Havana Convention applied to the American Continent and made no provisions for uniformity in technical matters.

Article 23 of the Paris Convention of 1919 states,

¹²IBID P.10

"with regard to the salvage of aircraft wrecked at sea, the principles of Maritime Law will apply, in the absence of any agreement to the contrary".¹³

Maritime Law was to be applied to salvage operations at sea in the absence of agreement. This was the nearest point arrived at towards international agreement on action to be taken in the event of an aircraft accident. Mance, in his work mentions that an agreement signed between Belgium, France, Great Britain and the Netherlands provided that where an accident occurred to an aircraft in a foreign country, such accident was to be immediately investigated by the authorities of the country in which it had occurred; a representative of the State of Registration, if a foreign state, being invited to attend the investigation and submit observations. He further states that "no provision was made for the publication of any report or the investigation".¹⁴

The relations between technical and legal investigations were discussed by the C.A.I. (Conference Aeronautique Internationale) and by the C.I.N.A. (Commission International de Navigation) and the latter body by 1926 had recommended

¹³International Convention relating to the Regulation of Aerial Navigation Oct. 13, 1919

¹⁴Mance. op.cit. P.30

that States should conclude agreements among themselves with a view to the carrying out of technical investigations entirely independent of investigations required by national statutory provisions.¹⁵ It must be noted that many States had already made regulations to govern the investigation¹⁶ of aircraft accidents, for national purposes. It would seem therefore, that by the year 1926, States which were concerned with the development of aviation had begun to realize the full potential of accident investigation and were prepared, in view of the international nature of aviation to take practical steps to assist in its rapid development and to make international air transportation as safe as possible.

The question of aircraft accident investigation was first given serious study at the Chicago Conference of 1944. Committee 11 (Technical Standards and Procedures) delegated to sub-committee 9, the responsibility for making recommendations in regard to accident investigation, including¹⁷ search and salvage.

¹⁵ Ibid P.30

¹⁶An Historical Survey of the Law of Flight op.cit P.

¹⁷I.C.A.C. proceedings op. cit. Vol.2 App. 2 P.1385

A draft Convention of the United States delegation formed the basis of discussions. Article 15 of that Convention proposed as follows:

"With respect to accidents occurring in the territory of a Contracting State involving aircraft of another Contracting State, the appropriate aeronautical authorities of the former State will co-operate in every way possible with the appropriate aeronautical authorities of the latter State to the extent of enabling them to be present or represented at investigations of such accidents, particularly with the view to obtaining full information¹⁸ bearing on the cause of the accidents".

The discussions held by this Sub-Committee resulted in proposals being submitted which in turn were drafted into Section 3 of Article IX of the Interim Agreement on International Civil Aviation which dealt with measures to facilitate air navigation and reads as follows:

"In the event of an accident to an aircraft of a member State occurring in the territory of another member State and involving death or serious injury

¹⁸ I.C.A.C. Proceedings Vol.1 P.559

or indicating serious technical defect, in the aircraft or air navigation facilities, the State in which the accident occurs will institute an inquiry into the circumstances of the accident. The State in which the aircraft is registered shall be given the opportunity to appoint observers to be present at the inquiry and the State holding the inquiry shall communicate the report and findings¹⁹ in the matter to that State".

This provision of the Interim Agreement went beyond the provisions of Article 15 of the draft proposals of the United States which have been quoted above.

Canada submitted a substitute draft proposal based on the final report of Sub-committee 6. The relevant part of the Canadian draft proposal reads as follows:

"Investigation (b) Conduct an investigation into the cause of any accident within its territory to an aircraft belonging to a signatory State involving death, serious injury or indicating serious technical weakness. Allow an accredited representative of

¹⁹Ibid. P.141

the State of Registration to appear before the investigating body with authority to question witnesses and examine evidence, and forward proceedings in full together with such conclusions that may be drawn therefrom to the State of Registration".²⁰

The Canadian proposal was considered along with the draft proposal of the United States and it was agreed that a basic Article in the Chicago Convention concerning the subject of aircraft accident investigation, should be prepared. A re-draft was submitted by the drafting committee which was itemised as Article 24 of the draft international Convention. It reads as follows:

"Investigation of accidents. In the event of an accident to an aircraft of a contracting State occurring in the territory of another contracting State, involving death or serious injury, or indicating serious technical defect in the aircraft or air navigation facilities, the State in which the accident occurs will institute an inquiry into the circumstances of the accident, in accordance, so far as its laws permit, with the procedure which may be recommended by the

²⁰ I.C.A.C. Proceedings Vol. 1....P.694
See also Proceedings Vo. 11. P. 1229-1232

International Air Organization. The State in which the aircraft is registered shall be given the opportunity to appoint observers to be present at the enquiry and the State holding the enquiry shall communicate the report and findings in the²¹ matter to that State".

Article 24 subsequently became Article 26 of the Chicago Convention with a minor amendment.

During the existence of the Provisional International Civil Aviation Organization (PICAO), and the early days of the International Civil Aviation Organization (ICAO), attempts were made to amend Article 26. The Air Navigation Committee in its Report to the Council of I.C.A.O. of 27 April 1946, recommended that Article 26 of the Chicago Convention be amended to permit the use of the Canadian terminology, that is, "accredited representatives to participate in the enquiry" instead of the phrase "observers to be²² present at the enquiry", other amendments were also proposed.

The Report of the Committee on the International

²¹ I.C.A.C. Proceedings. Op.cit. Vol. 1 P. 667

²² I.C.A.O. DOC. C/WP.3924 Pgs. 5 - 6.

Convention on Civil Aviation provided for under the Interim Agreement considered that the majority of recommendations for changing Article 26 did not constitute a fundamental departure from the text of the Article.²³ The Assembly at this early stage, adopted no amendments to the Convention and thereafter the question of the amendment of Article 26 was shelved, not before however, it was agreed that a study of the interpretation, application and limitations of Article 26 be undertaken by the Council of ICAO.²⁴ On March 30, 1951, the Council considered and endorsed the 121st Report of the Air Navigation Commission which dealt with the meaning given to Article 26 by the Commission. The following interpretation was accorded to Article 26, by the Council of ICAO:

- "(a) It deals only with the rights and obligations of two States - The State of Registry and the State of Occurrence;
- (b) It applies to an accident to an aircraft belonging to one Contracting State that occurs in the territory of some other Contracting

²³ I.C.A.O. DOC C/WP.3924 Pgs. 6 - P.9

²⁴ I.C.A.O. DOC. C.WIP 3924 Para. 12

State;

- (c) The accident must involve death or serious injury or must indicate some serious technical defect in the aircraft or air navigation facilities. The Article leaves no doubt of the necessity for an inquiry in the case of a serious technical defect but its application may well be difficult since a serious technical defect may not be evident unless a preliminary investigation is held; the Article being silent on the matter, it is for the State in which the accident occurs to decide for itself how it will discover an indication of serious technical defect that will necessitate an inquiry;
- (d) When the conditions of (b) and (c) are satisfied the obligation of the State of Occurrence to institute an inquiry arises. The obligation is unconditional and obligatory. There is nothing in the Article to prevent the State of Occurrence from delegating the conduct of the inquiry to another authority;
- (e) The inquiry once instituted must be conducted in accordance with the procedure which may be

recommended by ICAO but, this additional obligation being qualified by the words "so far as its laws permit", the ICAO recommended procedures will derive their force from other Articles of the Convention; in particular, if adopted by Council as Standards they will have to be complied with as far as practicable and any deviation therefrom will have to be reported according to Article 38. However, where the provisions of the Convention and the provisions of the Annex overlap, deviations would only be valid on those portions of the Annex not covered by the Convention;

- (f) The opportunity is given to the State of Registry to appoint observers to be "present" at the inquiry. (The word 'present' is taken to refer only to the physical presence of observers). It is an absolute right given by the Article for accidents covered by the Article. For other accidents coming within the scope of the Annex, deviation that in effect excludes

observers would be valid"²⁵.

Article 26 imposed three important obligations upon Contracting States when an accident occurs in the territory of a Contracting State to an aircraft belonging to another Contracting State, which involves death or serious injury, or indicates serious technical defect in the aircraft or air navigation facilities. Whenever such an accident occurs, the State in which the accident occurs is obliged to:

- (a) institute an inquiry into the circumstances of the accident in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization.
- (b) allow the State of Registry an opportunity to appoint observers to be present at the inquiry; and
- (c) communicate the report and findings in the matter to the State of Registry.

It will be seen from a study of Article 26 that it provides for an inquiry only in certain types of accident. It is silent on several important matters. It was left to the drafters of Annex 13 to fill in some of the gaps.

²⁵Ibid - Pgs. 10-11.

At the final plenary session of the International Civil Aviation Conference on December 7, 1944, several instruments were formulated. The Final Act contained the definitive²⁶ texts of the instruments formulated by the Conference. Of the resolutions and recommendations adopted were those pertaining to "Draft Technical Annexes;" the preamble of which contains the following recitals:

- "a. The largest possible degree of international standardization of practice in many matters is important to safe, expeditious, and easy air navigation.
- b. These matters typically involve problems of great variety and complexity and require that much new ground be explored; and
- c. Considerable progress has been made, during the discussions of the present Conference, in the development of codes of practice agreed upon as proper by the technicians participating in the discussions, but the time has been too limited, and the number of personnel able to participate directly, too small to permit carrying the discussions to

²⁶I.C.A.C. proceedings Vol. 1 Pgs. 113-372

final conviction of the adequacy or correctness of certain²⁷
of the determinations here made".

It was necessary therefore to leave the development of the procedures to groups of experts who had sufficient time and talent to draw up detailed 'codes of practice', and before these became effective, certain other procedures had to be satisfied.

Annexes contain 'Standards' and 'Recommended Practices' and are adopted and amended by the Council of ICAO in accordance with Article 37, Article 54 and Article 90 of the Chicago Convention. Article 37(k) of the Convention is the controlling Article in the development of Annex 13 and provides as follows:

"Each contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation. To this end the International Civil Aviation shall adopt and amend from time to time, as

²⁷Ibid. Pg. 123

may be necessary, International Standards and recommended practices and procedures dealing with: (k) Aircraft in distress and investigation of accident".

The relevant part of Article 54 states, "The Council shall:

1. Adopt, in accordance with the provisions of Chapter VI of the Convention, International Standards and recommended practices, for convenience designate them as Annexes to the Convention; and notify all contracting States of the action taken".

Article 90 deals with the manner of voting and²⁸ indicates how such Annexes are to become effective. A brief outline of the significance of 'Annexes' will indicate the importance of the matters contained therein. An Annex is made up of component parts and each part has a different status. Material comprising the Annex proper, consist of (a) Standards and Recommended Practices adopted by the Council (ICAO) under the provisions of the Convention (b) Appendices and (c) Definitions. Material approved by

²⁸See Chicago Convention 1944. Art 90

the Council for publication in association with the Standards and Recommended Practices, consist of:

(a) Forewords, (b) Introductions (c) Notes & (d) Attachments. ²⁹

A Standard is defined as "any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation."³⁰ A Recommended Practice is regarded as desirable in the interest of safety, regularity or efficiency of international air navigation and is defined as "any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interests of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavour to conform in accordance with the Convention".³¹

²⁹Foreword to Annex 13. Second Edition March 1966 P.4

³⁰Ibid. P.3

³¹Ibid. P.3

In the case of differences or non-compliance with Recommended Practices, Contracting States are not obliged to notify Council or any such differences. The Council has however invited Contracting States to notify differences even in cases of recommended practices, if any occur, in addition to those relating to international Standards, because knowledge of such differences may also be important for achieving uniformity in safety, efficiency, and regularity of international air navigation.³²

In the historical background to Annex 13, it is stated that:

"Standards and Recommended Practices for aircraft accident inquiries were first adopted by the Council on 11 April 1951, pursuant to Article 37 of the Convention on International Civil Aviation (Chicago 1944) and were designated as Annex 13 to the Convention".³³

They were based on recommendations of the Accident Investigation Division at its first Session in February 1946, and have since been developed at successive sessions

³²Foreword to Annex 13. Second Edition March 1966

³³Ibid.

of this Division. Annex L of the Interim Agreement provided³⁴
a basis for the first discussions.

A draft resolution dealing with the application of the Annex to aircraft accidents covered by Article 26 of the Convention was prepared by the Secretariat of ICAO. The draft proposal recommended that the provisions of the Annex should be followed only in inquiries into accidents involving death or serious injury and was in fact, more restrictive than the original recommendation in the draft resolution of adoption of the Annex, which had recommended that the provisions be applied in all inquiries instituted in the course of Article 26. The restrictive approach now prevails.

In answer to the query which accidents indicating serious technical defects in the aircraft or in air navigation facilities had been excluded when Article 26 imposed an obligation to investigate them, it was explained that "the Commission considered that the procedures in the Annex were appropriate for inquiries into accidents involving death or serious injury, but might go too far for inquiries

³⁴I.C.A.C. Proceedings Vol. II Pgs. 1226-1228

into accidents indicating a serious technical defect in a facility. For example, States might not be prepared to allow the accredited representatives of other States to take so active a part as the Annex provided for in the investigation of such accidents. At some future time, the Annex might conceivably be divided into three parts, with certain procedures for the investigation of accidents involving death or serious injury, slightly different procedures for the investigation of accidents indicating a serious technical defect in the aircraft, and still different ones for accidents indicating serious technical defect in air navigation facilities".³⁵

The important point to note here is that the Annex does not go beyond the limits of Article 26 in making provisions for aircraft accident inquiry. In effect, Annex 13 deals only with any 'aircraft accident' within the terms of the definition in the Annex.

The present position has been clearly stated. In order to maintain the correct relationship between the provisions of Article 26 and those of the Annex, the following principles have been observed:

- "(a) Article 37 of the Convention is the controlling Article in the development of an AIG Annex, but nothing in the Annex must contravene the express terms of Article 26 or other Article of the Convention, nor should it contain any provision which would do violence to the spirit and intent of the Convention.
- (b) Subject to (a), 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. It would be no 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, it 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. The Annex may also deal with accidents of a kind which do not fall within the provisions of Article 26".³⁶

³⁶Ibid. P. 12 Para. 21

It is clear from these observations that the limitations of Article 26 have been recognised and that Article 37 and Annex 13 are being used to bridge the gap. There is nevertheless, a close relationship between Article 26 and Annex 13. The difficulty arose out of the definition given to "aircraft accident" under the Annex. It became necessary for the Council of ICAO sitting at the twentieth meeting to reconcile these apparently overlapping provisions. It was at this session that Annex 13 was adopted.³⁷ The Council recommended that Annex 13 and the procedures contained therein should be the procedures to be followed in accordance with Article 26, and thus contracting States are not obliged to follow the procedures outlined in Annex 13 when an accident does not involve death, serious injury, or substantial damage to the aircraft, even if the accident indicates serious technical defect in the aircraft or air navigation facilities.

The limitation applies only with regard to the procedure to be followed; the other obligations remain, that is:

- (a) the State in which the accident occurs

³⁷Idib. P. 12 Para 22

is obliged to institute an inquiry;

- (b) the State in which the aircraft is registered shall be given the opportunity to appoint observers to be present at an inquiry, and
- (c) the State holding the inquiry shall communicate the report and findings in the matter to the State of Registry.

Accidents involving serious technical defect in the aircraft or air navigation facilities continue to be governed by the national laws of the Contracting States. The entire question of aircraft accident inquiry has now reached such a degree of importance that such differences may well be outdated, since certain States have already³⁸ taken steps to have incidents reported and investigated.

³⁸See Chapter 5.

C H A P T E R I I I

THE EXISTING PROVISIONS

It is proposed to consider the existing position in respect to accident investigation as is contained in the latest amended Annex 13.³⁹ Accident investigation procedure at the present time is controlled in the international context by the relevant provisions of Annex 13. The latest amendments were recommended after meetings of the Air Navigation Commission of the International Civil Aviation Organization which were held in Montreal, between January 19 and February 11, 1965.⁴⁰ The principal amendments concerned the following:

- (a) Definitions. The following terms namely, "inquiry" investigation" and "investigator-in-chief", were added to Chapter 1.
- (b) The inclusion of the State of manufacture in the participation of an investigation unless such participation is specifically stated as not being required;
- (c) New provisions were included for the protection of evidence pending the arrival of the accredited

³⁹ See Appendix 1

⁴⁰ I.C.A.O. DOC.8486. AIG/111 See also Foreword to Annex 13

representative of the State of manufacture;

(d) Provisions were made for timely notification of aircraft accidents to the State of manufacture, and

(e) it was agreed to introduce as a recommended practice (5.10) a specification permitting the attendance of representatives of the operator.

The Annex underwent extensive amendments in recognition of the need for world wide uniformity in many aspects of accident investigation. Giant strides were proposed in the fields of initiating and conducting an inquiry and in the presentation of reports. In this regard the agenda of the meeting of the Third Session of the Aircraft Accident Division of the Air Navigation Commission is significant. The latest amendments were formulated at this meeting. One of the tasks of the delegates present was the "examination of the material contained in Annex 13 with the purpose of making proposals for its revision to promote maximum effectiveness of investigations and inquiries into accidents involving modern transport aircraft and, consistent with the needs of present and foreseeable future aircraft operations, formulate recommendations mainly with the object of:

1. Notification of accidents.
2. Provision and availability of technical experts.
3. Information on accidents and reports on accidents inquiries.
4. Revision of definitions.^{"41}

It is significant also that this meeting dealt with probable and appropriate amendments to Annex 9 of the Chicago Convention, which deals with facilitation, of entry of experts into States and the question of exchanging information in connection with aircraft incidents was considered.

Annex 13 is divided into six chapters, contains a Foreword and three appendices, together with two attachments. It is proposed to consider each chapter separately.

Definitions

Definitions have caused, and continue to cause, a certain amount of confusion in the interpretation of Annex 13. The need for clear, precise and uniform definitions is another necessary factor in effecting uniformity of action under the existing international framework.

⁴¹Ibid. P. 1V - 1.

This chapter previously set out only three definitions, namely, "Aircraft", "Aircraft Accident" and State of Registry". A look at the definitions indicates a trend towards explanation and clarification with the aim of uniformity in view.

"Aircraft" is defined as "any machine that can derive support in the atmosphere from the reactions of the air";⁴² this definition is generally accepted since there have been no significant objections to it. Probably with the development of spacecraft and the possibility of the conflict of interests which will arise with the necessity to distinguish between airspace and outerspace, a clearer definition may become necessary. It must be noted that the United States of America in some of its legislative measures pertaining to "aircraft" does not use this definition,⁴³ nor is it used⁴⁴ in the United Kingdom.

"Aircraft accident" is defined as "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with

⁴²See Definitions Chapter 1 of Annex 13.

⁴³S101 of Federal Aviation Act 1958.

⁴⁴S 1(1)(C). Civil Aviation (Investigation of Accidents) Regulations 1951.

the intention of flight until such time as all such persons have disembarked in which:

- a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto or
- b) the aircraft receives substantial damage".

This definition speaks for itself and it is limited to cases of death, serious injury or substantial damage to the aircraft. One is reminded here that the Council of the International Civil Aviation Organization is yet to make out a procedure for accidents "indicating serious technical defect in the aircraft or air navigation facilities". This definition incidentally is somewhat limited in context to the obligatory requirements of Article 26 of the Chicago Convention, in that it introduces the aspect of "substantial damage" to the aircraft, and omits accidents "indicating serious technical defect in the aircraft or air navigation facilities".

Interpretations of the terms "serious injury" and "substantial damage" were found to vary among States. The terms were capable of several interpretations and were in

fact given different interpretations by different States. As a result, the Council of I.C.A.O. adopted definitive criteria for the terms "serious injury" and "substantial damage". Although many States have adopted or intend to adopt the interpretations recommended by the Council of ICAO, some states continue to use different interpretations. In order to achieve greater uniformity in the interpretation of these terms, contracting States are kept informed of the various different interpretations by Circular in order to assist them in arriving at a correct evaluation of information regarding aircraft accidents from other States. At the same time, those States that have interpretations different from those recommended, have been requested to give further consideration to adopting those interpretations recommended by ICAO. It is desirable for the purpose of comparisons, statistics, and other records that there should be a degree of uniformity in determining what constitutes an aircraft accident, and interpretations adopted by some States were included as guidance and other States were invited to provide for the guidance of others what criteria are used by them in determining what constitutes "serious injury" and "substantial damage" to persons and

aircraft, in relation to the definition of "aircraft accident"
in Annex 13.⁴⁵

"State of Registry" was defined as "The State on whose register the aircraft is entered" and is patently clear.

Three new definitions have been added to Chapter 1 of Annex 13, and they are namely, "inquiry, "investigation" and "investigator-in-charge".

- a) "Inquiry" is defined as - "The process leading to determination of the cause of an aircraft accident including completion of the relevant report.
- b) "Investigation" - as the gathering together in an orderly manner of factual information, relating to an aircraft accident, and
- c) "Investigator-in-charge" is defined as "the person charged with the responsibility for the organization, conduct and control of an investigation". His functions may be performed by a commission or delegated to some other body.

⁴⁵See Appendix 2.

Before these additions were made, there existed some confusion of terminology between the meaning of "investigation" and "inquiry" which necessitated an explanation from the Council of ICAO in the following terms:

"throughout the Annex the word "inquiry" is used as an all embracing term covering the gathering of all factual and relevant details of the accident, presentation of the evidence to the court of inquiry in accordance with the established legal procedure and the submission of the final report. The word "investigation" previously used indiscriminately has now been reserved to indicate that part of the inquiry which relates solely to the procurement of the evidence".

It was felt that this explanation was sufficient because it did not refer to the determination of a probable cause of the accident, although it was agreed that there was a necessity to accept an all embracing term to cover all aspects of the examination into an aircraft accident and to include therein the special function of gathering the factual and technical information relating to the accident. However, it was felt that by its very nature, a definition

ought to be as concise as possible and it was agreed that the scope of the inquiry should include:

- a) The investigation of the accident.
- b) The analysis of the evidence.
- c) The determination, if possible, of the cause.
- d) The completing of the relevant report, and
- e) The making of recommendations when appropriate".⁴⁶

It should be noted here that a new standard was added to Chapter 5 to read as follows:

"The inquiry instituted by a State shall include the investigation and the obtaining and recording of all relevant information, the analysis of the evidence; the determination, if possible, of the cause; the completion of the Report and the making of recommendations when appropriate. Where possible the scene of the accident shall be visited, wreckage examined and statements taken from witnesses".⁴⁷

The addition of this standard served to clarify what was in the past, a situation, quite likely to create some

⁴⁶ DOC 8486 - Pl.4 - 1.

⁴⁷ Annex 13. .5 .4.

confusion.

Applicability

In respect to the general applicability of the Annex as indicated in Chapter 2 thereof, it is understood that the Annex should apply, in the first place, to aircraft accidents occurring in the territory of a Contracting State to aircraft registered in another Contracting State. However, the general applicability is subject to certain standards and recommended practices, which will be considered later, in the light of the extension of the basic provisions⁴⁸ of the Annex.

Protection and Custody

Protection of evidence, custody and removal of aircraft is dealt with in Chapter 3 of Annex 13, and it consists of three important standards, namely; it requires the State in which the accident occurred to take reasonable measures to ensure:

- (a) the protection of evidence including the safe custody of the aircraft and its contents;
- (b) reasonable protection against further damage, access by unauthorized persons, pilfering and deterioration; and

⁴⁸ DOC. 8486, AIG/111 P. 1 - 1.

- (c) the preservation by photographic records or other means of any material evidence which might be removed, effaced, lost or destroyed.

The State in which the accident occurred is required, if a request is received from the State of Registry, to take all reasonable steps to ensure that the aircraft, its contents and any other evidence remain undisturbed pending inspection by an accredited representative of the State of Registry, so far as it is compatible with the proper conduct of the enquiry; provided that the aircraft may be moved in the event of necessity, to extricate persons or other valuables, or to eliminate danger to air navigation or to the public.

Finally, the State in which the accident occurs is required to release the aircraft or its contents when it is no longer required for the purposes of the inquiry, to any person or persons designated by the State of Registry. The State of occurrence is also required to facilitate access to the aircraft, its contents or parts, or itself effect removal of the said aircraft, contents or parts to a point accessible to the duly accredited representative of the State of Registry.

⁴⁹Annex 13 Chapter 3.4.

To the above standards has been added an important recommended practice, which extends the representation to the State of Manufacture. The practice recommended reads as follows:

"If a request is received from the State in which the aircraft was manufactured that the aircraft remain undisturbed pending inspection by an accredited representative of that State, the State in which the aircraft accident occurs should take all reasonable steps to comply with such a request so far as this is compatible with the proper conduct of the inquiry and does not result in undue delay in returning the aircraft to service⁵⁰ where this is practicable".

The State of Manufacture

The question of the participation of the State of Manufacture was given priority at recent discussions held by the Accident Investigation Division of the Air Navigation Commission of the International Civil Aviation Organization⁵¹ at its meeting above referred to, and the consensus was

⁵⁰Annex 13.Chapter 3.3

⁵¹See note 40.

that the State in which the aircraft was manufactured could play a most important role in accident inquiries in international and domestic aviation.

With the increase in the number of large modern aircraft, and the corresponding technological complexities involved in their every day operations, it has become very important that persons with intimate knowledge of the performance of these machines should be available at the earliest opportunity to assist where necessary, investigations resulting from failure or other malfunctioning of these machines. Because of the technical complexity in the organization of some modern aircraft, the task of determining the causes of accidents is made increasingly difficult and the need for the formulation of international procedures to utilize to the fullest extent the intimate and specialized knowledge possessed by the State of Manufacture of such aircraft is clear to all who are intimately concerned with safety in air transportation. Thus, there was not much difficulty in agreeing that the most effective contribution of the State of Manufacture of the aircraft concerned, would be in its actual participation in the investigation.

The extent of such participation created doubt. There were three viewpoints in this regard, one viewpoint was that it should participate throughout the inquiry, freely without restriction; the second was that such participation should be limited, and there was yet a third point of view which suggested that any such participation should be based upon invitation. Arguments of some weight and validity were tendered on behalf of each school of thought. In favour of the right to unlimited participation, it was argued that immediate examination by experts with an intimate knowledge of the aircraft type involved in the accident will avoid the possibility of effacement by time of valuable evidence that will affect valuable clues. It was also suggested that where the cause was a possible fault in the airworthiness of the aircraft, the complicated process of examination could best be undertaken with the advice of experts from the State of Manufacture. Further, that since the State of Manufacture was normally the State which first certificated the use of that type of aircraft, and was under obligation for its continuing airworthiness, in order to meet its obligations, it should have the right to participate

without restriction in all inquiries involving such aircraft. Against this viewpoint, it was pointed out that in some cases the causes of accidents are sufficiently and patently clear and the participation of the State of Manufacture is rendered unnecessary, in other words, it was felt that participation should not be automatic. A third viewpoint urged that the rights of the State conducting the inquiry could be more effectively maintained if the participation of the State of Manufacture was by invitation. It was necessary therefore in the light of these viewpoints which conflicted to some extent, to find a compromise, and the second alternative prevailed.⁵²

A provision was accordingly adopted into Annex 13 in the form of a standard and reads as follows:

"the State in which the aircraft was manufactured shall be entitled to appoint an accredited representative to be present at an inquiry into an accident to a turbine-engine transport aircraft unless it is specifically indicated in the initial

notification of the accident referred to⁵³
in 4.1 that such action is unnecessary".

This provision is a substantial change in the basic pattern of Annex 13 and it is a step forward towards the improvement of the entire process of investigation of accidents, so far as the technological aspect of aviation safety procedures is concerned. The State where the accident occurred is nevertheless not deprived of the last word. It retains the right to refuse admission to the State of Manufacture. Appendix 1 (k) of the Annex requires such State to indicate whenever the participation of the State in which the aircraft was manufactured is unnecessary.⁵⁴ It is also a recommended practice that when the State conducting the inquiry makes a request to the State of Manufacture to participate in an inquiry, such State should, unless it is impracticable to do so, provide an accredited representative to attend the inquiry.⁵⁵ Finally, an interesting note was added for the purpose of guidance, to the effect that the State of Manufacture of the aircraft or major component parts, or the State that first certificated the

⁵³Annex 13. Chapter 5.6

⁵⁴Annex 13. Appendix 1

⁵⁵Annex 13 Chapter 5.7

type may request participation in an inquiry involving types of aircraft other than those designated in Chapter 5.6, if it is believed that a useful contribution could be made to the inquiry or such participation might result in increased overall safety. The State conducting the inquiry is not precluded from making a similar request in similar circumstances.

Notification

Notification of an accident had presented difficulties in the past and it was necessary to make additional provisions to facilitate this process. Timely and expeditious participation of accredited representatives depends largely upon the speed and accuracy of reliable communications between the States concerned. In the past, notification practices showed that there was a lack of uniformity in practice between aeronautical authorities of States responsible for this important duty. There was no uniform system of rapid communication, for several reasons, ranging from inexperienced personnel to incorrect translation, and even often due to snags in diplomatic channels. These snags add to other problems inherent in organizing an investigation in some countries. To remove the burdens and facilitate

communication, it was agreed that ICAO should establish a uniform communication system for notification.

Two types of notification are now required. Formerly, provisions existed for only one formal notification which preceded certain details.⁵⁷ Now, an initial notification has to be sent immediately after an accident, and contains only essential information. A subsequent notification which follows provides further details concerning the accident and progress of the investigation.⁵⁸

It is now a standard that the State of Manufacture be notified with the same priority as the State of Registry, and accordingly the Annex is now amended to include the State in which the aircraft was manufactured.⁵⁹

The information to be provided in the initial notification was removed from the text of the Annex and is now the subject of an appendix to the Annex. The necessity for a subsequent notification is also a standard and States conducting inquiries are now required, within thirty

⁵⁷Annex 13 First Edition. Chapter 4.1

⁵⁸Annex 13 Second Edition. Appendix 2 Chap. 4.1, Chap. 4.2.

⁵⁹Annex 13. Chap. 4.1

days after an accident involving a transport aircraft, to forward the subsequent notification in the form specified in Appendix 2 of the Annex, to the State of Registry, to the State of Manufacture, and to any Contracting State which furnished information and was entitled to appoint an accredited representative, and to the International Civil Aviation Organization.⁶⁰ It was considered desirable that States be informed of all accidents in which airworthiness, technical defects, operational problems and other safety matters were involved. Where matters directly affecting safety are involved, the notification should be sent as soon as the information is available. A recommended practice was included in this Chapter to meet the situation where an accident occurs in the territory of the State of Registry, and it provides that the State conducting the inquiry should, within thirty days after an accident, send advice in accordance with the form prescribed in - Appendix 2 to the Annex, to the State in which the aircraft was manufactured; to the International Civil Aviation Organization; and to the State of Registry (if different from the State conducting the inquiry), of accidents to

⁶⁰Annex 13. Chap. 4.2.

all transport aircraft and to other aircraft, when airworthiness or matters of exceptional interest to the promotion of aviation safety are involved.⁶¹ It is also recommended that Appendix 2 should be prepared in one of the working languages of I.C.A.O. and that I.C.A.O. should disseminate to States, in a summary form at appropriate intervals,⁶² the subsequent notifications received. This is done through the Digest of Aircraft accidents prepared and published⁶³ by I.C.A.O.

The Inquiry

The Chapter of the Annex dealing with this important subject is now completely re-arranged. This was done because of the introduction of many amendments and the need for clarification. The more important amendments contain the following:

- (a) Provisions for the participation of the state of manufacture in prescribed circumstances.
- (b) Provisions designed to further world-wide uniformity in the methods of initiating and

⁶¹Annex 13. Chap. 4.4

⁶²Annex 13. Chap. 4.5

⁶³See Foreword Aircraft Accident Digest. No.14 Vol.11. Circ. 71 - AN/63.

conducting an inquiry, with a note suggesting the use as reference, of the Manual of Aircraft Accident Investigation prepared by I.C.A.O. and

- (c) The clarification of the entitlements conferred upon participants in an enquiry.

What should be included in an inquiry was explicitly stated in paragraph 5.4 and reads as follows:

"The inquiry instituted by a State shall include the investigation, and the obtaining and recording of all available relevant information; the analysis of the evidence; the determination, if possible, of the cause; the completion of the Report and the making of recommendations when appropriate. Where possible, the scene of the accident shall be visited, wreckage examined and statements taken from witnesses".

This standard provision assists to clarify the definition of "inquiry" as given in the "definitions" of Chapter 1 of the Annex. The clarification was considered necessary because the definition was deficient in that it omitted

reference to the important question of "the determination, if possible, of the cause" of the accident, and although it was recognised that definitions ought to be precise, it was nevertheless necessary to state quite clearly, what an inquiry should include. Whether or not an inquiry should have the power to make recommendations, was the subject of some contention but it was finally agreed by way of compromise that only in appropriate circumstances should such recommendations be made.

This Chapter of the Annex is important because the entire basis of the procedures to be followed in an inquiry in the international context is contained in this part. It begins by making the State in which the accident occurred responsible for the conduct of the inquiry or for the facilitation of its conduct by any state to which it has delegated this responsibility.⁶⁴ After stating what should be included in the inquiry, it proceeds to recommend that the investigation should have precedence over any other phase of the inquiry.⁶⁵ It is provided as a standard, that

⁶⁴Annex 13 Chap. 5.1

⁶⁵Annex 13 Chap. 5.4.2.

any Contracting State should, on request by the State conducting the inquiry, furnish it with all relevant information available to it and shall in such cases, be⁶⁶ entitled to appoint an accredited representative. It is a recommended practice that any Contracting State, the air safety facilities or services of which have been used or normally would have been used by an aircraft prior to an accident, and which has information pertinent to the inquiry, should furnish⁶⁷ such information to the State conducting the inquiry. It is further recommended that participation in the inquiry should confer entitlement to:

- (I) Visit the scene of the accident;
- (II) examine the wreckage;
- (III) Question witnesses;
- (IV) Have full access to all relevant evidence;
- (V) Be provided with copies of all pertinent documents, and make submissions in respect⁶⁸ to the various elements of the inquiry.

⁶⁶Annex 13. Chap. 5.8

⁶⁷Annex 13. Chap. 5.9.

⁶⁸Annex 13. Chap. 5.14.

Accredited representatives of States other than the State of Registry and the State of Manufacture may be limited to those matters which entitled such States to participation.

Finally, it is interesting to note that it is the responsibility of the State of Registry to conduct any inquiry which might result from an accident occurring in a location which cannot be established as being in the territory of a Contracting State. The State of Registry should endeavour to carry out an inquiry in co-operation with the State in which the aircraft accident occurs, but, failing such co-operation should itself conduct an inquiry with such information as is available.⁶⁹

A Note preceeding this Chapter of the Annex, makes it clear that nothing contained in it was intended to preclude a State conducting or participating in an aircraft accident inquiry, from calling upon the best technical advisers from sources such as operators, manufacturers and pilots. The lack of implementation of substantial parts of the provisions included in this Chapter of the Annex will be discussed in a later chapter.

⁶⁹Annex. 13. Chap. 5.3.

The Report

Two types of reports may be necessary. First the Report on the Inquiry, and secondly, a Summary of the Report. The Report itself is to be more flexible in its preparation because of the existence of different legal procedures. However, in the case of the Summary of the Report, standardization of format and terminology is required to facilitate speed of dissemination and understanding of its content.⁷⁰

The main value of the Report in the international framework is that it provides a basis for initiating improvements for the promotion of safety in serial navigation and aviation in general. In order to achieve this end, it is necessary to know the whole story, as far as possible, of the facts behind an accident. The facts upon which the conclusions are based are also to be inserted in the Report. The State of Registry, the State of Manufacture, and other participating States, in accordance with certain provisions⁷¹ are also entitled to receive a copy of the Report. The preparation of the Report is the prime responsibility

⁷⁰Annex 13. Appendix. 3.

⁷¹Annex 13. Chap. 6.1.

of the State which institutes and conducts the inquiry, but it is a recommended practice that such State should consult, when it considers it necessary, the State of Registry, and the State in which the aircraft was manufactured, if that State had appointed an accredited representative at the inquiry before publishing a Report or any part thereof.⁷² It is also recommended that a State receiving a Report or any part thereof, should not circulate or publish such information without the consent of the State instituting the inquiry unless the Report had been released by the State instituting the inquiry.

A further recommendation states that where the Report of an inquiry into an accident which occurs in the territory of the State of Registry contains matters of exceptional interest in the promotion of aviation safety, that the State should send to the International Civil Organization three copies of the Report of such accident prepared in the prescribed manner.⁷³

The Summary of the Report was primarily agreed upon

⁷²Annex 13. Chap. 6.2

⁷³Annex 13. Chap. 6.3 - 6.5.

to provide relevant material for I.C.A.O.; thus, terminology, in accordance with I.C.A.O.'s lexicon is used. States may also disseminate information if such information is of exceptional interest in the promotion of aviation safety, in an effort to inform those States not directly involved with the inquiry.⁷⁴

A problem that has confronted international air transportation is that of 'border formalities'.⁷⁵ The local regulations of any country, governing such matters as customs, immigration and public health, are necessarily important and every attempt must be made to meet these requirements, however, it is equally necessary to facilitate means of entry of experts and other accredited representatives in the case of an aircraft accident inquiry. For reasons already stated, the prompt arrival of qualified investigators in the event of an accident inquiry, cannot be over emphasized.

As early as the Chicago Conference of 1944, the desirability of facilitating entry into States was noted. Air Commodore Brown in presenting the report of his Committee

⁷⁴Annex 13. Chap. 6.3 - 6.5.

⁷⁵Walter H. Wager - Airline Frontier Formalities and Customs Free Airports. 20. J.A.L.C. 1953. P.416 et seq.

at that Conference said as follows:

"The necessity of search and rescue scarcely needs stressing, whilst the salvaging of a damaged aircraft is nearly always of vital importance in the work of accident investigation. Since the former task is an errand of mercy and the latter, a duty to the science and safety of flying, my Sub-Committee urges interested States to assist one another as far as possible in respect of customs⁷⁶ and immigration facilities".

Following upon the latest developments of Annex 13, it was found necessary to amend Annex 9 of the Chicago Convention dealing with facilitation of entry of experts into contracting States. The amendments, however, were minor in scope. It was found desirable to have experts admitted as quickly as possible after an accident occurred. In order to achieve this end, Annex 9 was amended in certain minor respects. The relevant provision now reads as follows:

"Subject to any conditions imposed by Annex 12 (search and rescue) and Annex 13 (aircraft accident inquiry), each Contracting State shall take the steps necessary to facilitate the temporary entry,

⁷⁶I.C.A.C. proceedings. Vol. 1. P. 753

as soon as possible, into its territory of qualified personnel required for search, rescue, accident inquiry, repair or salvage in connection with a lost or damaged aircraft".⁷⁷

Similar provisions were effected in regard to the facilitation of movement of aircraft parts.⁷⁸ The words "accident inquiry" were inserted in lieu of the word "investigation" wherever such word occurred in the Annex. These minor amendments were in keeping with the desirability of facilitating speedy entry of experts in the event of aircraft accidents. It would be a pity if this aim is defeated by States failing to conform with the more relevant and pertinent provisions of Annex 13 itself.

It is important to add a note at this stage on the question of aircraft accidents that occur on the high seas. The relevant provision of the Chicago Convention which deals with this question is Article 12 and reads as follows:

"Each contracting State undertakes to adopt measures to insure that every aircraft flying over or

⁷⁷DOC. 8486 - P.4-1, 4-2.

⁷⁸DOC. 8486 - P. 5-1

manoeuvring within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this Convention. Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable".⁷⁹

The material part of this Article which is of concern in this matter, is the nebulous third sentence; "over the high seas, the rules in force shall be those established under this Convention". The question arises therefore, as to the relationship between Annex 13 of the Chicago Convention and this provision. What duties and obligations arise and what are the rights and privileges of the respective States in event of an aircraft accident occurring

⁷⁹Chicago Convention 1944 Art. 12.

over the high seas? Article 26 of the Chicago Convention provides that a State in which an accident occurs is obliged to institute an inquiry into the circumstances of the accident in accordance, insofar as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization, however, it is equally clear that an accident occurring over the high seas, does not occur within the territory of a State.⁸⁰ Article 2 of the Geneva Convention on the High Seas, 1958, provides for the freedom of flight over the High Seas thereby embodying a rule of customary international law, but leaves the question unanswered. Dr. Jean Carroz states in his article "International Legislation on Air Navigation over the High Seas" that "in view of the absence of sovereignty over the high seas, it had proved indispensable to prescribe, as in the case of the Paris Convention, that the civil aircraft of all Contracting States should, when flying over the high seas, abide by⁸¹ the same rules without any possible deviation". To-day, Annex 11 provides standards and recommended practices for

⁸⁰Geneva Convention 1958.

⁸¹Jean Carroz, "International Legislation on Air Navigation over the High Seas" - 26 JALC 1959 Pgs. 158-172.

those parts of the airspace under the jurisdiction of a contracting State which provides Air Traffic Services for such areas, and also "wherever a contracting State accepts the responsibility of providing Air Traffic Services over the High Seas", but Annex 2 also deals with the topic of 'Rules of the Air'. It would appear after a careful consideration of the relevant provisions that one is constrained to refer back to the relevant provisions of Annex 13 to discover where responsibility lies in the eventuality of an accident occurring over or on the high seas. Annex 13 indicates that "the State in which the aircraft accident occurs shall institute an inquiry into the circumstances of the accident etc. It further states "it shall be the responsibility of the State of Registry to conduct any necessary inquiry in connection with an aircraft accident whenever the location of the accident cannot definitely be established as being in the territory of another State.⁸² It follows therefore that an inquiry into an accident which has been established to have occurred

⁸²Annex 13. Chap. 5.2.

over the high seas would be the responsibility of the State of Registry, and the duty to institute an inquiry into any such accident would lie with the State of Registry, whose duty it would be to conform with the provisions of Annex 13 if its laws so permit.

It is necessary to consider the relationship between those States that are signatories to the Chicago Convention and the few States that are yet to become members of the International Civil Aviation Organization; although few in number, they do in some cases possess international airlines and show some interest in international uniformity of air navigation rules and air procedures by attending many of the international Conventions dealing with several aspects of aerial navigation, if only in the capacity of observers. Contracting States to the Chicago Convention are requested in negotiating bilateral or multilateral agreements with any such State or States for the conduct of aircraft accident inquiries to endeavour, insofar as practicable, to conform to the requirements of Annex 13 of the Chicago Convention. Any such agreement should take into consideration the probable needs of both the State

of Registry and the State of Manufacture to participate in an accident inquiry and appropriate provisions should be inserted.⁸³ Along with the problem of non-contracting States, the latest amendment to Annex 13 also deals with the question of aircraft accidents in which the wreckage falls in the territories of more than one State. It was considered desirable to lay down some degree of guidance in such cases. In these cases, it was found to be even more important now that the aviation industry is entering the supersonic age, and accidents to high-flying supersonic aircraft may result in wreckage being scattered into the territory of several States. To deal with such contingencies, the Air Navigation Commission suggested where the wreckage of an aircraft falls in the territory of more than one State, the State in whose territory the major portion of the aircraft is located, should be regarded as the State in which the aircraft accident occurs for all purposes concerned with the initiation of an aircraft accident inquiry and should discharge all the responsibilities provided for in the Annex for the State in which the accident occurs.

⁸³Annex 13. Chap. .5.3; DOC. 8486 P. 1-1

The problem has been submitted to ICAO with a recommendation that it explores the need to develop material for inclusion in Annex 13 to provide for the assumption of responsibility for initiating an aircraft accident inquiry where the wreckage of the aircraft concerned falls in the territory of more than one State. Subject to what has already been mentioned, this problem will call for special consideration of the rights and duties of the State of Registry and may necessitate new rules of procedure for accidents of this type, involving more than ever a new form of international agreement for accident investigation.

CHAPTER IV

THE PROBLEMS OF IMPLEMENTATION

When the Council of the I.C.A.O. adopted Annex 13 on 11 April 1951, and recommended to States that the Standards and Recommended Practices for aircraft accident inquiry contained in it be followed as procedures for accident inquiries in accordance with Article 26 of the Convention, it was nevertheless accepted that States may, in accordance with Article 38 of the Convention, deviate from any provision of Annex 13, with the exception of the requirements of Article 26, which are:

- (a) In accidents involving death or serious injury or indicating serious technical defect in the aircraft or air navigation facilities, States are obliged to institute an inquiry, if an accident occurs within their boundaries;
- (b) the State in which the aircraft is registered shall be given an opportunity to appoint observers to be present at the inquiry; and
- (c) the State holding the inquiry shall communicate the Report and findings to the State of

Registry.

In dealing with the question of implementation, it is necessary to examine Article 38 of the Convention, which states as follows:

"Any State which finds it impracticable to comply in all respects with any such international standard or procedure, or to bring its own regulations or practices into full accord with an international standard or procedure after amendment of the latter, or which deems it necessary to adopt regulations or practices differing in any particular respect from those established by an international standard, shall give immediate notification to the International Civil Aviation Organization of the differences between its own practice and that established by the international standard. In the case of amendments to international standards any State which does not make the appropriate amendments to its own regulations or practices, shall give

notice to the Council within sixty days of the adoption of the amendment to the international standard, or indicate the action which it proposes to take. In any case, the Council shall make immediate notification to all other States of the difference which exists between one or more features of an international standard and the corresponding national practice of that State".

The necessity for standardization is obvious, but it is also quite clear that there can be no universal rule because of the varying stages of development of Contracting States; for one reason or another it may be impossible for a Contracting State to perform its obligation, and more especially so in the field of aircraft accident investigation. Article 38 gives to such State an opportunity to deviate wherever such compliance is impracticable, in which case, it shall give "immediate notification to the Council of differences between its own practice and that established by the international standard".

In the draft Report of the Committee on Technical

Standards and Procedures (Technical Committee II) under the heading "Significance of Technical Standards" it is stated inter alia as follows:

There can be no universal rule in this matter. Clearly, universal standardization in some matters is necessary to the safety of international air navigation; while it is equally clear that in other respects such standardization may be desirable merely as a convenience or a measure of economy. A suitable definition of obligation is required with respect to each technical document adopted. The obligations which might be assumed by the States in this connection are of at least three types. Most common is the obligation to supplant the terms of a national regulatory code by those of an international one, or to bring the national code into conformity with the international standard and keep it so. A particularly obvious instance of that sort relates to

the rules of the air, in respect of which it is obviously necessary that any change which proves desirable in an international standard should have worldwide application at the same hour. The second class of possible obligation is that of conformity to certain practices, such as the use of standard procedures in communications and in the distribution of meteorological information, or in symbolic representation on aeronautical charts. The third such category concerns possible obligation to make expenditures upon the maintenance of facilities in accordance with some agreed standard pattern. It may be said at once of the last of these classes that, desirable as it is, in the opinion of this Committee, that certain minimum standards of airway organization be attained, it is not believed that States can be expected to accept any general and continuing obligation to supply such facilities in connection with any general

standard, especially if a facility be one subject to ready amendment from time to time. The most that the Committee feels it possible to hope for in those instances, at least through the medium of any readily amendable documents attached to a general Convention, would be the acceptance of recommendations and an undertaking by the participating States to conform to such recommendations as far as their particular situations may permit".⁸⁵

Problems of implementation fall under three broad categories; first, there is the difficulty experienced by certain States to implement the necessary national legislation. Many national legislative systems among the contracting States find it impracticable to supplant the terms of a national regulatory code by those of an international one, or to bring its national regulations into conformity with international standards and requirements and keep them so without immense difficulty. Secondly, it is clear that problems of communications and language present a formidable barrier to the implementation of international standards, it is sometimes impracticable to achieve conformity to

⁸⁵I.C.A.C. proceedings Vol. 1. P.714

certain practices without agreement in other fields and with other agencies both national and international; for example, the use of standard procedures in communications may involve accord with the International Telecommunications Union; or the use and distribution of meteorological information may require overall agreement with the World Meteorological Organization. The third and an important problem is the vast expenditures involved in creating and maintaining the facilities required under the obligations accepted in accordance with some agreed procedure.

This aspect is of greater importance to-day with the advent of the supersonic air transport aircraft. In the matter under consideration, several States have notified I.C.A.O. of differences which exist between their national regulations and practices and the international standards and⁸⁶ recommendations of Annex 13. As of January 1964, the following sixteen states had informed I.C.A.O. of such differences or had in some way commented; namely, Afghanistan; Argentina, Canada, France, Germany, Greece, Italy, Lebanon, Mexico, Netherlands, Poland, Portugal, Spain, Thailand, Tunisia and Viet-nam.

⁸⁶See Appendix 3.

A glance at the comments of some of these States will indicate to some extent, the reasons for non-implementation as shown by these States. Afghanistan's comments were quite simple and may be typical of other developing countries. These comments state simply "The Civil Aviation Regulations in Afghanistan are in the primary stage. The intention of the Afghan authorities is to follow the provisions of the Annexes as far as is practical under the circumstances". Argentina commented that it will permit accredited representatives and advisers to attend the inquiry only and will not permit participation in the inquiry; and such representative will only be allowed full access to information, evidence, and certified copies of documents pertinent to the inquiry.

Canada refused to permit any participation by an accredited representative of another State in an inquiry; France indicated as follows:

- "(a) That it may delegate the whole or any part of the conduct of the technical inquiry only, but not of the judicial inquiry, to the State of Registry;
- (b) Accredited representatives of the State of

Registry will be permitted to be present at the technical inquiry only, and not at the judicial inquiry.

- (c) It will not furnish information concerning the judicial inquiry, only the technical information.
- (d) Accredited representatives will be permitted to participate only in the technical inquiry and not in the judicial inquiry.
- (e) The documents of the record of establishment of evidence, examination of documents, questioning of eye witnesses or other witnesses; reports and certified copies of all documents pertinent to the inquiry which are prepared by judicial police officials, may not be made available to investigators from the State of Registry or to accredited representatives permitted to participate in the inquiry".

Mexico stated that it will not implement the provisions contained in Annex 13, but will implement those in its national regulations for aircraft accident investigations. Spain indicated that "the inquiry will be initiated without

awaiting the arrival of an accredited representative of the state of registry" and a maximum of three observers may be present at the inquiry. Viet-nam commented that the standards included in paragraphs 1, 2, 3, 4 and 10 of Chapter 5, and the relevant paragraphs of Chapter 6 are only applicable to the technical inquiry. A summary of differences and comments is attached as appendix.

All Contracting States of the International Civil Aviation Organization have agreed to observe Article 26 of the Chicago Convention which is the relevant Article relating to Aircraft Accident in international law. However, detailed provisions as authorised by Article 26 and made under provisions of Article 37K are found in Annex 13 of the Chicago Convention.

The first edition of Annex 13 came into force on December 1, 1951 and the second edition came into force on August 25, 1966. Since the coming into force of the first edition of Annex 13, much has been done by contracting States by way of the implementation of this Annex in making it effective in their respective national regulations.

Article 38 of the Chicago Convention provides for

the notification to I.C.A.O. of differences between the national regulations and practices of States and the corresponding international standards and recommendations contained in Article 13; and as of December 1, 1963, as indicated by amendment No. 4 to the supplement to Annex 13, first edition;⁸⁷ the position was as follows:

Forty-two (42) States had notified I.C.A.O. that no differences will exist between their national regulations and practices and the international standards and recommendations of Annex 13, first edition. Below is a list of the States.

Australia	Ghana	New Zealand
Austria	Honduras	Norway
Belgium	India	Parkistan
Brazil	Indonesia	Phillipines
Burma	Iran	South Africa
Ceylon	Iraq	Sudan
China	Ireland	Sweden
Cuba	Israel	Switzerland
Czechoslovakia	Japan	Syria
Denmark	Laos	Turkey
Dominican Republic	Libya	United Arab Republic

Ecuador	Luxembourg	United Kingdom
Ethiopia	Malaysia	United States of America
Finland	Morocco	Uruguay

Forty-three (43) states had forwarded no information namely:

Algeria	Guinea	Niger
Bolivia	Guatemala	Nigeria
Cambodia	Haiti	Panama
Cameroon	Iceland	Paraguay
Central African Republic	Ivory Coast	Peru
Chad	Jamaica	Saudi Arabia
Chile	Jordan	Senegal
Colombia	Korea	Sierra Leone
Congo (Brazzaville)	Kuwait	Tanganyika
Congo (Leopoldville)	Liberia	Trinidad & Tobago
Costa Rica	Madagascar	Upper Volta
Cyprus	Mali	Venezuela
Dahomey	Mauritania	Yugoslavia
El Salvador	Nepal	
Gabon	Nicaragua	

Sixteen (16) states had notified I.C.A.O. of differences existing between their national regulations and practices

and the requirements of Annex 13 (First Edition). Comments were also received from these States.

The States are vis:

Afghanistan	Greece	Poland
Argentina	Italy	Portugal
Canada	Lebanon	Spain
France	Mexico	Thailand
Germany	Netherlands	Tunisia
Viet-nam		

It would seem after an analysis of the comments of States that the main objection is in the granting of sufficient locus standi to investigators or accredited representatives of Contracting States to full participation in the whole of the inquiry, and the underlying reason seems to be the lack of legislative authority to provide such permission. It must be borne in mind that national legislatures are equally concerned with national security as with implementing international standards, and if the latter is likely to conflict with the former, it is possible that States would show more concern for national security; and while it is accepted that the widest possible degree of international standardization of practice in matters

of international air navigation is desirable, problems do exist which require further exploration and which may be usefully attempted at an air law conference to deal specifically with this urgent matter of aircraft accident investigation, and its complexities.

CHAPTER V

A LOOK AT NATIONAL PROVISIONS

It is clear from the very nature of an aircraft accident that the inquiry must take a very different form to the investigation of other forms of transportation accidents. Unlike accidents to surface transportation, where it is more likely that there will be eye witnesses, and other factors to assist an investigator, aircraft accidents may occur in clouds or at great heights above ground, or even in desolate places far from habitation, and in many serious accidents, aircraft, passengers and crew are sometimes completely obliterated.

During the course of the Third Session of the Accident Investigation Division of the Air Navigation Commission of the International Civil Aviation Organization held in Montreal in January and February 1965, guidance material was developed for "the organization of an accident investigation". This material is a synthesis of the procedures adopted and the experience gained by many States that have conducted investigations of accidents involving modern transport aircraft. It is listed as

"Attachment B" of Annex 13 and states in its introduction as follows:

"An accident investigation is conducted pertinent to the accident with a view to establishing the probable cause thereof, and eventually when appropriate, the corrective action designed to prevent accidents. The accomplishment of these objectives requires that the investigation be properly organized, directed, carried out, co-ordinated and supervised by qualified technical personnel".⁸⁸

So far as the technical investigation goes, the lawyer agrees entirely with the functions of this trained body of experts. The lawyer accepts that volumes of factual evidence becomes available as a result of the care in which such an investigation may be conducted. However, certain problems remain to be clarified; for example, has the investigator-in-chief in every instance, a right of entry to private property during the course of gathering his evidence, or, put in another way, can a landowner refuse such parties from entering upon his property without due

⁸⁸See appendix 4.

process of law; another question among others that would concern the lawyer is, what guarantees of impartiality exist in the appointment of an investigating body.

Underlying every such institution, there is the need to see that justice is done. These are only some of the questions that lawyers are inclined to ask. Answers to these questions are sufficiently urgent and important to warrant consideration. In order to promote international standardization procedures, it is necessary to scrutinize national provisions to see where some degree of uniformity already exists. In considering this aspect in more detail, attention is given to the procedures used in the conduct of inquiries in certain areas. Examples are taken from both the Civil Law and Common Law systems, in considering the existing law at a national level.

The United States

In the United States the primary responsibility for the conduct of aircraft accident investigation lies with the Civil Aeronautics Board; in its functions, it is assisted by the Federal Aviation Agency. Title VII of the Federal Aviation (1958) Act, deals with aircraft accident investigation and the general duties of the

Board are described as follows:

"Sec. 70 1 (a) It shall be the duty of the Board to:

- (1) Make rules and regulations governing notification and report of accidents involving civil aircraft;
- (2) Investigate such accidents and report the facts, conditions and circumstances relating to each accident and the probable cause thereof.
- (3) Make such recommendations to the Administrator as, in its opinion will tend to prevent similar accidents in the future;
- (4) Make such reports public in such form and manner as may be deemed by it to be in the public interest; and
- (5) Ascertain what will best tend to reduce or eliminate the possibility of, or recurrence of, accidents by conducting special studies and investigations on matters pertaining to safety in air

navigation and the prevention of accidents."⁸⁹

In the selection of an investigation team, the Board has very wide powers; it may engage for service in the investigation of any accidents, persons other than officers or employees of the Board, and such persons shall have the same powers as the Board has with respect to hearings or investigations conducted by it. The Board is primarily responsible for the investigation of accidents involving civil aircraft of the United States including accidents involving foreign registered civil aircraft and accidents between civil and military aircraft.

In practice, this authority is delegated to an investigator-in-chief who is given certain powers to perform his duties. Section 320.5 of the Board's regulations⁹⁰ provides that an operator is obliged to notify accidents immediately, whereupon an Investigator-in-chief is appointed who becomes responsible, in the first instance for the security of the wreckage. Within minutes of the notification

⁸⁹Title VII - Aircraft Accident Investigation
Public Law 85 - 726, 85th Cong., 2nd Session; 72 Stat.731;49
U.S. Code; as amended.

⁹⁰Part .320. Rules pertaining to Aircraft Accidents,
Incidents, overdue aircraft and safety investigations,
Sub. - Part B - Initial notification of aircraft
accidents, Incidents and overdue aircraft.

of an airline accident, steps are taken to commence the investigation, the services of the State police, the local police, and if necessary, private detectives engaged by the Board are placed on guard over the wreckage to prevent unnecessary interference from the public. Generally, at the scene of an aircraft accident, many problems are likely to arise, especially if it is within the reach of curious passers-by. Problems of crowded roads, traffic jams, interference with bits of wreckage by souvenir hunters and such nagging problems, can give rise to many larger problems as the investigation develops. Acting under powers of police regulations which deal with these aspects roads may be blocked off and traffic jams avoided.⁹¹ The investigator-in-chief is responsible for the conduct of the technical investigation and he appoints groups of experts to deal with the several separate aspects of the accident. These aspects vary according to the nature of the accident, but they usually cover the various fields into which an investigation can be handled for speed and efficiency.

⁹¹Rizley, Further Reflections - Aircraft Accident Investigation by the Civil Aeronautics Board,
22.J.A.L.C. 452, 453. 1955.

The policy of the Civil Aeronautics Board is to⁹² allow the widest participation in any investigation. This is done to permit the use of the best possible personnel and skills in the conduct of the investigation. Of the groups usually invited to participate, the aviation industry itself may be represented by personnel chosen from the carriers, manufacturers, and the air transportation association; secondly, personnel concerned with the operation of the aircraft may be invited to participate, for example, airline pilots' associations, flight engineers' association and traffic control associations. It follows of course, that government organizations participate, such as the Federal Bureau of Investigation, and the U.S. Weather Bureau.

Through the close collaboration and the teamwork of these groups under the close supervision of the Investigator-in-chief, it is hoped that all the facts and other relevant circumstances and information would be forthcoming when the investigation is completed. The Board may deem it fit in certain circumstances to engage in a public hearing which precedes a formal report of the

⁹²See. Joint Research Project No.4. Aircraft Accident Investigations. - Inst. of Air & Space Law, McGill University, P.21

accident including a probable cause, and this report is issued and published by the Board. This briefly, is the procedure as followed by the aeronautical authorities of the United States. On analysis of the procedure, it is discovered that it is not the practice to permit participation by certain groups which, to the layman and lawyer, would appear to be intimately concerned and directly interested in the results of any such investigation.⁹³ The question may be asked, why are not certain parties who may be directly involved automatically permitted to participate? It has been shown that the State of Registry and the State of Manufacture are permitted to participate in the international context, as of right; therefore, why not the surviving aircrew personnel and other personnel directly involved in the particular flight, which resulted in the accident? Why not the dependents of the deceased or the injured survivors or other persons who can show injury as a result of such accident, or even representatives of the air travelling public? These questions would naturally interest the Lawyer or anyone interested in

⁹³Kriendler - Aviation Accident Law - Vol. 2. P.2 (1963)

resulting economic loss. A reason has been suggested for the absence of the group which consists of surviving passengers or their representatives and the personal representatives of the deceased. It has been pointed out that "the reason for their exclusion is simple passengers have no special knowledge or expertise to contribute to the investigation".⁹⁴

It is well known that in the case of surface transport accidents, there is no barrier to the person directly involved obtaining evidence and information with a view to private civil litigation. An interested party may conduct his own investigations. It may well be argued that in the case of an aircraft accident investigation, aggrieved parties ought to be permitted whenever it can be shown that their presence would be useful, to participate in the technical investigation.

The answer seems to emanate from the conflict of interests which arises after an aircraft accident, and which seems to be peculiar to the aviation field. First there is the great fear by operators and insurers that such

⁹⁴Joint Research Project (Note 92) P. 22.

participation may result in an increase in the number of court cases and litigation costs in general, and thereby restrict progress in accident prevention and the general growth of the industry; secondly, it is the avowed aim of all aircraft accidents investigation conducted by the C.A.B. to determine their cause with a view to preventing similar accidents in the future, and not to determine responsibility nor attribute economic loss since this latter aspect is in no way the concern of the investigating team. It is therefore, most important that the independence and impartiality of this body be assured. This is all the more necessary because of the official view of the United States authorities "that commercial aviation is no longer an infant industry entitled to special shelter, etc."⁹⁶

The Civil Aeronautics Board recognizes the resulting imbalance of the conflict of interests, as the following quote indicates:

"the Board is not unmindful, however of the possible hardship which confronts private litigants, who often have great difficulty

⁹⁶Statement by Chairman of the U.S. Delegation, at Special I.C.A.O. Meeting on Limits for Passengers under the Warsaw Convention and the Hague Protocol, Montreal. LIM -37,-14/2/66.

in establishing the facts relating to an aircraft accident. However, air carriers and aircraft manufacturers are frequently invited to participate in the field investigation since their detailed technical and operating knowledge can contribute to the discovery of important evidence bearing upon the accident. Such participation in the public interest does, however, allow them a degree of access to factual information regarding the accident not accorded to injured parties or the dependents of deceased persons who, not having the requisite technical background, are not permitted to take part in the investigation of the accident, and therefore, would not have equal access to such information".⁹⁷

However, the conduct of the technical investigation of an aircraft accident in the United States is universally accepted as being competent, exhaustive and complete, in spite of the apparent restrictions.

The Hearing

A public hearing of an aircraft accident investigation is within the discretion of the C.A.B.; the Federal Aviation

⁹⁷ See Joint Research Project P.30.

Act does not require the Board to hold such hearing.⁹⁸
However, it is the policy of the Board in the case of major disasters involving Civil transport aircraft, to hold such public hearings. A public hearing cannot be compared with a court sitting to hear and determine cases, on the contrary, they are held for the purpose of giving the public an opportunity to see the Board at work and serves as an assurance that everything is being done to trace the probable cause of the accident, and to prevent a recurrence. A public hearing is not held to fix legal liability, they are purely fact finding procedures, the regular rules of court procedure are not adhered to, and there is no appeal from its findings.⁹⁹

The Board of Inquiry consists of officers of the Civil Aeronautics Board, and the 'hearing officer'. This officer is responsible for the entire conduct of the hearing, witnesses are heard and relevant documents and exhibits are introduced that might aid the inquiry. Witnesses may be examined by the Board's technical officers who participate in the investigation and by members of

⁹⁸S. 303.5. Code of Federal Regulations. Chapter II Sub-Chapter B - See Joint Research Project P.148 Note (92)

⁹⁹See Joint Research Project. Note 92. C.A.B. Rules of Practice. S. 303.2. P. 148.

the panel, and also by other parties to the hearing. The hearing is controlled by the C.A.B. Rules of Practice. At the conclusion, any party to the hearing may submit recommendations to the panel as to the conclusions to be¹⁰⁰ drawn from the evidence.

When the hearing is of a public nature, any interested party may attend, but certain parties are normally requested to do so. Who may be a party to the hearing is settled by S.303.16(a) of the C.A.B.'s rules of practice which states, "the hearing officer may designate as parties to the investigations those persons, government agencies, companies and associations whose employees, functions, activities, or products were involved in the accident or who participated in the accident investigation and whose special knowledge and aeronautical skills¹⁰¹ contribute to the development of pertinent evidence". Passengers and their personal representatives are not considered "parties" and may not participate in the hearing. Because the result of the hearing is sometimes the basis for private litigation, it seems unfair that potential

¹⁰⁰IBID. S.303.20 P.150

¹⁰¹IBID. S.303.16(a) P.149

plaintiffs cannot participate in the hearing. The hardship which results has been noted by Kreindler, who thinks that this procedure is discriminatory against passengers and their estates, in that, no opportunity is given to them or their attorneys to examine witnesses or introduce evidence. This class is directly interested but nevertheless, has not the privilege of the other interested classes who are all permitted to take part in the inquiry.¹⁰² He also mentions that this class may have to pay as much as one thousand dollars for transcripts of the evidence and photostat copies of the evidence which are available only after the end of the hearing. At the end of the hearing, a report is prepared which is made available to the public.

It can be seen therefore that the policy of the aeronautical authorities of the United States as expressed in the policy and practice of the C.A.B., is to emphasize the function of determining the cause of the accident and relegating the determination of guilt and economic loss to other places. It is clear too that the underlying purpose is similar to that of Annex 13 in the international context which is the prevention of accidents in an effort

¹⁰²Kreindler. op. cit. See Note 93.

to effect greater safety in aviation.

The Report

The report of an aircraft accident investigation in the United States, is, in many cases, the only source of the facts of the accidents available. The institution of the technical investigation, its implementation, and the public hearing have been considered. The use of the report has been the subject of some discussion and judicial interpretation. The relevant legal provision in this connection is found in section 701 (e) of the Federal Aviation Act 1958, which states as follows:

"(c) No part of any report or reports of the Board relating to any accident or the investigation thereof, shall be admitted as evidence or used in any suit or action for damages growing out of any matter mentioned in such report or reports".¹⁰³

This provision is clear and there is no doubt that it speaks for itself. Therefore, although a potential plaintiff must turn to the use of the report, he cannot tender the document in evidence. This may be peculiar to

¹⁰³ The Federal Aviation Act of 1958, Public Law 85-726, 85th Congress - 2nd Session, 72 Stat. 731; 49 U.S. Code.

the United States, because such Report may be considered an official document in other countries and as such, may be used in courts of law in appropriate circumstances. The question is important and the problem as to what use can be made of the report in private litigation by a potential litigant is discussed later. The C.A.B. does not permit its employees to be used as witnesses to testify in cases of which they have personal knowledge because it is believed that such appearances would interfere with the performance of their official duties, and reduce their effectiveness.¹⁰⁴ There is also the supervening fear that airlines and manufacturers would be reluctant to participate voluntarily in investigations and would hesitate to supply evidence if such evidence could be used against them.¹⁰⁵ As a compromise, the Board permits "controlled use" by litigants of its employees.¹⁰⁶ To what use such Reports can be put and the extent to which employees of the Board may testify are governed by Part 311 of the C.A.B.'s Rules of Procedure. Information concerning accidents is only

¹⁰⁴Sec. 311 C.A.B. Rules - See Joint Research Project P.151

¹⁰⁵Ibid. P.29 See also Evidentiary Immunity of C.A.B. Accident Records and Reports. J.A.L.C. Vol.25 1958 Pgs. 235-240.

¹⁰⁶Joint Research Project p.26

released if it is in the public interest, and no employee is permitted to testify in court if the evidence is otherwise available through other means including the use of discovery procedures, and when such permission is granted by the Board, the employee's testimony must be confined only to facts observed personally in the course of the investigation. All opinion testimony is prohibited. It was necessary therefore, for judicial interpretation to come to the rescue from the position of rigidity adopted by the Board. Appropriate cases are discussed in a later chapter.

The United Kingdom

Power to make regulations to deal with aircraft accident investigations was first given in the Air Navigation Act of 1920 S.12 (1) which was later more clearly defined in Section 10 of the Civil Aviation Act of 1949.¹⁰⁷ The first regulations made to deal with the subject of aircraft accident investigation were promulgated in the Air Navigation (Investigation of Accidents) Regulations of 1922.¹⁰⁸

¹⁰⁷See Joint Research Project P.36

¹⁰⁸IBID. P. 34

To-day, after several amendments, the principal U.K. Regulations on this subject are found in the Civil Aviation (Investigation of Accidents) Regulations 1951, as amended.

Regulation 1 of the Civil Aviation (Investigation of Accidents) Regulations 1951 provides that accidents may be investigated at the discretion of the appropriate authority. In the U.K., this authority is exercised by the head of the Accidents Investigation Branch of the Ministry of Aviation, who is the Chief Inspector of Accidents. He is appointed under 6 (1) of the Regulations by the Minister and has power to carry out investigations in all accidents. It is interesting to note that in the U.K. the definition of an "Aircraft" and "Accident" goes beyond that of the definitions in Annex 13 of the Chicago Convention. ¹⁰⁹

It is the duty of the person in command at the time of the accident to notify the Minister; if he is unable to do so, then it is the duty of the owner, operator, hirer, or other person on whose behalf he was in command of the aircraft, as the case may be, to notify the Minister

(d)
¹⁰⁹Regul.1 (1) (c)/of the Civil Aviation(Investigation of Accidents) Regulations 1951.

by the quickest means of communication available. When the accident occurs in the U.K., the local police is usually alerted to the accident. In the U.K., only authorised persons may have access to the site of an accident which excludes curiosity seekers and the unnecessary crowds who may cause untold confusion and worry to investigators. Two types of investigations are possible in the U.K. An Inspector's Investigation or a Public Inquiry may take place dependent upon the circumstances. An Inspector's Investigation is pursued immediately upon notification, if the Chief Inspector of Accidents thinks an investigation is necessary in the interests of aviation safety. The investigation is actually carried out by an Inspector of Accidents appointed under Section 6 (1) of the Regulations of 1951.¹¹⁰ The Inspector of any accident investigation is selected from the Accident Investigation Branch of the Ministry of Aviation which is composed of the Chief Inspector of accidents, a deputy Chief Inspector,¹¹¹ nine Inspectors and eleven investigating officers. All

¹¹⁰The Civil Aviation(Investigation of Accidents)Regulations 1951
Statutory Instruments 1653

¹¹¹See Joint Research Project (Note 92) P.45

the members serve on a full-time basis and are experts in one field or another of aviation or connected industries. The public is also notified of the investigation and anyone so desiring may make representations as to the cause of the accident in writing, within a specific time limit. There is no defined number of members on any one investigating team, each accident is dealt with on its merits. The Inspector in Charge is responsible for the investigation and he has power to take statements from and to examine witnesses as he thinks fit, and to issue summonses to witnesses, who may be required to answer any questions and to make any signed declarations of the truth of those statements. He may also require the production of any relevant documents, in short, he has wide powers of interrogation. For the purpose of examining the physical evidence, the Inspector has wide powers to facilitate his tasks, and may:

- "c) have access to and examine any aircraft involved in an accident, and the place where the accident occurred, and for that purpose, require any such aircraft or any part thereof to be preserved unaltered

pending examination.

- d) examine, remove, test, take measures for the preservation of, or otherwise deal with the aircraft or any part thereof or anything contained therein and/or
- e) enter and inspect any place or building, the entry or inspection whereof appears to the Inspector to be requisite for the purposes of the investigation..
- f) take measures for the preservation of¹¹² evidence".

Extra expert help may be called upon when needed, but this is entirely in the discretion of the Inspector in Charge. The Attorney-General or the Lord Advocate of Scotland as the case may be, has power to intervene at any stage of an investigation to make representations or examine witnesses if he deems it fit in the public interest.

It must be emphasized that the Regulations empower the Inspector to give notice to any person where it appears to the Inspector that it is expedient so to do when a conflict

¹¹²R.7 (1) (c) (d) (e) (f) - Civil Aviation (Investigation of Accidents) Regulations 1951

of evidence arises.¹¹³ The criticism may be made that the Inspector may not have the special skill to determine this and anyone directly involved should be free to attend as "interested" parties within certain limits, however, if such a person is permitted to attend, he may be allowed to make a statement or give evidence, and examine witnesses¹¹⁴ if the evidence points him out to be blameworthy. Recommendations of the Cairns Committee suggested improved safeguards for the rights of the individuals and organizations to whom blame may be imputed, by the creation of a tribunal with the power to review the Inspector's findings in certain cases.¹¹⁵

The Minister may order a Public Inquiry when he thinks it expedient. In combined military and civil accidents, the Minister's decision is dependent upon the Inspector's Report, and certain other criteria. The criteria upon which such a public inquiry may be directed are as follows:

- "(a) Whether the accident is likely to disturb public confidence either in the safety

¹¹³R. 7 (4) 1951 Regulations

¹¹⁴R. 7 (5) 1951 Regulations

¹¹⁵See Joint Research Project p.47

of travel by air or in the manner in which the functions of the Ministry or the operator are being conducted.

- (b) Whether a public inquiry is more likely than an Inspector's investigation to establish the cause of the accident, and
- (c) Whether such measure of blame may be attributed to an individual as to prejudice¹¹⁶ his career".

When a public inquiry is held, the tribunal is composed of a Commissioner appointed by the Lord Chancellor and two assessors. The Commissioner must be a Barrister of at least ten years' standing and assessors must be possessed of some special skills or knowledge that can be of use to such a tribunal. A case is prepared and presented by the Treasury Solicitor under the direction of the Attorney-General, who has the power to cause notice of the inquiry to be served upon any person, who, in his opinion, ought to be served with notice. All such persons are deemed to be parties to the proceedings. It would appear

¹¹⁶See Joint Research Project - p. 49

however, that under R.9 (6), the Attorney-General, the owner, the operator, the hirer, and the person-in-command may be deemed 'parties' whether served or not with a¹¹⁷ notice of inquiry. Persons may also apply to become parties to the proceedings. The public inquiry is so conducted to provide any person against whom blameworthiness may be attached with an opportunity of making a defence. This tribunal, which is referred to as 'the Court' in the regulations, has the same powers as a court of summary jurisdiction, and may:

- "(a) enter and inspect, or authorize any person to enter and inspect, any place or building entry or inspection whereof appears to the court requisite for the purpose of of the inquiry.
- (b) by summons require the attendance as witnesses of all such persons as the court thinks fit to call and examine, and require such persons to answer any questions or furnish any information or produce

¹¹⁷R.9 (6) 1951 Regulations.

any books, papers, documents and articles which the court may consider relevant.

- (c) administer the oath to any such witnesses, or require any witnesses to make and sign a declaration of the truth of the statements¹¹⁸ made by him in his examination".

The hearing is in open court unless the court thinks that justice or public interest would be better served if the hearing is held in camera. At the end of the hearing, the tribunal determines the questions before it and reports to the Minister on the circumstances of the accident and its opinions on the causes thereof. The re-hearing of a public inquiry is also provided for in certain circumstances.

In the United Kingdom there are two provisions under which foreign countries may participate in an aircraft accident investigation. The first is in accordance with the provisions of Regulation 7 (2) of the 1951 Regulations which states:

"where an accident has occurred in or over the

¹¹⁸R. 8 (1) (a), (b), (c) of 1951 Regulations.

the United Kingdom to an aircraft registered in any country other than the United Kingdom, the Minister may authorize an investigator appointed by the duly competent authority of that other country to carry out an investigation, and in that event, the Minister shall so far as he is able, facilitate inquiries by the ¹¹⁹ investigator so appointed".

The second provision is in accordance with Regulation 12 of the 1951 (amended) Regulations which provides as follows:

"where an Inspector's Investigation or a Public Inquiry relate to an accident which has occurred in or over the United Kingdom an accredited representative of the country in which the aircraft is registered, or of the country which has, on request, furnished information in connection with the accident, may take part in the investigation or in the inquiry as the case may be; he may be accompanied by such

¹¹⁹See also R.8. (2) of the Air Navigation (Investigation of combined military and Civil Air Accidents) Regs. 1959 Stat. Inst. 1388.

technical or other advisers as may be considered
necessary by the authorities of the country
by which he is appointed".¹²⁰

Regulation 7 (2) is permissive only, while
Regulation 12, conforms with the international obligations
of Contracting States to the Chicago Convention as required
by Annex 13. It may be noted that this provision may
have to be extended to the State of Manufacture in order
to further conform with international obligations arising
under the Chicago Convention.

Accidents occurring abroad to British registered
aircraft may be investigated according to British procedures.
However, provisions exist whereby foreign accident reports
may be acceptable to British authorities, provided that
it is made plain that such report is a foreign report.¹²¹
It is recognized that where British representatives are
permitted to participate in foreign accident investigation,
such representative should prepare a separate report to
the Minister where necessary, and such report may be

¹²⁰R. 11 of 1951 Regulations. See also R.12 of 1959
(amended) Regulations.

¹²¹See Joint Research Project P.54.

published if it is found that the foreign report is clearly unjustified in its findings or is in any other way clearly unsatisfactory.¹²² It would seem that the situation in the United Kingdom on the question of the technical investigation differs somewhat to that of the United States and is somewhat more flexible so far as participation in the inquiry is concerned. However, the latest recommendations seem to indicate that the U.K. authorities are now seeking to emphasize that the principal function of an accident inquiry will be the determination of the cause of the accident thereby falling more in line with the aim in the international context.¹²³ The Report includes a summary of all relevant matters and varies according to the nature of the accident. Every effort is made to conform to the international procedures recommended by I.C.A.O. The Report also includes the conclusions as to the cause or causes of the accident, as opinions of the investigating body. Recommendations to prevent similar accidents are included

¹²²Ibid

¹²³ "The Report rightly emphasises that the purpose of accident investigation is to determine the cause or causes of an accident so that action, based on the findings of the investigation, can be taken promptly to avoid further accidents. The purpose of accident investigation will be stated explicitly in the regulations" Aviation Safety: Report presented to Parliament by the Minister of Aviation by Command of Her Majesty, April 1962. See Joint Research Project. P.192.

and the Report is forwarded to the Minister.

In the U.K., it is the practice to publish reports on all serious or important accidents unless its publications is contrary to the national interest, on security grounds or where a foreign aircraft was involved, and prior consent of a foreign government had to be obtained.

The Report is separate and apart from any report which may result from a Coroner's inquest or insurer's investigation which may also follow an aircraft accident. Where possible, in the interest of justice, the publication of the Report of an accident investigation may be deferred pending the determination of any similar investigation by other bodies or where it seems likely that criminal proceedings might ensue. The same does not apply to civil proceedings, and any interested party may purchase a copy of the report when it is published.¹²⁴

Case Law on the use of the report in civil proceedings is lacking, however, arguments in favour and against its acceptance as legal evidence in a court of law have been tendered.¹²⁵ The view of this writer is that the first

¹²⁴See Joint Research Project. p.57 (Note 92).

¹²⁵See Joint Research Project pgs. 55-60.

class of reports, that is, the Inspector's reports, are clearly inadmissible evidence. However, the Report of a tribunal ought to be in an entirely different category. The latter class of Reports ought to be considered official documents, once privilege is not claimed, and they are published. The contents of such Report ought to be evidence of the facts contained therein; the conclusions, however, ought not to be binding on a court, whose duty it ought to be to find on all the facts including the evidence contained in any such Report. This matter is considered further in a later chapter.

Accident Investigation in Scandanavia and Western Europe

In the Scandanavian countries air navigation is governed by Air Codes; in Norway, by the Norwegian Aviation Act of December 1960; in Denmark by the Danish Aviation Act of 10th June 1960; in Sweden, by the Swedish Aviation Act of 6th June 1957.¹²⁶ In Norway, provisions relating to public investigation of accidents and other similar occurrences in connection with civil aviation are found in administrative regulations made under the appropriate Aviation Act. In Sweden the question is dealt

¹²⁶See Joint Research Project (Note 92) pgs. 63-85.

with in the Act itself, which is further supplemented by administrative regulations made under the Act. In Denmark, the relevant provisions are found in the Act itself.

It is interesting to note that in each country there is a permanent committee of experts, appointed in each case for a definite period, which allows the various authorities responsible for accident investigation to perform their functions efficiently, independently and impartially. Similarly, it is seen that in Switzerland, Netherlands, France and Austria, aircraft accident investigation is controlled principally by administrative regulations made under relevant Aviation Acts, and underlying these Acts is the expressed aim of conforming to international standards and procedures.¹²⁷

In certain countries of this area, legislation pertaining to aviation in general and aircraft accident investigation in particular, as in the United Kingdom, in many spheres exceeds the standard requirements and procedures required and established under the Chicago Convention. For example, a glance through the legislation

¹²⁷See Joint Research Project (Note 92) pgs. 86-118.

of the States in this area shows that in Norway, the aviation authorities would investigate accidents involving substantial damage to property on the ground, or where the existence of a serious risk of an accident involving extensive personal or property damage has been indicated, that is, where the situation is tantamount to a "near miss".¹²⁸ There are provisions for notifying interested persons of the inquiry and establishing the rights and status of each of the parties. This group usually includes the owner, user, insurer, manufacturer, and others; it is also noteworthy that, there are provisions in the Act to implement the obligations of Article 26 of the Chicago Convention, and Annex 13 of the Convention, and already, there exists the legislation to permit representation from the State of Manufacture to participate in an investigation besides the accredited representative of the State of Registry. In the Scandanavian countries all the Aviation Acts provide for participation in the proceedings by all interested parties, although there are no public hearings as in the case of the United States or the United Kingdom. In Sweden the Report is required to indicate any injuries or damages arising out of the accident besides determining

¹²⁸

Section 164. Norwegian Aviation Act of 16 December 1960.
Joint Research Project - Appendix IV - Scandanavia. p.191.

the probable cause and making recommendations for future
safety.¹²⁹

In Switzerland, the Federal Law on Air Navigation of 1948, distinguishes between an administrative investigation and an inquiry. The first consists of the procurement of the evidence, while the second is concerned with the judicial determination of the cause of an accident. The definition of aircraft accident includes occurrences when the aircraft received or caused substantial damage;¹³⁰ and any person who can establish a credible interest in the outcome of the inquiry is entitled to participate in the hearings or to be represented by an authorized person. In cases of serious accidents involving commercial passenger air transport or where public interest is paramount, the hearing is held in public unless the security of the state or public order is in jeopardy.¹³¹ In Italy, Aviation law is governed by the "Codice della Navigazione" of 1942,¹³² and provisions pertaining to aircraft accident investigation are contained therein. Depending upon the

¹²⁹S.7. of Swedish Aviation Act of 6 June 1957.
See Joint Research Project. appendix 2 p.198.

¹³⁰Joint Research Project p. 92

¹³¹Joint Research Project p. 93

¹³²Ibid. pgs. 103-104.

nature of an accident, a summary or technical inquiry is held. It is interesting to note that at this inquiry, the probable causes of an accident and the responsibilities of the parties in the accident are determined. Regular witnesses, insurers, persons who suffered damages or their successors and anybody having an interest in the proceedings can also be heard. The Report establishes the causes of the accident and the responsibilities of the parties.

With regards to the use of the report in subsequent legal proceedings, it is interesting to note that there is some fundamental difference between civil law countries and those of the common law system. The legal theory underlying the procedures followed in civil law countries can be found in the Manual of German Law. In this manual, the following statement clarifies the situation:

"as compared with (Anglo-American) law, German law is much less strict in regard to the admissibility of evidence. In principle, any evidence is admissible, it is left to the court to decide how much value is to be attached to the

thus: evidence".¹³³ And it is further clarified

"Under the German code of civil procedure
(ZPO) this means that

"the court is not fettered by any formal
rules of evidence, but can evaluate the
evidence produced by the parties in its
own free and reasonable discretion.

Evidence by experts is on the whole
governed by the same provisions as is
that of witnesses. The experts are,
however, as a rule, not nominated by the
parties. The parties may submit opinions
by other experts in addition to the opinion
of the officially appointed expert.

The judge is in any case, entitled to
assess the value of the experts' evidence
and is in no case to be bound by the
conclusions drawn by the latter".¹³⁴

In the Scandanavian countries, the position is

¹³³Ibid. p. 116. (Note 48. Cohn, E.J. & G. Meyer, 2
Manual of German Law (British Foreign Office, London 1952)

¹³⁴Ibid.

similar, in that there is no barrier to the use of an
accident report in evidence in a civil case, provided
that rules of relevancy, state security, and public interest
135
permit its use.

¹³⁵Joint Research Project. p. 81

CHAPTER VI

Aircraft Accident Reports and their use in Litigation

A consideration of the use of aircraft accident reports in private litigation at the level of national jurisdiction is the aim of this chapter. It has been intimated earlier that in many instances, an aggrieved person is confined sometimes, only to the record of the accident as reported by a governmental tribunal. To what extent can this Report be used in private litigation must be given some consideration.

Every State undoubtedly has its own rules as to the admissibility of records. However, certain States have rules which on the surface may prohibit the use of records of this nature. In Common Law countries for example, the rule against the admissibility of hearsay evidence may appear to exclude the admissibility of a certain type of documentary evidence, unless tendered in a specific manner.

The first thought that arises in this regard is that certain States permit representatives of the State

of Registry and the State of Manufacture and others to participate in the inquiry, albeit that some States limit such participation to either the technical or the judicial inquiry. However, there are circumstances when due to the participation or the presence of foreign accident investigators, it becomes a relatively easy matter to have such witnesses testify on the facts as in any other matter.

In considering this problem one must refer to the rules of evidence obtaining in the *lex fori*. These differ depending on whether the system in use is of the Common Law or the Civil Law. Under Civil Law jurisdiction, there appears to be no real problem, since in every case the tribunal has the power to determine what evidence it will hear and what it will not, and evidence goes only to the weight. The problem is more complex when dealing with the law of evidence as obtains under Common Law jurisdictions. To obtain a clearer picture of the differences between the various systems, one must take a look at the statute law and case law as obtains in both systems. For this purpose examples of case law are taken from the

United States jurisdiction, which incidentally, contains the most examples because of its vast importance in the field of international air transportation; what is likely to obtain in the United Kingdom is also considered, with a brief look at Canadian provisions. The situation in West Germany is interesting and will be considered as the basic pattern for countries where the Civil Code prevails.

United States

In order to appreciate the approach to the question of the admissibility of accident reports in the United States jurisdiction, it is necessary to look at the manner in which this matter is handled at a domestic level. In the United States, maybe, more than in any other country, major airline disasters are frequently followed by lawsuits, and this tendency may be further increased as the avowed aim of the United States Government is to regard the aviation industry as being mature and no longer in need of protection. This was clearly indicated

at a recent diplomatic conference held in Montreal under the auspices of I.C.A.O. to review the limits of the Warsaw and Warsaw-Hague Convention on liability to passengers.¹³⁶

In the United States, the Civil Aeronautics Board is responsible for the conduct of aircraft accident investigation. Litigants very seldom have an opportunity to do so themselves and are constrained to rely on the work done by the investigators of the C.A.B., and the final report of this body.¹³⁷

The relevant statutory provision is found in section 701(e) of the Federal Aviation Act and reads as follows:

"(e) No part of any report or reports of the Board relating to any accident or the investigation thereof, shall be admitted

¹³⁶See Note 96.

¹³⁷Some Legal Ramifications of Aircraft Accidents - Lee. S. Kreindler. Aero-Space Medicine, July 1965 Vol. 36 No. 7. Symposium of the Joint Committee on Aviation Pathology; Fifth scientific session, held Oct. 12-14, 1964 at Armed Forces Institute of Pathology, Wash., D.C.

as evidence or used in any suit or action
for damages growing out of any matter¹³⁸
mentioned in such report or reports".

This provision is clear on the face of it and speaks for itself. Further, the Board has clarified its own position in a procedural rule made under its authority. As a result of the Board's strict observance of its rules some hardship had accrued and judicial interpretation was necessary to introduce some degree of equity.

One of the earliest decisions on the question of the admissibility of an aircraft report is evidence found¹³⁹ in the case of Stewart v Whitney et al. In this case, the court held that the report of an airline pilot's negligence could be successfully relied upon. In another¹⁴⁰ leading case of Ritts v American Overseas Airlines. Inc. the court made it quite clear that in its opinion, the

¹³⁸Public Law 85-726, 8th Cong., 2nd. Sess; 72 Stat.731;
49 U.S. Code (as amended)

¹³⁹1941 N.Y. Supreme Ct. Special Term, King's County,
May 5, 1941. Avi.R.961.

¹⁴⁰97 Fed. Supp. -45 (1947)

prohibition in section 701(e), applied only to reports of the former Air Safety Board or the C.A.B. relating to any accident, or the investigation thereof. Such prohibition, in its view, could not be extended to the use of the testimony of a witness examined by the Board in the course of the investigation. This view was more clearly expounded in the case of Kendall v United Airlines Inc.¹⁴¹ et al.

The principle involved in the case of Universal Airlines Inc. v Eastern Airlines Inc.¹⁴² goes even further. In this case, a C.A.B. investigator was compelled to testify at a trial as to his opinion of the probable cause of the accident. The court held that such a person becomes a compellable witness if he is the sole source of evidence reasonably available to the parties, in the interest of justice, although he cannot be compelled to produce any of the C.A.B.'s documents.

¹⁴¹1949. 2 Avi R 15045. (S.D. N.Y. Civil Actions No. 47-501 and 48-185). See also Tansey v T.W.A.; Supp. 458 (D.C. 1949).

¹⁴²Dist. Ct. for D.C. Ct. of Appeals. 1951.

It is possible to have admitted in evidence the report of the investigator, where such a report consists wholly of his personal observations and does not include¹⁴³ opinions or conclusions. An investigator may also be permitted to refresh his memory from his testimony before¹⁴⁴ a Board hearing. An interesting case from a lawyer's¹⁴⁵ viewpoint is that of Israel et al v United States; in this case the court on appeal permitted the evidence of a C.A.B. investigator as to the cause of an accident, which it would not have done normally, purely on the technical legal ground that objection as to its admissibility ought to have been raised at the time of trial.

In the case of Berguido vs Eastern Airlines,¹⁴⁶ it was held inter alia, that although C.A.B. accident reports

¹⁴³Lobel v American Airlines Inc. 1951 3 Avi.18,254.

¹⁴⁴Maxwell et al v Pink 1953 3 Avi.18,182

¹⁴⁵U.S. Ct. Appeal, 2nd. Circ., 1957. 5 Avi. 17,551

¹⁴⁶1964 U.S. AVR 54. See also Danon v U.S.A. 8 Avi.R 18,360.

may not be used at a trial, members of the team which prepared the report are allowed to testify as to their personal observations and conclusions.

It can be seen from the several cases cited above, what precisely is the role of the Civil Aeronautics Board, and other similar investigative bodies in the United States. It can be seen too, that the report of these Bodies are not usable per se in litigation. In fact, C.A.B. reports as such are expressly excluded by statute, and discovery process may be excluded in the case of military investigative reports on the ground of privilege. However, the witnesses, methods and other relevant procedures used by official investigative bodies may be the same that will be used by a private litigant. In any event, since the primary purpose behind official investigations is the determination of causation and the prevention of future accidents of the same or a similar type of accident, any such investigation may be satisfied with proof of causation, to the point where it can discover the cause of the accident and thus recommend measures for the prevention of future accidents. Thus the evidence collated may be insufficient for the standard of proof required in a court of law.

¹⁴⁸See Note 126.

Jack S. Mackin v Eugene M. Zuckart, 8 Avi R 17 463

We now turn to the interesting aspect of what attitude may be taken by the courts of the United States in respect to the use of foreign accidents reports in domestic litigation. In order to get a picture of the likely attitudes of the courts of the United States, it is necessary to consider a case pertaining to this question.

In the case of Leroy vs Sabena Airlines,¹⁴⁹ a pre-trial order ruled that the transcript of the Rome airport tower's conversation with the pilot was admissible in evidence. The trial judge had admitted the transcript into evidence even though the plaintiff had failed to lay any foundation for its admission by calling Italian witnesses or taking depositions in Italy. Delay denied the defendant a new trial. The court held, "in our opinion exhibit 15 (transcript of conversation) was the most important piece of evidence in the case and the plaintiff obviously failed to lay foundation for its admission and could not without the presence of a member of the Italian Government witnesses or their depositions. We received it into evidence without

¹⁴⁹ See Note - Legal - Foreign Reports on Air Crashes,
The Aeroplane and Commercial Aviation News. Aug. 26, 1965
P.26.
1964 - Avi. Cases 58-67.

this necessary proof because in the pre-trial order it appears that Judge Bonsal ruled that it was admissible and should be received in evidence with an opportunity to the defendant to offer proof to contradict it". The radio transcript of the Italian Government was affixed to the plaintiff's interrogatories. The court further stated, "we did not admit it merely because Judge Bonsal admitted it but rather because the defendant did nothing about Judge Bonsal's ruling although it was made two years before the trial, thus lulling the plaintiff into a sense of security and preventing him from preparing the necessary foundation for its admission either by calling the Italian witnesses or taking their testimony abroad". The substantial point in this case was the introduction in evidence of the Italian transcript. The defendant airline argued that the transcript was inadmissible as only hearsay and no foundation had been laid for its admission. The Court of Appeals held that the record of the radio conversation was made at the time of the accident, and that the transcript had been taken from this recording as part of the Italian Government's investigation of the crash

and appended to its report. In the circumstances, bias or unreliability was ruled out. The record was held admissible under the Federal Business Records Act and there was sufficient foundation for the purposes of this Statute. It has been suggested that this case may be of assistance to claimants in the United States and elsewhere in similar circumstances in establishing claims, where foreign Governments refuse official help in proving reports of crash investigations.

The case of Pekelis v Transcontinental & Western
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Air Inc. deals in detail with the admissibility of reports and is highly instructive. It seems that there is no difficulty in admitting foreign reports where representatives from the United States are associated in the conduct of the investigation. This case which deals primarily with liability under the Warsaw Convention and the admissibility of evidence, resulted from an accident which occurred near to the Shannon airport in Eire on December 28, 1946. Several documents were excluded at first hearing under the rule in Palmer v

1813 Avi. cases 17,440.

Hoffman, which precludes the admission of reports in certain circumstances. The United States Court of Appeals reversed judgment in this case, holding in effect that in an action to recover damages for a death resulting from a crash of an international flight where it is necessary for a plaintiff to prove that the accident was the result of "wilful mis-conduct" on the part of a defendant air carrier, letters and reports dealing with the investigation of the accident are admissible as evidence if such reports are binding on the air carrier and if they were made in the regular course of business. It must be noted however, that both members of the Civil Aeronautics Board and TWA representatives assisted in the conduct of the investigation. It appears therefore that foreign accident reports are admissible in the jurisdiction of the United States in the following circumstances:

- (a) Where such reports are admissible under provisions of the Federal Business Records Act and
- (b) Where by express or tacit admission a foreign report becomes part of the record.

It must be borne in mind that it is always dangerous to

generalize and in arriving at judicial decisions every case will be dealt with on its merits.

United Kingdom

In the United Kingdom the status of an accident report is governed by general principles of English Law. There is no statutory provision that accident reports are not admissible as evidence. Case law is also lacking in this regard.

As a result, it is difficult to state precisely what view will be taken if circumstances make it necessary to introduce a report in evidence. Any such report is prima facie inadmissible as hearsay evidence, and witnesses would be required to testify afresh at any subsequent judicial hearing arising from litigation. The question is ably discussed by Francis Lyall, who states "that the report would probably be treated as an official document receivable in evidence to prove the facts of the accident alone".¹⁸⁵ This view is supportable since public documents fall under exceptions to the general rule against hearsay evidence. The rule states as follows:

¹⁸⁵Joint Research Project (Note 92) p. 60

"A further group of exceptions to the Hearsay Rule comprises statements in public documents, which are receivable to prove the facts stated on the general grounds that they were made in the course of official duty, respecting facts which were of public interest, recorded¹⁸⁶ for the benefit of the public".

It is clear from the above statement of the rule that the opinions and conclusions drawn by such tribunal as opposed to the facts would be disregarded by a subsequent court, which will be bound in law to arrive at its own conclusions. A similar rule may apply to official reports of foreign States. The relevant rule states quite clearly that judgments and other judicial proceedings of foreign courts, and affidavits, pleadings or other legal documents filed or deposited in such courts, may be proved in any¹⁸⁷ Court of Justice, by examined or authenticated copies.

It would appear therefore that not much of a problem exists in the United Kingdom with regards to the use of

¹⁸⁶Halsbury's Laws of England, 3rd Ed. Vol.15 p.314

¹⁸⁷ " " " " " " " " p.375

a foreign accident report in litigation in a domestic forum, depending of course, on the proper foundation¹⁸⁸ having been laid prior to its admission.

In Canada, the position seems clear in regard to foreign accident reports and the relevant provisions may be found in the Canada Evidence Act. Section 23 (1) provides as follows:

"Evidence of any proceedings or record whatsoever of, on or before any court of Great Britain, Canada, any British Colony or possession, or the U.S.A. or any state in the U.S.A., or any foreign country may be made in any action or proceeding by^{an} exemplification or¹⁸⁹ certified copy thereof".

Further, sections 48-50, make provisions empowering the proper Canadian officials, abroad to take oaths,^{189A} declarations, etc. which are receivable in Canada. The emphasis here appears to be similar to that given in the United Kingdom, that is to say, such evidence goes only to the truth of the facts stated therein and findings

¹⁸⁸ See Joint Research Project. p. 59

¹⁸⁹ R.S.C. 59 revised statutes of Canada. Vol.5 p.5627.

^{189A} This applies in the Federal jurisdiction.

and conclusions would be disregarded.

Under the Civil Law System, the admissibility rule is far less stringent. In principle any evidence is admissible. It is the duty of the court to decide what value is to be attached to the evidence. The system is based upon the principles of free appreciation of evidence and its unfettered appreciation.

In West Germany the underlying principles were fully analysed in the case of Jugoslovenski Aero Transport Co. (J.A.T.) v Federal Republic of Germany.¹⁹⁰ This case resulted from the crash of a Yugoslav Airliner in Germany on November 3, 1957. The accident report was published and it contained a finding that the accident was due to pilot error. The Yugoslav airline objected to the finding and sought to have the court annul the accident report and retract the statements published in the reports. The court ruled, inter alia, that the aircraft accident inquiry commission was not a court, but an administrative body, and even as such, the accident investigation report may be used in Court in the case of private litigation. It is stated that judgment by a court can be based only

¹⁹⁰See Note 47d Joint Research Project p.114

on the court's own actual findings and free appreciation of evidence.

It may be noted that countries of Western Europe and Scandanavia are all basically of a Civil Law System and the fundamental principles are the same.

It is submitted therefore that under the Civil Law Systems official foreign accidents reports may be admitted in evidence, but will have only the probative value of tending to show whether or not negligence is proved, and such reports form part of the evidence of a trial and may be corroborated or rebutted in the usual manner.

CHAPTER VII

AREAS OF POSSIBLE CLOSER CO-OPERATION

The question of notification of aircraft accidents and incidents was touched upon in an earlier chapter. It was noted that the desirability to exchange information on incidents in the international context was recommended by the Air Navigation Commission, and the matter is now being studied by I.C.A.O. In this chapter, it is proposed to consider the degree of notification of accidents required in the international context; to look at the methods used in effecting such notification and to suggest more uniformity. A further discussion on the question of the investigation of incidents is also attempted, and this necessarily involves the question of the notification of incidents.

It has been shown that the relevant provisions of Annex 13 require an initial notification and a subsequent notification in certain classes of accidents. Notification is the responsibility of the State of Occurrence and must be given to both the State of Registry and the

State of Manufacture, where applicable. The initial notification should be sent by the quickest means as soon as the relevant information becomes available.

The first observation in this regard is that nowhere in the Annex is the operator required to notify an accident or incident to the State of Occurrence. It is therefore possible to envisage an instance of an accident occurring to a foreign aircraft in a State other than the State of Registry and the operator neglecting to notify the State of Occurrence of such an accident. There is, clearly, a need to make it obligatory upon the State of Registry, if not upon the operator himself, to notify the State of Occurrence of such an accident.

Secondly, the method of notifying an accident may present some difficulty in spite of the obligatory nature of the provision to utilize Appendix 1 and Appendix 2 of Annex 13 (Second Edition). It has become necessary to propose an amendment to the latest edition of Annex 13¹⁹¹ - in order to facilitate the matter of the notification

¹⁹¹See Appendix 5.

of accidents.

The problems of language and communications have been mentioned in an earlier chapter and cannot be minimised. In order to expedite the timely arrival of accredited representatives, it is necessary to indicate in the initial notification the nature of the accident and such information must be clear and precise. The form of communication ought to be as uniform as possible in order to avoid error in interpretation. Past experience showed that communications through diplomatic channels presented several snags, and to overcome delay it was recommended by the Accident Investigation Division at its Third Session held in Montreal between 19 January - 11 February, 1965, as follows:

"That I.C.A.C. establish a uniform plan for communication of the aircraft accident inquiry notifications between the authorities responsible for accident inquiries in order to expedite the receipt of such notifications, and that consideration be given to one or more of the following alternatives:

- (a) A common address code for example "ACCID" preceding the name of the town be used in telegraphic addresses for commercial services - (Example: ACCID. - DUBLIN);
- (b) A common I.C.A.O. two letter abbreviation (DOC. 6938 - COM/534/4) to follow the location indicator (DOC.7910) be used in telegraphic addresses for aeronautical service. (Example EIDWYB);
- (c) A common message prefix, for example, "NOTIFACC", be used with the existing communication system for both commercial and aeronautical services. However, if this alternative alone is adopted, then the relevant addresses of the authorities responsible for accident inquiries need¹⁹² to be included in DOC. 6938".

As a result of this recommendation, the Secretariat of I.C.A.O. proposed an amendment to the second edition of Annex 13, with a view to effecting greater uniformity in this important first stage in the commencement of an aircraft

¹⁹²DOC. 8486, AIG/111 p.1.1-3.

accident inquiry. By 15 August 1966, replies had been received from 46 contracting States, as follows:¹⁹³

<u>Acknowledgement only</u>	2 States	Guatemala, Panama.
<u>No comments</u>	11 States	Burma, Chad, Ireland, Laos, Malta, Morocco, Niger, Phillipines, South Africa, Sweden, Yugoslavia.
<u>Agreement/no objection</u>	31 States	Argentina, Brazil, Canada, Ceylon, Democratic Republic of Congo, Cyprus, Dominican Republic, El Salvador, Germany, Ghana, Greece, Iran, Israel, Korea, Lebanon, Malawi, Kingdom of the Netherlands, New Zealand, Parkistan, Portugal, Sudan, Tanzania, Thailand, Togo, Trinidad & Tobago

¹⁹³See AN-WP/3183 22/8/66

Turkey, United Kingdom,
United States,
Upper Volta, Venezuela,
Zambia.

Detailed comments 2 States Australia, India.

It can be seen from the replies received so far, that no States have indicated objection to the suggested amendment, and it is fairly safe to anticipate that the amendment will be adopted and duly become effective.

It is interesting to note the comments received from both Australia and India. Australia made it clear that the proposals were supported and would be implemented if adopted, but suggested, purely on the basis of semantics, that the word 'AIRAC' was already proposed for use in connection with Annex 15, and that since 'ACCID' will be telegraphic code, the question of pronunciation does not arise; further, it is proper abbreviation for all the official languages of I.C.A.O. namely, air accident, accident Aériens and Accidentes Aéreos.

India also intimated its acceptance of the proposed amendment, but suggested that the new code "should be made applicable to the subsequent notification also".

As a result, it was recommended that where matters directly affecting safety are involved, the same telecommunication procedure ought to be used for both the initial and the subsequent notification. For the subsequent notification the word 'ACCIDSUB' was recommended. The proposal for amending Annex 13 by amendment No. 1 is attached as an Appendix.

It can be seen from the above, that the need for uniformity in this important aspect of aircraft accident investigation has been detected quite early, and appropriate steps have been taken to correct the situation. It is hoped that States concerned with increased safety in Civil Aviation would find it possible to adopt these measures and take the necessary steps to have them implemented.

It has been shown that several States require that incidents be reported. The latest of these States is none other than the United States. Part 320 of Sub-Chapter C (Safety Investigation Regulations) of the Federal Aviation Act 1958, Title VII - Aircraft Accident Investigation, ¹⁹⁴ has been amended to include incidents. In the

¹⁹⁴ Safety Investigation Regulations (14C.F.R. Part 320). Amendment and reissuance of part 320 effective May 18, 1966. Rules Pertaining to Aircraft Accidents, incidents, overdue Aircraft and Safety investigations. See J.A.L.C. Vol. 32. No.3. P.438 (1966).

United Kingdom, the Report on Aviation Safety, presented to Parliament by the Minister of Aviation, states inter alia as follows:

"108. As the Report recommends, it is agreed that more accidents could be investigated with advantage and that the Accidents Investigation Branch might well inquire into some incidents, and within the limits of the resources of the inspectorate this will be done".

It states further as follows:

"111. It is intended to continue the present procedure for immediately reporting and investigating incidents which might involve a risk of collision. Any necessary individual action is taken on each such incident, and in addition, reports on all these incidents are analysed by the Air Miss Working Group - on which the Ministry of Aviation and the Air Ministry, as well as operators and pilots are represented. The group makes periodic reports on the results of its analyses,

including recommendations for any remedial
measures to deal with collision hazards".¹⁹⁵

The aeronautical authorities have made it clear that emphasis is placed upon the reporting and investigating of 'incidents', and in this connection, it is important to note that in the Civil Aviation (Investigation of Accidents) Regulations 1951, 'accident' has been defined to include "any fortuitous or unexpected event by which the safety of an aircraft or any person is threatened."¹⁹⁶ This definition is wide enough to include 'incidents' as defined in more detail in the legislative provisions of certain other States.

In Australia, where Civil Aviation is as highly developed to-day as in any other country, 'incident' is defined in Part XVI, Section 270 of the Air Navigation Regulations as follows:

"incident", in relation to an aircraft, means
an occurrence which takes place either on the
ground or in flight, in which -

(a) the aircraft suffers damage or a person suffers

¹⁹⁵See Aviation Safety Report - Joint Research Project
(Note 92). p.192

¹⁹⁶ S1 (1) (d). The Civil Aviation (investigations of
Accidents) Regulations 1951.

injury in circumstances other than those specified in the definition of "accident";

- (b) The aircraft has a forced landing;
- (c) the aircraft lands at a scheduled aerodrome in an unairworthy condition;
- (d) the aircraft is compelled to land at the aerodrome of departure without completing the scheduled flight;
- (e) the aircraft lands owing to conditions which make continuance of the flight inadvisable;
- (f) the position of the aircraft becomes unknown for any period; or
- (g) the safety of the aircraft or its occupants or of any other person or property is jeopardised".¹⁹⁷

This definition is comprehensive and includes most, if not all, the contingencies foreseeable which may sometimes be referred to as "near misses" or "air misses". Section 274 of the Regulations, makes it a legal requirement that 'incidents' be reported. It states as follows:

- "274 - (1) Where an accident occurs to an Australian aircraft, the pilot in command, the owner, the operator and the hirer

¹⁹⁷ Australian Air Navigation Regulations.

(if any) shall each be responsible for insuring that a written notification of the incident is furnished to the Director-General within forty-eight hours after the occurrence.

- (2) The notification referred to in sub-regulation (1) of this regulation shall contain the same particulars, mutatis mutandis, in relation to the incident ^{are} as/specified in relation to an accident in regulation 272 of these ¹⁹⁸ regulations".

The importance of the Australian regulations lies in the fact that from all reports, it works very successfully and has contributed in immense measure to safety in air ¹⁹⁹ navigation in that country. However, it seems to the writer that since this aspect of air safety functions is in the more advanced areas of Civil Aviation, it is not too much to endeavour to achieve this degree of progress in the international context. Already, it is well-known that

¹⁹⁸Ibid.

¹⁹⁹Incidents Probing Prevents Accidents: Aircraft
(Australian Aviation Publication) Vol.46. No. 2
1966 P.29.

I.A.T.A. has succeeded in some measure in obtaining its respective airlines to collaborate in the exchange of information pertaining to 'incidents'. It is believed that this function can be attempted by I.C.A.O. with some degree of success.

With respect to the question of participation in the inquiry, it has been shown that the majority of States permit more or less unlimited participation, however, some states including Canada, do not provide for such participation, and uniformity in this respect is needed.

The international standards of the Annexes of the Chicago Convention are only obligatory to the extent provided for by Article 37, and Article 38 of the Convention. It must be noted that Article 26 merely states that "the state in which the aircraft is registered shall be given the opportunity to appoint observers to be present at the inquiry, etc". States are obliged under the terms of Article 26 merely to permit observers from the State of Registry to be present at an inquiry. Article 37, does not create a similar obligation, it states that "each Contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures

and organization etc.". So long as the provisions of Article 38 pertaining to departures from international standards and procedures are observed, contracting States cannot be said to be in violation of the international agreement.

In practice, it is seen that many States permit the participation of accredited representatives by their relevant national air codes in complete accord with the requirements of Annex 13. It has also been shown that in accordance with Article 38, several States have indicated the points of departure from the required international standards and procedures.

The important problem remains, nevertheless, that because of the attitude of certain States in this regard, there have been, and will continue to be, complaints from governments and other organizations and groups interested in this important aspect of aerial navigation. For example, in an article published in the "Aviation Daily" of September 11, 1963, headed "CAB on outside looking in on foreign²⁰⁰ accident probes (analysis)"; the writer refers to the

²⁰⁰ Aviation Daily. Sept. 11. 1963.

discontent of the Civil Aeronautics Board of the United States. After describing lapses on the part of several States, he says "clearly there is an interest on the part of the CAB when an American-built airliner crashes - regardless of who owns it and just as clearly when an aircraft in commercial service in this country crashes elsewhere, regardless of who built it, there is 'public interest'. Yet there is no existing method for the CAB to do any more than show up at the **scene** of a crash, hat in hand, waiting to be asked in". He concludes by stating "an international accident investigation agency, perhaps under United Nations sponsorship, could provide the answer. But under present circumstances many industry observers feel that the State Department should take steps to make sure that CAB investigators be brought into foreign accidents in the interest of U.S. passengers and aircraft operations". This may be the view of an individual writer, but it may very well be a good sample of the opinion of the aeronautical authorities of the United States of America and other States. It is, unfortunately, the existing position at international air law as contained in the Chicago Convention, that the State of Registry is entitled merely to appoint an 'observer'

under provisions of Article 26.²⁰¹ It is indeed regrettable that States have not been able to arrive at full accord in this matter.

It has been urged that ordinarily the opportunity for observers to be present at the inquiry, and the requirements under Article 26 and Annex 13 for communication of reports and findings to the State of Registry would probably be sufficient, both for official purposes and for the interests of private litigation. Actual participation, is perhaps²⁰² desirable, but it is submitted, not always necessary". This argument is based upon the assumption that the State in which the accident occurred or the State that undertakes the conduct of the investigation possesses a high standard of technical proficiency in this field, and that the reports and findings were adequate in the past. It was nevertheless admitted that:

"The variance in completeness of the reports of the United States and Canada might reasonably cause real concern to persons interested in

²⁰¹Madole. D.W. International Aspects of Aircraft Accidents. See note 137.

²⁰²Barrett. D.M. International agreement on Aircraft Accident Investigation with some related problems of evidence. (un-published Term Paper). Institute of Air & Space Law, McGill University. 1959. pg. 18

the use of these Reports in private litigation
and who might have to depend on Reports
such as that of Canada for evidence bearing²⁰³
on the liability of an air carrier".

Canada does not permit participation by foreign representatives
in aircraft accident investigations. Accident investigation
in Canada needs to and may undergo rapid changes in the²⁰⁴
near future.

ICAO introduced as an attachment to Annex 13 of the
Chicago Convention of 1944, material intended to assist
in the application of the Annex which deals with the²⁰⁵
organization of an accident investigation. It is doubtful
if this guidance can always be followed and further,
samples of accidents reports indicate that the guidance
material is not always followed. Even though some States
may provide for the use of the official reports and findings
in subsequent litigation, such use could be of no practical
value, unless in the first instance, the report itself is

²⁰³Ibid.

²⁰⁴Patterson. A.R. - Some thoughts on Public Inquiries
into Aircraft Accidents in Canada. Unpublished
lecture, Toronto, Ontario, 1958.

²⁰⁵Appendix 4.

properly prepared.

A possible solution would be international agreement on the establishment of a permanent international agency under the auspices of I.C.A.C., whose duty it would be to conduct full and impartial investigations into all accidents pertaining to international Civil Aviation. Since all States would have agreed to the existence and functions of this impartial body, there would be no problems in granting to it the necessary powers to conduct its work. The initial responsibility to institute an inquiry will remain with the State of Occurrence, but the technical investigation would be undertaken and carried out by this accepted body of technical experts. Or perhaps, a Conference called for the specific purpose of ironing out differences with a view to arriving at a workable agreement may be undertaken at the request of those States that have the greatest need for uniformity in this important field of air navigation.

Another area in which there can be more uniformity, is that of the preparation and publication of the Report. The preparation of the Report is the responsibility of the State instituting the inquiry. Since the State of

Occurrence may delegate this responsibility, it follows that another State may be held responsible for the preparation of the Report. The preparation of the Report, in the past, was cause for a great deal of comment, because in many cases, Reports varied in content. Some were adequate while others were not. It was found necessary to provide that reports be standardized. Standardization was essential in order to avoid inconsistencies which plagued such reports in the past and to facilitate their inclusion in I.C.A.O.'s Accident Digest. To this end a stereotyped format was developed by I.C.A.O. and is now attached to Annex 13 as Appendix 3.²⁰⁶ The format is part of a standard and requires that the State instituting an Inquiry into an accident "involving aircraft engaged in commercial air transport operations, or into an accident from which information likely to contribute to the promotion of aviation safety can be obtained" shall forward to I.C.A.O. three copies of the Summary of the Report prepared in a working language of I.C.A.O. and in accordance with the format of Appendix 3.²⁰⁷ This requirement is a standard and is obligatory. The requirement is not confined to international commercial aviation. The Summary is not designed to replace the aircraft

²⁰⁶See Annex 13. Appendix 3

²⁰⁷See Annex 13. Chap 6.3

accident Report, which is prepared by the tribunal after the hearing of witnesses etc., and which is something apart from the Summary Report as required by the Annex. The Summary Report is designed for inclusion in the I.C.A.O. Aircraft Accident Digest, and contains information pertaining to the investigation, an analysis and conclusions, and recommendations.

It seems pertinent to note at this point that it may well be possible to obtain accord between States on a uniform and standardized form for preparation of the actual accident report. There can be little real objection to accepting a uniform format for the preparation of the accident report since many States have already agreed upon a standard form for the preparation of the Summary Report to be forwarded to I.C.A.O. It is therefore submitted that an attempt may be made to obtain agreement between States in this matter, with a requirement where possible, that such accident reports be made available in the working languages of I.C.A.O. and I.C.A.O.'s terminology be used.

It is well worth noting that Appendix 3 is part of a Standard, and it is even more interesting to note the requirements of paragraph 2.2 of Appendix 3, which

reads as follows:

"2.2 Conclusions. Reproduce in a) and b) below the text of the Report in its entirety unless this is inadvisable because of length or complexity".

- a) Findings. Indicate the most significant determinations of the fact-finding and analysis.
- b) Cause or probable cause(s).

It may be possible to devise ways and means of reaching agreement between States to have the Report on the Inquiry prepared in accordance with an agreed format, in accepted I.C.A.O. terminology, forwarded to the State of Registry, the State of Manufacture and other States entitled to the Report as obtains to-day.

The reason suggested for the lack of standardization in the preparation of the Report on the inquiry was the existing differences in legal systems and practices of States. More flexibility was considered desirable as a result of these differences. It is submitted however, that the finalization of a Report ought not to interfere with the legal practices of a State, and a format acceptable to all States may yet be attempted.

The question of the publication of the Report also gives cause for consideration with a view to achieving standardization and uniformity. The existing provision of Annex 13 dealing with this matter is in the form of a recommendation and reads as follows:

" A State should not circulate or publish a Report or any part thereof without the consent of the State instituting the inquiry unless such Report has already been published in the latter State. Similarly, the State instituting the inquiry should consult, when it considers it necessary, the State of Registry and the State in which the aircraft was manufactured, if this State appointed an accredited representative to the inquiry, before publishing a Report or any part thereof".²⁰⁸

It is interesting to note the development of this recommendation. Previous to its inclusion in the latest edition of Annex 13, there was no provision whatsoever with effect to the publication of the Report. As a result, some States, as a matter of courtesy, followed the practice

²⁰⁸ Annex 13. Chapter 6.2

of not circulating nor publishing the information contained in a Report or part of a Report without the consent of the State instituting the inquiry, unless this State had already released the Report for publication. Other States published the Report without consulting or obtaining the consent of the State instituting the inquiry, and this practice was quite likely to cause embarrassment.

It was considered necessary therefore to develop specific rules to govern the publication of the Report, the comments of States on this question was reviewed by the Air Navigation Commission. The comments of the United Kingdom were as follows:

"The United Kingdom considers that the State of Registry should be consulted as a normal courtesy before the State instituting the inquiry publishes a report or any part thereof. It does not consider consultation means the State instituting the inquiry would publish the report only with the agreement of the State of Registry but rather that the views of that State, if any, would be taken into consideration when deciding whether a report

should be published".²⁰⁹

France commented as follows:

....."the authorities of the State which is responsible for conducting the inquiry have the obligation of consulting the State of Registry of the aircraft involved in an accident before releasing the report to the public. The second part of the Recommendation 6.2 should therefore have the status of a standard, and the qualification 'when it considers it necessary' should be deleted, at least as regards the State of Registry".²¹⁰

It has been indicated above that a provision is now included in the Annex as a recommendation. Two important factors arise in the consideration of this provision, the first is the conflict which may arise in regard to national legislation based on state sovereignty. States may not be inclined to accept as an obligation the necessity to consult other States before publishing a report; on the other hand,

²⁰⁹CWP/4299 5/11/63 p. 3.

²¹⁰Ibid.

the legitimate interest of the State of Registry was sought to be protected and in order to do this effectively, it was sought to make it obligatory upon the State conducting the inquiry to consult the State of Registry, and the State of Manufacture, where applicable. However, it can be argued that to promote more effective uniformity in the publication of the Report, the States intimately concerned, especially the State of Registry and the State of Manufacture ought to be consulted, and where possible, persuaded to consent, to the release of the Report of the Inquiry. The effect of such consultation and consent will be to give to the Report an aura of unanimity, which would add weight to its use by other interested States, and avoid much embarrassment. In the circumstances, it is submitted that efforts should be made to arrive at further agreement in this regard and the requirement of consultation, if not consent, should be raised to the status of a standard.

C O N C L U S I O N S

It has been shown that the basic requirements of the international treaty known as the 'Chicago Convention' governs the conduct and obligations between contracting States in the field of international civil aviation. We note also that the relevant and direct provisions of that Convention pertaining to Aircraft Accident Investigation is contained in Article 26. Within this article are the legal obligations of the contracting States. The provision of Article 37k, and the relationship between Article 26 and Annex 13, have been considered. It is clear that the procedures recommended by Annex 13 do not have the status of a treaty agreement in all its manifestations. This view is arrived at, after the relevant provisions are considered. Article 26 provides that a State in which an accident to an aircraft occurs within the terms of the Article, "will institute an inquiry into the circumstances of the accident in accordance, so far as its laws permit, with the procedures which may be recommended by the International Civil Aviation Organization". Article 37, provides that each contracting State undertakes "to collaborate in securing the highest practicable degree of uniformity"

in all matters which will facilitate and improve air navigation, at the same time giving the International Civil Aviation Organization the power to adopt and amend, international standards and recommended practices. The difference between a Standard and a Recommended Practice has been pointed out; and the rights and duties of contracting States under Article 38 have also been dealt with in detail.

Emphasis was also given to the differences in the types of accidents required to be investigated under Article 26 and those required to be investigated under Annex 13. Article 26 requires that accidents "involving death or serious injury, or indicating serious technical defect in the aircraft or air navigation facilities" should be investigated. Annex 13, on the other hand, requires an investigation into circumstances where death or serious injury ensue, or where the aircraft receives substantial damage. It is seen that there are no international procedures for the investigation of accidents where a 'serious technical defect' occurs and the requirement to investigate an accident where the aircraft receives substantial damage is not directly required by the provisions of Article 26. States are permitted to pursue their own investigations in

circumstances indicating serious technical defect in the aircraft or air navigation facilities. On the question of definitions it has been shown that there is some degree of difference of interpretation between States, which necessitated the issuance of guidance material by the Council of I.C.A.O. There is urgent need for uniformity in this important matter. Lack of uniformity of definitions may lead to various States undertaking to investigate only those accidents, which, in their own interpretation amount to serious injury or substantial damage, thus making certain accidents subject to investigation and others, exempt from investigation in the international context.

The question of the notification of 'incidents' and their investigation apart from the notification and investigation of 'accidents' was emphasized. It has been shown that some States have provided for the notification and investigation of aircraft incidents in their national

legislations. It has also been shown where Article 26 requires that accidents 'indicating serious technical defect in the aircraft' should be investigated. Since 'serious technical defect' may not necessarily involve 'substantial damage to the aircraft' as is contained in Annex 13, it follows that the question of the notification and investigation of such incidents are left to States to deal with as their national laws permit. It is submitted that since the leading aviation States have legislated successfully for the enforcement of suitable provisions, and in fact observe them, it ought to be possible to persuade the other contracting States to follow suit, in the interest of uniformity and safety in air navigation. In other words, it is felt that with the advent of modern supersonic aircraft and 'jumbo jets', the question of safety in air navigation is even more important to-day and the entire question of aircraft incidents should now be considered in the international context with some degree of urgency.

There is an urgent need for the establishment of a Central Bureau of Accident Investigation. The need for a Central Bureau of Accident Investigation arises as a result of important and new features of both the aviation industry

and aerial navigation in general. On the International scene, it is well known that many Contracting States have not the technical expertise to conduct an inquiry into an accident involving the latest types of modern jet aircraft already in existence and to become operational in the near future.

I.C.A.O. has prepared and published guidance material pertaining to the organization of an accident investigation. This material indicates the intricacies and expertise which are considered necessary in the conduct of an adequate accident investigation. There is however no obligation upon any contracting State to adhere to the type of organization suggested by I.C.A.O. Many States will find it impossible to conduct an inquiry of any importance, because of the lack of specialists.

If such a Bureau is established in the international context, measures can be taken to ensure its probity and impartiality, and States can agree as to what extent and use its recommendations and findings can be implemented and in other ways put to use.

Such a Bureau may be centralised with regional departments, and could consist of experts in the field of aircraft accident investigation. It may be a permanent impartial body to deal with all aspects of accident investigation including study and research of all matters pertaining to increased air safety through the investigation of accidents and incidents.

Perhaps there can be international agreement on the use to be made of the Report of such a Bureau. Such Reports may or may not be admissible in evidence for the purposes of private litigation, the important factor however is that there can be agreement in such matters.

Finally it may be noted that in the field of international air law, some aspects of liability arising from accidents in international aviation are dealt with through international Conventions.

The Warsaw Convention as amended by The Hague Protocol of 1955, and the Guadalajara Convention of 1960 deals with the liability of air carriers towards passengers

and consignors of goods. The Rome Convention of 1952 deals with the liability of foreign air carriers for damage caused at the service. Some efforts have been made to conclude an international Convention on aerial collisions but without much success to date, nevertheless, in the field of aircraft accident investigation the treaty obligations of contracting States to the Chicago Convention are confined to the terms of Article 26 of the Convention. It is suggested that the time may be opportune for States to seek further uniformity in the field of aircraft accident investigation by way of special treaty, because of the accepted value and importance of internationally adequate accident investigation procedures in the furtherance of safety in international civil aviation.

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APPENDIX 1

AIRCRAFT
ACCIDENT INQUIRY

ANNEX 13

TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

SECOND EDITION - MARCH 1966

INTERNATIONAL CIVIL AVIATION ORGANIZATION

INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES

CHAPTER 1. - DEFINITIONS

When the following terms are used in the Standards and Recommended Practices for Aircraft Accident Inquiry they have the following meaning:

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air.

Aircraft Accident. An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked in which:

a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto; or

b) the aircraft receives substantial damage.

Note. - Interpretations of the terms serious injury and substantial damage adopted by some States are included as guidance in Attachment A.

Inquiry The process leading to determination of

the cause of an aircraft accident including completion of the relevant report.

Investigation. The gathering together in an orderly manner of factual information relating to an aircraft accident.

Investigator-in-charge. The person charged with the responsibility for the organization, conduct and control of an investigation.

Note. - Nothing in the above definition is intended to preclude the functions of an investigator-in-charge being assigned to a commission or other body.

State of Registry. The State on whose register the aircraft is entered.

Chapter 2. - Applicability

The specifications in Chapters 3 to 6 inclusive, with the exception of those numbered 4.4, 5.2, 5.3 and 6.4, apply to aircraft accidents occurring in the territory of a Contracting State to aircraft registered in another Contracting State.

Chapter 3. - Protection of Evidence, Custody and Removal of Aircraft

3.1 The State in which an aircraft accident occurs shall take all reasonable measures to ensure the protection of

evidence including the safe custody of the aircraft and its contents for such a period as may be necessary for the purposes of an accident inquiry. Such safe custody shall include reasonable protection against further damage, access by unauthorized persons, pilfering and deterioration, and shall include the preservation, by photographic records or other adequate means, of any material evidence which might be removed, effaced, lost or destroyed.

Note 1. - Control over the wreckage is dealt with in 5.4.3.

Note 2 - Prevention of damage to a flight recorder^X carried by an aircraft involved in an accident and to the recordings thereof calls for very careful handling and requires that the recovery and handling of the recorder and its recordings be assigned only to qualified personnel.

3.2 If a request is received from the State of Registry that the aircraft, its contents, and any other evidence remain undisturbed pending inspection by an accredited representative of the State of Registry, the State in which the aircraft accident occurs shall take all necessary steps to comply with such request, so far as

^XThe term flight recorder in this Annex is used as a generic term that includes flight data recorder, voice recorder and any other such type of recorder which might be developed.

this is reasonably practicable and compatible with the proper conduct of the inquiry; provided that the aircraft may be moved to the extent necessary to extricate persons, animals, mails and valuables, to prevent destruction by fire or other causes, or to eliminate any danger or obstruction to air navigation, to other transport or to the public.

3.3. Recommendation. - If a request is received from the State in which the aircraft was manufactured that the aircraft remain undisturbed pending inspection by an accredited representative of that State, the State in which the aircraft accident occurs should take all reasonable steps to comply with such a request so far as this is compatible with the proper conduct of the inquiry and does not result in undue delay in returning the aircraft to service where this is practicable.

3.4 Subject to the provisions of 3.1 and 3.2, the State in which the aircraft accident occurs shall release custody of the aircraft, the contents, or any parts thereof, which are no longer necessary for the purposes of an accident inquiry, to any person or persons duly designated by the State of Registry. For this purpose the

State in which the aircraft accident occurs shall facilitate access to the aircraft, the contents or any parts thereof, provided that, if the aircraft, the contents or any parts thereof lie in an area within which the State finds it impracticable to grant such access, it shall itself effect removal to a point where access can be given.

CHAPTER 4. - NOTIFICATION

INITIAL NOTIFICATION

4.1 The State in which an aircraft accident occurs shall notify the State of Registry and the State in which the aircraft was manufactured with the minimum of delay and by the quickest means. The initial notification shall include as much of the information contained in Appendix 1 as is readily available, but its dispatch shall not be delayed due to the lack of complete information.

4.1.1 Recommendation. - The initial notification concerning an aircraft accident should be prepared in one of the working languages of ICAO whenever it is possible to do so without causing undue delay.

4.1.2. As soon as it is possible to do so, the State in which an aircraft accident occurs shall dispatch the details omitted from the initial notification referred to

in 4.1 and other known relevant information.

4.1.3 Upon receipt of the initial notification referred to in 4.1, the State of Registry shall, as soon as possible, supply the State in which the aircraft accident occurred with any relevant information it has available regarding the aircraft and flight crew involved in the accident. The State of Registry shall also inform the State in which the accident occurred, whether it intends to be represented at the inquiry, and, if so, it shall indicate the probable date of arrival of its accredited representative.

4.1.4 Upon receipt of the initial notification referred to in 4.1, in respect of an accident covered by 5.6 and 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 and, if so, it shall indicate the probable date of arrival of its accredited representative.

SUBSEQUENT NOTIFICATION

4.2 The State conducting the inquiry shall forward the subsequent notification of an accident involving a transport aircraft to the State of Registry or the State

in which the accident occurred as appropriate, to the State in which the aircraft was manufactured, to the States referred to in 5.8 and to the International Civil Aviation Organization. The subsequent notification shall be sent in the form described in Appendix 2. When matters directly affecting safety are involved, the notification shall be sent as soon as the information is available and by the quickest means. In other cases, the notification shall be sent by airmail within thirty days.

4.3 Recommendation. - The State conducting the inquiry should forward the subsequent notification of an accident involving an aircraft other than a transport aircraft, when airworthiness or matters of exceptional interest in the promotion of aviation safety are involved, to the State of Registry or the State in which the accident occurred as appropriate, to the State in which the aircraft was manufactured, to the States referred to in 5.8 and to the International Civil Aviation Organization. The subsequent notification should be sent in the form described in Appendix 2 as soon as the information is available and by the quickest means and in any event within thirty days.

4.4 Recommendation. - When an aircraft accident occurs in the territory of the State of Registry, that State should send advice in the form described in Appendix 2 of all accidents involving transport aircraft and of accidents to aircraft other than transport aircraft, when airworthiness or matters of exceptional interest in the promotion of aviation safety are involved, to the State in which the aircraft was manufactured and to the International Civil Aviation Organization. When matters directly affecting safety are involved, this advice should be sent as soon as the information is available and by the quickest means. In other cases, this advice should be sent by airmail within thirty days.

4.5 Recommendation. - The subsequent notification concerning an aircraft accident should be in narrative form in accordance with Appendix 2. It should be prepared in one of the working languages of ICAO and using, as far as possible, the terminology contained in the ICAO Lexicon (Doc 8291).

CHAPTER 5. - INQUIRY

Note. - Nothing in this Chapter is intended to preclude

States conducting or participating in an aircraft accident inquiry from calling upon the best technical advisers from sources such as operators, manufacturers and pilots.

5.1 The State in which the aircraft accident occurs shall institute an inquiry into the circumstances of the accident. Such State shall also be responsible for the conduct of the inquiry, but it may delegate the whole or any part of the conducting of such inquiry to the State of Registry. In any event the State in which the accident occurs shall use every means to facilitate the inquiry.

5.2 It shall be the responsibility of the State of Registry to conduct any necessary inquiry in connection with an aircraft accident whenever the location of the accident cannot definitely be established as being in the territory of another State.

5.3 Recommendation. - When an aircraft accident occurs in the territory of a non-contracting State, the State of Registry should endeavour to carry out an inquiry in co-operation with the State in which the aircraft accident occurs but, failing such co-operation, should itself conduct an inquiry with such information as is

5.4 The inquiry instituted by a State shall include the investigation and the obtaining and recording of all available relevant information; the analysis of the evidence; the determination, if possible, of the cause; the completion of the Report and the making of recommendations when appropriate. Where possible the scene of the accident shall be visited, wreckage examined and statements taken from witnesses.

Note. - The Manual of Aircraft Accident Investigation (Doc 6920-AN/855) contains guidance material for the conduct of an investigation.

5.4.1 The State conducting the inquiry shall designate the investigator-in-charge of the investigation and shall initiate an investigation immediately.

Note. - Guidance material on a form of effective organization of aircraft accident investigation is given in Attachment B to this Annex.

5.4.2 Recommendation. - The investigation should have precedence over any other phases of the inquiry.

5.4.3 Recommendation. - The investigator-in-charge should have unhampered access to the wreckage and unrestricted control over it to ensure that a detailed examination

can be made without delay by authorized personnel participating in the investigation.

5.5 The State of Registry shall be entitled to appoint an accredited representative to be present at the inquiry.

5.6 The State in which the aircraft was manufactured shall be entitled to appoint an accredited representative to be present at an inquiry into an accident to a turbine-engine transport aircraft unless it is specifically indicated in the initial notification of the accident referred to in 4.1 that such action is unnecessary.

5.7 Recommendation - When the State conducting an inquiry referred to in 5.6 specifically requests participation by the State in which the aircraft was manufactured, that State should provide, unless impracticable to do so, an accredited representative to be present at the inquiry.

Note 1. Nothing in 5.6 or 5.7 is intended to preclude the State or States in which the aircraft, or major components of it, were manufactured, or the State that first certificated the type from requesting participation in the inquiry of an accident, even though the aircraft concerned is not of the class referred to in 5.6, when

it is believed that a useful contribution can be made to the inquiry or when such participation might result in increased safety.

Note 2. - Nothing in 5.6 or 5.7 is intended to preclude the State or States conducting an inquiry from requesting the State in which the aircraft, or major components of it, were manufactured, or the State that first certificated the type, to appoint an accredited representative to be present at such an aircraft accident inquiry, even though the aircraft concerned is not of the class referred to in 5.6, when it is believed that a useful contribution can be made to the inquiry or when such participation might result in increased safety.

5.8 Any Contracting State shall, on request of the State conducting the inquiry, furnish that State with all the relevant information available to it and, in such cases, shall be entitled to appoint an accredited representative.

5.9 Recommendation. - Any Contracting State, the air safety facilities or services of which have been or would normally have been used by an aircraft prior to an accident, and which has information pertinent to the inquiry should furnish such information to the State

conducting the inquiry.

5.10 Recommendation. - Representatives of the operator should be permitted to attend the investigation in order that they may make an effective contribution to it. The attendance of these representatives should be arranged through the State of Registry.

Note. - Nothing in the last sentence of 5.10 is intended to preclude the attendance of representatives of the operator when the State of Registry does not appoint an accredited representative or if his arrival is delayed.

5.11 An accredited representative shall be permitted to participate in the inquiry.

5.12 A State entitled to appoint an accredited representative shall also be entitled to appoint advisers to assist him at the inquiry.

Note. - Facilitation of the entry of the accredited representatives, their advisers and equipment, is covered in Annex 9 - Facilitation.

5.13 Recommendation - Advisers assisting an accredited representative should be permitted, under his supervision, to participate in the inquiry to the extent necessary to enable the accredited representative to make his participation effective.

5.14 Recommendation. - Participation in the inquiry should confer entitlement to:

- i) visit the scene of the accident;
- ii) examine the wreckage;
- iii) question witnesses;
- iv) have full access to all relevant evidence;
- v) be provided with copies of all pertinent documents;
- vi) make submissions in respect of the various elements of the inquiry;

provided that participation of the accredited representatives, and the assistance of their advisers, of States other than the State of Registry and the State in which the aircraft was manufactured may be limited to those matters which entitled such States to participation under 5.8.

Note 1. - It is recognized that the form of participation would be subject to the procedures of the State in which the inquiry, or part thereof, is being conducted.

Note 2. - The collection and recording of information need not be delayed to await the arrival of an accredited representative.

Note 3. - Nothing in 5.14 precludes the State conducting the inquiry from extending participation beyond the entitlement enumerated.

5.15 If, after the inquiry has been closed, new and significant evidence becomes available, the State which instituted the inquiry shall reopen it.

Chapter 6. - Report
on Inquiry

6.1 A Report containing the findings of the inquiry, together with the substantiating information upon which the conclusions were based, shall be sent with a minimum of delay by the State instituting the inquiry to the State of Registry, the State in which the aircraft was manufactured and the States mentioned in 5.8.

6.2 Recommendation. - A State should not circulate or publish a Report or any part thereof without the consent of the State instituting the inquiry unless such Report has already been published by the latter State. Similarly, the State instituting the inquiry should consult, when it considers it necessary, the State of Registry and the State in which the aircraft was manufactured, if this State appointed an accredited representative to the inquiry, before publishing a Report or any part thereof.

6.3 The State instituting an inquiry into

an accident involving aircraft engaged in commercial air transport operations, or into an accident from which information likely to contribute to the promotion of aviation safety can be obtained shall send to the International Civil Aviation Organization three copies of the Summary of the Report, prepared in one of the working languages of ICAO and in the format shown in Appendix 3 and using, as far as possible, the terminology contained in the ICAO Lexicon (Doc 8291).

6.4 Recommendation. - If the Report of an inquiry into an accident which occurs in the territory of the State of Registry contains matters of exceptional interest in the promotion of aviation safety, that State should send to the International Civil Aviation Organization three copies of a Summary of the Report prepared in the manner provided in 6.3.

6.5 Recommendation. - The State instituting the inquiry should, upon request, provide other Contracting States with pertinent information additional to that contained in the Summary of the Report.

APPENDIX 1. - INITIAL NOTIFICATION

(Note. - See Chapter 4, 4.1, of the Annex)

The initial notification shall include the following information:

- a) type, model, nationality and registration marks of the aircraft;
 - b) name of owner, operator and hirer, if any, of the aircraft;
 - c) name of the pilot-in-command;
 - d) date and time (GMT) of the accident;
 - e) last point of departure and point of intended landing of the aircraft;
 - f) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
 - g) number of crew and passengers: abroad, killed and seriously injured;
 - h) Nature of the accident and the extend of damage to the aircraft as far as is known;
 - i) an indication to what extent the inquiry will be conducted or is proposed to be delegated by the State in which the accident occurred;
 - j) physical characteristics of the accident area;
 - k) indication whenever the participation of the State in which the aircraft was manufactured is unnecessary.
-

APPENDIX 2. - SUBSEQUENT NOTIFICATION

(Note.- See Chapter 4, 4.2, 4.3, 4.4 and 4.5, of the Annex)

The subsequent notification shall include the following information where possible:

- aircraft (type;
(model;
(nationality;
(registration;

- owner;

- operator or hirer;

- date of accident;

- time (GMT);

- last point of departure;

- point of intended landing;

- geographical location of site of accident (LAT/LONG);

- type of operation;

- phase of operation;

- type of accident ;

- injuries to persons;

Injuries	Crew	Passengers	Others
Fatal			
Non Fatal			
None			

- damage to aircraft;

- brief description of the accident;

- progress of investigation and significant facts established during the investigation;

- precautionary actions taken or under consideration.

Attention is drawn to the terminology used in Chapter 1 of the Manual of Aircraft Accident Investigation (Doc 6920-AN/855).

APPENDIX 3. - SUMMARY OF ACCIDENT REPORT

(Note. - See Chapter 6, 6.3, of the Annex)

Format of Summary of the Report

The purpose of the Summary of the Report is not to replace the Aircraft Accident Report, but to summarize the Report for inclusion in the ICAO Aircraft Accident Digest in a convenient and uniform format.

Each Summary of the Report begins with a title giving the following information:

Name of the operator; type, model, nationality and registration marks of the aircraft; place and date of the accident; authority releasing the Report and date of release of the Report.

Note. - In preparing a Summary of the Report, using this format, ensure that:

- a) entries are made under each paragraph number;
- b) where information is not available in the Report, a note to this effect is included under each paragraph number;
- c) any other pertinent information from the Report such as diagrams, photographs, charts, etc.,

considered essential for inclusion in the Summary is attached.

1. - Investigation

1.1 History of the flight. A brief narrative giving the following information:

- Flight No., type of operation, last point of departure, time of departure (GMT), point of intended landing.
- Description of the flight and events leading to the accident including reconstruction, if any, of the significant portion of the flight path.
- Location (latitude, longitude, elevation), time of the accident (GMT), whether day or night.

1.2 Injuries to persons. Completion of the following (in numbers):

Injuries	Crew	Passengers	Others
Fatal			
Non fatal			
None			

Note. - Fatal injuries include all deaths determined to be a direct result of injuries sustained in the accident.

1.3 Damage to aircraft. Brief statement of the damage sustained by aircraft in the accident (destroyed, substantially damaged, slightly damaged, no damage).

1.4 Other damage. Brief description of damage sustained by objects other than the aircraft.

1.5 Crew information:

 a) Pertinent information concerning each of the flight crew members including: age, validity of licenses, ratings, mandatory checks, flying experience (total and on type) and relevant information on duty time.

 b) Brief statement of qualifications and experience of other crew members.

1.6 Aircraft information:

 a) Brief statement on the airworthiness and the maintenance of the aircraft (indication of deficiencies prior to and during the flight to be included if having any bearing on the accident).

 b) Brief statement whether the weight and centre of gravity were within the prescribed limits during the phase of operation related to the accident. (If not and if of any bearing on the accident give details).

 c) Type of fuel used.

1.7 Meteorological information:

- a) Brief statement on the meteorological conditions appropriate to the circumstances including both forecast and actual conditions, and the availability of meteorological information to the crew.
- b) Natural light conditions at the time of the accident (sunlight, moonlight, twilight, etc.).

1.8 Aids to navigation. Information on navigational aids available, including landing aids such as GCA, ILS, etc., and their effectiveness at the time, if pertinent.

1.9 Communications. Information on communications and their effectiveness, if pertinent.

1.10 Aerodrome and ground facilities. Pertinent information associated with the aerodrome, its facilities and condition.

1.11 Flight recorders . Location of the flight recorder installations in the aircraft, their condition on recovery and pertinent data available therefrom.

1.12 Wreckage. General information on the site of the accident and the distribution pattern of the wreckage; details concerning the location and state of the

different pieces of the wreckage are not normally required unless it is necessary to indicate a break-up of the aircraft prior to impact. Diagrams, charts and photographs may be attached.

1.13 Fire. If fire occurred information on the nature of the occurrence, and of the fire-fighting equipment used and its effectiveness.

1.14 Survival aspects. Brief description of search, evacuation and rescue, location of crew and passengers in relation to injuries sustained, failure of structures such as seats and seat-belt attachments.

1.15 Tests and research. Brief statements regarding the results of any necessary tests and research.

1.16 Give pertinent information not already included.

2. - Analysis and Conclusions

2.1 Analysis.

2.2 Conclusions. Reproduce in a) and b) below the text of the Report in its entirety unless this is inadvisable because of length or complexity.

a) Findings. Indicate the most significant determinations of the fact-finding analysis.

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b) Cause or probable cause(s).

3. - Recommendations

(As appropriate, from the Report).

APPENDIX 11

ATTACHMENT A. - DETERMINATION OF

"SERIOUS INJURY AND "SUBSTANTIAL DAMAGE"

(Note. - See Chapter 1, Aircraft Accident)

The terms "serious injury" and "substantial damage" included in the definition of Aircraft accident in Chapter 1 (Definitions) are capable of varying interpretations. Since it is desirable for the purposes of comparisons, statistics, etc., that a degree of uniformity be achieved in determining what constitutes an aircraft accident, interpretation of these terms assumes a degree of importance. Accordingly, for the guidance of all concerned, the criteria adopted by some States is reproduced.

Serious Injury

Serious injury means any injury which:

- 1) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received;
- 2) results in a fracture of any bone (except simple fractures of fingers, toes or nose);
- 3) involves lacerations which cause severe hemorrhages, nerve, muscle or tendon damage;
- 4) involves injury to any internal organ;
- or 5) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface.

Substantial Damage

Damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and which would normally require major repair or replacement of the affected component. The following types of damage are specifically excluded: engine failure, damage limited to an engine, bent fairings or cowlings, dented skin, small punctured holes in the skin or fabric, taxiing damage to propeller blades, damage to tires, engine accessories, brakes, or wing tips.

INTERPRETATION ADOPTED BY STATES FOR THE TERM "SERIOUS INJURY"

1. The following States have adopted, or are prepared to adopt ^x, interpretations identical or similar to those appearing in Attachment A to Annex 13 (Second Edition):

^x ^x [#] ^x
Australia , Belgium , Burma , Cambodia, Denmark ,
^x ^x ^o
Greece , India , Ireland, Kingdom of the Netherlands,
New Zealand, Pakistan, United Kingdom, United States,
^x
Vietnam, Zambia .

[#] Has adopted the following additional criteria:

"injuries which result in the permanent loss of hearing
or sight"

o

Intends to adopt the same interpretation as in Attachment A to Annex 13 although different interpretation is now in use (see below).

2. The following States have adopted other interpretations:

AUSTRIA

We consider as seriously injured any person who is declared unfit for work for at least 20 days, or who suffers from a health disorder of at least 20 days or from a mental disorder or who sustained a severe hurt (e.g. fracture of nose, loss of finger or eye).

BRAZIL

Serious Injury - means any injury which:

- 1) Affects the integrity of any person or system of the human body in such a way that involves a full physical functional incapacity to the professional activity.
- 2) when merely anatomic, affects the injured's appearance in such a way that he considers himself a social outcast.

CANADA

"Serious injury" means an injury that requires hospital or medical treatment or results in the suspension of normal activities for a period of five or more days and

includes unconsciousness, fracture of any bone except a simple fracture of a finger or a toe, lacerations of muscles or lacerations that cause severe hemorrhages, injury to any internal organs, second or third degree burns and any burn involving more than five per cent of the body surface.

CHILE

"Serious injury" to persons to mean mutilation of a limb occurring in an aircraft accident or as a result of such an accident, which leaves the injured person unable to care for himself or to perform natural function which he could perform before.

CHINA

Article 10 of our Penal Law defines, among other things, the term "serious injury" as follows (not official English version):

- 1) The destroying of the function of one eye or both eyes;
- 2) The destroying of the function of one ear or both ears;
- 3) The destroying of the function of tongue, taste or smell;
- 4) The destroying of the function of one or more of the four limbs;

- 5) The destroying of the function of genital organ;
- 6) Other serious injuries to the body and health, being incurable or hardly to be cured.

COLOMBIA

Serious Injuries ("Major Injuries" in our regulations) are such as necessitate hospitalization of the victim for treatment. Any of the six conditions listed below are classifiable as "Major Injuries" regardless of the length of stay in hospital:

- 1) Loss of consciousness due to encephalic cranial trauma. Where such loss of consciousness results from physiological causes such as hypoxia, hyperventilation, G effect etc., it shall not be classed as an injury.
- 2) Fracture of any bone excepting simple fractures of the nose or phalanges.
- 3) Traumatic dislocation of major joints.
- 4) Limited or extensive injuries which either result in serious hemorrhage or require surgical repair.
- 5) Injuries to any internal organ.
- 6) Second or third degree burns, or any type of

burns which affect more than five per cent of the surface of the skin.

FRANCE

I have the honour to inform you that the French Administration, like ECAC itself, has not found it possible to retain the distinction between "seriously" and "slightly" injured. It has adopted the following definitions:

Non-fatal injury: Any person who, as a result of the accident, is rendered unfit for work for not less than three days (or any equivalent damage under the national laws of each State).

It should be noted that this definition corresponds broadly to the scope of the physical damages quoted in Appendix A (page A-17) to the Report of AIG III (Doc 8486 AIG III).

GERMANY

Serious Injury - one that requires medical treatment and results in suspension of normal activities for a period of 5 or more days.

GHANA

Serious Injury (personnel) - An injury requiring indoor patient treatment and/or causing permanent disability of limb and/or

sense i.e. sight, smell, hearing or feel etc.

INDIA

Serious injury is one that requires hospital or medical treatment and results in suspension of normal activities for a period of five or more days, and any of the following:

- a) Unconsciousness;
- b) fracture of any bone (except simple fracture of fingers and toes);
- c) Lacerations involving muscles or which cause severe haemorrhages;
- d) injury to any internal organs;
- and
- e) second or third degree burns or any burn involving more than five per cent of the body surface.

However, for the terms "serious injury" and "substantial damages" we intend to adopt the criteria as appearing on page A-17 of the Report of the Third Session of Accident Investigation Division (Doc 8486/AIG III).

INDONESIA

Serious Injury:

An injury which requires hospitalization and

medical treatment for a period of 5 (five) or more days, or results in an unconsciousness or in a fracture of any bone (except simple fracture of fingers, toes or nose), lacerations which cause severe hemorrhage or involve muscles, injury to any internal organ, paralyze any part of the body or second or third degree of burns or any burns involving more than five per cent of the body surface.

IRAN

Serious injuries

- a) Injuries dangerous to life.
- b) Injuries requiring surgical operation.
- c) Injuries paralysing or damaging organs of the body.
- d) The intensity of the injury is so much that hurts or confines the injured to bed for more than 4 days.
- e) Burnings of second and third category or burnings damaging more than ten per cent of the skin.

ISRAEL

Serious Injury is specified by our Administration as follows: An injury that incapacitates the individual for 30 or more days.

ITALY

I have the honour to inform you that the interpretation normally given in Italy to the terms "serious injuries" and "substantial damages" in relation to the definition of "Aircraft Accident" is the following:

Serious Injury: Any injury that requires more than 40 days to heal, or that causes more than fifty per cent disability, or such that it may place the victim in "danger of death".

JAPAN

"Serious injuries" is used for injuries requiring medical treatment for more than five days.

KENYA

Serious Injury is considered injury which

- a) will probably require hospitalization and medical treatment for a period of five (5) or more days, or
- b) results in
 - 1) unconsciousness;
 - 2) fracture of any bone (except simple fractures of fingers and toes);

- 3) lacerations involving muscles or which cause severe hemorrhage;
- 4) injury to any internal organ; and
- 5) second or third degree burns or any burns involving more than five per cent of the body surface.

MALTA

No definition is given of the term "serious injury" in Malta law but such cases would be governed by the criteria of "grievous harm" as defined in sections 230-232 of the Criminal Code where bodily harm is deemed to be grievous if it can give rise to danger of

- 1) loss of life; or
- 2) any permanent debility of the health or permanent functional debility of any organ of the body; or
- 3) any permanent defect in any part of the physical structure of the body; or
- 4) any permanent mental infirmity.

PORTUGAL

Serious injury - an injury that may cause death or bring about, wounding to psychic or somatic alterations, a 15% or higher disability, as

given by legal tables.

Although this concept does not include the specification of organs and apparatuses, it has in our view the following advantages:

- a) It covers, if not all, at least nearly all serious injuries, and includes inter alia the consequences of psychic trauma.
- b) It prevents certain minor injuries from being regarded as serious, since they are not mentioned.
- c) As it does not contemplate delays for the development of illnessess, it enables very serious situations where symptoms are slow to be considered (e.g. certain cases of brain haemorrhage).

Note:- We think that in order to limit the serious injury concept to an anatomical point of view it would be necessary to prepare tables going far beyond the scope of a simple definition.

We further think that the physio-pathological condition of the patient at the time of the accident should be taken into account, because of the implications that such condition may have in the evaluation of the injury extention

(certain blood dyscrases, osteoporosity).

TANZANIA

Serious Injury is considered injury which

- a) will probably require hospitalization and medical treatment for a period of five (5) or more days, or
- b) results in
 - 1) unconsciousness;
 - 2) fracture of any bone (except simple fractures of fingers and toes);
 - 3) lacerations involving muscles or which cause severe hemorrhage;
 - 4) injury to any internal organ; and
 - 5) second or third degree burns or any burns involving more than five per cent of the body surface.

TURKEY

- a) Any aircraft accident that causes death, (including in 30 days after the accident);
- b) Any aircraft accident which causes any person to be cured in hospital or causes any operation;
- c) The aircraft accident that resulting with bone break, muscles injuries, loss of much blood,

injuries of inside organs, second and third burning and burning of five per cent of the body of any person.

YUGOSLAVIA

A serious injury is taken to mean an injury necessitating hospitalization for more than 5 days during which period the victim is unable to work.

Serious injury means any injury which results in:

- a) Loss of consciousness,
- b) fracture of any bone (except simple fractures of fingers or toes),
- c) lacerations of muscles or severe hemorrhages,
- d) injury to any internal organs,
- e) second or third degree burns, or any burns affecting more than five per cent of the body surface

ATTACHMENT B to State letter AN 6/1 - 66/96

INTERPRETATION ADOPTED BY STATES FOR
THE TERM "SUBSTANTIAL DAMAGE"

1. The following States have adopted, or are prepared to adopt ^x, interpretations identical or similar to those appearing in Attachment A to Annex 13 (Second Edition):

^x ^x ^x
Australia , Belgium , Cambodia, Canada, Denmark ,
^x ^x
Greece , India #, Kingdom of the Netherlands,
Pakistan, United Kingdom, United States, Vietnam.

Intends to adopt the same interpretation as in
Attachment A to Annex 13 although different
interpretation is now in use (see below)

2. The following States have adopted other interpretations:

AUSTRIA

Substantial damage means any damage that reduces
the value of the aircraft by more than 50%.

BRAZIL

Substantial Damage - means any abnormal occurrence
imposed to the aircraft from which:

- 1) results in the destruction of the aircraft; or,
- 2) results in the definite unavailability

to the aircraft for flight; or,

- 3) results in any damage to the aircraft which would require major repair or replacement of the affected component assigned to the highest level of maintenance service.

BURMA

Substantial damages constitute, in relation to an aircraft, as the result of which the aircraft is of no further value except for possible salvage of usable parts, or which necessitates its complete overhaul or the replacement of any major component or equivalent.

CHILE

"Substantial damage" to an aircraft means any damage caused by an aircraft accident which is difficult or onerous to repair.

CHINA

In the absence of express interpretation in our existing statutory instruments relative to civil aviation of the term "substantial damage" to aircraft, we may possibly explain this term by indicating that in respect of the damage the aircraft cannot be restored to its former condition or that there exists obviously substantial difficulty in restoring the aircraft to its original condition.

COLOMBIA

"Substantial damage" is said to occur when damage to a major component is so great as to necessitate its removal from the aircraft and replacement.

NOTE:-

The following are deemed to be major components:
Undercarriage. - Wing (excluding ailerons, flaps and tips); wing centre section (excluding flaps).
Fuselage and its main components (excluding doors, windows, handles, etc.); vertical stabilizer (excluding rudder); horizontal stabilizer (excluding elevator); "slab" type tail (in the case of aircraft which utilize this type of control surface); mainrotor head of a helicopter; engine nacelle (excluding parts designed to be removable); and power plant (excluding airscrew and accessories)".

CYPRUS

"Substantial damage" includes any damage which necessitates the replacement or extensive repair of any major component".

FRANCE

As regards damage to aircraft, the French

Administration has adopted the following criteria:

Aircraft virtually destroyed: Any damage whose repair would be more costly than the price of the aircraft and would normally entail final withdrawal from service. This may cover a destruction assessment of the order of 75 or 80 to 100%.

Aircraft seriously damaged: Any damage which necessitates the replacement or large-scale repair of a major component of the aircraft. This may cover a destruction assessment of the order of 25 to 75 or 80%.

GERMANY

Substantial damage - a damage necessitating major repairs and extensive investigation.

GHANA

Substantial damage (aircraft) - a damage involving replacement of major component and/or major insitu repair to the primary structure such as the fuselage/main plane/tail plane.

INDIA

Substantial damage - when major repairs or replacements and extensive investigation are necessary before the aircraft can be accepted as

airworthy. However, for the terms "serious injuries" and "substantial damages" we intend to adopt the criteria as appearing on page A-17 of the Report of the Third Session of Accident Investigation Division (Doc 8486/AIG III).

INDONESIA

Substantial damage

damage which necessitates major overhaul of the aircraft or the replacement of or extensive repairs to any major components of the aircraft. It does not include damages such as scrapped wing tips, bent fairings or cowlings, small punctured holes in the skin or fabric, dented skin or trailing edge, repairable damage to propeller blades, or damage to tyres, engine accessories, or brakes.

IRAN

Substantial damages -

- a) Damages requiring a long time to repair.
- b) Damages changing the shape and strength of the main structure of the aircraft.
- c) Damages changing the main flying qualities of the aircraft so that requiring substantial repair.

IRELAND

The term "substantial damage" is defined in Irish legislation as follows:

"Substantial damage" includes any damage which necessitates the replacement or extensive repair of any major component.

ISRAEL

Substantial damage - is specified as damage sustained by an aircraft, which requires major or extensive repairs, that have to be authorised and/or checked by an Airworthiness Surveyor before releasing the aircraft for further service.

ITALY

Substantial damage - damage that has an adverse effect on the structural characteristics, the performance or the safety of the aircraft.

JAPAN

Substantial damage - is the general term used for serious damage when it is considered that recovering to the airworthy state is inexpedient and intermediate damage such that major repair or alteration and sometimes study is necessary before being accepted as airworthy.

KENYA

Substantial damage - that which necessitates a

major overhaul of the aircraft, or which necessitates the replacement of or extensive repairs to any major component of the aircraft. Major components are defined as follows:

(a) landing gear mechanism (exclusive of tyres, brakes and fairing); (b) wing panel (exclusive of wing tip, flap and aileron); (c) wing centre section (exclusive of flaps); (d) fuselage; (e) vertical stabilizer (exclusive of rudder); (f) horizontal stabilizer (exclusive of elevators); and (g) power plant (exclusive of propeller, cowling and accessories).

MALAWI

The definition of "substantial damage" in the Air Navigation Regulations of Malawi is as follows:-

"Means any damage that necessitates the replacement or extensive repair of any major component or the equivalent considering all damage to the aircraft collectively".

MALTA

The term "substantial damage" is defined in the Malta Civil Aviation (Investigation of Accidents) Regulations,

1956, as:

"Any damage which necessitates the replacement or extensive repair of any major component".

NEW ZEALAND

"Substantial damage" is defined in Reg. 5(2) of the New Zealand Civil Aviation (Investigation of Accidents) Regulations 1953 as:

"Substantial damage means any damage which necessitates the replacement or extensive repair of any major component of the aircraft".

PORTUGAL

As regards damage to aircraft, the phrase "serious damage" is used to describe the damage requiring the replacement or the major repair of an important part of the aircraft estimated to involve 25 to 75% thereof.

SOUTH AFRICA

Substantial damage is defined as "damage as would, after repair, require certifications by the holder of an aircraft maintenance engineer, class I, licence".

TANZANIA

Substantial damage - that which necessitates a major overhaul of the aircraft, or which necessitates

the replacement of or extensive repairs to any major component of the aircraft. Major components are defined as follows: (a) landing gear mechanism (exclusive of tyres, brakes and fairing); (b) wing panel (exclusive of wing tip, flap and aileron); (c) wing centre section (exclusive of flaps); (d) fuselage; (e) vertical stabilizer (exclusive of rudder); (f) horizontal stabilizer (exclusive of elevators); and (g) power plant (exclusive of propeller, cowling and accessories).

TURKEY

- a) Any aircraft accident that causes the aircraft to be completely overhauled.
- b) The aircraft accident which causes any main part of the aircraft to be repaired or changed at repair-shop.

YUGOSLAVIA

Substantial damage is taken to mean any accident which results in such damage to the aircraft as renders it unserviceable and necessitates workshop repair.

ZAMBIA

No change is envisaged from the definition given

in the Zambian Air Navigation Regulations of 1954, which is:

Substantial damage - means any damage that necessitates the replacement or extensive repair of any major component or the equivalent considering all damage to the aircraft collectively.

APPENDIX III

CONTRACTING STATES THAT HAVE NOTIFIED ICAO OF
DIFFERENCES WHICH EXIST BETWEEN THEIR NATIONAL
REGULATIONS AND PRACTICES AND THE INTERNATIONAL
STANDARDS AND RECOMMENDATIONS OF ANNEX 13 FIRST
EDITION, OR HAVE COMMENTED ON IMPLEMENTATION

AFGHANISTAN The Civil Aviation regulations in Afghanistan
are in the primary stage. The intention
of the Afghan authorities is to follow the
provisions of the annexes as far as is
practicable under the circumstances.

ARGENTINA
CHAPTER 5

5 . 6 Instead of permitting accredited representatives
to participate in the inquiry, these will be
permitted to attend the inquiry only.

5 . 7 [■] Instead of permitting advisers to participate
in the inquiry, these will be permitted to
attend the inquiry only.

5. 8 An accredited representative will only be
allowed full access of all information and
evidence and entitlement of certified copies
of all documents pertinent to the inquiry.

■ Recommended practice..

CANADA
CHAPTER 5
5. 6

Canadian regulations make no provision for participation in an inquiry by anyone other than the persons duly authorized by the authority convening the Board of Inquiry. Participation by an accredited representative of another state cannot therefore be permitted.

5. 7 [☒] For the reasons indicated in regard to 5.6 this recommendation cannot be implemented.

5. 8 [☒] For the reasons indicated in regard to 5.6 this recommendation cannot be implemented.

FRANCE
CHAPTER 3
3. 2

The aircraft, its content and any other evidence will remain undisturbed, on request from the State of Registry, only insofar as the Judicial inquiry permits.

FRANCE
CHAPTER 5
5. 1

The French Administration may delegate the whole or any part of the conduct of the technical inquiry only, but not of the Judicial inquiry to the state of registry.

5 . 3 In the case of accidents which occur in

French territories, accredited representatives of the state of registry will be entitled to be present at the technical inquiry only and not at the judicial inquiry.

- 5 . 4 The French administration will furnish technical information only, but no information concerning the judicial inquiry.
- 5 . 6 In French territories, accredited representatives will be permitted to participate only in the technical inquiry and not in the judicial inquiry.
- 5 . 8 In view of the national legislative provisions, the following documents and materials prepared by Judicial Police officials may not be made available to investigators from the State of Registry or to accredited representatives permitted to participate in the inquiry.
- Record of establishment of evidence, examination of documents, questioning of eye-witnesses or other witnesses.
 - Reports and certified copies of all documents pertinent to the inquiry.

To make such documents available would, in fact, be contrary to the secrecy of Judicial inquiries, which is required by the Sections of the "Code Diinstruction criminelle".

GERMANY
CHAPTER 3
3. 2

The aircraft, its contents and other evidence can remain untouched at the request of the State of Registry until arrival of an accredited representative only to the extent compatible with the investigation to be carried out by the authorities for criminal prosecution.

GREECE

Annex 13 was accepted by this service except the only difference between our practices and the annex being that of the 'accident' definition which was formulated more ample and analyzed.

ITALY

Aircraft accident inquiry is governed in Italy, as regards general legal principles, by many articles of the CODICE Della Navigazione (Arts. 826Sqq). The Regulatory Provisions, which are very similar to those of Annex 13, are found in regolamento per La Navigazione Aerea (Arts. 273 Sqq) currently under revision.

LEBANON
CHAPTER 5

5 . 3 The representative of the State of Registry
5 . 4 shall be permitted in the technical inquiry
5 . 6 only, to the exclusion of the judicial inquiry
 the Minister of Justice might decide to conduct.

MEXICO

Mexico will not implement the Provisions contained in Annex 13, but will implement those contained in the National Regulations on aircraft accident investigations. (Regalments Nacional Sobre Investigaciones De Accidentes de Aviacion).

NETHERLANDS
CHAPTER 5

In the Netherlands Act regulating the investigation of accidents to Civil aircraft the expression "accredited representative" does not occur.
Netherlands Antilles - 11/10/62 - No difference.

POLAND
CHAPTER 1

Definitions.

The following definitions appear in our Regulations:

Aircraft Accident An occurrence associated with the operation of an aircraft which takes place from the moment when such aircraft begins to move under its own power for a flight until it comes to a stop at the conclusion of the

flight in which:

1. The aircraft is destroyed or substantially damaged and some or all crew members or other persons are killed or die as a result of injuries suffered.
2. The aircraft is destroyed or damaged to such an extent that it must be scrapped or requires fundamental repairs in full or in part.
3. The aircraft is damaged and requires routine repairs.
4. The aircraft lands owing to technical difficulties.
5. The aircraft, owing to reasons other than technical difficulties, lands on a field not intended for that purpose. Accidents associated with the use of parachutes are considered aircraft accidents.

Aircraft Any machine capable of deriving support in flight and of transporting persons and goods.

Besides these differences in the definitions

our Regulations are in accordance with the provisions of the annex.

PORTUGAL
CHAPTER 5

We intend to apply the provisions of Annex 13 with a single reservation, which has moreover been made by other states concerning the activities of the accredited representatives. These representatives may be present at the technical inquiry only, and, with the permission of the Chairman of the National Board officially appointed to conduct the inquiry, they shall have free access to all information it might be possible to obtain. They may not act as investigators nor may they sign the report with the other members of the Board.

SPAIN
CHAPTER 3

3 . 2 The inquiry will be initiated without awaiting the arrival of an accredited representative of the State of Registry.

CHAPTER 4)
4 . 2)
CHAPTER 6)

If requested, a copy of the report will be supplied.

CHAPTER 5

5 . 3 A maximum number of three observers may be

present at the inquiry.

5.1, 5.4 Difficulties may arise in the application of
5.5, 5.7 these standards and recommended practices
5.8, 5.9 since the existing decree does not provide
5.10 for such cases.

THAILAND
CHAPTER 5
5 . 6

Accredited representative will be permitted
to attend the inquiry only. National orders
- Article 8.

"As the State of Registry has the right under
the convention of International Civil Aviation
to send representative to attend the inquiry,
the Committee of accident investigation shall
allow such representative to do as the Committee
deems appropriate".

5 . 7 Cannot be implemented for reasons given in 5.6.
5.8 Cannot be implemented for reasons given in 5.6.

TUNISIA
CHAPTER 5
5 . 6

The accredited representatives may participate
in the inquiry as observers.

VIETNAM
CHAPTER 5
5.1, 5.2,
5.3, 5.4
5.10

The standards of these paragraphs and those
of Chapter 6 are only applicable to the technical
inquiry.

CHAPTER 6

CHAPTER 5

5.6 5.7 ,[⌘] The Standard of paragraph 5.6 and the recommendations
5.8[⌘] of paragraphs 5.7 and 5.8 are not applicable;
accredited representatives of other States
shall be authorized to attend the technical
inquiry but not to participate in it.

[⌘] Recommended practice.

APPENDIX 1V

ATTACHMENT B. - ORGANIZATION OF AN ACCIDENT INVESTIGATION

NOTE: - The following material was developed during the course of the Third Session of the Accident Investigation Division, held in Montreal in January and February 1965, as guidance material for the "Organization of an Accident Investigation". It is a synthesis of the procedures adopted and the experience gained by States that have conducted numerous investigations of accidents involving large modern aircraft. The phraseologies of the States that have contributed to this material have been preserved. It is thought that this material will be of interest to Contracting States.

1. - Introduction

1.1 An accident investigation is conducted for the purpose of determining all the facts, conditions and circumstances pertinent to the accident with a view to establish the probable cause thereof and, eventually when appropriate, the corrective action designed to prevent accidents. The accomplishment of these objectives requires that the investigation be properly organized, directed, carried out, co-ordinated and supervised by qualified

technical personnel.

1.2 It is recognized that the precise extent of a particular investigation will be contingent upon the nature of the accident and the availability of investigative resources. For example, a complex accident involving large turbine powered aircraft would require an investigation of much broader scope than that involving a small aircraft or a specific aircraft component.

1.3 The Group Organization described in the following text illustrates an acceptable method of conducting an investigation into a major accident, and in appropriately condensed form it also provides a basis for the organization of the smaller or less complex accident.

2- Group Organization

2.1 The investigator-in-charge will be appointed and will be responsible for the organization, conduct and control of the investigation. It is important that headquarters be established in the area of the accident as soon as possible for the purpose of conducting organizational meetings and daily business. The investigator-in-charge shall be fully responsible for co-ordinating the activities of all personnel associated with the investigation.

2.2 The investigator-in-charge should establish Working Groups, as required, to cover various phases of the investigation. Normally specialists from the State conducting the investigation will head the various Working Groups and the membership of such Groups may consist, as appropriate, of not only specialists from the State authorities concerned, but also the operator involved, the manufacturers of the aircraft, powerplants, and accessories, and from the various flight crew representatives and other interested parties who can contribute through their technical experience.

2.3 The number of Groups, and the number of personnel assigned to each Group, will be dependent upon the considerations set forth above and may include the following Groups.

Operations Group

2.3.1 The Operations Group is responsible for developing all facts concerning the history of the flight and flight crew activity in the final phases of the flight, during and after the accident. This includes flight planning, dispatching, weight balance, weather and weather briefing, radio communications, air traffic control, navigation facilities, en-route stops, refuelling and aeronautical experience, flight checks and general information concerning

the flight crew. The medical history of the crew, including any recent illnesses, psychological factors, crew rest periods and activities during the twenty-four hours prior to the accident, should be determined. This latter aspect of the investigation should be co-ordinated with the Human Factors Group to ensure that all information assembled is utilized to full advantage. The Operations Group should also develop information on the flight path just prior to the accident. In this effort, co-ordination with the Witness Statement Group is essential. There are occasions when it is desirable to form one or two additional groups to take over some of the functions of the Operations Group. The following two Groups are examples of this.

Weather Group

2.3.2 An accident in which weather is an important factor can best be served by a separate group of weather specialists. This Group would be responsible for the collection and compilation of all factual meteorological data pertinent to the accident, including both surface and upper air reports of actual conditions, pilot reports recorded meteorological data, as well as forecasts of

anticipated conditions prepared and issued by the appropriate agencies. Of necessity, close co-ordination must be maintained with other Groups, particularly the Operations, Air Traffic Control and Witness Statement Groups.

Air Traffic Control Group

2.3.3 When air traffic control or navigation aids are involved, the Air Traffic Control Group, which includes air traffic control specialists, should be established. This Group would be responsible for the review of the original records of the air traffic service units concerned including, when available, radar screen recordings, the monitoring of any original voice recordings and verification that written transcripts of voice communications are consistent with the recordings. This Group would provide, when appropriate, a reconstruction of the history of the flight based on ATC information. In addition, this Group would determine the operating status of pertinent navigation aids, communications equipment, radar, transponder equipment, computers, etc., and provide technical data on all such equipment and its operation, whenever it is deemed necessary.

Witness Statement Group

2.3.4 The Witness Statement Group is responsible for contacting and interrogating all persons who may have seen

or heard some portion of the flight or who may have knowledge concerning the flight or of the weather conditions at the time of the accident. They will obtain signed statements from witnesses, including survivors of the flight. The extent of the Group's activity can range from questioning a relatively few witnesses to a door-to-door activity covering great distances along the flight path in which hundreds of possible witnesses are interviewed. Information concerning observed positions, altitudes, sounds, aircraft behaviour and airborne disintegration can be developed in this manner. The location of witnesses at the time of the accident shall be plotted on a suitable map of the area. Close co-ordination must be maintained with the Operations Group in developing the probable flight path from the witnesses' statements and with the Human Factors Group in the interrogation of witnesses. In many instances interpretation and translation facilities have to be provided for the interrogation of witnesses.

Flight Recorder Group

2.3.5 This Group will locate and secure the flight recorder, if carried on the aircraft, and arrange through the investigator-in-charge for a readout. The calibration of the recorder must be taken into consideration in the

procurement of such a readout. The readout data when compiled must be co-ordinated with the Operations Group and such other Groups as the readout indicates.

2.3.5.1 Due to the importance of flight recorder data, extreme care must be taken in handling the recorder and its recording to prevent damage. Only fully qualified personnel should be assigned to recover and handle the recorder.

Structures Group

2.3.6 The Structures Group is responsible for investigating the airframe and flight controls. If the wreckage is scattered, the Group's first concern is to locate and identify as many sections, components and parts as possible and to plot their exact position on a wreckage distribution chart.

2.3.6.1 A reconstruction of the structure may be desirable and this could vary from laying out various pieces of wreckage on a flat area to the more complicated reassembly of all available pieces in position on a framework. This procedure is most often used in collision, structural failure, in-flight fire or explosion type accidents. Its purpose is to identify the point of original failure and to

establish progression of the break-up pattern.

Powerplants Group

2.3.7 The Powerplants Group is responsible for investigation of the engine or engines, including fuel and oil systems, propeller(s) and engine and powerplant controls. The initial work of this Group may be carried out in conjunction with that of the Structures Group in the locating and plotting of wreckage. Powerplant fire is to be investigated as to the extent and time of occurrence. This Group is also responsible for investigating the type of fuel, the possibility of it being contaminated and the effectiveness of the powerplant fire extinguisher system. These functions must be co-ordinated with the Structures Group.

Systems Group

2.3.8 The Systems Group is responsible for detailed examination of all systems and components, such as hydraulics, electrical and electronics, radio communication and navigation equipment, air conditioning and pressurization, pneumatic, ice and rain protection, cabin fire extinguisher, oxygen, etc. The examinations will include determination

of the condition and/or operational capabilities of components. It is important that all system components be accounted for within reason. The examination includes determination of the positions of associated controls and switches.

Maintenance Records Group

2.3.9 This Group is responsible for reviewing all maintenance records to ascertain the maintenance history of the aircraft in respect to adequacy of inspection, malfunctions that might be related to the occurrence, time on the aircraft, engines and components, and the time since overhaul. The function of this Group involves co-ordination with the State of Registry and the operator involved, and is normally performed at the maintenance base headquarters of the operator. This Group is also responsible for reviewing appropriate recovered flight documents.

Human Factors Group

2.3.10 This Group is responsible for the aero-medical and crash-injury aspects of the investigation. It is concerned with the possibility of crew incapacitation, the general physical and psychological conditions of the crew members and the environmental factors which might have affected the crew. It is also concerned with the possibility of psychological factors among passengers that might have been contributory to the accident. It will cover

matters involving autopsies of crew and passengers as appropriate. It will also investigate the evacuation and survival aspects, and design factors which may have contributed to the injury or death of aircraft occupants. The functions of this Group must be closely co-ordinated with the Operations and Witness Statement Groups.

Evacuation, Search, Rescue

And Fire Fighting Group

2.3.11 This Group is responsible for investigating the circumstances of evacuation, search and rescue, and the performance of ground fire fighting services. The activities of this Group include an examination of the respective equipment and of the manner in which it was used. The function of this Group must be co-ordinated, in particular, with the Witness Statement, Structures and Human Factors Groups.

3. - Group Functions

The primary purpose of Group Functions is to establish the facts pertinent to an accident by making use of the specialized knowledge and practical experience of the participating individuals with respect to construction

and operation of the aircraft involved in the accident and of the facilities and services that provided service to the aircraft prior to the accident. It also ensures that undue emphasis is not placed on any single aspect of the accident to the neglect of other aspects which might be significant to the investigation, and that, whenever it is possible to establish a particular point by means of several methods, all those methods have been resorted to and co-ordination of results has been ensured.

3.2 At frequent intervals during the investigation, the investigator-in-charge should hold meetings of all the various Groups to review the progress of work and to permit a free exchange of ideas and information among the Groups. Very often one Group will have uncovered some fact or facts which will serve as a valuable lead to another Group in their work. In this manner, all the relevant facts, conditions and circumstances relating to the accident are progressively developed.

3.3 Much of the work of the Groups can be completed at the accident site, but frequently tests or the continued study of parts or components are carried out at testing

facilities which may include the manufacturer's base.

Often it may be necessary to move the powerplants, instruments and/or system components immediately and carefully to more favourable locations for disassembly and study. This requires expert packing and transportation.

3.4 Specialists assigned to the investigation may communicate with any unit for necessary technical assistance. In such cases it is essential that they co-ordinate with the investigator-in-charge and the head of their Group on the nature of the problem and keep them fully informed regarding their activities.

3.5 As each Group completes its portion of the investigation, all of the factual data accumulated are studied and a Group factual report is prepared. The investigator-in-charge supervises the collection of all Group reports and is responsible for the composite report. This report shall be a comprehensive factual report of the whole investigation and shall form the basis for development of an analysis report which is fully supported by the factual information collected during the investigation and which leads ultimately to the establishment of the probable causes.

Appendix 5

Appendix 2. - Subsequent Notification

(Note. - See Chapter 4, 4.2, 4.3, 4.4, and 4.5
of the Annex).

The subsequent notification shall include the following information where possible:

- The identifying abbreviations ACCIDSUB
- (type;
(model;
(nationality;
(registration;
- owner;
- operator or hirer;
- date of accident;
- time (GMT);
- last point of departure;
- point of intended landing;
- geographical location of site of accident
(LAT/LONG);
- type of operation;)
- phase of operation;) (See Note 1)
- type of accident;)
- injuries to persons;

Injuries	Crew	Passengers	Others
Fatal			
Non fatal			
None			

- damage to aircraft;
- brief description of the accident;
- progress of investigation and significant facts established during the investigation;
- precautionary actions taken or under consideration
- signature

Note 1. - Attention is drawn to the terminology used in Chapter L of the Manual of Aircraft Accident Investigation (Doc 6920-AN/855).

Note 2. - The Manual of Aircraft Accident Investigation (Doc 6920-AN/855) contains guidance material concerning the preparation of subsequent notification messages whenever matters of safety are involved and require the sending of this notification over the AFTN or the public telecommunication service. It also contains guidance

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material concerning arrangements to be made
for prompt delivery of these messages to the
addressee.

APPENDIX V

ATTACHMENT B

(ATTACHMENT TO STATE LETTER SD 1/2-66/28)

PROPOSAL FOR AMENDMENT OF ANNEX 13 AS AMENDED
BY AMENDMENT NO.1

1. - Amend paragraph 4.1 to read as follows:

4.1 The State in which an aircraft accident occurs shall notify the State of Registry and the State in which the aircraft was manufactured with the minimum of delay and by the available quickest means. The initial most suitable and notification shall include as much of the information contained in Appendix 1 as is readily available, but its despatch shall not be delayed due to the lack of complete information.

Note.- In meeting the provision of 4.1 the Aeronautical Fixed Telecommunication Network (AFTN) will in most cases constitute "the most suitable and quickest means available".

- II. - Amend Appendix 1 - Initial Notification, to

read as follows:

APPENDIX 1. - INITIAL NOTIFICATION

(Note. - See Chapter 4, 4.1 of the Annex)

The initial notification shall include the following information:

- a) the identifying abbreviation ACCID;
- b ~~a~~) type, model, nationality and registration marks of the aircraft;
- c ~~b~~) name of owner, operator and hirer, if any, of the aircraft;
- d ~~c~~) name of the pilot-in-command;
- e ~~d~~) date and time (GMT) of the accident;
- f ~~e~~) last point of departure and point of intended landing of the aircraft;
- g ~~f~~) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
- h ~~g~~) number of crew and passengers; abroad, killed and seriously injured: others: killed and seriously injured;
- i ~~h~~) nature of the accident and the extent of damage to the aircraft so far as is known;
- j ~~i~~) an indication to what extent the inquiry will be conducted or is proposed to be delegated by

- the State in which the accident occurred;
- k j) physical characteristics of the accident area;
 - L K) indication whenever the participation of the State in which the aircraft was manufactured is unnecessary.
 - m) signature (when required) [■].

Note 1:- The 2-letter designator "YL" in association with an ICAO 4-letter Location Indicator forms the 6-letter Addressee Indicator for messages sent only over the AFTN to authorities responsible for aircraft accident inquiries. For messages sent over the public telecommunication service the aforementioned addressee indicator cannot be used and a postal or telegraphic address must be substituted.

The 6-letter Addressee Indicators and the corresponding postal and telegraphic addressees to the extent that they have been notified to ICAO, are published in the ICAO document: "Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services" (Doc 8585)

Note 2:- The Manual of Aircraft Accident Investigation

[■] Not required in the Aeronautical Fixed Telecommunication Network (AFTN).

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(Doc 6920-AN/855) contains guidance material concerning the preparation of initial notification messages and the arrangements to be made for their prompt delivery to the addressee.

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