

THE INDEPENDENCE AND OBJECTIVES OF THE ACCIDENT
INVESTIGATION FUNCTIONS OF THE SWAZILAND CIVIL
AVIATION AUTHORITY IN LIGHT OF THE ICAO GUIDELINES

by

BONGINKOSI W. MAGAGULA

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SUPERVISOR: PROFESSOR Dr. STEPHAN HOBE

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ABSTRACT

The need for any aviation authority to have an alert and more so, efficient accident or incident investigation mechanism cannot be over emphasized particularly in present day aviation practice. It is thus, in the best interest of any state, not only to be on the high alert in the event of an accident occurring. As well as also having sufficient resources and expertise, to engage in the investigative process. A significant factor to the carrying out of such investigations is off course, the manner in which such process is regulated. More so because investigations of this nature can only be carried out and addressed in a manner stipulated as a matter of law.

It would therefore follow, that the legislation which directly regulates the process in which the investigations are carried out should be both succinct and clear. Further, it should also adhere strictly to internationally established guidelines of due conduct in the occurrence of accidents. Aircraft accident and incident investigations are central to the observance of safety in aviation as a sector. Thus, the realization of aircraft safety in aviation is a central function of any aviation authority. It is a role so central, that it is one that is internationally recognised and harmonised. Though not a matter of enforced International law, international best practice in this field is established in a convention, in particular the International Convention on Civil Aviation of 1944, which is more commonly referred to as the Chicago convention. As all treaties and/or conventions this is an opt-in regulatory mechanism, in which only member states bind themselves. Therefore, where a state becomes a signatory to same and has bound itself, it is of crucial importance that it observes the laws or regulations to which it has bound itself.

As a matter of course, individual state compliance at times even for mere ratification purposes has proved over time to be a tricky process for numerous states. This is particularly prevalent in developing countries. Some texts have attributed this to various aspects, such as lack of necessary

expertise and resources amongst other factors. Whatever the reason however, it is important that states eventually comply with regulations laid out in conventions, so as to achieve harmonisation in processes of International applicability.

This research paper seeks to take an in depth look into to the extent to which Swaziland as a member state of the Chicago convention, has achieved compliance with the set guidelines of the Chicago Convention. However, the report will confine itself to aircraft safety as the focal point, and in particular, focus on the specific regulatory mechanisms that relate to aircraft accident and incidents.

CHAPTER 1:

1. INTRODUCTION

1.1. Background; History of Aviation Safety in Swaziland

This chapter seeks to give a brief overview of the history of Aviation Safety in Swaziland prior to the enactment of the prevailing legislation. The report will also discuss in brief, the order of certain events that preceded an audit carried out by Universal Safety Oversight Audit programme (“**USOAP**”) that catalysed the Parliamentary action that brought about the enactment of the current legislative framework.

The Swaziland Civil Aviation Act of 2009(“**the current Act**”), which is the prevailing aviation legislation in the Kingdom of Swaziland, is a descendant of the Civil Aviation Act of 1968,¹ (“**the former Act**”) which was repealed in the year 2009. During the phase of the former Act, the responsibility of regulating the aviation Industry in Swaziland fell squarely within the exclusive preserve of the Directorate of the Civil Aviation (“**DCA**”). This was a department forming part of the general Ministry of works. In essence, the responsibility to regulate Aviation as a field was the full responsibility of Government.

As expected, Government regulation came with its varying shortcomings. The Directorate of civil aviation was shrouded with the inefficiencies associated with government departments. The general responsibility of regulating civil aviation as a sector, involved mainly the registration of aircrafts, issuing of operators’ licences, pilots licences and the investigation of

¹ *The Swaziland aviation Act of 1968.*

aircraft accidents.² It is the investigation of aircraft accidents that will form the focal point of this report.

In the year 2007, a safety oversight audit was conducted by the USOAP delegation as instructed by the International Civil Aviation Organisation (“**ICAO**”). ICAO is in itself a creature established by treaty, being the Convention on International Civil Aviation (“**Chicago Convention**”). Whose purpose as an organization is to develop international Standards and Recommended Practices (“**SARPs**”), which States reference when developing their legally-enforceable national civil aviation regulations.³ These safety oversight audits are an initiative by ICAO that comprise of regular, mandatory and harmonized safety audits of all contracting states to the treaty establishing ICAO. The establishment of ICAO universal safety oversight audit came to being during the 32nd Assembly (Assembly Resolution “A32-11”) which resolved the establishment of the ICAO USOAP.⁴

The audit delegation identified that in the case of Swaziland, among other things that there was (while the former Act was in place), no proper keeping of records.⁵ An example of this was that the register that should have contained the list of aircrafts registered in Swaziland was only recorded in a hard copy and was not stored in any other form of database. On inspection by the USOAP delegation, of the register some pages were found to have been missing.⁶ A further finding of this audit was that, there were no documented processes or procedures that were to be followed by safety inspectors before the licencing and registration of aircrafts.

² *Ibid*

³ <http://www.icao.int/about-icao/Pages/default.aspx> accessed 27/ 08/ 2015

⁴ Resolution “A32-11” Adopted in the 32nd Assembly session of ICAO, accessible from <http://www.icao.int/meetings/amc/ma/assembly%2032nd%20session/resolutions.pdf> accessed 09/09/2015

⁵ Final Safety Oversight Audit Report (“The Audit Report-Swaziland”): *ICAO Universal Safety Oversight Audit of Civil Aviation system of Swaziland*, as carried out between the 18th to the 24th of July 2007

⁶ *Ibid* at page 9

In essence the delegation noted that the state of aviation in the country was in bad shape and required some work.

What is of relevance to this report nonetheless is the disquieting nature in which aircraft accidents and incidents were addressed in the former dispensation. This is a factor also noted by the USAOP auditors, whose findings and recommendations will be discussed further in the coming chapters of this paper.

At a brief glance over the Act, a startling lack of independence is immediately apparent in the former legislation, particularly the manner in which aircraft safety investigations were implemented. This is startling purely because the idea of the independence of technical accident and incident investigations (“**safety investigations**”) is an international, if not universal principle. It dates back as early as 1944,⁷ whereas in the Swaziland context, it seems to have gone unobserved for the longest time. This can be seen for example, from the fact that all aircraft safety investigations fell squarely to be the responsibility of the directorate of civil aviation. This department, it must be reiterated, was housed under the Ministry of Works. What this essentially meant, is that in the event an accident or incident occurred it was, the very same personnel that licenced the involved aircraft, that got to investigate and give a report on the cause and other details of the accident or incident. One obvious flaw with this situation was that, when an unworthy aircraft was that licenced to operate succumbed to a fault and caused an accident, the investigation delegation would be in a position to conceal this fact.

⁷ John a. Stoop and James P. Kahan “*Flying is the safest way to travel; How aviation was a pioneer in independent accident investigations*”,5 (2005), EJTIR, at page 115-128

The need to amend the former legislation or Act was therefore crucial. The process of formal amendment was necessitated further by the ICAO USOAP site audit. As mentioned, that the mandate for the USOAP comprises of regular mandatory systematic and harmonised safety audits of contracting states. In light of the fact that Swaziland is a contracting state of the ICAO, it was not absolved from this oversight process. The mandate for these regular audits, which are mainly referred to as “safety audits” bear the purpose of auditing *all safety related areas*.⁸

The mandate and scope of such oversight was expanded during the 35th session of the ICAO assembly,⁹ which resolved that the program be expanded to cover all safety related annexes. The assembly also requested the Secretary General to adopt a comprehensive systems approach for the conducting of safety oversight audits.¹⁰

The relevance of the Resolution in the analysis that this report seeks to make, is that, the resolution further directed that the Secretary General ensures that the comprehensive systems approach maintains, as a core element, the provisions contained in the following Annexes of the Chicago Convention namely; Annex 1 (personnel licencing), Annex 6 (operations of aircrafts), Annex 8 (Airworthiness of Aircrafts), Annex 11 (Air Traffic services), Annex 13 (Air craft and accident and incident investigation) *my emphasis*, and also Annex 14 (Aerodromes).

During the audit as carried out in Swaziland, in so far as safety investigations (as provided for in Annex 13 of the ICAO guidelines) are concerned the audit various findings were made.

These findings were made pursuant to a process of the audit delegation having collected all necessary evidence, which collection of evidence took the form of various interviews

⁸ The Audit Report-Swaziland *op cit* note 5 at page 1

⁹ Resolution “A35 – 5” Adopted in the 35th Assembly session of ICAO, accessible from <http://www.icao.int/environmental-protection/Documents/a35-5.pdf> accessed 09/09/2015

¹⁰ *Ibid*

conducted by the ICAO constituted delegation, with the Swaziland Aviation technical experts, as well the background that had been provided by the country's aviation sector. The findings *inter alia* pointed particularly to the fact that the Swaziland Legislation at the time needed urgent review.

Over all, the USAOP audit in its results / report identified 8 critical elements requiring urgent attention in the case of Swaziland and its compliance with the ICAO guidelines to which it is a signatory.¹¹

These were as follows, (the first three being *of relevance* to this report);

1. *Primary Aviation Legislation*: In which it noted various shortcomings in and called for the rectification of same.
2. *Specific operation regulations*: Which it noted Swaziland had put in place, however that the regulations failed *inter alia*; to set out adequate policies, guidelines and instructions that related to certain ICAO standard processes. Further, that in most fields the regulations did not contain the necessary provisions needed to enable safety oversights, in conformity with the ICAO Annexes.
3. *State Civil Aviation System and Safety Oversight functions*: Where it noted that there was one central body for the regulation of civil Aviation, the main aerodrome operator and the main air navigation service provider in Swaziland and the separation of these regulatory and operational functions was still a “*project*” (not finalised). There was a clear *lack of autonomy*. The function of carrying out the accident and incident investigation was the

¹¹ The Safety Oversight Audit Report *op cit* note 5at Page 3

responsibility of the DCA. The audit delegation established that the accident and incident information received by the DCA was not stored in any ascertainable database. The team further found out that the DCA had not carried out an analysis of the accident and incident information they had received.

Others critical areas were;

4. *Technical personnel and training*
5. *Technical guidance, tools and the provision of safety critical information*
6. *Licencing certification, authorisation and / approval obligations*
7. *Surveillance obligations*
8. *Resolution of safety concerns*

Worth mentioning at this point, is the fact that; in as much as these deficiencies were highlighted by the ICAO audit delegation as far back as 2007, it will be shown later in this report that the current legislation did not rectify various aspects that the Audit brought to focus. In particular that, the regulations did not do much to align themselves with the clearly set out guidelines that ICAO has put in place.

Summary conclusion

Meeting of ICAO standards where safety investigations are concerned, albeit deficient in varying aspects in the Swaziland case, have somewhat improved. The minor attempts to align with such standards that Swaziland has made so far are worth commending. Particularly, that they took the ICAO audit delegations recommendations seriously and went on to expedite the drafting of a new legislative framework, which would be known as the Swaziland Civil Aviation Authority Act 10 of 2009. It is this Act that will be the subject of this reports analysis. This report will seek to analyse whether the current Act meets the ICAO muster of recommended standards and practices.

CHAPTER 2:

2. THE PURPOSE AND OBJECTIVE OF SAFETY INVESTIGATIONS AS SET OUT IN ANNEX 13 OF THE ICAO GUIDELINE.

2.1 Outline

It is submitted that in Aviation; “*Aviation accident investigation is as old as aviation itself*”.¹² The series of events that led to the formalization of this aspect of aviation date back to the 11th of April 1951 pursuant to the adoption of Article 37 of the Convention on International Civil Aviation 1944 (the Chicago Convention). Towards the end of the 2nd World war the USA, Canada and the UK took the initiative to establish the International Civil Aviation Organisation (ICAO). It was from that Chicago conference (establishing ICAO) where issues such as routes, rates, fares and frequencies were dealt with. It elaborated on the commission that gathered in Paris in 1910 on the technical aspects of air navigation. Though the conference was not a complete success; many issues were settled along the lines of bilateral agreements rather than global treaties *nonetheless, accident investigation was successfully negotiated (multilaterally)*.¹³

As part of the Convention, a series of Annexes was drafted, including Annex 13. With this, the Standard and Recommended Practices for Aircraft Accident Enquiries were first adopted and designated to Annex 13.¹⁴

From as far back as its conceptualization, the aviation safety investigations were founded on the idea of a blame free approach. Which concerns itself with the ideal that aircraft accident and incident investigation ought *not to be carried out to apportion blame but rather to learn what the*

¹² Stoop and Kahan *op cit* 7 note at page 116

¹³ *Ibid* at page 117

¹⁴ Annex 13 to the Convention on International Civil Aviation: *Aircraft Accident and Incident Investigation document*, 10th Edition (July 2010) as published by ICAO

cause of the accident was and why it happened so as to take the necessary measures to prevent reoccurrence.

Stoop and Kahan,¹⁵ relate the events surrounding the first application of this principle to wartime aviation where the concept was further developed. It is stated that one Flanagan,¹⁶ conducted possibly the first study of incidents and "near misses" in aviation, when he surveyed U.S. Army Air Corps crews to determine what factors influenced mission success and failure. At that point it was established that in order to keep public faith in the aviation industry, a common process of *learning without allocating blame was deemed necessary*.¹⁷ In order to provide a timely feedback to all stakeholders in the sector, accident investigations had to be separated from judicial procedures, which focused on individual responsibilities and liability.

A further principle that was a point of focus was ensuring that, in the breath of safety investigations not being carried to apportion blame, ensuring that a strict separation was kept between technical investigations and judicial enquiries was necessary. Since the sole purpose of judicial enquiries would be apportioning blame. It is submitted that in the negotiations that brought about Annex 13, this was a key element.¹⁸

The process of arriving to Annex 13 was evolutionary in its implementation. It is said that, the manner of dealing with aircraft accidents presented by Annex 13 was one that emerged from the military and rapidly spread to the civil aviation sector.¹⁹ As this aspect of civil aviation developed further, it went on to ingratiate the principle of Independence of aircraft accident investigations.

¹⁵ Stoop and Kahan *op cit* note 7 at page 118

¹⁶ Flanagan: *The aviation psychology program in the Army Forces*, Washington D.C. Air Force (1948)

¹⁷ Stoop and Kahan *op cit* note 7 at page 118

¹⁸ *Ibid*

¹⁹ *Ibid*

It was during the 1960's where the issue of independence was raised by ICAO membership. The reason behind its introduction was to relieve investigations from dominant influence from the state.²⁰ Though, the idea of independence of aircraft safety investigations, in modern day aviation extends to independence from various other stakeholders such as manufacturers, aviation agencies and stakeholder's bearing interests such as commercial interest in the aircraft.

One may wonder why such eloquent and proficient systems of safety are recognised in the aviation sector. The answer is a simple one, which is that safety, is viewed as an industry wide problem and not one unique to a single operator, manufacture or state. Also that, in the case of aviation public confidence in the operational performance of aircrafts is always at stake, the obvious reason for this is that, aircrafts accidents are subject to high public profiles due to the high number of casualties and material damage involved.²¹

Thus, the underlying objective focusing on the safety systems in aviation is to make a lasting positive contribution to the improvement of this mode of transport's safety.²² The true and only agenda of aircraft investigations should be to improve public safety.²³

For the purposes of this report, the analysis that the author seeks to make, will be considered from the two vantage points of safety investigations that have emerged in this outline namely;

1. The *objective* of aircraft accident and incident investigations;
2. The *independence* with which these investigations should be carried out.

²⁰ Stoop and Kahan *op cit* note 7 at page 119

²¹ *Ibid* at page 116

²² European Transport Safety Council: *Transport accidents and incident investigation in the European Union*, Brussels, ETSC (2001), ISBN 90-76024-10-3

²³ Baxter T: *Independent investigation of transportation accidents* 19 Safety Sci. (1995), at page 271-278

2.2. The Objective of aircraft safety investigations by ICAO

According to ICAO Annex 13, Chapter, paragraph 3.1;

*“The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability”.*²⁴

Further at Chapter 5, paragraph 5.4: the annex states that;

“Any investigation conducted in accordance with the provisions of this Annex shall be separate from any judicial or administrative proceedings to apportion blame or liability”

It is clear from the above, that Annex 13 places the non-apportionment of blame as an imperative. Indeed it has been alluded to earlier, that from the inception of Annex 13 this was a pivotal focal point.

For certain member states, it has been conceded that application of Annex 13 has proven complicated to say the least.²⁵ Martins’ in his text explains that, there have been for certain countries, visible shortcomings in the full realization of Annex 13’s envisioned system. In this regard he states;

“some contracting states are not applying Annex 13 within its express terms, although they are contracting states. For some this is a matter of the lack of available resources, either human or economic or even both. Further, and much more important in practice, there are many countries which apply the letter of the Annex in such a way as to sterilize its spirit. This appears to be due to a number of causes, often found in combination. Firstly, the requirements of the local law and of the local procedures are interpreted and applied so as to

²⁴ Annex 13 *op cit* note 14 at chapter 3

²⁵ Christopher N. Shawcross et al; “*Shawcross and Beaumont air Law Air Law*”, Volume 2, 4th Edition

*preclude a more efficient investigation under Annex 13 in favour of a legalistic and sterile interpretation of its terms”.*²⁶

In the same text Martin, continues to express that Annex 13 is also quite complicated on procedural terms, yet not all states have the sophisticated aircraft accident and incident regulations providing for all the elements that Annex 13 so requires.²⁷

It is against this backdrop that, this report seeks to highlight and further scrutinise Swaziland’s compliance as it relates to Annex 13.

In the context of the Swaziland aviation legal framework, in particular, the prevailing Act, this principle objective of “investigations being carried for the sole purpose of identifying the cause of accidents and the prevention of accidents and incidents is quite wanting. In this regard, it is worthy of focus and analysis.

The aspect of contention can be found in S 50 of the current Aviation Act. The Section reads as follows;

S 50;

“The part of any report of the Director General relating to any accident or the investigation shall be admitted as evidence or used in any suite or action for damages arising in a manner mentioned in such report”.

The ICAO Annex 13, states clearly that in an investigation conducted in accordance with the

²⁶ *Ibid*

²⁷ Shawcross *op cit* note 24

provisions of the Annex, shall be separate from any judicial or administrative proceedings to apportion blame or liability. It appears that the Swaziland Legislation is contrary to the above principle since it makes the purpose of the accident and incident investigation to be that which would ordinarily be carried out for judicial purposes. Consequently it is then for purposes of apportioning blame and establishing liability. It provides for both a judicial procedure and the accident or incident investigation under the same section. This is confusing and stands to compromise the free flow of information from people that would provide valuable factual testimony for purposes of corrective measures and which would add value to safety of the aviation industry.

One can clearly deduce from the above that current Act permits the use of evidence or outcome obtained from an accident and investigations to be admitted as evidence and to be used in a suit or action for damages arising out of the accident and incident. In this regard it does not portray the same objective as regards the results obtained through its accident and incident investigations.

2.2.1. Investigations for purposes of ascribing blame

The particular problem that provisions such as S50 of the current Swaziland Act presents is that of appearing to lay emphasis on apportioning blame. Such blame would be in the form of criminal proceedings in the caption “*use as evidence*”. It also depicts the use of investigations for founding liability where it indicates the use of such parts of the report “*in any suite or action for damages arising*”. This problem fundamentally deviates or contradicts from the Annex 13 objective of not apportioning blame.

For a clearer understanding of the gravity of this deviation, it is important to consider varying thoughts of several authors, who deal with the particular problem of the use of investigations for the purpose of apportioning blame.

Perhaps as a point of departure, the history of this objective is worth a brief discussion. In the coming to being of the Chicago Convention, it introduced Article 26 which made clear reference to the investigation of accidents, and in this regard it provided that all such investigations are to “*be carried out in as far as the domestic laws (of a member state) permit with the procedures recommended by ICAO*”.

Shortly thereafter, a body known as the International Commission for Aerial Navigation (“**ICAN**”) was formed, in the Paris Convention of 1919. It is submitted at this point a clear attempt was made to distinguish between technical investigations and other blame ascribing investigations.²⁸ Since the 1926 ICAN resolution called for “*a technical investigations to be held following an accident to an aircraft ...*” the resolution was subsequently developed to lay emphasis on the point that such investigation should be “*entirely independent of the police, judicial or other investigations provided for by the laws of the state*”. This was a clear attempt to keep as far as possible, the investigation process from lending itself to one that ascribes blame of any law enforcement nature.

2.2.2. *The hazard of blame ascribing investigative processes*

²⁸ Russel F. Kane, “*Accident Investigations and the Public Interest: A pilots view*” 38, German Journal of Air and space Law (ZLW) 1 (1980)

Kane,²⁹ however notes with disarray the trend in modern day aviation practices that relate to safety and investigations, and the emphasis that these practices lay on criminal fault. To this end, certain authors have described this as the “criminalizing of air disasters”.³⁰

The reason this defeats the objective of blame free investigations was ably expressed by the then (ICAN resolution era) Attorney-General of the United States, when he publicly recognised the dangers of accident investigation reports serving to assist private parties in litigation. He foresaw that this trend, if continued, would make it increasingly difficult in future to secure, what he put as “*the frank disclosures which would foster aviation (safety)*”.³¹

This is a sentiment that is shared by many authors on the subject. Stoop and Kahan for instance state that, in the conceptualization of Annex 13, it was reckoned that in order to keep public faith in the aviation industry, a common process of learning without allocating blame was deemed necessary.³² They further emphasise that the blame free approach has clearly borne fruit as technical investigations of, for instance, designing and operation of aircrafts have seen impressive developments in the case of the European Union. The blame free approach has led to many (welcome) changes as well as new expertise on specific academic areas varying from mental fatigue and human failure, crew resource management or life cycle management.³³

Criminal or other blame ascribing investigations are simply at a cross-purpose with technical investigations.³⁴ They are conflicting enquiries yet surprisingly are at times simultaneous.³⁵ They

²⁹ Russel F. Kane *op cit* note 26 at page 11

³⁰ Elaine D. Solomon and Dina L. Relles, “*Criminalization Of Air Disasters: What Goal, If Any, Is Being Achieved?*” 76 *Journal of Air Law & Commerce* (2011) at page 407

³¹ Russel F. Kane *op cit* note 26 at page 1

³² Stoop and Kahan *op cit* note 7 at page

³³ *Ibid*

³⁴ Solomon and Relles *op cit* note 28 at page 1

may well, if allowed, defeat the objective of Annex 13. The reason is that, witnesses, in the face of their evidence being held against them to found liability of any sort, have a reasonable fear of frankly giving evidence to the technical investigation team. This deprives the team of the frank disclosures necessary to deal with the relevant aspects that the investigation ought to use to facilitate both the necessary corrective measures as well as prevention measures for the re-occurrence of accidents or incidents.

2.2.3. The balancing act between the objective of Annex 13 and ascribing blame where blame is due

It cannot be denied that where fault is apparent, those responsible should not be absolved. Kane ably expresses that the idea of the objective of the annex is not at all to grant immunity to those criminally liable but rather to afford the investigation team the due opportunity to achieve the objects of the Annex (which we have identified are of crucial importance to the maintaining of safety in aviation), prior to any other hindering processes being implemented, such as blame ascribing investigations.³⁶

In a progressive step by various countries, as a means to balance the requirements of law enforcement as well as those of aviation safety as secured by Annex 13, certain member states have devised as system of collateral investigations. Cannon,³⁷ suggests that that this is an advisable method to balance these two evidently competing interests.

How method is employed, is that the investigating authority conducts the technical investigations into the accident or incident, whose sole purpose is to determine the cause of the accident and to

³⁵Russel F. Kane *op cit* note 26 at page 11

³⁶ *Ibid*

³⁷ Thomas G. Cannon, “Witnesses to Military Air Crashes: Are Their Statements Secret” (28) Air Crash Litigation Journal (1981) at page 471 - 472

develop corrective measures to prevent future similar incidents. A second investigation is then conducted, preferably by a separate team, appointed by a judicial authority, which investigation is termed the “collateral investigation”.³⁸ An example of this type of set up can be seen in the American model which is an army wide model, which dictates that whenever an aviation safety investigation is conducted , a separate collateral investigation will be initiated if the following circumstances become apparent;

- a. *Whenever the accident may give rise to a claim against the United States; or*
- b. *The accident results in death or serious injury of any civilian or military personnel; or*
- c. *There is substantial damage to private or military property not requiring a claims investigation; or*
- d. *The accident is likely to receive congressional or widespread public interest; or*
- e. *The commander, for any reason other than those above (for example, the possibility of criminal, disciplinary, line of duty determination, or administrative actions against military personnel), thinks a collateral investigation.*³⁹

The American model for collateral investigations presents a lot that can be learned from. It projects a dimension in which, a balance is struck in achieving the objective of the Annex yet at the same time ensuring that those who have suffered damage get the opportunity to have their claims addressed.

This model is impressive, in that it preserves the object of Annex13 almost in meticulous form. It recognises that it owes its obligation first to its being bound to ICAO and the Chicago Conventions

³⁸ Cannon *op cit* note 35 at page 471

³⁹ Capt. Richard S. Ugelow and Capt. Edward A. Zimmerman, “*Aircraft Accident Investigations: New Responsibilities for SJA*”, 8, *The Army Lawyer*, (1972) at page 8

with regards to aviation safety as made apparent in Annex 13, yet maintains the public interest dimension catering for genuine claims, be they criminal or civil in nature being redressed accordingly. In the American context, the commander capacitated to issue the directive for technical investigations, directs the head of the technical investigation to consult with the Staff Judge Advocate (should he have some measure of doubt) on whether to initiate collateral investigation.

What is the value of this model of investigations? Well in considering that, for purposes of technical investigations an essential element is to gather as much information, in as much detail as possible to establish the *true* cause of accidents, it is of primary importance that those giving such evidence (the witnesses) are as frank and honest as possible in their relation of the sequence of events. This is a dimension of investigations that must be both fostered and protected. Therefore, in face of prosecution of witnesses (i.e. statements being used to found criminal or civil liability) this objective becomes near impossible to achieve. It must be remembered that civil aviation authorities are neither judicial nor quasi-judicial bodies and most of them have no powers to subpoena witnesses. Thus, they have to secure witnesses by requesting them to come forward with their testimonies. It is extremely difficult to elicit any forthcoming witness statement where witnesses face prosecution.

Therefore, in the promotion of encouraging frank disclosures by witnesses, such witnesses require protection. An essential feature in achieving this protection, and worthy of discussion, is that of protection of witness statements. In the ordinary course, the general rule in aircraft accident investigations is that statements of witnesses should be held in a confidential and privileged manner. The importance of this notion cannot be over emphasised in aviation safety. Kane ably expresses the reason for this when he remarks that;

*“There will be reluctance on the part of persons who know that their conversations are being recorded to reveal or discuss errors they may have made, when the circumstances demand full and frank disclosure in order that proper remedies or rescue actions may be instituted”.*⁴⁰

This is a depiction of how the absence of witness statement affects the fulfilment of the objective Annex 13. This proves to be detrimental to the investigating authority and consequently aviation as a sector. The other dimension it presents is the chilling effect that it poses to witnesses in their personal capacities. This Kane ably demonstrates in stating that;

*“The knowledge that witness reports, expression of opinion or even recorded conversations will be freely available to persons or institutions whose objective is the establishment of legal liability will induce these people, whose frankness is vital to the success of the investigation, to be, at the very least, very guarded in what they say”.*⁴¹

In this way by all means the object of the Annex is defeated.

It is simply of paramount importance, that to achieve purpose of accident investigation of aircraft safety as set out by the Annex, the aviation investigating authorities encourage witnesses to come forward with any information which might bear upon the cause of the accident. Further, such solicitation should come with the promise that their unsworn statement will not be divulged to anyone for any purpose other than safety and accident prevention.

⁴⁰ Russel F. Kane *op cit* at page 4

⁴¹ *Ibid*

Cannon,⁴² submits that in the American military aviation sector, the Air force Safety investigation Board, which does not have subpoena power, tries by this method to acquire information that might otherwise be withheld, such as information against a witness' own interest or those of an employer or co-worker. This is precisely the backdrop on which the idea of collateral investigations was founded. Since the collateral investigations are designed to gather and preserve evidence for all other purposes other than safety, such as court-martial, disciplinary and administrative proceedings and civil litigation. In this respect witnesses having to such proceedings are advised of their rights and they testify under oath where it must be noted, they have a right not to give self-incriminating evidence. Since in judicial proceedings be it criminal or civil proceedings, it is the duty of he who alleges to prove their allegations, though the onus may vary as between civil and criminal proceedings.

However, the first right of reservation of evidence collected by technical aviation accident investigations remains with the technical investigation team. They may withhold information considered confidential or privileged. The collateral investigators may not use confidential statements given to safety investigators.

2.2.4. Legal Impediments to protection of information collected for the purpose of technical investigations

However in recent years, with the advent freedom of information rights coming to the fore and the enactment of access to information laws, this has proven at times to be a hindrance to the maintenance of confidentiality or privilege of witness statement obtained in accident investigations. This presents a dynamic of conflicting interests, which at times compete during the process of aircraft accident investigations. Where, on the one hand aviation accident investigation

⁴² Cannon *op cit* note 35 at 471

authorities collect evidence (including witness statements) for the sole purpose of determination of the cause of the accident and on the other hand, other stakeholders move suits to compel disclosure of this information under access to information laws, for the purpose of acquiring the information disclosed for blame ascribing processes.

A case that references this well is the American case of the *United States v Webber Aircrafts*.⁴³ In this case one Captain Richard Hoover, an Air Force pilot, suffered serious injuries when he ejected from his plane after its engine failed. Because the incident was a “significant” air crash, the Air force was required to conduct both a “collateral investigation” and “safety investigation”. Notwithstanding the two distinct processes being in place, Captain Hoover went on to file a suit in a Federal (civic) district court against Webber Aircraft Corporation and the Mills manufacturing Corporation (these were the two companies that had manufactured the ejection equipment), this caused the manufacturers to then seek civil discovery or disclosure of the all the Air Force investigation reports pertaining to the accident.

It can be noted from this case that the value of collateral investigations was exposed. In that the Air force gave the complete record of the collateral investigation and only selected portions of the safety investigation. This however should not take away from the fact that for a moment, freedom of information laws stood to shake the foundations of confidentiality in the practice of safety investigations in aviation.

It is a commendable thing however that the law in its nature is an ever evolving phenomenon. In the face of the threat to the ideals of confidentiality and privilege in accident investigations, the aviation sector moved quickly to assert their right to protect certain information that was vital to

⁴³ *United States vs. Webber Aircraft Corporation and others*, (Docket number 82-1616) Argued January 11, 1984

the preservation of the object of Annex 13 in all investigations. To this end it asserted its right to be able to have regulations that preclude as a matter of law information that is privileged from any suits compelling discovery. This allowed technical investigators to assert the right of privilege, where compulsion to discover under access to information laws were brought against them in court.

This principle can be traced back to cases that sought to counter Government privilege in military aircraft accidents. The American case of *Reynolds*,⁴⁴ the United States Supreme court established four requirements which must be met before the claim of privilege is allowed, these being;

- 1. The privilege must belong to the body asserting (in this case it was government), and it must be asserted by the body in the proceedings;*
- 2. The privilege can neither be invoked nor waived by a private party;*
- 3. The head of department must determine the existence of the report and claim for privilege from a personal inspection thereof; and*
- 4. A formal claim must be lodged by the head of the department.*

The importance of the option of a technical investigation team being able to assert privilege when faced with suits of access to information is invaluable to the investigation process. This goes a long way to preserving the objective of the Annex 13, but also serves the aviation sector well as it affords them the benefit collecting the necessary information to establish with clarity the cause of accidents and thereby prevent future re-occurrences.

A progressive step that states may implement to ensure the due compliance with Annex 13's objective is to prompt the alignment of Access to Information laws to the requirements of preservation of confidentiality and privilege, such that the laws allow for various agencies to

⁴⁴ *United States vs Reynolds* 345 U.S 1 (1953)

assert privilege in the course of proceedings compelling disclosure. Other states go as far as listing the various reports that can be classifiable and allowed privilege, should parties being compelled to disclose need to assert privilege. For instance, the American Freedom of Information Act, states that disclosure provisions do not apply to matters that are “inter-agency and intra-agency memorandums or letters which would not be available by law to a party other than a party in litigation with that agency”.⁴⁵ This means actions or suits instituted purely for the purposes of discovery will not suffice to compel the handing over of information to the party compelling the production of such information, through Freedom of Information laws.

Rather, it can only be through discovery in civil litigation, that a party can elicit any information it requires. It should be noted that in litigation, the notion of non-discovery of information that is privileged as between attorney and client is well established. Thus this affords the party in possession of the information a fair opportunity to assert the privilege as to the information.

States such as United States of America have taken a firm step as to the protection of information collected as part of technical investigations and have gone so far as formally regulating this aspect. This can be noted from legislative enactment 49 U.S.C. ss 1154 (b), which regulates the use of the National Transportation Safety Board (“NTSB”),⁴⁶ accident reports in civil litigation and it states that;

“No part of a report of the Board, related to an accident or an investigation of an, may be admitted into evidence or used in a civil action for damages resulting from a matter mentioned in the report”.

⁴⁵ Freedom of Information Act 5 USC

Note how this is in stark contrast with the Swaziland Act. Various authors commend this sort of enactment. The rationale for this position is that in their nature aviation safety reports make findings only for the purpose of preventing accidents in future, thus are based on a lesser amount of evidence than is required to support findings for the purposes of assessing liability for damage arising from the accident.⁴⁷ Further, aircraft accident and incident investigation regulations are framed in such a way that they give the investigating team the complete freedom to determine the probable cause of aircraft accidents without having to consider the huge civil liabilities that may flow from its findings if such findings were admissible in suits for damages.⁴⁸ This in my view is an ideal situation in order to achieve protection of witness statement containing information divulged only for purposes of technical safety reports.

Summary

In this sub paragraph the Objective of Annex 13 to the ICAO guidelines as they relate to aircraft safety investigations has been presented. It was noted that Annex 13 makes express mention of the fact that “the sole objective of safety investigations shall be the prevention of accidents and accidents. It is not the purpose of this activity to apportion blame”. It is trite that the prevention of future accidents would only be possible if it is established what caused the said accident. This in practical terms would mean the collecting of relevant factors that relate to the accidents, crucial to which are often witness statements. These statements are superlative guide as to where the investigators should look to establish the problem.

To this end, the idea that all information that was collected to establish the cause of the accident and incident shall be used for only that purpose. It was established that witness statement

⁴⁷ John W. Solomon “*Use of Aircraft accident investigation Information in actions for damages*” (17) *Journal of Air Law and Commerce*, 283 (1950) at page 287

⁴⁸ *Ibid*

protection was essential to the securing investigations that were blame free and thus aligned to the objective of Annex 13. When traced back to its origins, it was evident that even for ICAO, the idea of this blame free approach was that it facilitated the maximisation of collection of evidence necessary to establish the cause of accidents and thereby prevent future accidents. The more witnesses gave open and frank accounts of the sequence of events in accidents, the more the aviation industry was able to foster greater safety in aviation. Indeed, it is submitted that the blame free approach has yielded much fruit, particularly in the field of aircraft development which has been dubbed nothing short of “impressive”.

It is therefore against this back drop, that trends in criminalizing these investigations are cause for concern in the aviation accident and incident investigation practice. Various authors note this trend and express widespread concern of it. They further note that if this is continued, the consequences will simply be the impediment of aviation safety. This will create a chilling effect on those with the most critical insight into the circumstances of an aircraft accident scenario.

2.3. Independence

2.3.1 The requirement of independent Investigation by IACO

In terms of Chapter 5, paragraph 5.4;

“The accident investigation authority shall have the independence in the conduct of the investigation and shall have unrestricted authority over its conducts....”

This is a principle of equal importance to that of the objective. It features in the ICAIO manual of Aircraft Accident and Incident Investigations,⁴⁹ which states in part that, a “safety investigations authority must be strictly objective and impartial and must also be perceived to be so”. Further, that the investigating authority must be established in such a way that it must be able withstand outside pressures.

Independence as a concept is one that is highly regarded in most if not all spheres of administration. It is regarded that processes that require accountability, such as governance are undertaken impartiality is essential. This ensures transparent results, free of influence or agendas. This enhances the credibility of any institution and increases public confidence in that institution based on the knowledge that such institution can be relied upon to be honest. Independence is often a strong feature in administrative processes.

The aviation sector is no different. In its nature, the process or practice of safety investigations is one that requires at most times for the aviation authority to give an account. This can be seen from the requirement that the results of such investigation be reported publicly.⁵⁰

The requirement of independence in aircraft safety investigations is also a notion as old as aviation itself. It is submitted that during the 1960's, the issue of independence was raised in order to relieve investigations from *a dominant influence of the State*. During investigations, the influence of State interests, secondary causal factors and circumstantial influences should also be

⁴⁹ ICAO Doc 9756 /AN 967 – Manual of Aircraft Accident and Incident Investigations

⁵⁰ Annex 13 *op cit* note 14 at chapter 6

addressed. The debate on this matter can be traced to around 1937, after a series of major air crashes.⁵¹

Preceding Annex 13, the ICAO Manual of aircraft accident and incident investigation (Doc 9756), Part 1, which relates to Organisation and planning, states clearly in paragraph 2.1.2 to 2.1.3 that among other things;

“The accident investigation authority must be strictly objective and totally impartial and must also be perceived to be so. It should be established in such a way that it is able to withstand political or other interference or pressure”.

Stoop and Kahan,⁵² state however that arriving at such independence, however, proved to be a long process, and still is not completed. They relate that in consideration of various countries that are signatory to the Chicago Convention, one finds that compliance ranges full independence in some countries, nominal but factual dependence in some countries and finally full dependence in certain countries.

2.3.1 *Swaziland's observance of the independence principle*

The case in Swaziland may well be related to the latter instance, especially if the current Aviation Act,⁵³ is anything to go by. Part IV of the Swaziland Civil Aviation Act dedicates itself in its entirety to “Accident Investigation and Prevention”. The Chapter ranges over 23 clauses, starting from section 47 to 70. One of the first things that one notices when going through these clauses

⁵¹ Stoop and Kahan *op cit* note 7 at 119

⁵² *Ibid*

⁵³ Swaziland Aviation Act 10 of 2009

is the evident manner in which the Director General is a dominant feature in the Chapter. This is mainly because of the majority of processes that relate to the accident investigations are either directed by the Director General or at the very least have to pass through his hand in some way or another. He is simply central to the processes. This is an evident concentration of power to the Director General. This is the first indicator of a general lack of independence in the processes investigation of aircraft accidents in the current Act.

To put this into perspective, it is fitting that we consider the significance of the position of “*Director General*” in the Swaziland Aviation Authority. The current Act relates to the Director General as; “The Chief Executive Officer of the Authority” *who shall be responsible for the exercise of powers and the discharge of duties of the authority subject to overall control and supervision of a board. Among his powers are that of performing acts, investigations amending order and directives, making and amending general and special rules and procedures in accordance with the Act that he may deem necessary.* He is further responsible for the day to day running of the authority.

It must be noted at this time that the ‘Authority’ which the Director General leads, is the same Authority whose powers are wide reaching and include functions such as issuing licenses to Aircraft maintenance engineers, Air traffic controllers and aircraft maintenance organisations. The issuing of certifications for aircraft airworthiness, aircraft manufacturing, processing and test organisations as well as training organisations are also functions of the Authority lead by the Director General.

This I trust, puts into perspective why it cannot be said that an investigation conducted under the order of the Director General can in any way be said to be independent. One simple reason *inter alia* is the conflict of interest that immediately, exists where an accident or incidents is established

to have been caused by a function that relates to some of the delegated tasks of the Authority such as licencing or certification.

A further anomaly that can be noted from the current Act, is its disregard for independence. This appears in that it does not make mention of the need for independence of the accident or incident investigation throughout the chapter's (Part IV) text. In fact the word independence literally appears once in section 47(9) where it reads;

“The accident investigation Team shall be independent of the authority so as to participate in the investigation of accidents involving aircrafts registered in Swaziland and occurring in the territory of a foreign country, consistent with any agreement or other arrangement between Swaziland and the country in whose territory that the accident occurred”.

This presents two noticeable problems. The first being, it implies that independence by the investigation will only be observed only in a case where the investigation involves another state i.e. when the accident of an aircraft registered in Swaziland occurs in another country. Secondly that such independence will be observed only if there exists an agreement or arrangement with such a foreign country that facilitates for such independence to be observed. Thus, if no such agreement or arrangement exists then no independence shall be required. In both instance the overall independence of the investigation remains compromised. It is disheartening to note that even in the one place in the Act that relates to independence it fails to ensure this independence.

Annex 13 makes provision for the appointment of an investigator in charge on the convening of an accident or incident investigation.⁵⁴ Surely it should be this officer who designates or constitute

⁵⁴ Annex 13, op cit note 14 at chapter 5

the team he/she is to work with in carrying out the investigations. I see no reason why the director General ought to involve himself in this process. The only impression this creates is one in which the Director General seeks to appoint someone or team of people he can influence if it came down to that.

It must be reiterated, as ably expressed by Baxter that the true and only agenda of independent investigations is to improve public safety.⁵⁵ It follows that since the objective of accident or incident investigations is that of establishing the true causes of accident so as to ensure future safety, it is simply essential that the outcome of investigations is arrival at the truth. This proves difficult where investigators hold any proprietary, political or other interest as the process is rendered devoid of the transparency it so requires. Therefore to avoid any conflict of interest it is best that the agency, council or team that conducts the investigation is separate from the company, ministry, agency, authority or any other stakeholder to or involved in regulations, certifications, or surveillance of aircrafts that are being investigated.⁵⁶

2.3.3. The value of independent aircraft accident or incident investigations

The rationale behind this principle is that the independence, of the body responsible for investigations eliminates partisan or proprietary influence be it real or imagined, which would as a matter of course exist if when an agency and or stakeholders involve themselves in an investigation or better put investigate themselves.

The effect of an independent team or agency is that it is able to scrutinise in detail and at length all the factors and aspects of the accident. It is trite after all that such factors and aspects are wide

⁵⁵ Baxter *op cit* note 22 at page 271

⁵⁶ *Ibid*

ranging and may at times include institutional factors. To this end, the independent investigators are able to make the due and necessary recommendations without concerns for past decisions or fear of same, which at times may lead to the concealing of certain factors.⁵⁷

Thus independence of investigations leads to credibility of these investigations. Such credibility is key to the public. It has been stated earlier in this text that where aviation is concerned the public confidence stakes are always high. It must be remembered that the public is within their right to access to information should be afforded sight of investigation reports. Independence proves crucial in this regard because without it there will always be a suspicion of a “cover up” or a failure to take a robust stand with the regulatory authority of the state concerned. This often leads to the public’s not accepting the report.⁵⁸

The element of credibility stretches beyond just the purpose of public opinion, but in many cases has proven a requirement even for litigation purposes. Various court rulings have discarded the use of reports that were sought to be produced as evidence in civil litigation, on the grounds that these reports were untrustworthy. Such untrustworthiness has been inferred from political interference. For example, in the American case of *Drummond v Alia – The Royal Jordanian Airline Corporation*,⁵⁹ wherein the court rejected the admission of an airline accident report authored by the Government of Qatar for amongst other factors that “(3) *there was a possibility that the Government of Qatar may have required the report in such a way that it was prepared in such a way that it protects itself from liability*”. I am in agreement with the view of the American court in this regard. It points to the possibility of the consequences of political interference in accident

⁵⁸ Baxter *op cit* note 27

⁵⁹ 11 Fed. R Evid. Serv. 1904, 1905 (W.D. Pa 1982)

investigations. Further, it shows how this is a true impediment to credibility of reports that are not carried out independently of political interference.

A further crucial element that unconditionally requires such investigations to be carried out independently is that of the policy makers. They are tasked to make necessary rectification, amendments or even enactments guided by the factors that are revealed by investigation reports. It is simply essential, that they receive a true account of the investigations findings in the investigating teams report. Thus, where an investigation team or agency is not independent this is ultimately a disservice to a nation.

Therefore stakeholders; be they political, economic or otherwise ought, to realize that the key issue in any accident investigation is the status of impartiality of the body carrying out the investigation. Since any organisation with an actual or even perceived vested interest in the results of the investigation, is rarely, if at all, able to act with impartiality in cases such as investigations.⁶⁰

In a text by the European Transport and Safety Council,⁶¹ where it is stated that it is often found that public transport (including aviation as a transport mode) investigation are to a greater or lesser extent carried out with conspicuous *exceptions* and rarely carried out for the purposes or aim merely improving safety. It is noted that, although recommendations are made often, they frequently fail to identify the cause of what is wrong.⁶² This of course would be a different case if the requirement of independence of investigations was observed.

⁶⁰European Transport Safety Council *op cit* note 21 at page 118

⁶¹ *Ibid*

⁶² *Ibid*

Vollenhoven,⁶³ makes a worthy argument when he submits that achieving Independent accident investigations, is a matter that requires political will and commitment. The commitment should be to the principle of transparency and consequently independence. He notes that; it is impossible to carry out an independent investigation, if the government simply puts together or appoints a committee to do so. To be successful, independent investigations need to be anchored in law, with regulations to govern the powers of the investigators. There need to be provisions giving the investigation board, the power to decide which statements and which of the underlying reports can be made public.

It is therefore, extremely essential that regulating authorities get on board with ensuring that independence of investigations is observed. By ensuring that the investigating organisation's undertakings, where they concern investigations of accident or incidents, are totally independent of the regulating authority and all other relevant stakeholders to the aircrafts involved.

⁶³ Pieter van Vollenhoven "*Independent Accident Investigation: Every Citizen's Right, Society's Duty*" 3rd European Transport Safety Council Lecture (Rue du Cornet 34) B-1040 Brussels on 23rd January 2001 accessible at www.etsc.be accessed 28/08/2015

CHAPTER 3:

3. IMPLICATIONS OF THE SWAZILAND ACTS NON-CONFORMITY WITH ANNEX 13

3.1. Introduction

This chapter looks at the negative implications of the Swaziland Civil Aviation Act of 2009's non-conformity with Annex 13. It is trite that the Annexes main aim is to set out standards and recommended practices that member states to the Chicago Convention should to the best of their ability incorporate in their domestic law. This is based on a history of establishing best practice in the field of aviation. Thus it should follow that where a member state does not heed the advice of ICAO; some detriment ought to result from that. This Chapter considers various factors that in the Swaziland case are resultant of non-conformity to Annex 13.

3.2. Non conformity hinders future safety.

The overriding detriment will always be future aviation safety. It has been set out with particularity and sufficiently in this report how the object of investigations as set out in Annex 13 (that *shall be the prevention future accident and not to apportion blame*) is a principle that is well placed in aviation safety. Further, that in jurisdictions, where it is well implemented it has borne fruit.⁶⁴ Thus at this point the essential role of safety investigations carried out in line with the object stated in Annex 13 cannot be overemphasized.

It stands to reason therefore that the Swaziland Act being at such a tangent with the objective of the Annex, translates to the quality of safety investigations in the Swaziland context being poor. Not only that, but also the manner in which they are carried will fall short in achieving the

⁶⁴ Stoop and Kahan *op cit* note7 at page 119

objective, which in itself entails the learning of what the cause of an accident or incident is so as to prevent future reoccurrences.

The current Swaziland Act being in conflict with Annex 13, means that safety investigations in the Swaziland context lend themselves to the problems that various authors (in this report) have pointed to, as problems when investigations are not carried out in line with the Annex 13.

Particularly as regards the manner in which the safety investigations in Swaziland allow the ascribing of blame. In that they allow reports of accident investigations to be used as evidence in litigation proceedings. This, considering the body of works cited in this report, means that the quality of the information collected during investigations is not accurate, sufficient or lacking in some or other way. Also that it fails to obtain information crucial to the establishment of the cause of the accident.

This particular detriment does not effect to Swaziland alone, but to the international aviation world as a whole. The particular reason that reports ought to be submitted to ICAO is, among other reasons, that all member states to ICAO are meant to benefit from the lessons learnt in each investigation conducted in each member state. This saves a lot of member states from having to make the same mistakes. I do believe that many countries have been saved from aviation accidents just by implementing in their own territories recommendations of other countries accident reports, even before they experience the particular accident themselves.

It is an unfortunate position therefore that Swaziland finds itself in. Since it not only deprives its own aviation practice of future safety, but the international aviation world as a whole.

As well, the lack of independence in the manner on which the investigations are carried out lend the conclusive reports that result in investigations to unworthiness and lack of credibility. It really does not serve Swaziland as a state to be in a position in which their practices are not trusted in the international arena. As a developing country, various sectors are perpetually in the state of growth, aviation is no different. In a world where one of harmonization's aims are to bring global practices to a par. This has the positive implications of bringing even developing countries up to the levels of developed countries, thus it really does Swaziland a disservice to be pulling an opposite direction, as it deprives them of the necessary aid, improvement and development that should ordinarily come with initiatives in which all underdeveloped, developing and developed countries come together.

3.3. Non-conformity impedes of progress both of aviation practice and legislations

It follows therefore that the lagging behind of Swaziland in terms of aviation best practice impedes progress in the steps that could be taken to improve accident and incident investigations. This improvement could be in various aviation sectors such as technology, skills and expertise all the way to legislation that reflects such advancements in the field of accident and incident investigation in Swaziland.

States that are developed have even legislated developments that they have undertaken in the practice of accident and incident investigations. An example of this is the practice of collateral reporting in jurisdictions with advanced aviation practice such as the United States of America as well as the United Kingdom.

It is nothing short of disappointing to have a position such as that of Swaziland in modern day aviation practice. Aviation law is a well-researched area of law, in particular as regards accident and incident investigations. It is a fair criticism to say that there is actually no excuse to have a legal position that is *so far* behind in its accordance with international best practice.

3.3. International Implications of non-conformity

Conventions and treaties are put in place to establish best practice in practices or fields of international application. They counter the affect the absence of International laws, where such laws cannot exist. Thus standards and practices that have become customary to certain fields are conglomerated and formed into treaties to which states can contract to being governed by.

It is a problem therefore where a state binds itself as a signatory to a treaty yet fails to integrate the prescripts of the treaty in to domestic law and consequently in conduct. This renders that member state in breach of the Treaty. The consequence of breaching treaty obligations is termination or suspension of the operation of that treaty in that particular member country. This is regulated by of the Vienna Convention on the Law of treaties (The “**Vienna Convention**”), which allows for the suspension of the operation of a treaty in whole or in part in that state. It further provides for the termination of relations as between member states and treaty breaching states.⁶⁵

⁶⁵ Article 60

However over and above this the Chicago Convention itself makes provision for the consequences of non-conforming states, in its Article 88, where it states;

“The Assembly shall suspend the voting power in the Assembly and in the Council of any contracting State that is found in default under the provisions of this Chapter”.

Both these Article makes it clear the grave nature of the consequence of breaching ones treaty obligation. The idea of a possible termination of relations from other member states would be a setback for any nation. It is after all trite that the world has become a global village and to succeed it is essential to function as a collective.

CHAPTER 4:

4. DO THE REGULATIONS ENACTED IN 2013 ALLEVIATE THE PROBLEM?

4.1. Introduction

This chapter will look at the role of the Civil Aviation Authority (Aircraft Accident and Incident Investigation) Regulations 2013. Which were enacted to further regulate the accident and incident processes with particular regard to Annex 13. This follows the requirement of ICAO for member states to conduct investigation “in as far as is practicable” in accordance with the Annex, and to this end incorporate same into domestic laws.⁶⁶

The regulations will be considered in order to establish if they cure the shortfalls of the Act or at the least, alleviate the problems the Act presents regarding aircraft accident and incidents. To this end, the report will look first at, the commendable inclusions made in the regulations and have a brief discussion of the shortfalls that remain in the regulations.

4.2. Commendable inclusions

4.2.1. Furtherance of the object of Annex 13

The Regulations in section 20 (2) make the commendable inclusion of the protection of information contained in accident reports, it states that;

“The Accident reporting system established under sub regulation (1) shall be non-punitive and afford protection to the information and to the sources of information”

⁶⁶ Article 26 of the Chicago Convention

It goes on to further somewhat, establish privilege of such information gathered through investigations. It provides for any person seeking disclosure of these records, to pursue this disclosure through a court application. It reads;

“(5) A person seeking public disclosure of the information referred to in sub regulation (4) shall apply to the court for an order for the release [of the information] and for this purpose shall satisfy the court that the disclosure;-

- (a) is necessary to correct the conditions that compromise safety or change policies and regulations;*
- (b) does not inhibit its future availability in order to inhibit safety;*
- (c) complies with the applicable privacy laws; and*
- (d) shall be de-identified (redacted), summarised or aggregated form”.*

This is indeed a commendable inclusion having discussed above the value of protection of witness information. There is still more that can be done to this regulation that can further protect information or report of technical investigations. However this is a good place to start.

Another notable addition worth commending is the outright allowance section 10(1) by the Minister to the Chief Investigator to appoint suitably qualified technical personnel to actively assist in the investigation. This of course, will go a long way to aiding the quality of investigations.

4.3. Noted shortfalls

4.3.1. *Lack of independence*

The regulations however fall very short with particular regards to independence. There is still a visible concentration of power on a political figure; that being the Minister. Further, a confusing dimension is how the regulations are at a cross with the Act. The regulations confer the powers of the appointment of an investigation team (which in the Act are conferred to the Director General of Civil Aviation Authority) to the Minister.

This is reflected in section 6 (1) – (2) of the regulations.

This is in conflict with the principle of independence that Annex 13 calls for in respect of investigations. In the world of aviation, where certain states have gone as far as having totally independent investigating bodies, it is simply a regressive step to still have clauses of this nature in national regulation.

A second negative indicator that relates to independence in the regulations is with the reporting of accident investigations. Section 20 states that, it is the Minister that shall establish the system of reporting accident and incident investigation. Not only that, it also states in section 19, that publication of these reports shall be done with the approval of the Minister.

It suffices to say that this report has dealt at length with the implications or consequences of the remaining shortfalls. There is clearly some work that needs to be done as to the aligning of the

Swaziland regulatory framework to Annex 13 and the ICAO guidelines as a whole, in relation to accident and incident investigations.

Conclusion

It is clear from the above that though there are some notable welcome changes included in the regulations in the furtherance of the objectives of ICAO, as reflected in Annex 13. However, there remain some disappointing indicators of the reluctance by Swaziland to move to a totally independent and impartial manner of conduct in accident and incident investigations. This as mentioned earlier will continue to cast a shadow on the credibility of these investigations and the reports thereto.

CHAPTER 5:

5. A COMPARATIVE VIEW ON THE POSITION IN FOREIGN JURISDICTIONS.

5.1. Introduction

This chapter will briefly show whether other jurisdictions present with similar cases of non-conformity with Annex 13 and if so what the status of non-conformity is. The chapter will then in the same comparative exposition elicit the positions in jurisdiction whose status of safety investigations conforms to Annex 13, so as to see what can be learned from these jurisdictions.

5.2. Non-conforming Jurisdictions

5.2.1. Latin America and parts of Europe

Largely it is Latin American and parts of European countries that have been identified to be non-conformist with the Annex in the manner in that they fail to observe primarily the objective set out by the Annex, that is the use of technical reports in judicial proceedings. These countries include Argentina, Spain and Portugal. It is held that in these countries the judiciary tends to directly intervene and demand that the entire investigation work to be conducted towards determining liability of the accident, rather than attempting to discover evidence that may prevent future accidents.

5.2.2. *Germany and the United Kingdom.*

Countries such as Germany and the United Kingdom have been identified to be lacking in the independent manner in which investigations are carried out. They have been identified to have “nominal dependence but factual independence”⁶⁷.

5.3.3 *Uganda*

This report sought to seek out in particular the Ugandan Aviation sector, as preliminary research to this study revealed that in fact Swaziland in seeking to frame its new Legislative provision adopted the Ugandan approach. Needless to say therefore on assessment of both the Ugandan Civil Aviation Authority Act,⁶⁸ it mirrors the flaws that have been brought forth in this report where the Swaziland Act is concerned, in particular as they relate to Independence. The Ugandan Regulations,⁶⁹ present with the same power concentration and non-autonomous processes wherein the Minister is the authority to issue instructions as to investigations. They further have the power to appoint investigators and experts to participate in the investigation and lastly the final report shall be passed through him for approval prior to dissemination. It must be said however that the Ugandan aviation safety does not share the blame apportioning nature of the manner of investigations that Swaziland presents with.

This report has exhaustively dealt with the problems that present with not meeting the objective of safety investigations as set out by ICAO in Annex 13, as well as, that of the lack of independence

⁶⁷ Stoop and Kahan *op cit* note 7 at page 119

⁶⁸ Of 1999

⁶⁹ The Civil Aviation (Aircraft Accidents and Incidents Investigation) Regulations, No.23 of 2012

in the manner in which such investigations are carried out and in that breath shall not repeat those in this chapter.

5.3. Conformist Jurisdictions

5.3.1 *United States of America*

It is so far the American model of carrying out aircraft accident and incident investigation that meets the requirements of Annex 13, both in terms of its objective and the principle of Independence in investigations. Throughout this text they have proved exemplary on all aspect and indeed a lot can be learned from their model. Particularly with regards to the following;

1. Non-blame ascribing investigations; that meet the objective of Annex 13 of carrying out investigations *“of an accident or incident for the prevention of accidents and incidents and it not being the purpose of this activity to apportion blame or liability”*.

In this regard the American model pioneered the conducting of collateral investigations to secure reporting that would satisfy liability founding information for the purposes of judicial proceedings.⁷⁰

2. As regards independence the American model is arguably the pioneer in the ensuring that investigations are conducted free from any political or other influence. This they did by constituting a body solely designated to the investigation of aircraft accidents and incidents namely the NTSB. This body has wide reaching investigative powers and therefore does not answer to any political or other authority. This is desirable as it secures

⁷⁰ *Ibid*

the necessary independence desired to achieve credible aircraft and incident reporting.⁷¹

5.3.2. The United Kingdom

The United Kingdom has to be lauded in their observance of the object of Annex 13, for the conduct of blame free or rather non blame ascribing investigations. They too boast an impeccable record for the beneficial use of collateral reporting, to ensure that blame ascribing processes are well catered for.

5.3.3. South Africa

A neighbouring Jurisdiction that this report found to be remarkable in its conformity was South Africa. The most notable feature is that of the independence of the investigation. It indeed reflects the American. The South African Aviation Act,⁷² dedicates the whole Chapter 5 of its Act to accident and incident which captures the object of Annex 13 in meticulous form, and goes far to make accommodation for the striking of the balance between their Constitutional provision for public enquiry, yet protecting the need for non-blame ascribing investigations. The most striking feature in this chapter however is the formation of the South African Safety Aviation board. It does not warrant repeating under this sub topic what the significance of such a body reflects for purposes of the independence of investigations. Indeed this is one position that a majority of African Member states can learn from.

The states that conform to the Annex have proven in what has been translated to statistics the true value of the objects and other requirements of Annex 13. They have recorded extensive

⁷¹ *Ibid*

⁷² 13 of 2009

reductions in aircraft accident and incident rates.⁷³ This shows that the reasoning behind the regulation of this area of aviation law is not simply one of mere formality, but rather, one of purpose. It is therefore deserving of complete observance by all member states to the Chicago Convention which birthed both ICAO as an organisation and consequently its guidelines such as Annex 13.

⁷³ See C.O. Miller “*Some comparative thoughts concerning International Civil Aircraft accident Inquiry Methodologies*” 239 A.B.A. Sec.Ins. Negl. &Comp. L. Proc. (1969) at page 245

CHAPTER 6:

6. RECOMMENDATIONS

6.1. Introduction

This section of the report takes into account all factors of detriment discussed in this report and seeks to make recommendations of possible measures that can be taken to alleviate such factors of detriment. The section will make recommendations for the overall text as opposed to categorical aspects thereof.

Recommendations:

6.2. Statutory bar of use of reports for litigation purposes

Enacting regulations with the force and effect of law, which statutorily bar the use of reports of investigation of accidents and incident investigations from use in civil and criminal litigation is recommended. This is particularly desirable in relation to reports compiled by investigation teams. This is in consideration of the fact that, in their nature these reports are not sufficient for use in litigation, since mostly they only take account of factors precisely collected for the prevention of future accidents. It has been stated in this report that, the lack of statutory protection for the use of these reports in litigation, casts a threat of witnesses not coming forward with candid account of the occurrence of events that lead to aircraft accidents and incidents. This affects the future collection of crucial evidence required to ensure aviation safety as a whole. Not only for the state that stages the investigation, but also the rest of the world which stands to benefit from these safety investigation reports.

In furtherance of this recommendation, the test as set forth by the *Machin*,⁷⁴ case (“the *Machin* privilege) should be made a consideration. This privilege protects witness information given under the assurance of confidentiality. It has been established earlier in this report, the ease with which witness statements are obtained where witnesses are assured of confidentiality of their statements. Further the assurance that such statements may not be used against them in court litigation gives them comfort. The beauty of the *Machin* privilege is that, inherent to it, is the need to assert it prior to it being observed. This means that investigation teams, wishing to keep aspects of the reports confidential, need to assert the *Machin* privilege report during court proceedings if they object to the statements being admitted into evidence. Where such privilege is not asserted then there is no requirement for the report to be withheld.⁷⁵

It is desirable that such admissibility of investigation reports is allowed as matter of last resort in litigation.⁷⁶ To this end the use of the reports must be acquired after a motion has been moved for the disclosure of same such that it is done under the order of a Judge. This affords the investigating authority, the opportunity to make representations on why the reports can absolutely not be used for evidentiary value. Further, it allows the investigation authority to request that confidential aspects that should be ordinarily privileged as per statute, to be redacted from the reports to be disclosed, if the order for disclosure of the report is granted.

6.3. *Legislative provision for collateral reporting*

The value of collateral reports has been discussed in this report. To this end, it desirable that provision is made as a matter of law that all technical / safety accident investigations be accompanied or followed by collateral investigations which are to be conducted for the sole

⁷⁴ *Machin v Zuckert* 316 F.2d 336, 375 U.S 896 (1963)

⁷⁵ See the case of *Bray v United States, No. Civ. A. 03-5150, 2005 WL 598754*

⁷⁶ *Simpson op cit* note 65 at page 289

purpose of the satisfaction of judicial requirements. It has been mentioned that in their nature, technical accident or incident investigations, often are inherently compiled much to the inadequacy of court litigation requirements. Thus collateral reports tend to collect evidence in such a manner that they are sufficient to found, prove or disprove liability in court litigation. They are a releasable source of factual material for all purposes other than safety and accident prevention.

It is noted however, that in jurisdictions that provide for collateral reporting there is no clear line of implementation as regard whether such reports should be compiled concurrently with technical investigations or after.

In my view, in particular as well, for the Swaziland context, I would suggest the compilation of the reports post completion of the technical investigation. This view is guided by the fact that it is clear that the line of reasoning for most legislative enactments that provide for collateral reports, make consideration for the fact that, it should only be instructed where there is a reasonable belief that civil or criminal proceedings may ensue. Thus, it is my view that, so as not to deviate from the ICAO principle and object of investigations, it is the technical investigation that should have first preference. It is my view that, it is the one should be telling as to whether a judicial enquiry should follow.

This further allows it to conduct the technical investigation without any hindrance from judicial authorities' or legal officers. It must be noted that the procedure for the compilation of collateral reports is one that is designed to permit the release of reports of collateral investigations and to protect the information in the accident report which is obtained solely for accident prevention

purposes.⁷⁷ A recommendation dealing with the need to educate legal professionals and the judiciary as to the fact finding mission of aviation accidents will be introduced later in this report, will reveal the undesirability of the involvement of such professionals in an aircraft accident or incident investigation. It is rightly submitted that (as a purpose) collateral investigations provide a cloak of immunity for the contents of a safety report.⁷⁸

6.4. *Constitution of an independent body with the sole mandate of safety investigations*

It is my considered view that in this regard the best lesson can be learnt from the constitution of the NTSB which is the investigative body in the United States of America. This is a body that is solely dedicated to transport safety and has the exclusive sole and independent mandate to carry out accident and incident investigations. They're independence is such that they do not answer to any political or other authority nor require any approval for the implementation of their mandate. This guarantees their credibility in the implementation of their duties.

This is also in line with the EU legislation, that is, the Council Directive (94/56/EC) for civil aviation; establishing the fundamental principles governing the investigation of civil aviation accidents and incidents. This calls for independent accident investigations and the status of impartiality of the body carrying out the inquiry. It requires that any organisation undertaking transport accident investigations are totally independent of the regulatory authority. The directive was put in place to formally regulate the requirement of independence in transport accident investigations amongst the EU community.

⁷⁷ *Infra* at 233-234

⁷⁸ Colonel Charles R. Burton "Aircraft Accident Investigations: An analysis of the recent changes in the new regulations governing the investigations", 14 U.S.A.F JAG Law review 233 (1972) at 233

The successes of the NTSB are well recorded. They are leaders in the field of accident investigations and have been lauded for their contribution to the establishment of aviation as the safest mode of transport. This has gone very far to show the value of the establishment of an impartial and independent body solely dedicated to transport safety.

6.5. *Capacity building (educating) of all parties to the investigation on the objectives and processes of accident and incident investigations*

Ortiz and Capaldo,⁷⁹ make the worthy recommendation that it is essential that Judges must be educated on the purpose of accident investigations, and further be educated on the damage that inappropriate use of an investigation report may cause.⁸⁰ This is due to the observation made over time, that where there is judicial interference in investigations disturbs the technical investigations and ultimately penalizes the quality of future of investigations which in turn decreases flight safety.

Examples of the detrimental aspects of judicial interference in safety investigations are that; (a) they delay investigations so as to supply information on a frequent basis and within the peremptory periods ordered by judges. This ultimately causes delays for even operators tasked with implementing preventative measures. (b) delays and interference in investigations may arise due to judiciary ordered seizure of vital component parts of for the investigation which, in many cases may also be damaged or altered as a result as a result of the lack of knowledge of the

⁷⁹ Colonel Luis Ortiz and Dr. Griselda Capaldo “*Can Justice use technical and personal information obtained through Aircraft Accident Investigations*” 65 *Journal of Air Law and Commerce* 263 (1999-2000) at page 269

⁸⁰ *Ibid*

persons who manipulate or keep them.⁸¹

6.6. *Not requiring reports of technical safety investigation to be submitted to a political or other authority for approval*

The investigating body should not have to submit its finalized report to any higher authority for approval before it is published. Without these criteria, there will always be the suspicion of a ‘cover up’ or a failure to take a robust stand with the regulatory authority of the state concerned and thus a lack of public acceptability.

6.7. *Updating Annex 13 of ICAO guidelines*

Ortiz and Capaldo make another worthy recommendation in their text on the need to update Annex 13 itself.⁸² They are of the view that modifications of certain aspects of Annex 13 would contribute to the Judiciary’s interpretation of the investigations purpose, while at the same time in countries that lack specific Legislation e.g. Swaziland, it would facilitate a greater understanding among legislators regarding the study and passing of laws that harmonize the interests that are often at stake during and after accident and incident investigations. This will also serve in the Judiciary’s acceptance of and correct interpretation of the spirit of Annex 13 and the Chicago Convention correctly.

The importance of this lies in the fact modern day aviation is intrinsically international because of the elements involved ranging from passengers to equipment that is sourced globally, thus it is imperative that the judiciary realizes that in such a globalized world the decisions they make in aviation cases in their own countries have direct and immediate repercussions on other countries.

⁸¹ *Ibid* at page 268

⁸² *Ibid* at page 272

The sort of amendments envisaged to annex 13 would be to the effect of modifying certain clauses to enhance the obligatory tone so as to ensure compliance as well as emphasis on various priorities in procedures of accident and incident investigations.⁸³

⁸³ For a full discussion on proposed modifications see Ortiz and Capaldo *op cit* note 71 at page 273- 277

CHAPTER 7:

7. CONCLUSION

It has emerged with sufficient clarity in this report is the fact that Annex 13, as both a standard and recommended practices is not one of mere formality or uniformity of rules, but rather one with a purpose. This report has shown the importance of upholding the standards of non-blame ascribing investigation that are also independent.

However it suffices to say that it is very simple to point out flaws of nations such as Swaziland, in failing to fully meet up with international standards, without considering the truth of insufficient recourses being available in these low budget states, such that, they bring themselves to the standards of international conformity. A factor that absolutely cannot be denied is that of the Aviation sector being one that requires a high amount of resources. It is in its nature an “expensive” field. Thus naturally, conformity in itself should come at a cost, one that developing countries simply cannot bear.

However such developing countries, in the face of such resource disparity are not blameless. The Chicago Convention in section 37 makes an express allowance for countries that fail, refuse or unable to adopt any proposed standards to file a statement of differences, that essentially reflects the differences that remain, as all things treaty related failure to do this translates consent. The consequence of consent being to be bound to the proposed adoption.

This leaves countries in a precarious position however, in that they are bound by adopted principles which they deviate substantially from. They therefore run the risk of losing voting rights in the Assembly and ultimately the possible termination of membership from ICAO.

This in my view speaks to the need for the next generation of aviation development talks to not be so focused on only advanced development, but also back track, to ask the and solve the

question of the great resource divide that presents between 1st world nations and developing nations. The formation of such Organisations is after all to achieve the ideal atmosphere of harmonisation, this should also include the due consideration hindrances to this harmonisation.

BIBLIOGRAPHY

Articles

1. Baxter T: *Independent investigation of transportation accidents* 19 Safety Sci. (1995)
2. Charles R. Burton “*Aircraft Accident Investigations: An analysis of the recent changes in the new regulations governing the investigations*”, 14 U.S.A.F JAG Law review 233 (1972)
3. C.O. Miller “*Some comparative thoughts concerning International Civil Aircraft accident Inquiry Methodologies*” 239 A.B.A. Sec. Ins. Negl. &Comp. L. Proc. (1969)
4. Elaine D. Solomon and Dina L. Relles, “*Criminalization Of Air Disasters: What Goal, If Any, Is Being Achieved?*” 76 Journal of Air Law & Commerce (2011)
5. Flanagan: *The aviation psychology program in the Army Forces*, Washington D.C. Air Force (1948)
6. John A Stoop and James P Kahan “*Flying is the safest way to travel; How aviation was a pioneer in independent accident investigations*”,5 (2005), EJTIR
7. John W. Solomon “*Use of Aircraft accident investigation Information in actions for damages*” (17) Journal of Air Law and Commerce, 283 (1950)
8. Colonel Luis Ortiz and Dr. Griselda Capaldo “*Can Justice use technical and personal information obtained through Aircraft Accident Investigations*” 65 Journal of Air Law and Commerce 263 (1999-2000)
9. Capt. Richard S. Ugelow and Capt. Edward A. Zimmerman, “*Aircraft Accident Investigations: New Responsibilities for SJA*”,8, The Army Lawyer, (1972)
10. Russel F. Kane, “*Accident Investigations and the Public Interest: A pilots view*” 38, German Journal of Air and space Law (ZLW) 1 (1980)
11. Thomas G. Cannon, “*Witnesses to Military Air Crashes: Are Their Statements Secret*” (28) Air Crash Litigation Journal (1981)

Books

1. Christopher N. Shawcross et al; “*Shawcross and Beaumont air Law Air Law*”, (1995) Volume 2, 4th Edition

Legislation

1. The Freedom of Information Act 5 U.S.C. § 552
2. South African Civil Aviation Act 13 of 2009
3. The Swaziland Aviation Act 31 of 1968
4. The Swaziland Aviation Act 10 of 2009
5. The Civil Aviation Act of Uganda of 1999
6. The Civil Aviation (Aircraft Accident And Incidents Investigation) Regulations, No.122 of 2013, (SWAZILAND)
7. The Civil Aviation (Aircraft Accident And Incidents Investigation) Regulations, No.23 of 2012, (UGANDA)

Conventions

1. Convention on Civil Aviation of 1944 (“The Chicago Convention”)

Reports

1. Final Safety Oversight Audit Report (“The Audit Report-Swaziland”): *ICAO Universal Safety Oversight Audit of Civil Aviation system of Swaziland*, as carried out between the 18th to the 24th of July 2007
2. European Transport Safety Council: *Transport accidents and incident investigation in the European Union*, Brussels, ETSC (2001), ISBN 90-76024-10-3

Model Legislation

1. *Annex 13 to the Convention on International Civil Aviation: Aircraft Accident and Incident Investigation document*, 10th Edition (July 2010) as published by ICAO
2. ICAO Doc 9756 /AN 967 – Manual of Aircraft Accident and Incident Investigations

3. Resolution “A32-11” Adopted in the 32nd Assembly session of ICAO
4. Resolution “A35 – 5” Adopted in the 35th Assembly session of ICAO

Cases

1. *Drummond v Alia – The Royal Jordanian Airline Corporation* 11 Fed, R Evid. Serv. 1904, 1905 (W.D. Pa 1982)
2. *Bray v United States, No. Civ. A. 03-5150, 2005 WL 598754*
3. *United States vs. Webber Aircraft Corporation and others*, (Docket number 82-1616) Argued January 11, 1984
4. *United States vs Reynolds* 345 U.S 1 (1953)
5. *Machin v Zuckert* 316 F.2d 336, 375 U.S 896 (1963)

Lectures

1. Pieter van Vollenhoven "*Independent Accident Investigation: Every Citizen's Right, Society's Duty*"; 3rd European Transport Safety Council Lecture (Rue du Cornet 34) B-1040 Brussels on 23rd January 2001 accessible at

Websites

1. <http://www.icao.int/about-icao/Pages/default.aspx>
2. <http://www.icao.int/meetings/amc/ma/assembly%2032nd%20session/resolutions.pdf>
3. <http://www.icao.int/environmental-protection/Documents/a35-5.pdf>
4. www.etsc.be