



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

NINETEENTH CONGRESS
First Regular Session

HOUSE BILL NO. 7818



Introduced by **Representative GLORIA MACAPAGAL-ARROYO**

AN ACT
PROTECTING AIRCRAFTS, VESSELS, AND THEIR CREWS AND PASSENGERS
FROM DANGEROUS LASER BEAMS

Explanatory Note

There are existing Philippines laws and regulations on the use of laser devices within Philippine territory.

The use of laser as a firearms accessory is subject to Republic Act No. 10591, otherwise known as the *Comprehensive Firearms and Ammunition Regulation Act*, dated 29 May 2013. The law imposes a higher penalty on any person possessing an unregistered firearm that is "fitted or mounted with laser or any gadget used to guide the shooter to hit the target such as thermal weapon sight (TWS) and the like."¹ The law, however, does not prohibit the use of laser as an accessory of a registered firearm; it merely subjects the firearm to a higher registration fee.²

On 28 July 2010, Congressman Antonio Lagdameo introduced House Bill No. 1860, An Act Regulating the Sale, Manufacture, Distribution and Use of Laser Pointers, Providing Penalties for Violation thereof and for Other Purposes. The bill proposed to prohibit Class 3B and Class 4 laser pointer devices, and to penalize the manufacture, sale, distribution and use thereof. On 18 July 2011, Senator Antonio Trillanes introduced Senate Bill No. 2888, An Act Defining the Offenses of Assault Using a Laser Device and Aggravated Assault Using a Laser Device and Imposing Penalties Thereon. The bill noted increasing incidents in the Philippines and abroad of temporary blindness suffered by airline pilots due to laser beams emanating from residential and commercial areas. It proposed to define as a crime of assault the use of a laser pointer, pen or similar device to distract, annoy or attack another

¹ Section 28.e(2).

² Registration of weapons with laser accessories is subject to Napolcom Resolution No. 01-14 dated 5 September 2014.

person. It further proposed to consider such assault as aggravated if directed against a person operating a motor vehicle, airplane, helicopter or ship at sea. These bills did not pass into legislation.

In the area of civil aviation, Republic Act No. 9497, otherwise known as *Civil Aviation Authority Act*, dated 4 March 2008, merely provides that the Board of Directors of the Civil Aviation Authority of the Philippines (CAAP) may “prohibit or regulate the establishment and operations of electrical, electronics, sound, magnetic, laser, or other electronic gadgets, equipment or installations which will tend to interfere with or impair air navigation in accordance with the international standards and recommended practices on airports, as recommended by the [International Civil Aviation Organization or ICAO].” ICAO has already issued a *Manual on Laser Emitters and Flight Safety* (2003),³ *Annex 14 Standards and Recommended Practices for Aerodromes* (2004)⁴ and *RASG-Mid Safety Advisory - 12* (2017),⁵ all of which recommend the designation of a laser-beam free flight zone (LFFZ), a laser-beam critical flight zone (LCFZ), a laser-beam sensitive flight zone (LSFZ), a normal flight zone (NFZ), and protected flight zones (PFZ). Accordingly, the CAAP adopted a *Manual of Standards for Aerodromes* (2017) establishing the foregoing flight zones and restricting the use of laser emitters with visible beams, except those operated by the authorities.⁶ However, the CAAP did not impose any penalty or fine for breach of the restriction. In Memorandum Circular No. 015-17 dated 12 May 2017, CAAP merely undertook that “adequate steps shall be taken to prevent emission of laser beams from adversely affecting flight operations.” It is notable that under Republic Act No. 6235, otherwise known as *An Act Prohibiting Certain Acts Inimical to Civil Aviation, and for Other Purposes*, dated 19 June 1971, the use of laser devices is not among the acts penalized as interference with flight navigation.⁷

In the area of maritime navigation, the International Maritime Organization (IMO) has not issued safety standards relating to laser beams. However, some countries like the US have adopted regulations against civilians aiming certain types of laser beams at ships at sea.⁸ At the same time, however, the US has authorized the installation of its Laser Weapon System (LaWS) on warships, such as USS Ponce.⁹ Thus, the prohibition applies only to civilians using the device.

³ See skybrary.aero/sites/default/files/bookshelf/3849.pdf.

⁴ See edisciplinas.usp.br/pluginfile.php/5918118/course/section/6091447/ANEXO_14_Vol_1.pdf.

⁵ See www.icao.int/MID/Documents/2016/RSC5/RSA%202012-%20Laser%20Attacks%20Safety%20Guidelines.pdf.

⁶ See caap.gov.ph/wp-content/uploads/2021/04/MOS-for-Aerodromes-2nd-Edition-1-1.pdf. In the United States, the law punishing the intentional aiming of a laser pointer at an aircraft provides for exceptions: the use of laser pointers by authorities; and the use of laser pointers to signal distress. See 18 U.S. Code § 39A - Aiming a laser pointer at an aircraft.

⁷ In the US, the Federal Aviation Authority issued a regulation that “[n]o person may assault, threaten, intimidate, or interfere with a crewmember in the performance of the crewmember’s duties aboard an aircraft being operated.” See 14 C.F.R. § 91.11. This provision was interpreted to

⁸ See 46 U.S. Code § 70014 - Aiming laser pointer at vessel, at uscode.house.gov/statviewer.htm?volume=134&page=4709; UK Laser Misuse (Vehicles) Act 2018;

⁹ See US Congressional Research Service, *Navy Shipboard Lasers for Surface, Air, and Missile Defense: Background and Issues for Congress*, Navy Shipboard Lasers: Background and Issues for Congress, 21 December 2022 at sgp.fas.org/crs/weapons/R44175.pdf.

In the Philippines, there is no law regarding laser devices being aimed at sea vessels. Consequently, the Department of Transportation (DOTr); Maritime Industry Authority (Marina); and Philippine Coast Guard (PCG) have not adopted any regulation on the matter.

With respect to fishing vessels, Republic Act No. 8550, otherwise known the Fisheries Code, dated 25 February 1998, and Republic Act No. 10654, otherwise known as the Illegal, Unreported and Unregulated Fishing Act, dated 27 February 2015, prohibit the use of fishing superlight attractors in municipal waters and bays. As detailed in Administrative Order No. 262, s. 2018, the prohibition does not apply beyond municipal waters. Based on the definition in these laws and regulation, a superlight is dispersed and therefore not similar to a laser beam.¹⁰

Finally, in the area of international law, the Protocol on Blinding Laser Weapons, Protocol IV of the 1980 Convention on Certain Conventional Weapons, prohibits the use of laser weapons whose combat design is to cause permanent blindness.¹¹ The protocol does not prohibit other laser weapons that are not designed to cause permanent blindness.¹² Moreover, the protocol is in force only during international and non-international armed conflict;¹³ It has no application during peacetime.¹⁴ For this reason, sovereign states have to enter into bilateral agreements on the use of laser weapons during peacetime.¹⁵ Absent such agreement, the development, testing and actual use of laser weapons by a sovereign state would not be considered contrary to international law, for, in fact, major military powers have been developing and testing laser weapons.¹⁶ Individual states may, of course, pass legislations prohibiting or regulating such laser weapons. However, these national laws may only apply within their respective territories, and not beyond their territorial seas.¹⁷ They may not be enforced against the military vessels of a foreign state or commercial vessels that are devoted by said foreign state to a governmental purpose, as such vessels enjoy sovereign immunity, even while they are situated within the territory of another state.¹⁸

In view of the foregoing legal and regulatory gaps, a legislation is needed to protect aircrafts, shipping vessels, fishing vessels, and their crews and passengers from death, injury or damage to property resulting from any permanent or temporary blindness intentionally or accidentally caused by laser beams, while said

¹⁰ Section 4.61, Section 44, Section 61 and Section 93, Republic Act No. 8550, 28 February 1998; Section 44, Republic Act No. 10654, dated 27 February 2015.

¹¹ 2024 UNTS 163.

¹² Article 1, *ibid.*

¹³ Article 2, *ibid.*

¹⁴ Article 1, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, 1342 UNTS 163. It relates to Article 2, Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, 12 August 1949, 75 UNTS 2, which states that it "shall apply to all cases of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them."

¹⁵ See Agreement between the United States and Soviet Union on the Prevention of Dangerous Military Activities, 1566 UNTS 309; Agreement between the Canada and Soviet Union on the Prevention of Dangerous Military Activities, 1852 UNTS 239.

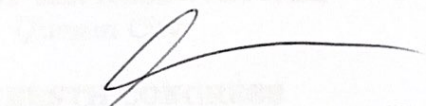
¹⁶ ZM-87 "Portable Laser Disturber" by China, AN/SEQ-3 Laser Weapon System by the US, and Block 2 by South Korea.

¹⁷ The M/V "SAIGA" (No. 2) Case (Saint Vincent and the Grenadines v. Guinea).

¹⁸ The "ARA Libertad" Case (Argentina v. Ghana), Provisional Measures.

aircrafts or vessels are situated within Philippine territory, territorial sea and airspace.

Hence, the passage of this bill proposing an Act Protecting Aircrafts, Vessels and their Crews and Passengers from Dangerous Laser Beams is earnestly sought.


Representative GLORIA MACAPAGAL ARROYO
2nd District, Pampanga

HOUSE BILL NO. _____

Introduced by Representative GLORIA MACAPAGAL-ARROYO

AN ACT
PROTECTING AIRCRAFTS, VESSELS AND THEIR CREWS AND PASSENGERS
FROM DANGEROUS LASER BEAMS

Be it enacted by the House of Representatives and House of the Senate in
Conference in Congress assembled:

SECTION 1. This Act shall be known as "An Act Protecting Aircrafts, Vessels
And Their Crews And Passengers From Dangerous Laser Beams."

SECTION 2. Prohibition against aiming a laser device at a vessel or aircraft -- As
used in this Act, a laser device is one designed or used to emit a beam of
radiation by stimulated emission that emits a beam designed to be used by the
operator as a pointer or highlighter to indicate, mark, or identify a specific position,
person, thing, or object.

When a laser device is aimed directly at an aircraft or vessel or
any part of the aircraft or vessel, the aircraft or vessel shall be considered as a
vessel or aircraft in danger and the operator shall be liable for a fine of not less than
one hundred thousand pesos (P100,000) nor more than one (1) million pesos (P1,000,000).

When a laser device results in death, injury or damage to
any person or property, the operator shall be liable for a fine of not less than
one million pesos (P1,000,000) nor more than five million pesos (P5,000,000) or
imprisonment for not less than ten (10) years nor more than twenty (20) years, or both.

The penalty shall be imposed on the individual authorized by the operator



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1 **AN ACT**
2 **PROTECTING AIRCRAFTS, VESSELS AND THEIR CREWS AND PASSENGERS**
3 **FROM DANGEROUS LASER BEAMS**
4

5
6 Be it enacted by the House of Representatives and House of the Senate of the
7 Philippines in Congress assembled.

8 **SECTION 1.** *Title.* This Act shall be known as An Act Protecting Aircrafts, Vessels
9 And Their Crews And Passengers From Dangerous Laser Beams.

10
11 **SECTION 2.** *Prohibition against aiming a laser device at an aircraft or vessel —* As
12 used in this Act, a *laser device* is one designed or used to amplify electromagnetic
13 radiation by stimulated emission that emits a beam designed to be used by the
14 operator as a pointer or highlighter to indicate, mark, or identify a specific position,
15 place, item, or object.

16 (a) Whoever intentionally aims the beam of a laser device directly at an aircraft or
17 vessel at sea or at the path of said aircraft or vessel shall be penalized with a fine
18 of ₱100,000.00 or imprisoned for not more than one (1) year.

19 (b) Should the unlawful use of laser device results in death, injury or damage to
20 property, the penalty to be imposed shall be a fine of ₱500,000.00 or imprisonment
21 of not more than six (6) years, without prejudice to the imposition of actual, moral
22 and exemplary damages.

23 (c) The prohibition shall not apply to (1) an individual authorized by the Civil

Aviation Authority of the Philippines (CAAP) or the Philippine Coast Guard (PCG) or personnel of the Department of Health (DOH) or Department of Science and Technology (DOST) who are engaged in research and development of lasers; and (2) an individual sending an emergency distress signal with the use of a laser device.

SECTION 3. *Extent of Application* — This act extends to the Philippine archipelago as defined under Republic Act No. 9522, the territorial sea extending from the Philippine archipelagic baselines, Kalayaan Island, Bajo de Masinloc and other rocks in the West Philippines Sea, the respective territorial seas of said rocks, and the territorial airspace above them.

SECTION 4. *Implementing Rules and Regulations* — The CAAP, PCG, and the Philippine Maritime Industry Authority (MARINA) shall issue an omnibus implementing rules and regulations. Within a non-extendible period of 30 days from publication of this Act, the National Mapping Authority shall delineate all the areas to which this Act shall apply as provided under Section 3.

SECTION 5. *Separability Clause*. Should any part or provision of this Act be held unconstitutional or invalid, the other parts or provisions not affected thereby shall continue to be in full force and effect.

SECTION 6. *Effectivity Clause*. This Act shall take effect fifteen (15) days following its publication in the Official Gazette or in any two (2) newspapers of general circulation.

Approved,