THE STATE RESPONSIBILITY FOR THE IMPLEMENTATION OF MANEUVERING CHARACTERISTICS AUGMENTATION SYSTEM (MCAS) UNDER THE 1944 CHICAGO CONVENTION

THESIS



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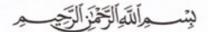
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MOTTO

Allah tidak menuntut hamba-hamba-Nya sesuatu yang tidak mereka sanggupi

(QS. Al-Baqarah : 286)

If you want to become significantly better at anything, you have to fall in love with the process of doing it. You have to fall in love with building the identity of someone who does the work, rather than merely dreaming about the results that you want. In other words, fall in love with boredom, fall in love with repetition and practice. Fall in love with the process of what you do and let the results take care of themselves.

(Unknown)

The act of wanting to pursue something is even more precious than actually becoming that thing. Just being in the process is a prize. You're doing fine. Sometimes you're doing better sometimes you're doing worse but at the end it's just you. Lets have no regrets and feel yourself grow. Just enjoy while pursuing it because it is that precious.

(Mark Lee)

If you're doubting yourself, it could be a sign that something big will happen. Try to remind yourself when you weren't sure of yourself but you kept going instead and it worked out. We don't have to wait for self doubt to disappear to move forward. Doubts kill more dreams than failures ever will.

(Lavina Sabila)

DEDICATION

This Thesis is dedicated to:

Allah Subhanahu Wata'Ala

Who has ease every step that I take, every decision that I made, and every path that I chose.

Who has given me strength to be able to endure everything and finally completing my thesis.

Who has given me so much joy and blessings in the midst of every challenges that I face.

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TABLE OF CONTENT

TABLE	OF CONTENT	xii
СНАРТ	TER I	2
INTRO	DUCTION	2
I. B	Background of Study	2
II. P	roblem Formulation	8
III. F	Research Objectives	8
III. C	Originality of The Research	8
IV. D	Definition of Terms	13
Α.	Maneuvering Characteristics Augmentation System (MCAS)	13
B.	State Responsibility	14
C.	Implementation	15
VI. T	heoretical Review	15
Α.	International Aviation Law	16
В.	Legal Protection for Airline Passengers	17
С.	State Responsibility for Civil Aviation	19
VII.F	Research Method	23
СНАРТ	TER II	26
STATE	RESPONSIBILITY FOR CIVIL AVIATION SAFETY	26
I. I	nternational Aviation Law	26
A.	International Law	26
B.	Aviation Law	30
C.	Airplane Airworthiness	35
II. I	egal Protection for Aviation Passenger	37
III. S	tate Responsibility	42
A.	Definition of State Responsibility	42
B.	Basic and Characteristics of State Responsibility	44
C. 0	Characteristics of State Responsibility according ILC and ARSIWA	46
D. 7	Types of State Responsibilities	49
IV. A	Aviation Safety Responsibilities	54
A.	State Responsibility for Aviation Safety	55
B.	Carriers Responsibility for Aviation Safety	57
C.	Responsibility of Manufacturing Companies for Aviation Safety	61

D.	Pilot Responsibility for Aviation Safety	62
V. S	State Responsibility in Islamic Perspective	65
СНАРТ	TER III	68
THE L	TATE RESPONSIBILITY FOR LION AIR JT610 PLANE CRASH DUE TO ATEST DEVELOPMENTS OF MANEUVERING CHARACTERISTICS ENTATION SYSTEM (MCAS)	
	The State's Responsibility for The Safety of Civil Aviation in The Perspective national Aviation Law	
A.	Definition of State Responsibility	69
B.	The State Responsibility in International Law and National Law	70
C. Nat	The State Responsibility for Aviation Safety in the Perspective of International and ional Law	74
	ndonesia's Responsibility for the Absence of Pilot Training for the Latest Delopment of the Maneuvering Characteristics Augmentation System (MCAS)	_
A.	Definition of Maneuvering Characteristics Augmentation System (MCAS)	88
B.	The Parties that are Responsible for Conducting Pilot Training	90
C.	The parties that can be held responsible for the Lion Air JT 610 airplane accident	92
СНАРТ	TER IV	96
CLOSI	NG	96
I. (Conclusion	96
II. F	Recommendation	97
DEFED	PENCES	00

Abstract

As the technology advances, the need for transportation technology is increasing. The anti-stall system known as the Maneuvering Characteristics Augmentation System (MCAS) implemented on Boeing 737 MAX 8, allegedly caused two plane crashes involving Lion Air JT610 in October 2018 and Ethiopian Airlines in March 2019. In this matter, the flight crew did not receive training about this new system. Boeing also did not include the MCAS system in the existing manual book. This research aims to determine whether the state is responsible for the absence of pilot training on the latest system developed by the Boeing Company as the aircraft manufacturer. This research found that besides the state's duties in making aviation regulations, the responsibility is limited to supervision and investigation when an accident occurs. The conclusion is that aircraft manufacturing companies need to reform the international regulations that specifically address their governing responsibilities.

Keywords: Maneuvering Characteristics Augmentation System (MCAS), State Responsibility, Boeing

CHAPTER I

INTRODUCTION

I. Background of Study

MCAS, or Maneuvering Characteristics Augmentation System, is a computer system that prevents excessive nose-up on aircraft.¹ The meaning of nose-up is a position where the front of the aircraft faces excessively upward, which can cause a stall. Stall is a condition where several things occur that can cause the plane to lose lift and end in an airplane crash.²

The Maneuvering Characteristics Augmentation System (from now on called MCAS) function commands a nose-down stabilizer to enhance pitch characteristics with elevated load factors during steep turns, and it flaps up flight at airspeeds approaching stall. The MCAS is activated without pilot input and only operates in automatically. The system is designed to allow the flight crew to use column trim switches or stabilizer aisle stand cutout switches to override MCAS input.³ Flight Control Computer (FCC) commands the function using input data from sensors and other airplane systems. The MCAS function becomes active when the Angle of Attack (AOA) exceeds a threshold based on airspeed and altitude.

¹Muhammad Alfandy. P., Reo. Y., M. Luqman. B., *Sistem Pembaruan Otomatis Perangkat Lunak Pada Sistem Kendali Pesawat Terbang, Studi Kasus : MCAS Boeing 737 MAX,* Teknika STTKD : Jurnal Teknik, Elektronik, Engine Vol 8, No. 1, Juli 2022 https://jurnal.sttkd.ac.id/index.php/ts/article/view/506/363

²CNN Indonesia, "Kondisi Stall Bisa Bikin Jatuh Pesawat" Terdapat pada https://www.cnnindonesia.com/teknologi/20150121152619-185-26275/kondisi-stall-bisa-bikin-pesawat-jatuh Diakses pada 24 Des 2022

³SKYBRARY. "Maneuvering Characteristics Augmentation System", Terdapat Pada https://www.skybrary.aero/articles/maneuvering-characteristics-augmentation-system-mcas Diakses pada 25 Des 2022

The Angle of Attack (from now on called AOA) is a sensor that indicates the aircraft's angle of attack to ensure that the aircraft does not experience a stall. For example, consider aircraft with a stall limitation of 40 degrees. The Angle of Attack (AOA) will indicate the aircraft's angle of attack before reaching 40 degrees. Additionally, it will indicate the predetermined altitude and speed. At this point, the AOA system will issue orders or cautions to the pilot. The AOA sensor in the Lion Air JT 610 and Ethiopian Airlines ET 302 is different from the AOA sensor found in another aircraft (737-NG). In the MAX 737 series aircraft, the AOA Sensor is directly related to the MCAS it makes where it acts automatically after giving the pilot a warning. However, this automation feature was not widely known by B737 MAX pilots because it was not listed in the operation manual. Only after the Lion Air JT 610 incident occurred, Boeing explained this feature.⁴

Suspicious began to fall onto the Boeing flight control system known as the MCAS after several deadly crashes happened. On October 29, 2018 the Indonesian people were shocked by the crash of the Lion Air Boeing 737 MAX with flight number JT 610 flight from Jakarta to Pangkal Pinang in Java Sea 13 minutes after the airplane took off and caused the deaths of 189 passengers and crew. The National Safety Committee of Indonesia released an official statement or final report regarding the cause of the Lion Air Boeing 737 MAX crash. This was due to the MCAS design, which relies on just one sensor, which is very vulnerable to

⁴Netflix Documentary "DOWNFALL: The Case Against Boeing"

⁵Direktorat Jenderal Perhubungan Udara Kementerian Perhubungan, *Menhub Pastikan Pesawat Lion JT610 Jatuh Di Laut Jawa*, Okt 2018, terdapat pada https://dephub.go.id/post/read/menhub-pastikan-pesawat-lion-jt610-jatuh-di-laut-jawa, Diakses pada 27 Des 2022

errors. Another factor that caused the crash was that the pilot had difficulty responding correctl to the MCAS movement due to the lack of instructions in the manual and training.⁶

A few months later, on March 10, 2019, the aviation world was again shocked by the second tragedy of the crash of the Ethiopian Airlines with flight number ET 302. The accident occurred 5 minutes after takeoff from Addis Ababa Bole International Airport in Ethiopia, causing the death of 157 passengers.

The Ministry of Transport and Logistic Aircraft Accident Investigation Bureau of the Federal Democratic Republic of Ethiopia released the final report of the crash on the 18 of March, 2019. The final report states that the accident was similar to the Lion Air JT 610 where the MCAS also triggered it by reading and analyzing the situation. When the sensors in the aircraft's nose indicated that the plane was climbing at an angle that might cause a stall, MCAS misread the information and thought the height might result in a stall, causing it automatically lower the aircraft's attitude.⁸

Mentioned in Netflix's latest documentary "DOWNFAL: The Case Against Boeing" which was directed by Rory Kennedy and produced by Rory Kennedy, Keven McAlester, Mark Bailey, Justin Wilkes, Sara Bernstein, Brian Grazer, and Amanda Rohlke, that the MCAS caused these unusual Boeing Company plane crashes. They could prompt the Federal Aviation Administration (FAA) to request additional training for pilots, yet the training had never taken place.⁷

⁶CNBC Indonesia, 9 Hal yang Sebabkan Kecelakaan Lion Air JT 610 Terjadi, Okt 2019, Terdapat pada https://www.cnbcindonesia.com/news/20191025152833-4-110207/ini-9-hal-yang-sebabkan-kecelakaan-lion-air-jt-610-terjadi Diakses pada 27 Des 2022

⁷*Ibid*, p.3.

The statement above is supported by statements contained in the final report on the Lion Air JT610 crash issued by the Republic of Indonesia National Transportation Safety Committee (KNKT RI). Here are some statements that can support the argument that Boeing has indeed neglected the safety of the aircraft:⁸

- a. Boeing made several revisions regarding the authority of this MCAS. Initially, Boeing designed this MCAS with a limit to the stabilizer movement at 0.6 degrees with a maximum nose down movement of 4.2 degrees which was then changed to 2.5 degrees. After this change, the Functional Hazard Assessment (FHA) has reviewed all documents except for the System Safety Assessment (SSA) document. Without submitting the latest document from the System Safety Assessment (SSA), the Flight control system specialist from the Federal Aviation Administration (FAA) can assume that there has been no change in the design of the aircraft.
- b. Boeing proposed removing MCAS from Flight Crew Operating Manual (FCOM), which was granted by the FAA. Specifically, it is written in 14 FAR 25.1585 (b):

"Information or procedures not directly related to airworthiness or not under the control of the crew must not be included, nor must any procedure that is accepted as basic airmanship."

Boeing believed that the system was automatic, requiring no separate handling. They also believed no specific procedure was necessary for the

5

⁸ Komite Nasional Keselamatan Transportasi Republik Indonesia, Aircraft Accident Investigation Report, Okt 2019

MCAS, assuming no differences from existing procedures existed; this might indicate of why Boeing intentionally did not include the MCAS in the Flight Crew Operating Manual. Additionally, they believed that this system is not directly associated with airworthiness. However, it is crucial to acknowledge that neglecting to address this system appropriately during unforeseen events could potentially jeopardize the safety of individuals. The Lion Air JT 610 plane tragedy highlighted the necessity for distinct capacities to address and minimize the recurring incorrect activations of MCAS, which were different from what was initially assumed.

c. It is also written in the Final Report that the flight crew training would have helped them recognize anomalous circumstances and take the proper action. Boeing should have provided more information or extra training regarding the newest development system of B737-MAX8 because they thought the condition would be the same as the previous model, the 737-NG.

In addition, the Federal Democratic Republic of Ethiopia Ministry of Transport and Logistics, and the Aircraft Accident Investigation Bureau issued a report on the crash of Ethiopian Airlines ET302 five months after the Lion Air JT610 crash. The report stated that the Flight Crew Operations Manual (FCOM) and Aircraft Flight Manual (AFM) documents supplied by Boeing did not contain any information about MCAS. Boeing failed to perform a specific examination of potential dangers

related to the uncommanded MCAS function while classifying it as a "Major" issue.

Additionally, they did not classify MCAS as a system vital to safety.⁹

The similarity of the two final reports issued by the governments of each state shows that the manufacturers considered that the design developments carried out did not affect the operation of the aircraft and assumed all the flight crew were already familiar with the system.

It has been published in several international journals that there is indeed competition between Boeing and Airbus. This rivalry in the aviation industry exerts significant pressure on Boeing, leading the company to develop MCAS quickly without prioritizing proper prototype testing.¹⁰ So, assuming that the pilot is familiar with the MAX series, the manufacturer pondered that pilots could fly the MAX without cost and time-consuming training in a simulator.¹¹

Therefore, the purpose of writing this thesis is to analyze state responsibility for civil aviation from the perspective of international law and analyze whether Indonesia as a state can be responsible for the Lion Air JT 610 plane crash, which was allegedly caused by the absence of pilot training regarding the latest technological developments, specifically the development of Maneuvering Characteristics Augmentation System (MCAS).

⁹ Federal Democratic Republic of Ethiopia Ministry of Transport and Logistic Aircraft Accident Investigation Bureau, Investigation Report on Accident to the B737-MAX8 ET-AVJ Operated by Ethiopian Airlines, Dec 2022

¹⁰Michael Naor, Nicole Adler, "Psychological Safety in Aviation New Product Development Teams: Case Study of 737 MAX Airplane", p.6, 2020

II. Problem Formulation

- I. How is the state's responsibility for the safety of civil aviation in the perspective of International Aviation Law?
- II. Is the absence of pilot training as the main cause of the Lion Air JT610 crash, Indonesia's responsibility?

III. Research Objectives

- To analyze the state's responsibility for the safety of civil aviation in the perspective of International Aviation Law
- 2. To analyze whether Indonesia is responsible for the absence of pilot training as the main cause of the Lion Air JT610 crash

III. Originality of The Research

No.	Titles	Substances	Differences with Thesis
1.	Responsibilities of the	Analysis of the	- This paper focuses
	State and Aircraft	responsibility of the	on the
	Manufacturer on Lion	United States as the	accountability of
	Air JT610 and Ethiopian	manufacturer	the United State as
	Airlines ET302	company's state for	the state where
	Accidents under	the Lion Air JT610	Boeing Company
	International Law,	and Ethiopian Airlines	is located rather
	Padjadjaran Journal of	ET302 Aircraft	than discussing
	International Law,	Accidents and	how to examine
	2020.12	whether national court	the aircraft
		decisions can fill the	manufacturers.
		void in international	

¹²Khansa. A, A. Latipulhayat, Responsibilities of the State and Aircraft Manufacturer on Lion Air JT610 and Ethiopian Airlines ET302 Accidents under International Law, Padjajaran Journal of International Law vol. 4 No.

	Т		
		law regarding aircraft manufacturing.	 This paper focus more on the the implementation of court decisions regarding to aircraft manufacturer within the scope of national courts This paper focuses on the manufacturer's company state, not on the state of the two flight accidents.
2.	Wahana Sazpah, Fence Wantu, Nur Mohammad Kasim, Tanggung Jawab Korporasi Boeing Atas Kecelakaan Pesawat di Wilayah Indonesia. ¹³	responsibility of Lion Air Airlines and the	Focus on discussing compensation for the Lion Air Flight JT610 Accident using the Indonesian positive law not in the International Law perspective. The papers also

¹³Wahana S., F. Wantu., N. Mohamad K., Tanggung Jawab Korporat Boeing atas Kecelakaan Pesawat di Wilayah Indonesia, Gorontalo Law Review, vol. 3 No.1 April 2020

			focus on the manufacturer company.
3.	Novi Dwi, Rinitami Njatrijani, Hendro Saptono, Tanggung Jawab Perusahaan Penerbangan Air Asia Terhadap Keselamatan Dan Keamanan Penumpang Qz - 8501 Ditinjau Dari Konvensi Montreal 1999, Diponegoro Law Journal, 2019.14	research includes how the airworthiness requirements of aircraft are based on the provisions of the Act and how the responsibility of Air Asia as the carrier for	
4.	The Criminal liability of lion air JT 610 and Boeing Company for Negligence to Maintain the Feasibility of B 737 MAX Engine, Kezia	of the Lion Air Airline for the flight JT 610 crash and the negligence of Boeing	thesis focuses more on the criminal liability both for the airline and

¹⁴Novi D., R. Njatrijani, H. Saptono, Tanggung Jawab Perusahaan Penerbangan Air Asia Terhadap Keselamatan Dan Keamanan Penumpang Qz - 8501 Ditinjau Dari Konvensi Montreal 1999, *Diponegoro Law Journal*, 2019.

	Thrisanda (Thesis), 2021 ¹⁵	Maintaining the Feasibility of B 737 MAX engine	company in the perspective of Indonesian Law. None of the analyses talk about the state responsibility in the international law perspective.
5.	Pengaturan Pertanggungjawaban Terhadap Penumpang Pesawat Menurut Konvensi Montreal 1999 dan Implementasinya Pada Pesawat Ethiopian Airlines Flight ET302 Pada Tahun 2019, Dhani Putra Vadyza (Thesis), 2022 ¹⁶	Discussing the liability of carriage in an accident involving the Ethiopian Airlines Flight ET 302 in the perspective of the 1999 Montreal Convention	discuss responsibility from the point of view of a state but an airline and does not discuss
6.	Tanggung Jawab Negara Untuk Keselamatan Lalu Lintas Penerbangan di Timor Leste Berdasarkan Chicago	discusses the juridical	oversight of aviation safety in Indonesian national law, while this

¹⁵Kezia Thrisanda, *The Criminal liability of lion air JT 610 and Boeing Company for Negligence to Maintain the Feasibility of B 737 MAX Engine*, Universitas Gadjah Mada, 2021 (Thesis)

¹⁶ Dhani Putra Vadyza, Pengaturan Pertanggungjawaban Terhadap Penumpang Pesawat Menurut Konvensi Montreal 1999 dan Implementasinya Pada Pesawat Ethiopian Airlines Flight ET302, 2022 (Thesis)

Convention 1944 dan	according to the 1944	whether Indonesia as a
Timor Leste Civil	Chicago Convention	state can be held
Aviation Basic Law, Luis	for airlines and airport	responsible for the
Caldeira Alves (Thesis),	regulators in Timor	Lion Air JT 610
2015 ¹⁷	Leste and oversight of	accident caused by
	safety under Timor	inadequate pilot
	Leste's national law.	training due to the new
		system.
7. Ida Andriani, Cok Istri;	Discusses the	This journal discusses
Parsa, I Wayan,	responsibility of	the responsibility of
Tanggung Jawab	airlines for accidents	airlines and the
Maskapai Penerbangan	that occur due to pilots	responsibility of pilots
Apabila Terjadi	using illegal drugs and	to users of flight
Kecelakaan Akibat Pilot	the responsibility of	services for accidents
Memakai Obat	these pilots to users of	due to the use of
Terlarang, Kertha	flight services or	prohibited drugs by
Semaya : Journal Ilmu	passengers	pilots. This journal
Hukum, Vol. 4 No. 1,		does not discuss at all
May 2015. ¹⁸		whether a state can be
		held responsible for
		accidents caused by
		the absence of pilot
		training for the latest
		aircraft systems.

Luis Caldeira Alves, Tanggung Jawab Negara Untuk Keselamatan Lalu Lintas Penerbangan di Timor Leste Berdasarkan Chicago Convention 1944 dan Timor Leste Civil Aviation Basic Law, Fakultas Hukum Universitas Padjajaran, 2015 (thesis)

18 Ida Andriani, Cok Istri; Parsa, I Wayan, Tanggung Jawab Maskapai Penerbangan

¹⁸ Ida Andriani, Cok Istri; Parsa, I Wayan, Tanggung Jawab Maskapai Penerbangan Apabila Terjadi Kecelakaan Akibat Pilot Memakai Obat Terlarang, Kertha Semaya: Journal Ilmu Hukum, Vol. 4 No. 1, May 2015

The primary distinction between the mentioned articles, journals, and theses, which served as original sources, and the research conducted by the authors, lies in the fact that the former did not address the issue of a state's responsibility in aircraft accidents or whether a state is accountable for pilot training related to a newly developed system by an aircraft manufacturing company. On the other hand, the mentioned writings predominantly focus on airlines' responsibility for various accident causes, including the discussion of pilot use of prohibited drugs. However, the current study centers on the absence of pilot training for a new system, which led to two fatal accidents occurring within five months, sharing the same contributing factors and causes.

IV. Definition of Terms

A. Maneuvering Characteristics Augmentation System (MCAS)

The 737 MAX 8 has the MCAS (Maneuvering Characteristics Augmentation System) designed to enhance the longitudinal stability features when the flaps are retracted and the aircraft is at high Angles of Attack (AoA). The MCAS system directs the downward movement of the stabilizer to improve the pitch behavior during steep turns with increased load factors and during flight without flaps at speeds close to the stall speed. The MCAS system is engaged automatically, without any input from the pilot, and functions exclusively in automatic mode. The technology is specifically designed to enable the flight crew to bypass MCAS input by utilizing either the column trim switches or the stabilizer aislestand cutout

switches. The Flight Control Computer (FCC) commands the function using input data from sensors and other airplane systems.¹⁹

The MCAS feature is activated when the Angle of Attack (AoA) surpasses a predetermined threshold determined by the combination of airspeed and altitude. Once the Angle of Attack (AoA) drops below the hysteresis threshold, which is 0.5 degrees lower than the activation angle, the Maneuvering Characteristics Augmentation System (MCAS) instructs the nose-up stabilizer to bring the aircraft back to its original trim position before to the MCAS activation.

B. State Responsibility

Peter Salim put forward three terms namely accountability, liability, and responsibility. An accountability is usually associated with economic problems such as bookkeeping and payments. Liability is usually associated with civil issues with specifications referring to issues whose responsibility has reached court and is usually manifested in the form of compensation.²⁰

A Liability itself comes from the word *Lagire* and the word *Lier* which respectively come from Latin and French which means bound or binding. In his book, Bin Cheng expressed his opinion regarding the notion of Liability. It is a term that is often used to refer to obligations that have consequences from a violation of legal obligations. The legal obligation above involves making every effort to rectify

¹⁹ *Ibid. p.2*

²⁰Sefriani, *Hukum Internasional Suatu Pengantar*, Jakarta: Rajawali Pers, 2016, hlm 251.

losses arising from defects in obligations that were not fulfilled or errors that occurred.²¹

The difference between responsibility and liability is in terms of regulation. If responsibility has not been explicitly regulated, it differs from liability, which is governed by a legal norm.²²

C. Implementation

In this case, the intended implementation is the application of the latest system in the Boeing B737-MAX 8 aircraft series, namely the Maneuvering Characteristics Augmentation System (MCAS).

VI. Theoretical Review

The FAA issues a standard airworthiness certificate to assess the suitability of an aircraft for operation. A standard airworthiness certificate is the formal license granted by the FAA that permits the operation of aircraft that have been certified in specific categories namely Normal, Utility, Acrobatic, Commuter, Transport, Manned free balloons, Special Classes.²³

A standard airworthiness certificate remains valid as long as the aircraft meets its approved type design, is in a condition for safe operation and maintenance, preventative maintenance, and alterations are performed in accordance with 14 CFR parts 21, 43, and 91. The FAA's assessment of whether an aircraft is safe for

²¹Neni. R., *Perkembangan Prinsip Tanggung Jawab (Bases of Liability) dalam Hukum Internasional dan Implikasinya terhadap Kegiatan Keruangangkasaan*, Jurnal Hukum IUS QUIA IUSTUM No. 3 Vol. 21 Juli 2014: 335 - 355

²²Sefriani, loc.cit.

²³Federal Aviation Administration I Standard Airworthiness Certificate https://www.faa.gov/aircraft/air cert/airworthiness certification/std awcert

operation is based on their initial evaluation of the overall condition of the aircraft. The assessment of aircraft goods is contingent upon factors such as the aircraft's manufacturer, model, age, type, the comprehensiveness of its maintenance records, and the general state of the aircraft.

Furthermore, in terms of international aviation law, the 1929 Warsaw Convention was the first convention to be used as a reference in regard to international aviation law. The provisions governing the responsibility of air carriers for passengers are more clearly written in the 1929 Warsaw Convention Article 17 written with the conditions that must be met to state that the air carrier is responsible for the losses incurred.²⁴ In his book Doo Hwan Kim stated that the existence of a loss from injury to the liability of a party raises liability for any losses that occur.²⁵

A. International Aviation Law

Aviation Law is one of the specialty fields in Studies of Law. Air Law encompasses the unique features and requirements of the aviation industry from a broad perspective. There is no authoritative regulatory organization that possesses the legal authority to establish universally applicable air laws for all states, nor is there any existing international law on the matter. The term "Air Law" refers to a collection of both tacit and explicit agreements that governments establish in relation to aviation.

²⁴E. Saefullah Wiradipradja, *Tanggung Jawab Pengangkut dalam Hukum Pengangkutan Udara Internasional dan Nasional*, (Yogyakarta: Liberty Yogyakarta 1989), hlm 56.

²⁵Doo Hwan Kim, "A Commentary to the Article VI of the OST", Proceedings on United Nations/Republic of Korea Workshop on Space Law, New York, 2004, hlm 78.

International Aviation Law is a distinct branch of International Law that encompasses regulations pertaining to common occurrences in the aviation industry, such as accidents. This law is essential for enhancing the effectiveness and efficiency of international air transport. International Law is a collection of regulations designed to restrict potential occurrences within airports and on board aircraft. Particularly like other fields in International Law according to Article 38 (1) ICJ the sources for this law can be found in the international convention.

B. Legal Protection for Airline Passengers

The amount of airline companies serving flights to various routes, both national and international flights, today proves that the transportation industry, especially air transportation, has experienced rapid development. However, not a few of the existing flights have caused losses and unrest on the part of consumers.²⁶ Things such as flight delays, lost goods, to plane crashes that cause so many victims happening. Apart from the airlines, the state has an important role in prioritizing the safety and protection of air transportation passengers. Therefore, in the national positive law there are several regulations that regulate consumer protection.

In the book of *Perlindungan Konsumen Maskapai Penerbangan di Indonesia* it is stated that the party protected in the Consumer Protection Act is the final consumer as an individual who uses and gets the ultimate benefit from a product or service.²⁷ In Article 1 paragraph 1 of Law Number 8 of 1999 concerning Consumer Protection, it states that consumer protection itself is an effort that can be made to

²⁷Ali Imran (et), *Perlindungan Hukum Konsumen Maskapai Penerbangan di Indonesia*, Padang:Andalas University Pers., s.a, hlm. 10

²⁶Made Indra Suma Wijaya dan Ide Bagus Surya Dharmajaya, *Perlindungan Hukum Terhadap Penumpang Transportasi Udara Niaga*, 2017, hlm. 3

ensure legal certainty regarding the safety and welfare of consumers.²⁸ Furthermore, Article 4 regulates consumer rights which are a form of consumer protection including the right to obtain correct and honest information, the right to receive advocacy and protection, and the right to receive compensation, compensation and/or reimbursement, if the goods and/or the services received are not in accordance with the agreement or not as they should be.²⁹

In addition, it was mentioned in the Sriwijaya Law Reviews written by Annalisa Yahanan, Febrian, and Rohani Abdul Rahim regarding consumer protection for aviation safety, one of The protection of consumer rights related to aviation safety is Flight Safety Standards which are stated in the Aviation Law UU no. 1 of 2009, one of which concerns Flight Safety Standards that safety and security standards on flights in Indonesia must be met considering that the safety and security of passengers during flights is a priority.³⁰

Consumer protection for airline passengers has also been protected by the 1999 Montreal convention in international law where this convention stipulates in Article 3:

> "The passenger shall be given written notice to the effect that where this Convention is applicable it governs and may limit the liability of carriers in respect of death or injury and for destruction or loss of, or damage to, baggage, and for delay".

²⁹Pasal 4 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen
 ³⁰Annalisa Yahanan ed, *The Protection of Consumer Rights For Aviation Safety and Security in Indonesia and Malaysia*, Sriwijaya Law Reviews, Vol 1, Issue 1, January (2017), hlm
 28.

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²⁸Pasal 1 ayat 1 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen

The 1999 Montreal Convention then regulates further in a separate chapter regarding the Liability of the Carrier and the Extent of Compensation for Damage, where in Article 17:

> "The carrier is liable for damage sustained in case of death or bodily injury of a passenger upon condition only that the accident which caused the death or injury took place on board the aircraft or in the course of any of the operations of embarking or disembarking".

C. State Responsibility for Civil Aviation

According to the Dictionary of Law, state responsibility is an obligation of a state to make reparation arising from a failure to comply with a legal obligation under international law.31 In addition, another view of state responsibility in international law is that international law recognizes two forms of rules in which there are regulatory arrangements that give rights and obligations to a state or commonly referred to as primary rules, and legal consequences of states that do not comply with their obligations or secondary rules where These secondary rules are the responsibility of a state.³²

The law of state responsibility may be found in customary international law, the case of international courts and tribunals, and general principles of law.³³ The International Law Commission (ILC) has played a significant role in the advancement of the legal principles governing state accountability. Since 1956, the

³³Andrew D. Mitchell, Jennifer Beard, *International Law in Principle*, Publisher: Thomson Reuters, first ed, 2009

³¹ElizabethA.Martin ed., A Dictionary of Law, Oxford University Press, New York, 2002, hlm. 477. Available online https://www.ekhtebar.com/wp-content/uploads/2018/10/Oxford- <u>Dictionary-Of-Law.pdf.</u> Accessed on March 16th of 2023, 10.25 Western Indonesian Time.

32 Sefriani, op.cit, hlm 254.

International Law Commission (ILC) has faced a significant difficulty in debating and formalizing the notion of state responsibility within the framework of international law. The initial version of the legislation pertaining to state accountability, known as the Draft Articles of accountability of States for Internationally Wrongful Acts, was officially approved by The International legislation Commission (ILC) on August 9, 2001.³⁴

The Draft Article of Responsibility of States for Internationally Wrongful Acts (2001) regulated state responsibility in international law in 4 discussion sections, namely the first section discussing The Internationally Wrongful Act of a State, the second regarding the Content of the International Responsibility of a State. State, the third is about The Implementation of The International Responsibility of a State, and the fourth part is about General Provision, and consists of 59 Articles.³⁵

It is well stated on the Draft Article of Responsibility of States for Internationally Wrongful Acts (2001) article 2 that an internationally wrongful act conduct when there is an action of omission that is attributable to the State under international law also it conducts a breach of an international obligation of the state. One of the many types of mistakes and losses that cause state responsibility, violation of obligations in the form of an action and/or negligence that has been committed by a state.³⁶

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³⁴Neni Ruhaeni, Direct International Responsibility of Non-Governmental Entities in The Utilization of Outer Space, Padjajaran Journal of Law, Vol. 7, No.1 Year 2020, p. 108.
³⁵Sefriani, loc.cit.

³⁶Starke J.G., *Pengantar Hukum Internasional*, Jakarta; Sinar Grafika, 2015, e-book, hlm.

The characteristics of the consequences of the emergence of state responsibility in the perspective of international law are described by experts in general, namely that there has been an agreement between two or more states related to international law that creates obligations for the states involved, an act or omission of this obligation has been carried out. which results in state responsibility, as well as the occurrence of damage or loss as a result of actions that violate these obligations.³⁷

In the Draft Article of Responsibility of States for Internationally Wrongful Acts (2001), state responsibility arises when an international violation occurs and results from the violating act some kind of negligence. Article 1 Draft Article of Responsibility of States for Internationally Wrongful Acts (2001) have formulated that:

"every internationally wrongful act of a state entails the international responsibility of that state" 38

Where what is meant by the article above is an act that violates an obligation to an agreement that concerns the interests of a state. On Draft Article of Responsibility of States for Internationally Wrongful Acts (2001) According to Article 8³⁹, a state will be held responsible for any acts of private entities in two circumstances: first, when the private entity has received instructions from a state

Terhadap ILC Draft On State Responsibility 2001), Jurnal Hukum No. 30 Vol. 12

38 Article 1, Draft Article on Responsibility of States for Internationally Wrongful Acts, Year 2001.

³⁷Sefriani, Pemohon Tanggung Jawab Negara dalam Hukum Internasional (Studi Kritis Terhadan ILC Draft On State Responsibility 2001). Jurnal Hukum No. 30 Vol. 12

³⁹Article 8, Draft Article on Responsibility of States for Internationally Wrongful Acts, Year 2001.

to carry out the relevant actions; and, second, when the entity is under the guidance or control of the state.⁴⁰

One of the elements of an internationally wrongful act is an act omission attributable to a state under international law. But on this matter, the state itself is a legal construct which cannot directly engage in conduct. Rather, acts and omissions which a state is entitled to take the responsibility for are committed by the government organs, individuals, organizations, corporate entities, and other organizations with a different kind of ties to the states.⁴¹

Aviation law itself regulates responsibility in the 1944 Chicago Convention. Annex 6 and Annex 13 are the Annexes of the 1944 Chicago Convention which regulate state responsibility in the supervision and investigation of aircraft accidents. Whereas in national law there is Law No. 1 of 2009 concerning Aviation where further provisions regarding government responsibilities which include supervision and investigation are regulated in Minister of Transportation Regulation No. PM 93 of 2016 concerning the National Aviation Safety Program and Government Regulation No. 62 of 2013 concerning Transportation Accident Investigations. In addition, there is also a convention that regulates the responsibility of airlines, namely the 1999 Montreal Convention as it is known that airlines are absolutely responsible for matters that occur during flights such as accidents or damage/loss of baggage.

⁴⁰James Crawford, *State Responsibility : The General Part*, Publisher: Cambridge University Press, 2013, e-book, p. 141

41 Andrew D. Mitchell, Jennifer Beard, op.cit p.142

VII. Research Method

1. Research Typology

The type of research for this research is normative research. It is a research method that is done by researching the data through books, journals, legal theory documents, library materials, or secondary data. The research is not only limited to the data above, but it is also based on the convention interpretation and the studies of the 1999 Montreal Convention and other conventions. This research also will also break down the legal opinion of the specified scholars regarding Aviation safety.

2. Research Approach

In relation to the research typology using the normative research, the research approach of this thesis uses the statutory approach where it is carried out by reviewing all laws and regulations relating to legal issues being handled. For this thesis, the statutory approach is conducted by examining the international convention and international law such as the 1944 Chicago Convention and 1999 Montreal Convention. The author uses Law no. 1 of 2009 concerning Aviation, Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 93 of 2016 concerning the National Aviation Safety Program, as well as Ministerial Regulation Number PM 74 of 2017 concerning Civil Aviation Safety Regulations Part 830 (Civil Aviation Safety Regulation Part 830) concerning Accident Investigation Procedures and Serious Civil Aircraft Incidents as Indonesian national law in this research. Moreover, a case study methodology is also utilized which emphasized on examining the 2018 Lion Air JT610 accident case.

3. Objective of Research

The objective of research carried out and written by the author on this thesis is about the state's responsibility for the safety of civil aviation in the perspective of International Aviation Law and to analyze whether Indonesia's responsibility for the absence of pilot training as the leading cause of the Lion Air JT610.

4. Research Data Source

The primary data sources are derived from several International Conventions that are related to this research, such as:

- The Article on Responsibility of States for Internationally Wrongful Acts
 2001
- The Convention for the Unification of certain rules relating to international carriage by air, The Warsaw Convention 1929, regulates issues of liability or responsibility in the event of an accident in any international transportation activity for passengers, baggage or cargo.
- The 1999 Montreal Convention establishes airline liability in the case of death or injury to passengers, as well as in cases of delay, damage or loss of baggage and cargo. It unifies all of the different international treaty regimes covering airline liability that had developed haphazardly since 1929.
- The Convention on International Civil Aviation, The 1944 Chicago Convention a convention on International Civil Aviation
- Law Number 8 Year 1999 Concerning Consumer Protection
- Law Number 1 Year 2009 Concerning Aviation

- Minister of Transportation Regulation No. PM 93 of 2016 concerning the
 National Aviation Safety Program
- Government Regulation No. 62 of 2013 concerning Transportation Accident Investigations.

The secondary data sources in this study were data obtained from legal books about International Aviation Law, legal opinions, and also news of the current situation regarding international aviation.

CHAPTER II

STATE RESPONSIBILITY FOR CIVIL AVIATION SAFETY

I. International Aviation Law

A. International Law

The impossibility of a state in carrying out its goals and functions, especially in the international sphere, without international relations and laws governing relations between these countries makes the existence of an international law a fundamental thing for every state in fighting for its national interests in international matters.⁴² According to Mochtar Kusumaatmadja, International Law is all the principles and rules governing problems and relations between countries (relationships that cross borders between countries) with their subjects which include state-state relations, state relations with other legal subjects. which is not a state and the relationship between legal subjects who are not a state and other legal subjects. 43 In international law, there are sources that are used as material for a legal expert in determining the legal rules that apply to a particular event or situation. Although explicitly article 38 of the Statute of the International Court of Justice does not clearly state the discussion of sources of international law and only applies to international institutions or organizations, experts still use Article 38 of the Statute of the International Court of Justice as a reference in discussing sources of international law because it specifically deals with Article 38 in it is implied a

⁴²Jawahir Thontowi, Hukum dan Hubungan Internasional, ctk. pertama, Yogyakarta: UII Press Yogyakarta, 2016, hlm. 3

⁴³Mahendra P. Kurnia, "Hukum Internasional (Kajian Ontologis) (*International Law; an Ontological Review*), Risalah Hukum Fakultas Hukum Unmul, Vol. 4, No. 2, Des 2008, hlm. 81 mei 4

content and a soul that has a generally applicable legal value.⁴⁴ These sources in international law are categorized into several, namely:

1) International Agreements

International agreements are agreements made by international legal subjects after which these agreements will give rise to international obligations and rights. According to Article 2 of the 1969 Vienna Convention, an international agreement is a written agreement between countries that is only valid if it pertains to a state under international law. International agreements today have become the main source or instrument in international relations between countries that make international agreements the most important source of other international law sources.45

2) International Custom

Custom, as one of the most ancient origins of law, represents a tradition that endures through successive generations. It is adhered to primarily due to apprehension and societal influence, driven by the opinions of the general public. A custom transforms into customary law when it satisfies the prerequisites established by legal frameworks. Consequently, custom plays a significant role in the evolution and formation of law.⁴⁶

⁴⁵Sefriani, op.cit, hlm. 33

⁴⁴I Wayan Parthiana, "Pengantar Hukum Internasional" Bandung: Mandar Maju. 1990, hlm. 150

⁴⁶Brij Bihari Prasad, "Sources of International Law", International Journal of Scientific Research in Multidisciplinary Studies, Vol.5, Issue.11, November 2019, p. 83. (jurnal) mei 5

Article 38 paragraph 1 of the Statute of the International Court of Justice is an article which mentions international custom as one of several existing sources of international law. The article stated as

"International Custom as evidence of a general practice accepted as law". 47

3) Court Decision and Doctrine

In Article 38 of the Statute of the Court, sources of law in international law are classified into primary sources of law and subsidiary or additional sources of law. In this case, court decisions and doctrines are one additional source of law. Subsidiary sources of law are known as additional sources of law used by judges in deciding a case and become sources of law that cannot stand alone, in other words, subsidiary sources of law serve as supporting arguments from existing primary sources of law.

Court decisions are more used to prove the rules of international law against problems that arise as a result of the application of primary legal sources such as international agreements and international customs. In addition, there is no rule of binding precedent in the application of international law as is written in Article 59 of the Statute of the Court that

"The decision of the Court has no binding force except between the parties and in respect of that particular case".⁵⁰

4) General principles of law recognized by civilized nations

⁴⁷I Wayan Parthiana, loc. cit

⁴⁸Ida Bagus Wyasa Putra, Buku Ajar Hukum Internasional Fakultas Hukum Udayana, 2017, hlm. 36

⁴⁹Heliarta, *Mengenal Hukum Internasional*, PT. Sindur Press, Semarang, 2010, hlm. 13

⁵⁰Ida Bagus Wyasa Putra, Op.cit, hlm. 49

The purpose of these broad legal principles is to provide a solution for judges when they encounter non-liquet issues in a case. This principle can be in the form of general principles such as those in civil procedural law, criminal procedural law, and others whose procedural law is implemented in the practice of national countries, which makes general law principles not limited to international law.⁵¹

Things that can lead to the use of international law are written in Article 2 of the Draft Article of Responsibility of States for Internationally Wrongful Acts (2001) which states that there has been an internationally wrongful act. An internationally unlawful act happens when a State's action or failure to act violates its international duties under international law. One type of errors and losses that can lead to a state being held responsible is when a state violates its obligations through an intentional conduct or clear negligence.

I Dewa Gede Palguna who is a Constitutional Court Judge expressed his opinion regarding state responsibility in international law where a state has the obligation to be responsible for actions or omissions that are caused, which because it causes a violation of a state's international agreements or obligations.⁵² Thus, the elements that can lead to the use of international law because of state responsibility are also written in the draft Articles on Responsibility of States for Internationally Wrongful Acts 2001 as follows:

1) There are acts or omissions that can be linked (imputable) to a state

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⁵¹Sefriani, *op.cit*, hlm. 42

⁵²Made Maharta Yasa, *Buku Ajar Hukum internasional: Tanggung Jawab Negara*, Fakultas Hukum Universitas Udayana, 2017, hlm. 162

 Such act or omission constitutes a violation of an international obligation, whether the obligation arises from an agreement or from other sources of international law.

B. Aviation Law

In general, aviation law is also known as air law where air law itself is a law that applies in airspace or airspace which is subject to the sovereignty of a state. In the literature itself, aviation law is better known as air law because it is considered that the term is unsatisfactory and less broad which only discusses aviation or air transportation where air problems are not only limited to aviation problems.⁵³ Verschoor defines air law or aviation law as one of the laws used to regulate what happens in the airspace or as a regulation for anything that happens in the airspace which has benefits for the flight process, and provides benefits to the interests of the nation. (k.martono)

a. Paris Convention 1919

Initially, airplanes were only employed for the military endeavors of a nation. Prior to the outbreak of World War I, nearly every European state possessed combat aircraft. Prior to the military use of airplanes by other nations, Germany employed a hot air balloon in 1910 as a mode of transportation. This balloon traversed the territories of other European countries, including France..

As a result, when German-owned air transportation passed through France, it became apparent that international legal standards were necessary to establish clear rules regarding a state's complete and exclusive control over its territory.

⁵³E. Saefullah Wiradipradja, *Pengantar Hukum Udara dan Ruang Udara*, PT. Alumni : Bandung, edisi pertama, 2014, hlm. 2

Consequently, a dedicated international conference was convened, with the participation of 19 countries, to deliberate on air law. Another convention took place in Paris at that time and was utilized nine years later, ultimately becoming recognized as the 1919 Paris Convention.⁵⁴

Many countries developed their technology in the transportation sector after World War I ended. The aircraft, originally designed solely for military transportation, has undergone efforts to enhance its capabilities for fast long-distance air travel. These developments aim to achieve maximum altitude and distance in the airspace, enabling the aircraft to be utilized for both transportation and commercial communication purposes.

After the international Conference which was held in Paris to determine the rules of sovereignty of a state over a territory, this provision continued with the holding of the 1939 Paris Protocol which had a more detailed discussion with a discussion of the special issues inherent in the category of losses that arise against people on the surface earth due to activities carried out in the air space. After that, the developments of international agreements on air law were written, among others, in the 1929 Warsaw Convention, the 1944 Chicago Convention and the 1999 Montreal Convention. ⁵⁵

b. Warsaw Convention 1929

The 1929 Warsaw Convention, signed in Warsaw on October 12, 1929, originally regulates the unification of compensation for international flights,

⁵⁴Sudirman H. Nainggolan. *Pengaturan Penerbangan Sipil Internasional Menurut Hukum Internasional Yang Melintasi Antar Negara*, Sumatra Journal of International Law, 2014, Journal, hlm. 2

⁵⁵ibid.

regulates air force documents, limits airline liability, and regulates issues related to court jurisdiction in the compensation process. These changes were aimed at standardizing the responsibilities related to air transport and travel documents on international flights. Conversely, a move towards unification occurred with the introduction of protocols like The Hague Protocol of 1955, the Guatemala Protocol of 1971, and the Montreal Protocols 1-4.

Ultimately, the 1929 Warsaw Convention was considered unsuitable in light of advancements in air transportation that necessitated more complex regulations. As a result, multiple conventions pertaining to international aviation were reestablished, and members of the International Civil Aviation Organization (ICAO) put forth a new proposal. The aim of this endeavor was to update and modernize the existing 1929 Warsaw Convention system. The Montreal Convention, also known as the Convention for the Unification of Certain Rules for International Carriage by Air, was signed in Montreal on May 28, 1999. (H.K. Martono, Agus Pramono 2013).

c. Montreal Convention 1999

The 1999 Montreal Convention highlights the importance of unlimited carrier compensation, and it brings two significant changes from the 1929 Warsaw Convention. These alterations involve the removal of compensation limits and the opportunity for passengers to opt for their home state's legal system when making compensation claims. These adjustments are driven by the concerns of international

air travelers as consumers and the pursuit of fair compensation guided by the principle of restitution.⁵⁶

The 1999 Montreal Convention, also known as the Convention for the Unification of Certain Rules for International Carriage by Air 1999 was established in Montreal, Canada, on May 28, 1999. According to the first paragraph of Article 1 of the Montreal Convention, it encompasses all instances of international transportation of individuals, luggage, or goods conducted by aircraft for compensation.⁵⁷

In Article 1, paragraph (2) of the 1999 Montreal Convention, international transportation refers to the movement of goods that occurs as a result of an agreement between two parties, where the departure and destination points are in different regions or countries. Additionally, the 1999 Montreal Convention is applicable to transportation carried out by a state or a legal entity, provided it meets the conditions outlined in Article 1 (Article 2, paragraph (1)). Article 2, paragraph (2) of the 1999 Montreal Convention allows for the transportation of administrative postal items, with the airline responsible for postal items in accordance with relevant regulations. However, the carriage of postal items falls outside the scope of the 1999 Montreal Convention if they do not conform to its provisions.⁵⁸

d. Chicago Convention 1944

⁵⁶ Fadia Fitriyanti, et.al., Responsibility of Airlines Company to the Passenger After the Ratification of Montreal Convention 1999 by Indonesia, Jurnal Cita Hukum (Indonesia Law Journal), Vol. 9 No, 1, 2021, p. 137

⁵⁸ Maria Ayu, International Law Making: Convention for the Unification of Certain Rules for International Carriage by Air (Montreal Convention) 1999, Indonesian Journal of International Law, Vol. 3 No. 2, 2006, hlm. 245

In addition, the 1944 Chicago Convention was also an international convention governing aviation. international civil. The beginning of the making of the Chicago Convention was when political discussions were carried out by countries discussing civil aviation which would play a very large role in international relations so that on December 7, 1944 the Chicago Convention was signed making this convention the basis for the formation of the International Civil Aviation Organization (ICAO).⁵⁹ The main focus of the establishment of the International Civil Aviation Organization (ICAO) is as a means of inhibiting or preventing the emergence of conflicts in the world of civil aviation. The International Civil Aviation Organization contains agreed rules for international civil aviation which are included in the Annex which become the standard for setting international civil aviation standards, one of which is in terms of aviation facility standards.⁶⁰

Following technological developments in the world, Indonesia is also experiencing developments in terms of air transportation. As with the development of international air transportation, Indonesia is also experiencing developments in two types of aviation, namely in military aviation and civil aviation. In short, the development of civil aviation in Indonesia began in the third decade of the 20th century in 1928 to be precise with the establishment of a commercial airline company in the Dutch East Indies whose shares consisted of joint ventures from various European companies called KNILM (Koninklijke Nederlandsch Indische

⁵⁹International Law Making : Convention on International Civil Law, Indonesia Journal of International Law, Vol. 6 No. 4, Juli 2009, hlm. 563

⁶⁰Ardianti Mawardika, Peran Rezim Internasional International Civil Aviation Organization (ICAO) dalam Penanganan Kasus Penembakan Pesawat Sipil Ukraina oleh Militer Iran Januari 2020, thesis, Fakultas Hukum Universitas Diponegoro, 2022

Luchtvaart Maatschappij). It took about 30 years for the development of aviation in Indonesia. The stable factor of political conditions around 1950 provided an opportunity for the development of aviation in Indonesia to continue a new chapter and wrestle again in the world of aviation.⁶¹

With the development of public transportation facilities along with the increasing flow of globalization which requires high mobility to be the main thing that is currently needed by humans. Therefore, compared to other means of transportation, airplanes as a means of air transportation provide advantages such as time efficiency with a wide range of destinations.⁶²

The risk of an accident occurring in air transportation activities is something that cannot be avoided, so to protect the rights and obligations of both the airline and passengers, a unification of regulations is carried out on this matter. Indonesian national law refers to Law Number 1 of 2009 concerning aviation law with provisions for the value of compensation regulated in the Minister of Transportation Regulation 77 of 2011 concerning physical injury, death and damage to baggage. Apart from that, flight delays are also regulated in the Minister of Transportation Regulation Number 89 of 2015.⁶³

C. Airplane Airworthiness

In both domestic and international flights, the airworthiness of an aircraft is the main thing in ensuring the safety of passengers. Airworthiness itself is a condition

⁶¹Dadan Adu Kurniawan, *Menelusuri Jejak Awal Penerbangan di Indonesia (1913-1950an)*, Universitas Sebelas Maret Surakarta

⁶²Adhy Riadhy Arafah, Sarah Amalia Nursani, *Pengantar Hukum Penerbangan Privat*, Kencana : Rawamangun, Jakarta Timur, September 2019, hlm. 2

 $^{^{63}}$ Ibid.

in which an aircraft design has been fulfilled in a safe condition and ready to operate. The Federal Aviation Administration (FAA) as the largest transportation agency of the United States government, that is responsible for regulating and supervising all aspects of civil aviation throughout the state, defines airworthiness in many places throughout Title 14. Its first designation is 14 CFR 3.5(a), which states that airworthiness "means an aircraft conforming to its type design and a condition of safe operation. In addition, the definition of airworthiness is also explained in Annex 8 of the 1944 Chicago Convention where it is defined as:

"The comprehensive and detailed airworthiness codes established, adopted or accepted by a Contracting State for the class of aircraft, engine or propeller under consideration".

It is stated in both paragraphs of Article 34 of Law Number 1 of 2009 concerning Aviation related to airworthiness that every aircraft operated is required to meet the requirements of airworthiness standards where in this case one of the airworthiness standards of an aircraft is passing inspection and airworthiness testing.⁶⁴

In the case of airworthiness of an aircraft, annex 8 of the 1944 Chicago Convention is a forms of the Recommended Standards and Practices for the Airworthiness of Aircraft adopted by the Council on March 1, 1949 pursuant to the provisions of Article 37 of the International Civil Aviation Convention (Chicago 1944). This annex consists of part I which consists of understanding the airworthiness of an aircraft, chapter II which discusses the general airworthiness

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⁶⁴Panji Adhyaksa Sunaryo, *Pengaturan Hukum Mengenai Kelaikudaraan dan Pengoperasian Pesawat Udara Menurut Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan*, Lex Administratum, Vol. IX, No. 3, April 2021, hlm. 230

procedures applicable to all aircraft, and part III discusses the minimum airworthiness characteristics for airplanes provided, or to be provided, with certificates of airworthiness classifying them in an established ICAO category. Lastly, the IV part of this annex is a recommendation concerning the use of a performance code as an alternative to the one contained in the Annex, in which the climb values had the status of Recommended Practices made by the Airworthiness Division collaborating with the Operations Division.

II. Legal Protection for Aviation Passenger

Consumers according to Hornby are defined as someone who buys goods or uses certain services. Whereas in Black's Law Dictionary the consumer is those who consume, individuals who buy, utilize, uphold, and discard products and services. While the passenger is a person who has committed himself by paying the cost of transportation (in this case air transportation) for himself.⁶⁵ The characteristics that classify a person as a passenger are that person's status as a party to the transportation agreement. In this case he pays for the transportation costs, agrees to the conditions made by the airline, and has the necessary transportation documents.⁶⁶ In this case, passengers are included as one of the consumers who use services for their own or non-commercial needs.⁶⁷

Aviation safety as the main goal of operating commercial flights has several aspects related to consumer protection as users of air transportation services. Not

⁶⁵Abdul Atsar, Rani Apriani, *Hukum Perlindungan Konsumen*, Deepublish: Yogyakarta, 2019, hlm. 2

⁶⁶Vinna Vanindia, *Perlindungan Hukum Bagi Penumpang Angkutan Udara (Studi Kasus pada PT. Garuda Indonesia)*, Thesis, Universitas Pembangunan Nasional "VETERAN" Jawa Timur, 2012.

⁶⁷Abdul Atsar, Rani Apriani, loc.cit.

only airlines, the state in this case is obliged to have calculations to anticipate the possibilities that exist that can cause accidents. In addition, there is a close relationship between the physical planes and maintenance aspects in terms of ensuring flight safety, so that the requirements for aviation engineering must be met, one of which is training for airline pilots in terms of the development of new systems because apart from the physical aspects of the aircraft and maintenance, aviation safety also has a close relationship with the quality and factors of human resources involved in the flight activity. Aviation safety is the overall result of a combination of various factors, namely aircraft factors, personnel, aviation facilities, flight operations and aviation regulatory agencies.⁶⁸

Along with the increase in technological advances and human needs that are always evolving, it is undeniable that the consequences faced, especially in the operation of air transportation, such as flight delays, lost goods, to plane crashes, have caused so many victims. Therefore, regulations and policies are needed to create air transportation that is safe, efficient, orderly and comfortable, as well as guaranteeing the rights of a passenger as a consumer or service user such as the passenger's right to security and information, the right to choose, and the right to be heard.⁶⁹

In this study, the authors will provide an analysis of consumer protection in national law and also consumer protection regulated in international conventions.

⁶⁸Ashar Sinilele, *Perlindungan Hukum Terhadap Penumpang pada Transportasi Udara Niaga Pada Bandara Sultan Hasannudin Makassar*, Jurnal Hukum Pidana dan Ketatanegaraan, Vol. 5, No. 2, Desember 2016, hlm. 198

⁶⁹Muhammad Taufik Hidayat, *Perlindungan Hukum Terhadap Pengguna Jasa Angkutan Udara Dalam Perspektif Peraturan Perundang-Undangan Tentang Penerbangan*, Al-Adl: Jurnal Hukum, Vol. VIII, No. 3, Sept-Des 2016.

1) Protection in International Law Perspective

The regulations governing aviation in international conventions are contained in the 1944 Chicago convention which is seen from all the articles and the existing annexes, the form of protection regulated is the same as what is regulated in Law Number 1 of 2009 concerning aviation. Of all the arrangements in the 1944 Chicago Convention, both in the articles and the annexes, the forms of protection related to safety, service and security are the same as the provisions in Law No. 1 of 2009 concerning aviation.

The matters governing safety in the 1944 Chicago Convention are contained in Chapter V where in this chapter the condition of aircraft that must meet the eligibility requirements for flight is one of the important things and as an embodiment in supporting and guaranteeing the safety of passengers and crew. Basically, the provisions regulated in Chapter V of the 1944 Chicago Convention are as follows: Document *carried in aircraft, certificate airworthiness, license of personnel, journey log books, recognition of certificate and license* which will be reaffirmed in Chapter VI of the Chicago Convention which regulates international standards and recommendations. Chapter VI of the 1944 Chicago Convention emphasizes the matters stipulated in Chapter V of the 1944 Chicago Convention regarding the standards that must be met by an aircraft in order to be able to operate and carry out international flights properly.⁷⁰

⁷⁰Rizwan Zauhar, Perlindungan Hukum Terhadap Korban Kecelakaan Joy Flight Berdasarkan Undang Undang Nomor 1 Tahun 2009 tentang Penerbangan dan Konvensi Chicago 1944 (Studi Kasus Kecelakaan Sukhoi Superjet 100 Pada Tanggal 9 Mei 2012), Fakultas Hukum Universitas Brawijaya, Thesis, 2012

There are two Articles in the 1944 Chicago Convention which allude to airplane accidents where in Article 26 and annex 13 of the 1944 Chicago Convention which states that a state's protection for airplane passengers is in the form of the State in which the accident occurs will institute an inquiry into the circumstances of the accident, In accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Investigation of accident Organization.

However, the rest of the Article and the annex are not specifically written related to the protection of airplane passengers as consumers other than the responsibility of the carrier or the compensation required when an accident occurs. In other words, the 1944 Chicago Convention regulates more about preventive efforts that can be made in preventing and minimizing the occurrence of aircraft accidents which can cause many victims and other losses. Because of this, the 1944 Chicago Convention stipulated aviation and technical aviation standards that must be met by airlines.⁷¹

Other regulations that discuss the protection and obligations of the state and airlines for airplane passengers are also regulated in the 1999 Montreal Convention where in Article 3 it is written that:

"The passenger shall be given written notice to the effect that where this Convention is applicable it governs and may limit the liability of carriers in respect of death or injury and for destruction or loss of, or damage to, baggage, and for delay".

⁷¹ *Ibid*.

The 1999 Montreal Convention then regulates further in a separate chapter regarding the Liability of the Carrier and the Extent of Compensation for Damage, where in Article 17:

"The carrier is liable for damage sustained in case of death or bodily injury of a passenger upon condition only that the accident which caused the death or injury took place on board the aircraft or in the course of any of the operations of embarking or disembarking".

2) Consumer Protection in National Law Perspective

Regarding consumer protection for aviation safety, one of The protection of consumer rights related to aviation safety is Flight Safety Standards which are stated in the Aviation Law UU no. 1 of 2009, one of which concerns Flight Safety Standards that safety and security standards on flights in Indonesia must be met considering that the safety and security of passengers during flights is a priority.

One way is to guarantee aircraft airworthiness standards as stipulated in Chapter VI of Law Number 1 of 2009 concerning aviation, which is a form of giving passengers as consumers who use flight services their rights to obtain guarantees. Apart from that, one of the laws that also regulates consumer protection is Law Number 8 of 1999 concerning Consumer Protection detailed in Article 1 paragraph 1 it states that consumer protection itself is an effort that can be made to ensure legal certainty regarding the safety and welfare of consumers.⁷²

⁷²Pasal 1 ayat 1 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen

Consumer safety and security as well as legal certainty is also one of the consumer protection principles regulated in Article 1 paragraph 2 of Law Number 8 of 1999 concerning Consumer Protection.⁷³

The existence of fundamental rights in protecting consumers such as consumer rights when experiencing personal or property losses, consumer rights to obtain goods and/or services at reasonable prices, and rights to obtain appropriate solutions to problems faced makes the state and business actors obligated to fulfill these rights.⁷⁴

Furthermore, Article 4 regulates consumer rights which are a form of consumer protection including the right to obtain correct and honest information, the right to receive advocacy and protection, and the right to receive compensation, compensation and/or reimbursement, if the goods and/or the services received are not in accordance with the agreement or not as they should be.⁷⁵

III. State Responsibility

A. Definition of State Responsibility

According to the Black Law Dictionary, responsibility is a situation in which a person or agency or a state is obliged to answer for an act done, and repair any injury it may have caused.⁷⁶ In general, state responsibility in international law is defined as responsibility, liability and accountability. Sefriani in her book distinguishes these three definitions related to state responsibility being state

⁷³Pasal 1 ayat 2 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen ⁷⁴Renata Christha Auli, *Hukum Perlindungan Konsumen: Cakupan, Tujuan, dan Dasarnya*, Hukumonline.com, 26 Juli 2022 (online article https://www.hukumonline.com/klinik/a/hukum-perlindungan-konsumen-cakupan-tujuan-dan-dasarnya-lt62dfc65f7966c/#)

⁷⁵Pasal 4 Undang-Undang Nomor 8 Tahun 1999 tentang Perlindungan Konsumen

⁷⁶ https://thelawdictionary.org

responsibility in civil form and the obligation to pay compensation for liability, state responsibility which is linked to financial matters to define accountability, and responsibility which is defined as "share the burden" of the consequences of an act.⁷⁷

The term "liability" frequently refers to the obligation to make compensation. However, the term "liability" can also refer to obligations placed on states as a result of harmful effects of high-risk activities that are not illegal under international law, such as operating a nuclear plant close to a border (a legal activity) that accidentally causes radioactive contamination on the territory of a neighboring state (a harmful effect requiring compensation). So according to Sefriani, the most prominent thing about the difference between responsibility and liability is that responsibility is used if a responsibility has not been regulated exclusively and in detail, while liability is used for responsibilities that already have regulations in legal norms.

However, there are several international law experts of the other opinion that the two phrases of responsibility and liability do not yet have standard terms to be conceptualized in accountability in international law, as is the case with the opinion expressed by Peter Malaczuk where the two terms are often used interchangeably. His statement on the definition of the two terminologies that although the terms "responsibility" and "liability" are utilized at times interchangeably, this usage of terminology in the literature is by not completely consistent.⁸⁰

⁷⁷Sefriani, loc.cit, hlm. 253

⁷⁸Peter Malanczuk, Akehurt's Modern Introduction to International Law 7th Rev. Ed., Routledge, London & New York, 1997, p.254

⁷⁹Sefriani, op.cit. hlm. 253 (loc.cit)

⁸⁰Peter Malanczuk, *loc.cit*.

In their book titled The Law of State Responsibility, James R. Crawford and Alain Pellet elucidate state responsibility is the fundamental concept that holds a state liable for its breaches of international agreements. This principle includes the duty to stop the incorrect behavior, provide appropriate assurances and guarantees of non-recurrence, and offer restitution for any inflicted injury.⁸¹

Other than that, The International Law Commission (ILC), comprising legal experts responsible for the advancement of international law, has also played a role in defining state responsibility. As per the ILC, state responsibility refers to the legal ramifications at the international level resulting from a state's violation of an international obligation.

B. Basic and Characteristics of State Responsibility

According to Karl Zemanek, the underlying factor that gives rise to a state's responsibility is the violation committed against the subjective rights of another state. In addition to this basis of state responsibility, another factor that establishes a state's accountability for its wrongful actions arises from the provisions found in international agreements or customary international law.⁸²

The responsibility of a state under international law differs from responsibility under domestic law, as a certain act may not be considered a legal violation according to domestic law, but if international law deems it otherwise, the state must still be held accountable. In such cases, the state's responsibility arises from

⁸²Rhona K.M. Smith et.al, Hukum Hak Asasi Manusia, Yogyakarta: Pusat Studi Hak Asasi Manusia Universitas Islam Indonesia (PUSHAM UII), 2008, hlm. 75

⁸¹Crawford, J. R., et.al., The Law of International Responsibility, Oxford Commentaries on International Law, Oxford University Press, New York, 2010.

the breach of international law, despite it not being classified as a violation under domestic law.⁸³

A state is considered to possess and may be held responsible for its acts when it has fulfilled the three fundamental aspects or components mentioned before. Conversely, if a state only satisfies one or two of these three components, the state cannot be deemed responsible. Malcolm N. Shaw, in his book International Law, identifies three fundamental attributes that define state responsibility:⁸⁴

- a. There are international obligations that are binding on the State that will be held accountable. The international obligations in question are the obligations of a state that arise due to international sources such as international agreements, international customs that have been considered as law by the international community, as well as obligations arising from the jurisprudence of international courts.
- b. There is an act or omission due to a violation of an international obligation by a State which then creates the responsibility of a state.
- c. There is damage that causes one party to suffer losses, which is caused by acts or omissions that have been committed by a state.

In addition to the elements of state responsibility above, there are two theories that form the basis for the birth of state responsibility, namely the theory of risk where according to this theory, a state bears full responsibility for any actions that result in significant harmful consequences, regardless of whether the activity itself

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⁸³*Ibid*.

⁸⁴Malcolm N. Shaw, *International Law Sixth Edition*, Cambridge University Press, New York, 2008, p. 781

is considered legally permissible. Consequently, this theory led to the establishment of the principle of absolute liability, strict liability, or objective responsibility.⁸⁵ Alongside the risk theory, there exists a fault theory that asserts the liability of the state arises when it can be demonstrated that the state's actions involved some form of mistake. Actions are deemed erroneous if they are conducted with malicious intent or negligence that cannot be justified. This fault theory subsequently led to the establishment of the principle of subjective responsibility or responsibility based on fault.⁸⁶

C. Characteristics of State Responsibility according ILC and ARSIWA

It is commonplace that the emergence of a state's responsibility is due to the idea in the international sphere that no state can enjoy its rights over the rights of other countries. That is, every state that violates or injures the rights of other countries in order to obtain their rights causes the emergence of state responsibilities that have been regulated in international law. State accountability can also arise from non-performance of an international obligation originating from an international treaty or custom that has been considered a source of international law.

The International Law Commission (ILC) has contributed to developing the law of state responsibility. The International Law Commission (ILC) is a United Nations entity responsible for advancing the progress and a framework of

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⁸⁵Huala Adolf, Aspek-aspek Negara dalam Hukum Internasional, Rajawali, Jakarta, 1991, hlm. 174
⁸⁶Ibid.

international legal norms. An important contribution made by the International Law Commission (ILC) is the creation of the Draft Articles on the Responsibility of States for Internationally Wrongful Acts in 2001. These articles function as a fundamental basis of international law, providing overarching principles that are intended to be flexible and applicable to future advancements and modifications in international law.

Article 1 of the Draft Article on Responsibility of States for Internationally Wrongful Acts (1) establishes the fundamental principle that serves as the basis for the entire article. According to this principle, when a State violates international law, it incurs international responsibility.

An internationally wrongful act committed by a State can involve one or more actions, omissions, or a combination of both. Determining whether an internationally wrongful act has occurred depends on two factors: firstly, the obligations that are alleged to have been breached, and secondly, the contextual conditions within which such an act takes place. And to simplify the meaning of this article is that an act that violates an obligation to an agreement that concerns the interests of a state.⁸⁷

Due to the state's participation in the international community, all states possess a legal stake in safeguarding fundamental rights and fulfilling essential obligations. These obligations encompass prohibiting acts of aggression, genocide, and establishing rules for the protection of basic human rights, including safeguards

47

⁸⁷James Crawford, The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries, Cambridge University Press, The Pitt Building, Trumpington St., Cambridge, United Kingdom, 2003, p. 77

against slavery and racial discrimination, as highlighted by the court. Subsequent cases have further reaffirmed this notion.

The implications of a more comprehensive understanding of international responsibility must be appropriately reflected in the articles. Although these articles encompass conventional scenarios of bilateral responsibility, they extend beyond such situations and encompass a broader scope. 88 The fact that under Article 1 every intentionally wrongful act of a State entails the international responsibility of that State, does not mean that others States may not also be held responsible for the conduct in question, or for injury caused result. Nonetheless, the basic principle of international law is that each State is responsible for its own conduct in respect of its own international obligations. 89

Article 1 as the fundamental principle that explained every internationally wrongful act of a state will entail its international responsibility. However, Article 2 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts 2001 provides further clarification on the specific conditions necessary to establish the presence of an internationally wrongful act by a state. This article outlines two key elements: first, the conduct in question must be attributable to the state according to international law, and second, the conduct must constitute a violation of an international legal obligation that is applicable to that state at the given time for responsibility to be attributed to the state.

88 Ibid.

⁸⁹Ibid.

D. Types of State Responsibilities

According to F. Sugeng Istanto, The responsibilities of a state are divided into several types, namely:⁹⁰

1) Delictual Liability

Delictual liability or commonly known as responsibility for unlawful acts, typically arises when a state acts negligently or makes mistakes against foreigners, whether the foreigner is within its own territory or in the territory of another state. Matters that can result in the emergence of state responsibility for acts against the law or delictual liability are as follows:

a. Exploration of outer space

Every state that launches a satellite bears responsibility for any potential (in this case, damages) caused by its satellite to objects or entities in the territory of another state. Absolute liability is the principle applied to the activities of space exploration, and its legal provisions are regulated in the Liability Convention of 1972.

b. Exploration of Nuclear

Similar to previous satellite launching activities, the state is consistently and necessarily for any damages and losses resulting from nuclear exploration activities. The principle of absolute responsibility is also applied to nuclear exploration endeavors. The rationale for employing the principle of absolute responsibility in this domain is due to the extremely high-risk nature of nuclear exploration, as with space exploration activities.

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⁹⁰F. Soegeng Istanto, Hukum Internasional, UAJ Yogyakarta, Yogyakarta, 1994, hlm.

c. Cross-border Activities

Every state is responsible for the obligation to regulate and supervise every activity carried out within its territory. A nation bears responsibility for any activity that crosses its national borders and causes harm to other countries, encompassing both public and civil losses. If the incurred losses fall under the classification of harmful losses, then the principle of absolute responsibility is invoked to hold the state accountable. On the other hand, if a state's activities cause ordinary losses, then the state's responsibility depends on the negligence or intent of the action.

2) Contractual Liability

Contractual liability is the responsibility of a state that arises because that state violates agreements or contracts that have been made and agreed with other states, where violations of these agreements inevitably result in losses to other states. Breaching agreements with other countries will inevitably harm the involved parties. Consequently, such violations impose the obligation on a state to be accountable for compensation. The exact amount of compensation resulting from the breach can be determined through negotiations or adjudication by bodies like the International Court of Justice or Arbitration Courts.

3) Responsibility for Concessions

The Calvo Clause refers to contractual liability agreements established by the host state where a foreign corporation operates. Under this clause, the corporation is required to refrain from seeking support or intervention from its home government regarding any issues arising from the concession agreement between the host state and the foreign corporation. In cases involving the Calvo Clause, if a

dispute arises between the host state and the foreign corporation, the matter must be brought before the national court of the host state and be subject to its national laws, without any further interference or assistance from the corporation's home state. The concession itself entails the granting of rights, permits, or land by the government, company, or individual to a foreign individual or institution.

4) Responsibility for Expropriation

Expropriation is an act of taking other people's assets by paying compensation for the losses incurred. Responsibility for expropriation is the revocation of individual property rights for the public interest accompanied by the provision of compensation.

5) Responsibility for the State's debt

If a state fails to carry out and meet its obligations as stipulated in contracts or debt agreements, it becomes inherently liable to fulfill its responsibilities by paying debts or compensating for losses.

6) Responsibility for international crimes

International crime refers to actions committed against the law in the international sphere which is a violation of an international obligation towards international fundamentals where the violation is also recognized by the international community as a crime which has violated international law where it creates an obligation to be responsible.

In accordance with international law, when a state commits an error as described, it is obligated to provide reparations for both tangible and intangible

damages resulting from its actions as described in Article 31 that establishes the overarching principle that the state held accountable is legally and automatically obligated to provide "complete" redress for any harm incurred, encompassing both tangible and intangible losses resulting from the wrongful act. ⁹¹ Article 32 further stipulates that the responsible state cannot use its own laws as a justification for failing to fulfill its obligation to provide reparations. ⁹² Prior to delving into a more detailed examination of reparation, it is necessary to understand the definition of reparation itself, as outlined in The Black's Law Dictionary, it defines reparation as The action to provide reparation for an error or compensation for the losses caused by a state that violates the subjective rights of another state and deems such action a violation of an international obligation. ⁹³ Meanwhile, according to Ian Bownlie, reparation is an action that involves payment of compensation or restitution, an apology, punishment for those responsible, and serves as a measure to prevent the recurrence of a violation. ⁹⁴

In the draft articles of the International Law Commission (ARSIWA 2001), specifically Article 34, the various forms and types of reparation are outlined, which encompass restitution, compensation, and satisfaction.⁹⁵

⁹¹The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act. (Draft articles on Responsibility of State for Internationally Wrongful Acts, ILC, November 2001, Art. 31)

⁹²The responsible State may not rely on the provisions of its internal law as justification for failure to comply with its obligation under this part. (Draft articles on Responsibility of State for Internationally Wrongful Acts, ILC, November 2001, Art. 32)

⁹³Bryan A Garner, 1999, Black's Law Dictionary, Seventh Edition, St. Paul Minn: West Group, 2009, p. 1301

 ⁹⁴Ian Brownlie, Principle of Public International Law, Clarendon Pers, Oxford, 1979, hlm.
 431 dalam Huala Adolf, Aspek-Aspek Hukum Internasional, Rajawali, Jakarta, 1991, hlm.

⁹⁵Full reparation for the injury caused by the internationally wrongful act shall take the form of restitution, compensation, and satisfaction, either singly or in combination... (Draft articles on Responsibility of State for Internationally Wrongful Acts, ILC,November 2001, Art. 34)

a. Restitution

Restitution is the first form of reparation which is defined as reestablishing by Article 35. The precise concept of restitution has been ambiguous, with many rulings referring to the restoration of the status quo ante, while others pertain to the hypothetical scenario that would have unfolded had the wrongful act not occurred. Article 35 of the law adopts a more limited interpretation, which means that any repercussions that occur after the breach will be resolved through compensation, which may include interest.

b. Compensation

In cases where restitution is not furnished or fails to entirely mitigate the repercussions of the harm, the state accountable is obliged to provide compensation for any quantifiable financial harm, such as loss of profits, arising from the wrongful act inflicted upon the injured state or its citizens.⁹⁶

c. Satisfaction

Satisfaction is one form of reparation that involves redressing an international legal subject's actions that violate the honor of another state. Satisfaction can be achieved through diplomatic negotiations and is adequately demonstrated through a formal apology or assurance that the offending actions will not recur.⁹⁷ Satisfaction may consist of an acknowledgment of the breach, an expression of regret or apology or "another appropriate modality" that is neither disproportionate nor "humiliating" to the responsible state. Like restitution and compensation,

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⁹⁷F. Sugeng Istanto, loc.cit.

satisfaction is intended to restore the injured state to its pre-injury status, as though the wrong had not occurred, but it focuses on the wrongful conduct of the responsible state so as to provide a remedy for injuries that are not financially accessible, such as moral or legal injury. 98 The distinction between satisfaction as a remedy and satisfaction as a form of disapproval or sanction has not always been well-defined. According to the commentary, satisfaction is not considered a standard form of reparation. Therefore, Article 37 specifies that the responsible state is obligated to provide satisfaction for the incurred injury only when it cannot be fully remedied through restitution or compensation. Criticism of satisfaction as a remedy appears to stem from its historical misuse to extract concessions from weaker states, rather than a lack of state practice. 99

IV. Aviation Safety Responsibilities

Along with the times that affect the use of transportation services needs that continue to increase, it also requires responsibility for flight safety where safety is the main factor that must be considered by all parties without exception. Aviation safety is a condition where the requirements are maintained and guaranteed in the utilization of both airspace, aircraft, air bodies, air transportation, flight navigation, and existing facilities. Aviation safety is a priority matter that requires supervision, so to realize flight safety when the flight takes place, the support of the parties involved is needed, both directly and indirectly.

⁹⁸Dinah Shelton, *Rightings Wrong: Reparations in the Articles on State Responsibility*, Cambridge University PressThe American Journal of International Law, Vol. 96, No. 4, Oct 2002, p. 848

⁹⁹Ibid.

The following are some of the parties that have responsibility for passenger safety in aircraft operations:

A. State Responsibility for Aviation Safety

The ideology of a state becomes the basis of a state in carrying out air transportation activities. Air transportation activities will be carried out entirely by the government such as the Civil Aviation Administration of China (CAAC) in China because China is a state that adheres to socialist ideology. Apart from China, the government became the full administrator who held power in the Soviet Union, and Cuba. For countries that adhere to a liberal ideology such as the United States, there are no government-owned flights and they are entirely managed by the private sector. Meanwhile, for countries that adhere to a combined ideology, the implementation of air transportation, including its support, is carried out by the government together with the private sector, for example Indonesia, Canada, the United Kingdom and the Netherlands.

The following are some of the state's responsibilities as a state regarding aircraft flight safety: 100

- a. Responsible for ensuring the safety of the transportation facilities provided in a condition that meets aviation safety procedures and requirements.
- b. Responsible for carrying out supervision consistently by checking applicable laws and aviation safety regulations.

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Dave Akbarshah Fikarno, *Faktor-faktor penyebab rendahnya keselamatan penerbangan di Indonesia*, Fakultas Ekonomi Universitas Indonesia, Thesis, 2009.

c. Responsible for upholding the law when administrative compliance with regulations is breached, including actions such as certificate revocation.

Meanwhile, the forms of supervision that can be carried out by the government as referred to in point (b) are as follows:¹⁰¹

- a. Carry out regular monitoring of the implementation of air transportation service business activities. From carrying out this monitoring, analysis can be produced which can later be used as evaluation material regarding the presence or absence of violations during air transportation business activities.
- b. If violations occur, corrective actions will be issued up to three times, and
 if the violations continue beyond that point, administrative sanctions will
 be imposed..

The stages of supervision that the government can carry out consist of two stages, namely as follows: 102

- a. Supervision involves the implementation of a certification procedure, which ensures that certification aligns with aviation safety prerequisites.
- b. Supervising the certificate holders in order to ensure their ongoing compliance with the identical aviation safety standards established at the time of their certification.

State's responsibility for aviation safety in international law is regulated in the 1944 Chicago Convention. Annex 6 and Annex 13 are Annexes to the 1944 Chicago

¹⁰¹ *Ibid*.

¹⁰² Ibid.

Convention which regulate state responsibilities in participating in monitoring and investigating aircraft accidents. Whereas in national law there is Law No. 1 of 2009 concerning Aviation where further provisions regarding government responsibilities which include supervision and investigation are regulated in Minister of Transportation Regulation No. PM 93 of 2016 concerning the National Aviation Safety Program and Government Regulation No. 62 of 2013 concerning Transportation Accident Investigations.

B. Carriers Responsibility for Aviation Safety

As a business entity, it is an obligation for airlines to ensure the safety and security of aircraft passengers. This responsibility can be invoked in case the airline commits an error that could jeopardize passengers. Both international and national laws have established regulations governing airlines, recognizing them as both business and legal entities.

The determination of the responsibility of an airline can rely on the relevant provisions, serving as a valuable tool for identifying the accountable parties, attributions, and various types of liability.¹⁰³ The responsibility of the carrier is intricately linked to the principle of responsibility, which typically places the onus of proving the existence of fault on the party in question. These responsibility principles are additionally utilized to establish the carrier's boundaries of accountability.¹⁰⁴

Mohammad Sufi Syalabi, et.al., *Perlindungan Hukum Bagi Pengguna Jasa Transportasi Udara dan Tanggung Jawab Maskapai Penerbangan Terhadap Penumpang yang Dirugikan Akibat Kecelakaan Pesawat*, Diponegoro Law Journal, Vol. 6 No. 1, 2017, hlm. 3

Amad Sudiro, *Tinjauan Hukum Terhadap Prinsip-Prinsip Tanggung Jawab Pengangkut dalam Angkutan Udara*, Era Hukum No. 1 TH. 5, Juli 1998

a. Liability Based on Fault Principle

The basis for this principle of responsibility is that there is a burden of proof where the burden of proof is on the injured party (plaintiff). This principle requires that users of transportation services must be able to prove that losses were caused by the carrier's fault. A claim will be void or not accepted when the plaintiff cannot prove the things that are the basis for the fault being on the part of the carrier.

b. Presumption of Liability Principle

This principle argues that the carrier is considered as a party that is always burdened with responsibility for losses arising from transportation activities without the plaintiff having to prove it first, in the sense that proof is borne by the carrier. The carrier can be released from its obligations if it can prove that it is not at fault for the losses incurred.

c. Strict Liability Principle

The principle of strict responsibility holds the opinion that responsibility is borne by the defendant or in this case the carrier. Regardless of whether there is an error or not, and without having to provide proof, responsibility will always be borne by the carrier. The principle of absolute responsibility views mistakes as something irrelevant to be disputed

The 1999 Montreal Convention stipulates the carrier's responsibility and compensation for passengers. It delineates the carrier's responsibility for passenger safety, addressing accidents resulting in passenger injuries or fatalities, as well as the carrier's responsibility for damage, destruction, or loss of checked baggage,

provided that such incidents occur either onboard the aircraft or during any period within which the checked baggage was in the charge of the carrier.

 a. The responsibility of the carrier for accidents that cause injuries to the death of passengers.

Article 17 paragraph (1) of the 1999 Montreal Convention becomes the legal basis for the responsibility of airlines for aircraft accidents that occur which cause injuries to the death of aircraft passengers. This article regulates matters that are indeed the responsibility of the airline or carrier for the safety of passengers. Article 17 paragraph (1) of the 1999 Montreal Convention reads:

"The carrier is liable for damage sustained in case of death or bodily injury of a passenger upon condition only that the accident which caused the death or injury took place on board the aircraft or in the course of any of the operations of embarking or disembarking"

From Article 17 paragraph (1) of the 1999 Montreal Convention above, it can be concluded that airlines have responsibility for passengers if:¹⁰⁵

- There is an event/activity
- The incident is an incident that can caused an injuries or resulting death of passengers
- Is an activity when the passenger is on board or when it's in a process of loading/unloading goods

Rahmad Ramadhan Nur, Analisis Yuridis Tanggung Jawab Pengangkut Terhadap Kerugian Yang Dialami Pengguna Jasa Angkutan Udara Internasional Berdasarkan Konvensi Montreal 1999 Di Indonesia, JOM Fakultas Hukum Universitas Riau, Vol IV Ed. I, 2019, Hlm. 7

The amount of compensation for these incidents is regulated in Article 21 of the 1999 Montreal Convention. Article 21 of the Montreal Convention mandates uncompromising carrier liability up to 100,000 Special Drawing Rights (SDR), roughly equivalent to \$135,000, with the sole acceptable defense being contributory negligence. For claims surpassing 100,000 Special Drawing Rights (SDR), the carrier can argue that the damage didn't result from its negligence or wrongful actions, or that the incident arose from circumstances beyond the carrier's control. This article signifies a significant shift in the potential compensation available to plaintiffs, augmenting the prospect of passengers receiving sufficient compensation for serious injuries or fatalities resulting from accidents. 106

Unless the carrier can substantiate the plaintiff's involvement or direct responsibility for the disaster, there is a fixed compensation maximum of \$135,000. Once the barrier is surpassed, the plaintiff has the potential to get an unlimited amount by demonstrating that the accident was caused by the carrier's negligence. This threshold is less stringent in comparison to the need to demonstrate that the carrier has a conscious intention to cause the accident. As a result, this guarantees that plaintiffs will have an improved likelihood of securing just and equitable recompense for their losses.¹⁰⁷

b. The responsibility of the airline or carrier for damage or loss of passenger baggage.

¹⁰⁷ *Ibid*.

Jennifer McKay, "The Refinement of the Warsaw System; Why the 1999 Montreal Convention Represents the Best Hope for Uniformity." Case Western Reserve Journal of International Law, Vol 34:72, 2002, p. 85-86

The responsibility of the airline or carrier arises in the event of damage, destruction or loss of checked luggage. Damaged, destroyed and lost items that have not been inspected are also the responsibility of the airline if the damage is indeed caused by the airline.

C. Responsibility of Manufacturing Companies for Aviation Safety

Aircraft manufacturing companies are obligated to perform a variety of testing procedures, including design evaluations, training exercises, and design development processes, in order to actively minimize and decrease the likelihood of aircraft accidents. These processes continue until they can definitively ensure that the aircraft is in an operational and safe condition for flight.

In addition to the aforementioned responsibilities, manufacturing companies are also compelled to undergo a certification process. In fact, there exists an independent government agency entrusted with overseeing this certification procedure. In the case of Boeing, since its production facility is situated in the United States, the Federal Aviation Administration (FAA), a civil aviation regulatory body in the United States, assumes the role of managing the certification process. Nevertheless, it's important to note that the certification process remains a shared responsibility between the manufacturing company and the regulatory agency. Essentially, the manufacturing company is the entity that possesses comprehensive knowledge of all aspects of the aircraft production process,

including considerations and perspectives related to aviation safety during production. 108

The manufacturing company bears a responsibility known as Product Liability (PL), which becomes applicable when an aircraft is involved in an accident resulting in losses. In the event of an accident, the Federal Aviation Administration can be absolved of liability because the ultimate responsibility for maintaining the highest levels of aviation safety lies with the manufacturing company. Consequently, this places the onus on the manufacturing company to deliver excellent product outcomes and ensure the aircraft's quality in terms of design, production, and, if design modifications are made, to take full responsibility for these aspects. 109

D. Pilot Responsibility for Aviation Safety

It only takes a relatively short amount of time airplanes are still the most popular means of transportation for most Indonesian people today. The reason is, airplanes can be an alternative form of transportation as a means of transport that doesn't take a long time, even for trips abroad. However, regardless of the short time an aircraft can take, safety and security in flight are still a top priority in flight operations. The safety aspect itself can be seen from whether or not an aircraft meets the existing safety requirements for operating aircraft as well as the safety aspect as

62

Hendarmin Djarab, Proses Sertifikasi Pesawat Terbang, Jurnal Hukum & Pembangunan, Vol 18, No 2, 2017, hlm. 129
 Ibid, hlm. 132

a preventive measure in preventing the possibility of an accident occurring in flight.¹¹⁰

In an aviation activity, there are at least three parties that can be held accountable when an accident occurs, namely the airport management, the airline, and the flight crew¹¹¹

Annex 9 of the 1944 Chicago Convention establishes the legal framework for international aviation laws. It delineates the specific duties and obligations of those involved in aircraft operation. Annex 9 of the 1944 Chicago Convention classifies these individuals into two distinct categories: cabin aircraft crew and flight deck crew. In Indonesia, the preferred terms are "flight personnel" or "licensed personnel" to describe those who have certain activities and obligations in the aviation industry. On the other hand, the phrase "aircraft personnel" is used to refer specifically to the flight crew.¹¹²

According to Diederiks Verschoor in his book "An Introduction to Air Law", flight personnel are categorized into two groups: ground personnel and flying personnel. Ground personnel are individuals who remain involved in air transportation activities on the ground, such as airport personnel, meteorological officers, and security officers. This is in contrast to flying personnel who perform their duties during the actual flight, including the pilot, co-pilot, and flight crew.¹¹³

 112 Pasal 1 ayat 12 Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan

Alan Pradigo Setyo Budi, et.al, Pertanggungjawaban Hukum Pilot dalam Insiden Kecelakaan Pesawat Udara Akibat Kelalaian (Pilot Error), Diponegoro Law Journal, Vol. 8 No. 4, 2019, hlm. 2432

¹¹¹ Ibid.

¹¹³ Diederiks Verschoor, *An Introduction to Air Law*, Kluwer Law International, 2006, hlm. 33, as quoted by Neni Ruhaeni dan Imam Sunendar, *Tanggung Jawab Pilot Dalam Kecelakaan*

The International Civil Aviation Organization categorizes the powers and responsibilities of a pilot as an aircraft captain, namely:¹¹⁴

- a. As the aircraft's captain, the pilot holds the responsibility for the aircraft's state, the well-being of the flight crew, flight planning, and the overall achievement of the flight.
- b. As the aircraft's captain, the pilot possesses the authority to issue directives to both the flight crew and passengers in the event of unexpected situations, particularly if a criminal incident takes place onboard.
- c. in their role as the pilot in command, is granted the power to undertake essential measures to ensure flight safety.
- d. The duties of the pilot as an aircraft captain are primarily administrative, which can include documenting incidents like births and deaths that happen during the flight.
- e. Pilots as aircraft captains are given the right to decide when and in what manner to request assistance in search and rescue operations in the event of a transport accident.

In addition to the above, Annex 6 of the 1944 Chicago Convention also contains the meaning and responsibilities of a pilot-in-command. The term Pilot-in-command "Pilot-in-command" inherently indicates a pilot selected by the operator or owner to hold command authority and carry the responsibility for

Pengangkutan Udara Menurut Perspektif Pengangkutan Udara dan Hukum Pidana, Jurnal Hukum Universitas Islam Bandung, hlm. 286

¹¹⁴ For details, see *Ibid*, p. 287

guaranteeing the safety of the flight. The following are the things that are borne by the pilot-in-command:¹¹⁵

- a. The pilot-in-command shall be responsible for the operation, safety and security of the airplane and the safety of all crew members, passengers and cargo on board.
- b. The pilot-in-command is responsible for making sure that a flight will not be commenced if any flight crew member is unable to perform their duties due to reasons like injury, illness, fatigue, or the influence of psychoactive substances. Additionally, the flight should not proceed beyond the nearest suitable aerodrome if the capacity of the flight crew members to perform their functions is significantly diminished due to factors such as fatigue, illness, or oxygen deprivation.
- c. The pilot-in-command bears the duty of promptly informing the nearest appropriate authority, using the fastest means available, in the event of an airplane accident leading to severe injury, fatalities, substantial damage to the aircraft, or property.

V. State Responsibility in Islamic Perspective

In Islamic view, the responsibility of the state revolves around the concept of governance and leadership aligned with Islamic principles and teachings. Islamic governance prioritizes justice, accountability, and the welfare of the people.

As described by Ibrahim Ismail in The Law & You: Election (2013The term "governance" derives from the word "govern" and contains a range of

65

Annex 6 to the Convention of International Civil Aviation, *Operation of Aircraft Part II International General Aviation*, 10th Edition, July 2018, p. 2.2-10

interpretations. Essentially, it pertains to the act of exerting control over policies and the management of governmental affairs. Furthermore, it refers to the method and process of governing, which includes the authority and activities carried out. Technically, governance encompasses the process of making decisions and carrying out or not carrying out those decisions. Legally, it refers to the governance and operation of an organization within the boundaries of legal structures.¹¹⁶

It is noted that the principles are Islamic compliance as the Holy Quran describes good governance as the law of justice, a just and principled order and compliance of rights and responsibilities in society. The Holy Qur'an declares:

"You who have believed, be persistently standing firm for Allah, witnesses in justice, and do not let the hatred of a people prevent you from being just. Be; that is nearer to righteousness. And fear Allah; indeed, Allah is Acquainted with what you do." 117

The Islamic view of good governance is qualitative and not merely mechanical.

The principal aspects of good governance can be summarized into seven core principles: 118

- a. Mutual Consultation (As-Shura)
- b. Leadership (Khilafah)
- c. Accountability (Hisab)
- d. Transparency
- e. Justice (Adl)

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¹¹⁶ Mohammad Ismail, *Good Governance According to Islamic Perspective*, Fiat Justisia Jurnal Ilmu Hukum, Vol. 11 No, 3, Juli-September 2017, p. 201

¹¹⁷ QS. Al-Maidah: 8

¹¹⁸ Mohammad Ismail, op.cit, p. 216

- f. Equality
- g. Promote good and prevent evil (Al-Amr Bil Maruf wa Nahi al-Munkar)

CHAPTER III

THE STATE RESPONSIBILITY FOR LION AIR JT610 PLANE CRASH DUE TO THE LATEST DEVELOPMENTS OF MANEUVERING CHARACTERISTICS AUGMENTATION SYSTEM (MCAS)

In this chapter, the author discusses in depth the answers to the main issues of the topic presented, namely state responsibility for the safety of civil aviation from the perspective of international aviation law, as well as Indonesia's responsibility that can be fulfilled for the Lion Air JT 610 aircraft accident, which was caused by the absence of pilot training regarding the latest technological developments specifically the development of the Maneuvering Characteristics Augmentation System (MCAS). The author uses the Article on Responsibility of States for Internationally Wrongful Acts 2001 as a relevant source to answer questions regarding state responsibility and international conventions governing aviation law, which are The 1929 Warsaw Convention, The 1999 Montreal Convention, and The Convention on International Civil Aviation, as well as the national regulation Law Number 1 of 2009 concerning Aviation to answer whether a state can be responsible for an airplane accident that occurred and what form this responsibility takes.

The main aspects supporting this thesis include the overall notion of state responsibility in international law, the perspective of state responsibility within the domain of international aviation law, and Indonesia's accountability for the Lion Air JT 610 plane crash, which resulted from the absence of pilot training concerning the latest technological advancements, particularly the development of the Maneuvering Characteristics Augmentation System (MCAS).

I. The State's Responsibility for The Safety of Civil Aviation in The Perspective of International Aviation Law

A. Definition of State Responsibility

According to the Oxford English Dictionary, responsibility means the state or fact of being in charge of or having a duty towards a person or thing; obligation. This sense of responsibility is ingrained in human consciousness, whether the behavior is intentional or unintentional, making it a natural aspect of human existence that every individual is burdened with. This innate responsibility requires individuals to fulfill their obligations resulting from their actions and is a hallmark of civilized humans who take responsibility for their actions, which may cause harm and impact the rights and justice of others. 119 Responsibility entails the obligation to adhere to the law, and it requires rectifying of any damage caused.

Hans Kelsen, the pioneer of pure legal theory, introduced the concept of responsibility in his book, which strongly correlates with obligations (although not identical). Obligations emerge due to laws designed to regulate and impose responsibilities on each legal subject. Consequently, every legal subject burdened with obligations must fulfill them as mandated by the relevant legal rules. Failure to carry out these obligations results in responsibilities and sanctions. Each legal subject must face sanctions, coercive actions on the applicable legal rules, to ensure the orderly fulfillment of obligations. According to Hans, the legal subject of the

¹¹⁹Julista Mustamu, *Pertanggungjawaban Hukum Pemerintah (Kajian Tentang Ruang Lingkup Dan Hubungan Dengan Diskresi)*, Jurnal Sasi, Vol. 20 No. 2, 2014, hlm. 22 (accessed online, June 13th 2023 10.45 am)

sanction can be said to be legally "responsible" for their violations and negligence. 120

Responsibility is a fundamental principle in law, closely intertwined with contemporary notions of a legal system and its governing norms. This term stems from the concept of 'responding,' explicitly referring to the obligation an individual or entity owes to others when they violate a legal duty.¹²¹ To put it differently, responsibility can be defined as addressing the violation of legal duties. The term 'responding' implies the legal repercussions resulting from such breaches. Therefore, responsibility signifies the threshold at which the law is considered 'effective,' making it binding and, as a result, a matter of legality rather than mere morality. 122 State responsibility is a longstanding concept within international law, originating from situations where a state wrongs another. Over time, it has evolved into a widely recognized general principle of international law.¹²³

B. The State Responsibility in International Law and National Law

The International Law Commission (ILC) has made significant contributions to the field of state responsibility and established a framework for safeguarding the international community's interests as a whole. State responsibility was among the

¹²⁰ Hans Kelsen, *Pure Theory of Law*, Terjemahan, Raisul Muttaqien, Teori Hukum Murni: Dasar-Dasar Ilmu Hukum Normatif, Cetakan Keenam, Bandung: Penerbit Nusa Media, 2008, hlm. 136.

¹²¹ Robert Kolb, The International Law of State Responsibility, Edward Elgar Publishing, 2017, p.1.

122 *Ibid*.

¹²³ Ian Brownlie, System of the Law of Nations: State Responsibility: Part I, 1983, Quoted by Danwood Mzikenge Chirwa, The Doctrine of State Responsibility As a Potential Means of Holding Private Actors Accountable for Human Rights, Melbourne Journal of International Law, Vol. 5, 2004, p.

initial fourteen areas identified by the ILC for "codification and progressive development." Formulating relevant legal instruments in this area has spanned several decades, resulting in multiple documents, with Resolution 56/83 on the International Responsibility of States for Internationally Wrongful Acts (referred to as Resolution 56/83) being the primary one. This resolution was adopted by the UN General Assembly in 2001.¹²⁴

The concept of a state's international responsibility arises due to the inherent limitation on external state sovereignty. It pertains to establishing accountability at the international level when a state engages in an internationally wrongful act, specifically by violating an obligation stipulated in a treaty while causing harm or detriment to another state. The international responsibility of a state reflects the recognition that state sovereignty has bounds in the context of ensuring accountability for wrongful actions committed on the international stage. 125

The specific understanding of state responsibility can be described as the result of normative decisions taken at three levels. 126

1) The first, initial, and most fundamental decision revolves around the concept of responsibility. Since the significant shift in the early 1960s, responsibility has been established as the central element in discussions regarding wrongdoing. It is a broad concept positioned, "between illegality and liability," as described by Philip Allott. It encompasses, "the general

¹²⁴ Milka Dimitrovska, The Concept of International Responsibility of State in The International Public Law System, Journal of Liberty and International Affairs, Vol. 1 No.2, 2015, p.3 https://e-jlia.com/papers/v2_1.pdf 125 lbid.

¹²⁶Christine Chinkin, and Freya Baetens, Sovereignty, Statehood and State Responsibility, Cambridge University Press, 2015.

conditions under international law for the State to be considered responsible for wrongful actions or omissions, and the legal consequences that ensue." as stated by the International Law Commission (ILC). The concept's breadth of application is remarkably ambitious, and it also assumes that the international law of responsibility should be unified, preceding principled distinctions based on sources.

- 2) Responsibility represents the second level of normative choices, involving both the substantive interpretation of 'responsibility' and the International Law Commission's (ILC) distinction between general aspects of the international framework (covered in the ILC's text) and specific rules. Among these guiding principles, the following are particularly noteworthy:
 - a. International responsibility is an objective concept (generally not dependent on fault or damage) and autonomous from domestic law.
 Responsibility arises from the actions or inactions of individuals/entities acting on behalf of a State.
 - b. As a broad notion, responsibility includes various ancillary conduct (particularly involvement in another state's unlawful actions). It also encompasses a restricted set of circumstances that prevent the wrongful nature of conduct.
 - c. The occurrence of wrongful behavior leads to overarching obligations of stopping the conduct and providing compensation (termed as 'the new legal relations resulting from the commission of an internationally

wrongful act') to restore legality and reinstate the affected situation following the breach. Any endeavor to enforce these obligations must adhere to specific general requirements governing the application of responsibility (such as establishing a valid 'title' to respond and providing prior notification, among others).

3) The third level of normative decisions consists of specific rules that elaborate on these guiding principles. The precise provisions in the ILC's text usually manifest this level, giving practical meaning to the principles established at the second level. This is achieved, for instance, by enumerating grounds of attribution and circumstances that preclude wrongfulness, formulating various types of reparation, delineating the potential 'titles' that allow a state to invoke another state's responsibility, and so forth. Many of these specific rules existed long before the ILC began its work on responsibility, but we now comprehend their relevance through the ILC's framework.

The development of human consciousness indicates a tendency towards actions influenced by personal or group interests. As a result, international law is limited to functioning through coercion to establish legal commitments and associations. 127

The connection between the international responsibilities of states and the essence of international law and the global legal order is intricate. The global legal system serves as a framework for enforcing functional rules that govern the conduct of international actors. International responsibility links domestic law, state

¹²⁷Milka Dimitrovska, Op.cit

sovereignty within national borders, and the practical application of international principles, primarily through coercion at the highest hierarchical level. While international responsibility is crucial for the progress of the international legal system, it is not the ultimate goal itself. The central concern lies in the enforceability of international law, and the rules governing international responsibility form the foundation for its establishment. These rules play a pivotal role, both in theory and norms, as well as in concrete and practical terms on a case-by-case basis. 128

State responsibility entails legal consequences for a state or any international law subject, such as the duty to provide reparation to the person or entity that has suffered loss due to the violation.¹²⁹

C. The State Responsibility for Aviation Safety in the Perspective of International and National Law

The actors involved in the aviation industry must possess a profound understanding of the significant responsibility associated with their activities. Numerous international conventions serve as the foundation for the advancement of this industry, such as the 1944 Chicago Convention and its 18 annexes, along with the regulatory guidelines established by the International Civil Aviation Organization (ICAO). Additionally, the 1929 Warsaw Convention, complemented

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¹²⁸Milka Dimitrovska, Op.cit,

¹²⁹Tatyana Eatwell, State Responsibility for Human Rights Violations Committed in the State's Territory by Armed Non-Stat Actors, Academy Briefing Universite De Geneve, 2018, p. 10

by the 1955 Hague Protocol and further supplemented by the 1966 Montreal Agreement, played crucial roles in shaping the aviation industry.¹³⁰

Indonesia has adopted the content of the 1944 Chicago Convention into Law No. 1 of 2009 on Aviation. It is widely known that the 1944 Chicago Convention and its 18 Annexes pertain to public law concerning a state's authority to establish aviation regulations within member countries of the convention. These regulations cover various aspects, such as ensuring aircraft airworthiness, granting flight permits, ensuring flight safety, determining aircraft nationality, and setting investigation standards for accidents. Moreover, the 1929 Warsaw Convention, which serves as a foundational framework for the aviation industry, is a private law that governs provisions regarding contractual relations between air carriers and passengers. 131

The air transportation activities will be carried out entirely by its government. The ideology of a state becomes the basis of a state in carrying out air transportation activities. For example, the Civil Aviation Administration of China (CAAC) in China because China is a state that adheres to socialist ideology. Not only China but Soviet Union and Cuba's governments became the full administrators who held power in terms of carrying out air transportation activities. For countries that adhere to a liberal ideology such as the United States, there are no government-owned flights, the private sector entirely manages them. Meanwhile, for countries that adhere to mixed ideologies, the implementation of air transportation, including its

¹³¹ *Ibid*.

¹³⁰Hasan Sidik, *Tanggung Jawab Pengangkut Udara Atas Keterlambatan*, Journal of International Studies, Vol. 1, No. 1, November 2016, hlm. 64

support, is carried out by the government and the private sector, for example, in Indonesia, Canada, the United Kingdom, and the Netherlands.¹³²

Ensuring aviation safety is a collective obligation of both directly and indirectly involved parties. Parties who are directly involved, such as flight operators and aircraft crew; parties who are not directly involved, such as the government, which acts as a regulator; and other parties, including the general public, such as airplane passengers. Each entity has its role in achieving aviation safety, and the public is expected to contribute by providing feedback to the government to foster, regulate, and oversee flights. The principles of fairness and equality are upheld in the realm of universal pilot activities. This principle aims to ensure that aviation operations and services are carried out without discrimination, catering to all segments of society and meeting their needs accordingly.¹³³

Not only is a state responsible for issuing various regulations as part of its obligations but it is also tasked with ensuring the safety and security of civil aviation. To achieve this, a state is responsible for carrying out certification and supervision to ensure that air transportation adheres to aviation safety standards, as outlined in the 1944 Chicago Convention.

1) State Responsibility for Aviation in the Perspective of International Law From an international law perspective, the state responsibility for aviation is contained in the 1944 Chicago Convention, with further details specifically written in an Annex of the 1944 Chicago Convention.

 $^{132}\mathrm{H.K.}$ Martono, Sistem Penyelenggaraan dan Pengusahaan Transportasi Udara, Bhuana Ilmu Populer, Jakarta, 2009, hlm. 34

¹³³ Yaddy Supriyadi, *Keselamatan Penerbangan : Teori dan Problematika*, Telaga Ilmu Indonesia, Tangerang, 2012, hlm. 5

The main objective of Annex 6 of the Convention of International Civil Aviation is to discuss the Operation of Aircraft simply to ensure maximum safety and efficiency in international air transport by establishing standardized procedures for operating an aircraft.¹³⁴ The aim of Annex 6 is to enhance the safety of international air navigation by outlining guidelines for safe operational practices. Additionally, it seeks to promote the efficiency of international air navigation by encouraging ICAO's contracting states to facilitate the passage of foreign commercial aircraft that adhere to airplane safety standards.

Annex 6 of the Convention specifies the obligations of states in overseeing their operators, with a specific emphasis on flight crew. The primary requirement is to establish a system for supervising flight operations to ensure an ongoing level of safety. It mandates the provision of an operations manual for each aircraft type and places the responsibility on each operator to adequately educate all operations personnel about their duties and responsibilities, as well as their relevance to the overall airline operation. Some of the responsibilities of the state in the supervision activities referred to include, for example, Section 2, Chapter 2.3 of Annex 6 concerning the Airplane Performance Operating Limitation. As a form of state supervision over aircraft maintenance, the State Registry's certificating authority can determine an aircraft's operational limitations. This determination includes placards, listings, instrument markings, or combinations thereof, which contain those operating limitations prescribed by the certificating authority of the State of

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¹³⁴ The Convention of International Civil Aviation Annexes 1 to 18, International Civil Aviation Organtization

Registry. These visual presentations shall later be displayed in the aircraft. In addition, in Section 2 of Chapter 2.5 of Annex 6 concerning the Airplane Performance Operating Limitation, the State of Registry is responsible for ensuring the establishment of all the aircraft equipment needed in terms of aircraft communication, navigation, and surveillance equipment.

The 1944 Chicago Convention provides a regulations related to the investigation of aircraft accidents in Article 26 of the 1944 Chicago Convention which states that:

"In the event of an accident to an aircraft of a contracting State occurring in the territory of another contracting State, and involving death or serious injury, or indicating serious technical defect in the aircraft or air navigation facilities, the State in which the accident occurs will institute an inquiry into the circumstances of the accident, in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization. The State in which the aircraft is registered shall be given the opportunity to appoint observers to be present at the inquiry and the State holding the inquiry shall communicate the report and findings in the matter to that State."

Furthermore, Annex 13 of the 1944 Chicago Convention regulated the investigation into this airplane crash. Annex 13 outlines the global standards for investigating aircraft accidents and incidents. Chapter 5 of the Annex of the 1944 Chicago Convention deals with the investigation process and assigns the responsibility investigating to the state where the accident or incident occurred. Usually, this state conducts the investigation, but it has the option to delegate some

Annex 6 to the Convention of International Civil Aviation, Operation of Aircraft Part II International General Aviation, 10th Edition, July 2018, p. 2.3-1
 Ibid.

or all of the investigation to another state. If the occurrence takes place outside the territory of any State, the State of Registry of the aircraft is responsible to conduct the investigation. The State of Registry, Operator, Design, and Manufacture, who are involved in the investigation, have the right to designate an accredited representative to participate in the investigation and appoint advisers to take part as well. Furthermore, the state conducting the investigation is authorized to seek assistance from the most qualified technical experts available to help with the investigation.¹³⁷

As written in Annex 13, the state conducting the investigation is free to conduct the investigation and has unrestricted authority. The responsibilities of the state that is conducting the investigation include: 138

- a) Collecting, recording, and analyzing all relevant information about the accident
- b) Protecting the accident investigation record
- c) Providing advice and recommendations regarding safety when necessary
- d) Determining the causes and/or contributing factors to the accident
- e) Completing the final report

As for issuing the final report, the state that conduct the investigation should send a copy of the final report draft to the following States, inviting their significant and substantiated comments on the report as soon as possible:¹³⁹

¹³⁹ *Ibid.* p. 6-1

79

An Analysis in the Light of Recent Air Crashes of Roeing 737 MAX Aircraft p. 153

An Analysis in the Light of Recent Air Crashes of Boeing 737 MAX Aircraft, p. 153

138 Annex 13 to the Convention of International Civil Aviation, Aircraft Accident and Incident Investigation, 11th Edition, July 2016, p. 5-2

- a) The State that instituted the investigation
- b) The state of Registry
- c) The state of the Operator
- d) The State of Manufacturer
- e) The State of Designs
- f) Any State that participated in the investigation as per chapter 5 of Annex 13

In case the state that conducts the investigation does not receive any comments from all the relevant states mentioned above within 60 days from the date of the initial transmittal letter, the final report will be released unless the concerned states mutually agree on an extension of this timeframe.¹⁴⁰

Chapter 5 of Annex 13 of the 1944 Chicago Convention also includes provisions regarding the investigator-in-charge, flight recorders, autopsy examination, coordination with judicial authorities, informing aviation securities authorities, disclosure of records, and re-opening of an investigation.

Because Lion Air JT 610 plane crashed into the Java Sea which is still included in Indonesian territory, Indonesia has the right to investigate. Indonesia, as the state where the aircraft is registered and the location where the accident occurred, has the authority to designate observers to participate in the investigation.

80

¹⁴⁰ *Ibid*.

2) State Responsibility for Aviation in National Law

According to Article 308 paragraphs (1) and (2) of Law Number 1 of 2009 concerning aviation, the Minister of Transportation, as a structure of the Indonesian government, is responsible for aviation safety by establishing a state safety program. The state safety program is stated in Article 308 and elaborated upon in Article 309 paragraph (1). The following is a national aviation safety program, which consists of:

- a. Aviation safety regulations
- b. Objectives of aviation safety
- c. Aviation safety reporting system
- d. Safety data analysis and exchange
- e. Accident and incident investigation
- f. Safety promotion
- g. Safety oversight (supervision)
- h. Law enforcement

As in point B, the national aviation safety program's targets include aviation safety performance indicators, measurements of aviation safety achievements, safety performance targets, and acceptable levels of aviation safety. The determination of aviation safety is part of the responsibility of the Directorate General of Civil Aviation, which later targets and results in achieving aviation safety performance for the public.¹⁴³

¹⁴¹Pasal 308 ayat (1) dan (2) Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan

¹⁴²Pasal 309 ayat (1) Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan

¹⁴³Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 93 Tahun 2016 tentang Program Keselamatan Penerbangan Nasional, butir 3.1.2

Furthermore, the aviation safety reporting system listed in point C is one of the facilities used to provide information regarding aviation safety performance to the highest position. The flight safety report database source include Flight Inspector Supervision Reports, Accident or Serious Incident Reports, Safety Management System (SMS) Reports, and voluntary reports. The database from those reports can be used as a comprehensive and in-depth analysis to compile and update the related laws and regulations.¹⁴⁴

The state's next responsibility is supervision and conducting investigations when accidents occur in aviation activities. Authorities carry out supervision to ensure that aviation service providers implement aviation safety regulations according to the existing standards, which aim to ensure the safety of the parties during flight activities. The supervision itself, according to Earl P. Strong, in his book entitled Basic Management, hecking and correcting essential matters in a company so that when the implementation occurs, nothing deviates from the plan.¹⁴⁵

The air transportation has increasingly become a transportation that can support people's mobility quickly and effectively. Apart from that, air transportation also plays a role in supporting effectiveness and efficiency in other sectors as well as being one of the drivers of the dynamics of national development in underdeveloped regions.¹⁴⁶

¹⁴⁴ *Ibid.* butir 3.1.3

¹⁴⁵Earl P. Strong, *Manajemen Dasar, Pengertian, dan Masalah*, Penerbit Bumi Aksara, Jakarta, 2001, hlm. 241

¹⁴⁶Makswel Y. Tabaru, et.al, Fungsi Pengawasan Terhadap Keselamatan Penerbangan Bandara Udara (Studi di Bandara Udara Kuabang Kao. Kab. Halmahera Utara), Jurnal Administrasi Publik, Vol. 3 No. 038, 2016, hlm. 8

Because aviation activities affect many things, as explained above, supervision is the main subject in aviation activities to prevent fraud and deviation. Authorities supervise to ensure that the implementation aligns with the policies set for achieving an effective and efficient flight function.¹⁴⁷

The National Aviation Safety Supervision is a function carried out by the Directorate General of Civil Aviation to ensure that standards, procedures, and regulations related to aviation activities comply. Aviation safety supervision activities are ongoing supervision of every aviation service provider and other stakeholders for compliance with aviation safety regulations, whether they are by the existing standards, and ensuring there is no diversion for personal gain.

The supervision written in Article 312 paragraph (2) of Law No. 1 of 2009 concerning Aviation involves of audits, inspections, observations, and monitoring. The oversight of national aviation safety is one of the activities that is the responsibility of the flight inspector. Aviation inspectors are personnel whom officials fully authorize to supervise the safety, security, and service of aviation activities.

Ministerial Regulation Number PM 93 of 2016 concerning the National Aviation Safety Program go into more depth relating the form of supervision that has been explained previously on Law No. 1 of 2009 concerning Aviation:¹⁴⁸

a. Audits

¹⁴⁷ ibid.

¹⁴⁸Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 93 Tahun 2016 tentang Program Keselamatan Penerbangan Nasional, Bab V Jaminan Keselamatan Penerbangan Nasional.

Quoting Ministerial Regulation Number PM 93 of 2016 concerning the National Aviation Safety Program point 5.1.2, an audit is:

"...scheduled, systematic and in-depth inspection of procedures, facilities, personnel and documentation of aviation service provider organizations to see compliance with applicable rules and regulations."

The Director General of Civil Aviation conducts an audit of each flight activity. This audit combines both a product and system approach. It comprises scheduled audits, which follow a calendar cycle, and unscheduled audits triggered by specific incidents. These unscheduled audits occur when an inspector is at the location or during mandated program audits. Additionally, The Director General of Civil Aviation conducts risk-based audits to align with the risk profile of aviation service providers, ensuring their effectiveness in managing risks.

The government can the authority to conduct these risk-based audits at any time, with or without prior notification. Such risk-based audits may be initiated as a follow-up to scheduled audits, particularly if there are identified weaknesses in the aviation safety aspects of the airline service provider.

b. Inspection

The inspection activities carried out by the flight inspectors are activities in which simple checks are carried out on whether or not the standards set for a certain object end product are met or not.

c. Observation

Before an inspection, it requires in-depth and detailed observation and tracing of aviation safety on certain parts determined by procedures, facilities, personnel, and the documentation of the aviation service provider organization. The intention behind the above is to allow flight inspectors to assess compliance with applicable rules and regulations. To ensure flight safety, continuous direct observations of aviation service providers can be conducted, which may involve examining products or evaluating systems. Observation of the product is checking the work of individuals, activities, or processes. The purpose of observing the product is to ensure that the product complies with the regulations, implementing instructions, and procedures set by the airline service provider. Furthermore, system observation is carried out as a thorough check of companies and systems to ensure that aviation service providers manage their responsibilities for aviation safety. The government carried out this observation on this activity as one of the responsibilities for national aviation safety.

d. Monitoring

The monitoring is carried out to evaluate the existing data, reports, and information to identify developments in aviation safety performance. The authorities will later use the forms of supervision as a database source for national aviation safety reports, accident or serious incident reports, Safety Management System reports (SMS), and voluntary reports. The results of this supervision report are in the form of Minutes submitted by the flight inspector. The authorities will use these reports as a source for the national aviation safety database, which will then be comprehensively and in-depth used as an aviation safety analysis tool to update relevant legislation and set national aviation safety performance targets. The report also coordinates the flight safety control and oversight function at the Head

¹⁴⁹ *Ibid.* butir 1.3.23

Office of the Directorate General of Civil Aviation and the Airport Authority Office, including the delegation of control and supervision data after permitting activities in the aviation sector. ¹⁵⁰ The state in this case also has the responsibility to conduct investigations into aviation accidents. The air transportation today is one of the choices of many people in supporting their mobility in carrying out activities between countries effectively and efficiently. The rapid developments in the aviation industry are also not spared from the risks that must be faced every day.

With the current technological developments, the possibility of an aircraft accident is still occurring. So, a particular team is needed to give the authority and right to evaluate every aircraft accident. The government has established the National Transportation Safety Committee (KNKT) as a permanent independent institution where the tasks, functions, and authorities are delegated to the National Transportation Safety Committee (KNKT). It has been detailed in the Ministerial Regulation Number PM 93 of 2016 concerning the National Aviation Safety Program.

The duties and functions of the National Transportation Safety Committee (KNKT) are to conduct investigations into transportation accidents that have occurred, including aircraft accidents. The purpose of the investigation into the occurrence of the aircraft accident is not to determine guilt and negligence, not to impose sanctions or penalties, nor to determine who can be held responsible for the aircraft accident that occurred.¹⁵¹ The investigation was carried out to identify the

¹⁵⁰ *Ibid.* butir 3.1.3.5

¹⁵¹ *Ibid.* Bab III Kebijakan dan Tanggung Jawab Keselamatan Penerbangan Nasional butir 3.2.3.1

factors causing the aircraft accident, and the results of the investigation can later be used as material for evaluation, suggestions, and considerations, as well as the input to the President through the Minister of Transportation to improve the procedures and aspects of safety and security in the world of aviation.

The aircraft accident investigation procedures are further regulated in Ministerial Regulation Number PM 74 of 2017 concerning Civil Aviation Safety Regulations Section 830 (Civil Aviation Safety Regulation Part 830) concerning Civil Aircraft Accident and Serious Incident Investigation Procedures. The investigations carried out by the National Transportation Safety Committee (NTSC) include: 152

- a. Collecting, recording, and analyzing the relevant information on accidents that have occurred
- b. Protecting the accident investigation records
- c. Providing advice and recommendations regarding safety when necessary.

 The recommendation regarding safety in question is in the form of a proposal from an accident investigation agency with the aim that with the information obtained from an aircraft accident that occurred during the information, it is hoped that it can prevent an accident or unwanted event without creating accusations or liability for the accident
- d. Determining the causes and/or contributing factors to the accident
- e. Completing the final report

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Peraturan Menteri Nomor PM 74 Tahun 2017 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 830 (Civil Aviation Safety Regulation Part 830) tentang Prosedur Investigasi Kecelakaan dan Kejadian Serius Pesawat Udara Sipil, Bagian 830. D Tata Cara Investigasi

II. Indonesia's Responsibility for the Absence of Pilot Training for the Latest Design Development of the Maneuvering Characteristics Augmentation System (MCAS)

A. Definition of Maneuvering Characteristics Augmentation System (MCAS)

Maneuvering Characteristics Augmentation System (MCAS) was introduced on the 737 MAX 8 to improve the aircraft's longitudinal stability when the flaps are retracted and when flying at high Angles of Attack (AoA). The primary function of MCAS is to direct the nose-down stabilizer and enhance the pitch behavior in specific scenarios, such as steep turns with increased load factors and when flying with flaps up at speeds close to stalling. The activation of MCAS does not require any input from the pilot, and it only operates when the aircraft is in manual control and the flaps are up. The system allows the flight crew to counteract MCAS inputs by using the control column trim switches or activating the stabilizer aisle stand cutout switches.¹⁵³

One of the factors that underlie the Boeing company's decision to take steps in creating the latest MCAS technology is that it is hoped that by creating this latest system, the Boeing company's production aircraft can keep up with technological advances that are still developing today as well as market pressures that also urge Boeing to develop new technology that is more efficient. The Airbus company, which until now is still Boeing's main competitor when it creates aircraft where fuel efficiency is 10-15% higher than the planes created by Boeing, makes the newest

¹⁵³ Sebastian Makó, et.al, *Evaluation on MCAS System*, Acta Avionica Journal, Vol. XXI 40, No. 1, 2019, p.22

output aircraft from Airbus at that time the fastest-selling aircraft in the world. Moreover, Boeing Company felt the urgency to launch a comparable aircraft with increased fuel efficiency. They announced the launch of a new development of the 737 MAX 8 back in 2011.¹⁵⁴

During the MAX 8 development in March 2016, Boeing authorized modifications to MCAS, granting it greater authority to push the aircraft's nose down in specific situations. After implementing these changes, Boeing, which should be obligated to renew the Flight Crew Operations Manual (FCOM) by adding the latest system, promptly removed all mentions of MCAS from their Flight Crew Operations Manual (FCOM). The FAA approved this decision to omit MCAS from the pilot handbook without raising any questions or concerns. This incident highlights Boeing's tendency to conceal critical information from the FAA. 155

Because of the pressure Boeing Company gets from urgently developing a new system, they develop the MCAS on Series B737-MAX 8 production aircraft as quickly and cheaply as possible without prioritizing proper prototype testing. So, assuming the pilot is familiar with the MAX series aircraft, the manufacturer pondered that pilots could fly the MAX without costly and time-consuming training in a simulator. As a result of the combined mistakes mentioned earlier, pilots or flight crews could not effectively mitigate or resolve issues that arose during the flight.

¹⁵⁵ *Ibid*.

¹⁵⁴ Mutsa Malunga, et.al, *Key Lessons from the Boeing 787 MAX 8 Accidents*, Sieso Medal Paper, Institution of Chemical Engineer (IChmE), 2022, p. 24

B. The Parties that are Responsible for Conducting Pilot Training

There are no regulations regarding state responsibility for procuring pilot training in the 1944 Chicago Convention or Law Number 1 of 2009 concerning aviation. According to the two regulations, the state is only responsible for supervising. The supervision in Annex 13 of the 1944 Chicago Convention is the supervision of the surveillance system as well as supervision of in-depth and detailed observations and tracing of aviation safety on certain parts that have been determined by procedures, facilities, and personnel, to the documentation of aviation service provider organizations such as written in Ministerial Regulation Number PM 93 of 2016 concerning the National Aviation Safety Program.

In international law, the notion of internationally wrongful acts is acknowledged, referring to actions by a state that lead to international responsibility. This concept has been universally recognized as a fundamental principle in international law. Article 2 of the Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA) 2001 regulates that it could happen when a state conducts an action attributable to the States under international law, and it constitutes a breach of an international obligation of the states. In general, there is no proof that Indonesia as a state has breached any of its international obligations. Indonesia only supervises aircraft safety and investigates the occurrence of Lion Air JT610 accidents. In addition, Indonesia does not comply with three essential characteristics of a state responsibility put forward by Malcolm N. Shaw in his book International Law. So, Indonesia cannot be held responsible for the Lion Air JT610 accidents.

The obligation to procure pilot training is Boeing's obligation as an aircraft manufacturing company and the FAA's obligation as a civil aviation regulatory agency in the United States. It is the same as issuing aircraft airworthiness certificate, which is Boeing's responsibility as a manufacturing company with FAA approval and supervision.¹⁵⁶

Under the provisions related to the continuing airworthiness of aircraft, Indonesia, as the State of Registry, only has an obligation to inform the State of Design when it first enters an aircraft of the type certified by the latter into its registrar. The State of Design will share essential information with the State of Registry to ensure the aircraft's ongoing airworthiness and safe operation.¹⁵⁷

From all the cumulative information above and due to all the factors that caused the Lion Air JT610 accident, Boeing Company and FAA became the two international legal subjects involved in the accidents. These two legal subjects had done several main actions:¹⁵⁸

1) Boeing, as a manufacturer of the aircraft, did not provide the required document regarding the latest developments of MCAS. This was deemed to be a fatal mistake and made the FAA not aware of the latest changes in the MCAS system.

¹⁵⁶ Khanza Aminatuzzahra, Atip Latipulhayat, Responsibilities of the State and Aircraft Manufacturer on Lion Air JT610 and Ethiopian Airlines ET302 Accidents under International Law, Padjajaran Journal of International Law, Vol. 4, No. 2, June 2020, p. 158

¹⁵⁷ Annex 8 to the Convention of International Civil Aviation, *Airworthiness of Aircraft* 10th Edition, April 2005

¹⁵⁸ Khanza Aminatuzzahra, Atip Latipulhayat, Responsibilities of the State and Aircraft Manufacturer on Lion Air JT610 and Ethiopian Airlines ET302 Accidents under International Law, Padjajaran Journal of International Law, Vol. 4, No. 2, June 2020, p. 158

- 2) Boeing, as manufacturers, assumed the flight crews had understood the system and assumed the 737 MAX Series worked the same as the previous 737 Series, which led Boeing to not provide MCAS system information on the flight crew manuals and training for the flight crews.
- 3) FAA, as the civil aviation regulatory agency, was deemed to lack knowledge of MCAS and did not properly supervise Boeing's ODA.
- C. The parties that can be held responsible for the Lion Air JT 610 airplane accident

In the first place, Indonesia as a state was not a legal subject in this accident, as Indonesia has carried out its obligations and responsibilities as a state. As an aircraft manufacturing company, Boeing did not inform about its newest system in the manual and FAA's lack of knowledge of the newest system from the start. Even before the accident occurred, the airline Lion Air had requested training from Boeing for its pilots to benefit the 737 MAX aircraft. However, the training never occurred after Boeing stated that this was unnecessary.

However, the difficulty of suing Boeing Company within the scope of international law is supported by the absence of regulations regarding aircraft manufacturers. The scope of the 1929 Warsaw Convention and 1999 Montreal Convention as the two conventions that governed the international air carriage law only regulates within the rights and obligations of air carriers and consumers,

¹⁵⁹ Khanza Aminatuzzahra, loc.cit.

¹⁶⁰ Media Indonesia, "Sebelum Kecelakaan, Lion Air Minta Pelatihan dari Boeing" Januari 2020, terdapat pada https://mediaindonesia.com/internasional/283427/sebelum-kecelakaan-lion-air-minta-pelatihan-dari-boeing diakses pada 1 Agustus 2023

including settlement of certain cases and the amount of compensation. The scope concerning air manufacturers is not regulated in these two conventions. Instead, it applies only to similar cases that have occurred in the past, and national law settled these cases.¹⁶¹

In January 2021, The Boeing Company (Boeing) reached an agreement with the Fraud Section and the U.S. Attorney's Office for the Northern District of Texas to settle a criminal charge filed against them. The charge pertained to a conspiracy to deceive the Federal Aviation Administration's Aircraft Evaluation Group (FAA AEG) during their evaluation of Boeing's 737 MAX airplane. According to court documents, Boeing, through two of its 737 MAX Flight Technical Pilots, provided false information to the FAA AEG about the speed range capabilities of the Maneuvering Characteristics Augmentation System (MCAS), a part of the 737 MAX's flight controls. ¹⁶²

On October 21, 2022, the United States District Court for the Northern District of Texas issued a ruling (Order) stating that over a dozen family members and representatives of individuals who lost their lives in the Boeing 737 MAX crashes, namely Lion Air Flight 610 on October 29, 2018, and Ethiopian Airlines Flight 302 on March 10, 2019, were able to demonstrate that they suffered direct and proximate harm due to Boeing's conspiracy to defraud the United States. Boeing acknowledged this conspiracy in the Deferred Prosecution Agreement (DPA)

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¹⁶¹ Khanza Aminatuzzahra, et.al., Op.cit. page 156-157.

The United States Department of Justice, United States V. The Boeing Company, available online https://www.justice.gov/criminal-fraud/case/united-states-v-boeing-company Accessed on August 1st 2023

submitted in this case. As a result, these family members and representatives are considered crime victims under the Crime Victims' Rights Act (CVRA). 163

According to the Deferred Prosecution Agreement (DPA), Boeing must make payments up to more than \$2.5 billion. This includes a criminal monetary penalty of \$243.6 million, compensation of \$1.77 billion to Boeing's 737 MAX airline customers, and the creation of a \$500 million fund to provide compensation to the heirs, relatives, and legal beneficiaries of the 346 passengers who tragically lost their lives in the Boeing 737 MAX crashes involving Lion Air Flight 610 and Ethiopian Airlines Flight 302.¹⁶⁴

In addition, Lion Air, as an airline, is also responsible for the accident on the Lion Air JT 610 aircraft. Those who were responsible for the accident were the airlines, as stipulated in the 1999 Montreal Convention as the legal basis for international legal regulations and the Act. Number 1 of 2009 concerning flights and Regulation of the Minister of Transportation Number PM 77 of 2011 concerning the Responsibilities of Air Transport Carriers as Indonesian national law.

In accordance with Article 141 of Law Number 1 of 2009 related to Aviation, the airlines bear responsibility for missing passengers, experienced death, permanent disability, or injuries resulting from incidents that occur during air transport on board or during boarding. If the loss occurs due to deliberate actions

¹⁶³ *Ibid*.

¹⁶⁴ Office of Public Affairs U.S Department of Justice, Boeing Charged with 737 Max Fraud Conspiracy and Agrees to Pay over \$2.5 Billion, Jan 2021, Available online https://www.justice.gov/opa/pr/boeing-charged-737-max-fraud-conspiracy-and-agrees-pay-over-25-billion Accessed on August 1st 2023

or errors committed by the airlines or the person responsible for transportation, the carrier is held accountable for the loss.¹⁶⁵

Article 17 of both the 1929 Warsaw Convention and the 1999 Montreal Convention for the Unification of Certain Rules for International Carriage by Air (MC-99) governs the liability of air carriers concerning passengers. According to Article 17 (1) of the Montreal Convention, it states that:

"The carrier is liable for damage sustained in case of death or bodily injury of a passenger upon condition only that the accident which caused the death or injury took place on board the aircraft or in the course of any of the operations of embarking or disembarking'.¹⁶⁶

¹⁶⁵ Pramuditya Syaiful Maarif, Burhanudin, Implementasi Penerapan Pemberian Ganti Kerugian Korban Kecelakaan Pesawat: Studi Kasus Lion Air JT 610 PK-LPQ, Journal of Legal Research, Vol. 3 Issue 4, 2021, hlm. 628

¹⁶⁶Eman Naboush, Raed Alnimer, Air carrier's liability for the safety of passengers during COVID-19 pandemic, Journal of Air Transport Management 89, 2020, p. 2

CHAPTER IV

CLOSING

I. Conclusion

- 1. The state is one of the parties that are responsible for ensuring that the aircraft is safe and fit for use. State responsibility for aircraft flight safety has been regulated in Article 26 of the 1944 Chicago Convention and Annex 13 concerning investigative procedures that a state can carry out if an accident or incident occurs. In addition, the 1944 Chicago Convention, specifically in Annex 6 and Annex 8, requires states to ensure that aircraft can operate. This is depend on the aircraft meeting the existing standards, which are outlined in both the standard certificate of airworthiness and the operational standards. Indonesia has also codified the content of the 1944 Chicago Convention into Law No. 1 of 2009 concerning Aviation.
- 2. As has been regulated in both international law and Indonesian national law, the responsibility of the state is limited to supervision and investigation when an accident occurs. The Annex 6 of the Convention specifies the obligations of States in overseeing their operators, with a specific emphasis on flight crew. The primary requirement is to establish a system for supervising flight operations to ensure an ongoing level of safety. In Indonesian national law, state supervision of aviation safety is regulated in Article 312 paragraph (2) of Law No. 1 of 2009 concerning Aviation that the supervision takes the form of: audits, inspections, observations, and monitoring. Meanwhile, the responsibility for

Investigations in international law is regulated in Article 26 of the 1944 Chicago Convention and Annex 13. Additionally, Ministerial Regulation Number PM 74 of 2017 addresses Civil Aviation Safety Regulations, specifically Section 830 (Civil Aviation Safety Regulation Part 830), which concerns Civil Aircraft Accident and Serious Incident Investigation Procedures. However, these legal sources do not include the state's responsibility for providing training for pilots. Therefore, it is not appropriate to place the burden of responsibility for the absence of training on the latest design developments made by manufacturing companies on the state. The state cannot be used as a guarantor for products produced by manufacturing companies. Hence, the ultimate responsibility for ensuring the highest level of flight safety is in the aircraft manufacturing company. The procurement of training for pilots is the responsibility of the Boeing company as an aircraft manufacturing company.

II. Recommendation

1. Transparency of all parties in ensuring the safety and security of aviation transportation is the most essential thing, for aircraft crew teams such as pilots and other crew, countries, airlines, and aircraft manufacturing companies. As a manufacturing company, Boeing should be able to provide information about the latest systems created in the 737 MAX 8 series aircraft and include them in the Flight Crew Operation Manual. In addition, although it is considered that the 737 MAX 8 series has the same technology as the previous 737 series, the Maneuvering Characteristics Augmentation System (MCAS) is still the latest technology that must be

- socialized and simulated training for all pilots. Assuming the pilot will understand the system without including it in the Flight Crew Operation Manual (FCOM) and conducting a simulation is a fatal step.
- 2. Not only do regulations concerning airline responsibility for aircraft accidents need to be formed, but regulations governing aircraft manufacturing companies today are also essential because if there is an airplane accident and the cause is the burden and the fault is on the manufacturer company, it will be easier to adjudicate under international law without having to sue the company under their national law. Beside the regulation, the contractual treaty based shouldn't be standardized. In the public area within Chicago Convention has to be in similar position.

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