



NALSAR UNIVERSITY OF LAW HYDERABAD

Presentation

On

Global Air Safety Regulations: An Overview

by:

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INTRODUCTION

- ❑ The air transport industry plays a major role in world **economic activity**.
- ❑ **Key Elements** to maintain civil aviation **is to ensure safe, secure, efficient and environmentally sustainable operations** at the global, regional and national levels.
- ❑ **A specialized agency** of the United Nations, the International Civil Aviation Organization (ICAO) was created in 1944 to promote the safe and orderly development of international civil aviation throughout the world.
- ❑ **ICAO sets the Standards** and Recommended Practices (SARPs) necessary for aviation safety, security, efficiency and environmental protection on a global basis

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- ❑ Foremost among the **chief priorities** for aviation administrations and airlines **is the safety of passengers, general public, ground personnel and property.**
 - ❑ **The objective** of this module is to **highlight the various difficulties** in regulating air safety and the measures taken by international organizations, particularly the ICAO, in this direction. This module will study the causes of aircraft accidents, their investigation, liability issues involved in air disasters and evolution of security law through various international conventions.

THE CONCEPT OF AVIATION SAFETY

❑ WHAT IS SAFETY?

- Flight is inherently a risky venture, carried out in a hostile environment at great speed.
- “Safety” means **“freedom from danger or risks”**.
- Accordingly, some commentators tend to link the concept of **safety with accident prevention**.

SAFETY OF AN AIRCRAFT IS BASED ON OPERATIONAL ISSUES & HUMAN PERFORMANCES ETC.

❑ OPERATIONAL ISSUES

- i) Air Ground Communication**
- ii) Air Space Infringement** (Unauthorized Entry)
- iii) Bird Strike** (Birds collision with an aircraft)
- iv) Controlled Flight Into Terrain** (An accident, flown on ground, water etc.)
- v) Fire, Smoke and Fumes** (Aircraft Fire Risk from Battery powered items carried on aircraft)
- vi) Ground Operations** (all aspects of Ground Handling except runways)
- vii) Airworthiness** (aircraft suitability for safe flight)

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- viii. Loss of Control** (unintended departure from controlled flight)
 - ix. Loss of Separation** (for defined controlled air space is breached)
 - x. Runway Excursion** (Over running of aircraft from runway)
 - xi. Runway Incursion** (Unauthorized aircraft on a runway)
 - xii. Wake Vortex Turbulence** (Disturbances in Atmosphere)
 - xiii. Weather** (High level Ice Crystal Icing: Effects on Engines)
 - xiv. Emergency and Contingency** (Aircraft Exit Injuries)
 - xv. Level Bust** (Altitude deviation)

2. Human Performance

- i) Human Behaviour** (Ex: Pilot handling skills)
- ii) Design Philosophy** (Ex: Recovery from Failure)
- iii) Human Performance Modelling** (Ex: Errors occurring at each level of performance.
- iv) Organization and Human Performance** (Ex: Risk of Fatigue due to night shifts)
- v) Human Factors Training** (Ex: An Interruption breaks the thread of procedures between Pilots and ATC's)
- vi) Aeromedical** (Ex: Outbreak of contagious diseases)(Ebola; Measles; Corona V)

3. Enhancing Safety

- i) Cabin Safety** (Ex: Cabin Air Quality)
- ii) Flight Technical** (Ex: Aircraft Tyre Maintenance; Area Navigational System)
- iii) Safety Management** (Ex: Hazard Identification Sources)
- iv) Theory of Flight** (Ex: Aqua Planning)
- v) Safety Culture** (Strengths and Weaknesses of Air Navigation Service Provider)

PROBLEMS RELATING TO AIR SAFETY

- ❑ **Near misses** has had led to an escape from a major accident.
- ❑ At every stage of aerial operations aviation is more **exposed and vulnerable to risks** today than in the past.
- ❑ **Aviation accidents are caused by** a culmination of several concurrent failures in mechanical, human and/or technological components in the air transport system.
- ❑ **The challenge to the aviation industry** and government is to determine how accidents should be minimized and safety improved further, in order to maintain the public confidence in air travel

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- ❑ **Safety is based** on co-operative and co-ordinated network of diverse agencies.
 - ❑ The safety of international air transport is governed primarily by two main endeavors - the **development** and implementation of sound regulatory standards and **implementation** of non-regulatory accident prevention measures.
 - ❑ Aviation is a **complex system** and requires a precise co-ordination of human and mechanical elements for its functioning.
 - ❑ The majority of air **accidents**, the investigations reveal, **are the result of human errors.**

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- ❑ To overcome this problem at all levels of the organization, there must be an organizational structure which can cater the safety at all levels.
 - ❑ **Ex:** ICAO laid the standards ie. Annex-1 Pilot Licensing.
 - ❑ Better air safety, devoid of human errors, demands advance planning for disaster prevention.
 - ❑ **A conflict is bound to arise** in the operation of aerial safety rules, which calls for a **greater integration of the air safety law in both civil and military** spheres (Balancing the air space management will prevent accidents)
 - ❑ **Congestion in air space led to safety issues.**

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- ❑ When the Chicago Convention was negotiated in **1944 the parties did not envision two safety-related issues: safety oversight** responsibilities and the safety of civil aircraft in flight.
 - ❑ **Another factor affecting the safety** of civil aircraft in flight is **interception and other coercive measures directed at civil aircraft.**

STATE SOVEREIGNTY

Air Navigation **General Principles and Application of CC 1944**

- ☐ Sovereignty
- ☐ Territory
- ☐ Civil and State Aircraft
- ☐ Misuse of Civil Aviation

Sovereignty

- ❑ The Montevideo Convention of 1933 in its Article 1 provides that a State as a legal person of international law should possess:
 - (a) **permanent population**; (inhabited by a stable community)
 - (b) **a defined territory**; (politically controlled stable community)(certain portion of land)(Maldives; Mumbai; Sri Lanka)
 - (c) **government**; and (a defined legal order having 3 separately identifiable factors)
 - (d) **capacity** to enter into relations with the other States.
- ❑ A State's adherence to the rule of law is extremely important as determinant of good governance.

Article 1

Sovereignty

Article 1

Sovereignty

“The contracting States recognize that every State has complete and exclusive sovereignty over the air space above its territory”.

Sovereignty

- ❑ The first norm, which dominates all the rest, is immediately encountered in Article 1 of the CC-1944.
- ❑ The complete and exclusive sovereignty of every State in the air-space above its territory, as recognized in this Article, means on the one hand an all-embracing sovereignty (without limit of height” and,

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- ❑ On the other, a **sovereignty not shared with other** (i.e. restriction laid under **Article 5 appears to be conflictable. We must therefore assume that the provision of Article 1 applies only in so far as it is not expressly restricted by other provision of the Convention by engagements entered into elsewhere.**
 - ❑ The problem here is when, and to what extent, **can a State revoke unilaterally the norms thus created?** (only in case to what extent it is endangered in any given case) (restricted by the right of innocent passage).

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- ❑ The general norm, therefore, is that **sovereignty extends to an altitude as high as aircraft can reach.**
 - ❑ This sovereignty cannot be deduced from the nature of the air, but must rather be **based on the interest which is recognized to be paramount, of having control over one's own air-space** lies in the fact that the subjacent State is the best position to control the air above its territory.
 - ❑ In addition, **with the development of civil aviation State have also agreed on rules regarding the reciprocal use of each other's air-space** in their common interest.

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- ❑ Recognition by States of their sovereignty over their airspace inevitably presupposes that this rule has already entrenched in the annals of air law in an earlier instrument. The Convention Relating to the Regulation of Aerial Navigation on 13 October 1919 established that *the High Contracting Parties recognize that every Power has complete and exclusive sovereignty over the airspace above its territory.*
- ❑ Even the 1919 Paris Convention merely recognized *sovereignty* of every State over the airspace above its territory. This means that sovereignty over airspace was already an **established right** at international law.

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- ❑ The right bestowed by the private law maxim *Cujus est solum, ejus est usque ad coelom* was formally entrenched as a absolute right of a person under ancient Roman Law. This maxim, which means that a right of land ownership brings with it rights of ownership of airspace above the land, was later found to be unacceptable as an absolute rule. Disparaged by some commentators as the “product of some black letter lawyer” the **rule was later adapted to mean that no nation acquired any domain in what was known as navigable airspace such domain was needed to protect subjacent territory.**

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- ❑ The important question is how is sovereignty determined? **To determine sovereignty in airspace, three elements would have to be resolved:** the use of airspace; the nature of its possession; and the nature of its control to the exclusion of others.
- ❑ **By the end of 19th century**, the private law concept of absolute ownership of airspace over land was antiquated (outdated).
- ❑ **The beginning of the 20th century** saw the emergence of States' sovereignty in airspace. The impetus for public international law to take over the issue of rights over airspace was given by the August 1904 aerial incident where Russian guards shot down the German balloon *Tschudi* when it was flying

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outside Russian territory and two unrelated but similar incidents that occurred in 1908 and 1910 respectively. The French Government hastened to call a conference of European powers in 1910. **For the first time, participating States at this conference recognized airspace as belonging to individual States.**

- ❑ **Sovereignty in international law** is the right to exercise the functions of a State to the exclusion of all other States in regard to a certain areal of the world.
- ❑ **Professor O.J. Lissitzyn** analyses the concept of sovereignty in its modern development as having **three basic principles**: that each State has exclusive sovereignty over its airspace; ;each State has complete discretion as to the

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admission of any aircraft into its airspace; and, that airspace over the high seas **and other areas not subject to a State's jurisdiction** is *res nullius* (*nobody's property*) and is free to the aircraft of all States.

- Finally, it is incontrovertible that **sovereignty is no longer an absolute concept that would shield States against any internal acts of aggression or irrationality against its citizens**. Sovereignty can therefore no longer be accepted in the international for a as seen an absolute protection against interference. **It is no longer an absolute right but a change of responsibility on a State where it is accountable to both domestic and external constituencies**. A Brookings Instt.

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study has **recently revealed that in internal conflicts in Africa, sovereign states have often failed to take responsibility for their own citizens' welfare and for the humanitarian consequences of conflict, leaving the victims with no assistance.** Therefore, what is needed is a delicate balance between respect for State sovereignty and protection of the citizenry against arbitrary and capricious **acts of States.**

- **Practical Aspects:** From an aviation perspective, the first official instance of sovereignty of airspace under Article 1 of the Chicago Convention being recognized at ICAO was at its 21st Assembly **(held in Montreal from 24 September to 15 October 1974)** where the **Assembly adopted Resolution A21-7**

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(the Airport of Jerusalem) where the Assembly recognized that Jerusalem airport lay in the Arab occupied territories and was registered under the jurisdiction of Jordan in **ICAO's Middle East Air Navigation Plan (Refer: Slide 55)** . The Assembly, in the context of Article 1 of the Chicago Convention, resolved that all Contracting States to the Convention should take all necessary measures **to refrain from operating, or giving permission to any airline to operate any air service, whether scheduled or non-scheduled, to or from Jerusalem airport, unless prior permission is granted pursuant to the relevant article.**

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- ❑ At the same session, the Assembly adopted Resolution A 21-21 (Consolidated Statement of Continuing Policies and Associated Practices Related Specifically to Air Navigation) Appendix N of which declared that *any Contracting State which delegated to another State the Responsibility for providing air traffic services over its territory to another State by mutual agreement did so without delegation of its sovereignty.*

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- **ICAO's Response 1973:** Taking concerted action towards suppressing all acts which jeopardized the safe and orderly development of international air transport. In this context, **the most forceful example of ICAO's role can be seen in Resolution A20-2 – *Acts of Unlawful Interference with Civil Aviation***, adopted in **March 1973** by the Assembly, which reaffirmed ICAO's role as facilitating the resolution of questions which may arise between Contracting States in matters affecting the safe and orderly operation of civil aviation throughout the world.

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- ❑ The downing of KE007 brought about an Extraordinary Session of the ICAO Council in Montreal on September **15-16, 1983**. The Session was requested by Canada and South Korea in order to consider the incident. **Two resolutions were adopted.**
- ❑ **First**, the Secretary General of the ICAO were **to initiate an investigation of the incident** in order to determine the facts and technical aspects and also for the Air Navigation Commission **to review the Chicago Convention and other related documents and to examine possible amendments in order to avoid a repetition of the tragedy.**

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- ❑ **The other resolution** ordered the ANC to deal with special tasks and thereafter report to the ICAO Council. The following year, April 24-May 10 of 1984, the ICAO Assembly convened for an extraordinary session **in order to amend the Chicago Convention with a specific rule prohibiting the use of arms against civil aviation.**
- ❑ **With this rule, the Assembly sought to find a balance between the safety of civil aviation and the sovereignty of states.** It was unanimously adopted and the purpose was not to create a new rule but to consecrate an already existing principle.

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- ❑ The general desire was to reaffirm the principle of non-use of weapons against civil aircraft in flight. **The new article was named 3bis.** In order to enter into force, the article must be ratified by two-thirds of the ICAO member States.
- *Every Contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of person on board and the safety of aircraft must not be endangered....*
- *The contracting States recognize that every State, in the exercise of its sovereignty, is entitled to require the landing at some designated airport of a civil aircraft flying above its territory without authority or if there are reasonable grounds to conclude that it is being used for any purpose inconsistent*

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- *Every civil aircraft shall comply with an order given inconformity with paragraph (a) of this Article (3 bis). To this end each contracting State shall establish all necessary provisions in its national laws or regulationis to make such compliance mandatory for any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State.....*
- *Each Contracting State shall take appropriate measures to prohibit the deliberate use of any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State for any purpose inconsistent with the aims of this Convention. This provision shall not affect paragraph (a) or derogate from paragraphs (b) and (c) of this Article.*

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Territory

Extra territorial Operation of Laws ?

(Another dimension of “Sovereignty” emerged)

- The Chicago Convention **does not mention aviation and environmental protection** (which was not a subject of concern at all in 1944) the Convention has been dragged into spat that has developed with the enforcement by the European Union of its extension to aviation of the **European Emission Trading Scheme (EU-ETS)**

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- In 2003, The European Union, by Directive 2003/87/EC amended the European Union's Emissions Trading Scheme **to include the aviation sector in the scheme**. Initially, in 2011, only flights between EU airports were to be included in the Scheme. **From 2012 this was extended** to all flights arriving at or departing from an EU airport. **This means that the EU-ETS is applicable to any airline and its flight from anywhere in the world that is destined to Europe and vice versa.** *This would mean that the Scheme would be applicable, for example, to an American carrier's flight from New York to London **all the way covering inter alia emissions released over American airspace right through the flight over other territorial airspace before entering European airspace.***

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- **Issues:** Held, in every instance of extra territorial jurisdiction, there are ***two issues*** to be considered;
- **the first** is **whether the State or group of States has the authority to exercise extra territorial jurisdiction**; and
- **the second** is **whether the exercise of that authority reasonable** (taking into consideration the law concerned and the potential foreign policy conflicts).

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Drones and Sovereignty

- ❑ Drones are essentially pilotless aircraft which are usually called unmanned aircraft systems. **Remotely piloted aircraft system (RPAS) operations are spreading beyond the original military applications,** towards other State non-military operations (e.g. **police, coast guard and similar**), but also into civil aviation.
- ❑ However, these aircrafts are mostly, at present, used in military attacks **and therefore do not strictly form part of the civil aviation.**

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- ❑ **Authorization required to enter into airspace of other State:** However, they are not without their influence on civil aviation as seen in **Article 3 (c) which provides that no State military aircraft of a Contracting State shall fly over the territory of another State or land thereon without authorization by special agreement or otherwise, and in accordance with the terms thereof.**
- ❑ *Laden with sophisticated sensors and carrying Hellfire missiles and laser-guided bombs, they patrol the skies above Afghanistan, launch lethally accurate strikes against terrorists in the tribal areas of Pakistan, Yemen and Somalia and have helped NATO turn the tide against Muammar Qaddafi's forces in Libya. Even calling them Unmanned Aerial Vehicles (RPASs) or Unmanned Aerial Systems (RPAS) is slightly misleading. There may not be a man in the cockpit, but each Reaper, a bigger, deadlier version of the Predator, requires more than 180 people to keep it flying. A pilot is always at the controls (albeit from a base that might be 7500 miles, or 12000 km, away); and another officer operates its sensors and cameras.*

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- ❑ **Right of Self-Defence:** But under **Article 2.4** of the **United Nations Charter** states unequivocally; *All member States **refrain from in their international relations from the threat to use of force against the territorial integrity or political independence of any State**, or in any other manner inconsistent with the Purposes of the United Nations* . (**Art. 51** further qualifies stating that *member States can exercise the **right of self-defence**, but must be reported to the Security Council*).
- ❑ **The concept of Sovereignty took a new twist with the invasions of Afghanistan and Iraq.** Following the events of 11 September 2001, where civilian commercial aircraft were used as weapons of mass destruction.

CONCEPT OF “FIR’ AND “ADIZ”

- ❑ **Flight Information Region (FIR):** In aviation, a Flight Information Region (FIR) is a specified region of airspace in which a flight information service and an alerting service (ALRs) are provided. It is the largest regular division of airspace in use in the world today.
- ❑ ***Example: Railways in India:***
 - Northern Railway (Delhi); North Eastern Railway (Gorakhpur); Northeast Frontier Railway (Guwahati); Eastern Railway (Kolkata); South Eastern Railway (Kolkata); South Central Railway (Sec'bad); Southern Railway (Chennai); Central Railway (Mumbai); Western Railway (Mumbai); South Western Railway (Hubbali); North Western Railway (Jaipur); North Central Railway (Allahabad); South East Central Railway (Bilaspur); East Coast Railway (Bhubaneswar); East Central Railway (Hajpur).

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- **Air Defence Identification Zone:** An Air Defense Identification Zone (ADIZ) is airspace over land or water in which the identification, location, and control of civil aircraft is performed in the interest of national security. They may extend beyond a country's territory to give the country more time to respond to possibly hostile aircraft

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- ❑ **Meaning of Air Defence Identification Zone:** An ADIZ was first established by the US., and then followed by Canada. It is a zone of 300 miles beyond their territory where for safety reasons; they require any aircraft entering that zone to identify itself and to state its course and destination. If they don't expose themselves to the danger of being intercepted.
- ❑ **ADIZ** gained prominence as a tool with which a State could control and be prepared for aircraft approaching their territory. An ADIZ is an area in airspace over land or water which may not be over the sovereign territory of a State in which ready identification, location and control of all aircraft is required in the interest of national security.

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- ❑ **ADIZ** must not be confused with **Flight Information Regions (FIRs)** which are areas established for the facilitation of airspace and air traffic management. FIRs generally involve a subjacent State which has undertaken responsibility for providing air traffic control services. **The main purpose of establishing an ADIZ is to properly identify all approaching aircraft for security purposes** so that they could, prior to entry into national airspace, satisfy certain local entry requirements. Although there is no overwhelming evidence, either from a scholastic or legislative perspective that lends legal legitimacy to the establishment of **ADIZ, such a concept has never been challenged as being inconsistent with existing law.**
- ❑ **NOTE: FIR IN INDIA: Mumbai (VABF); Kolkata (VECF); Delhi (VIDF), Chennai (VOMF)**

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- ❑ It has been argued that ADIZs came into prominence as a security tool in air navigation as a corollary to the events of 11 September 2001 where aircraft were used as weapons of mass destruction.
- ❑ Norway, UK, India, Pakistan and Canada (CADIZ) are some countries which maintain ADIZs as well as the United States.
- ❑ If an analogy from maritime law and practice were to be applied to ADIZ, one could cite the ***United States Convention on the Law of the Sea (UNCLOS) 1983*** and entered into force on November 16, 1994 after receiving 60 ratifications.

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- ❑ ***Vorsorgeprinzip – Precaution Principle:*** Broadly speaking, ADIZ requirements are those that sovereign States require aircraft to comply **with if they are to be permitted to enter sovereign airspace.** Therefore ADIZs requirements act as condition precedent that are calculated to ensure the protection of that State. Today, this principle enjoys a wide, unprecedented recognition.

- ❑ ***The Precautionary Principle*** is usually applied through a structured approach to the analysis of risk, which comprises three elements: ***risk assessment; risk management;*** and ***risk communication.***

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- **Preemption and Prevention** are necessary elements in today's political and military fabric, where legal legitimacy is ascribed to actions of States which act swiftly to avoid harm and protect its citizenry. This is often accomplished by bypassing rigid dogma and entrenched rules based on the precautionary principle and on the maxim ***necessitat non habet legem*** (necessity has no law or rules). Another is ***Inter arma enim silent leges*** is a maxim attributed to Cicero, which translates as **"In times of war, the laws are silent."**

Preemption; - A sword that Cuts Both Ways,

Preemption; - is when an act, which is potentially harmful to a State and is imminent, is effectively precluded by military or other action.

Prevention; is when an act, which is potentially harmful to a State and is inevitable, is effectively precluded by military or other action.

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- ❑ **Bush Doctrine:** Another issue is the judicial interpretation of the extent to which a State is justified in suspending an existing legal order to protect its citizens. Against the backdrop of the Bush Doctrine* which followed the events of 11 September 2001 and the justification of the invasion of Afghanistan, in spite of Article 2.4 of the Charter of the United Nations. Of special relevance in this regard is the judicial examination by the United States Supreme Court of the imprisonment of an Arab-American immigrant, 3 months after the terrorist attacks of 9/11.

****Bush Doctrine:** The Bush Doctrine is attributed to the modern notion of preventive war and the justification that the United States had the right to secure itself against countries that harbor or give aid to terrorist groups, which was used to justify the 2001 invasion of Afghanistan.*

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- ❑ The attacks of 11 September 2001 inevitably highlighted the strategic position of civil aviation **both as an industry vulnerable to attack and as an integral tool in ensuring peace and security in the world.**

SOVEREIGNTY IN THE AIR AND THE EXCHANGE OF TRAFFIC RIGHTS

- ❑ **Article 6** of the Chicago Convention provides that “no scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or authorization of that State, and in accordance with the terms of such permission or authorization”.
- ❑ **Under Article 28 (Air navigation facilities and standard systems) the provision of air navigation services is clearly a State responsibility deriving from the concept of sovereignty in the air.**

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- **Article 28:** *Each contracting State undertakes, so far as it may find practicable, to:*
 - *(a) Provide, in its territory, airports, radio services, meteorological services and other air navigation facilities to facilitate international air navigation, in accordance with the standards and practices recommended or established from time to time, pursuant to this Convention;*
 - *(b) Adopt and put into operation the appropriate standard systems of communications procedure, codes, markings, signals, lighting and other operational practices and rules which may be recommended or established from time to time, pursuant to this Convention;*
 - *(c) Collaborate in international measures to secure the publication of aeronautical maps and charts in accordance with standards which may be recommended or established from time to time, pursuant to this Convention.*

NATIONAL SOVEREIGNTY

❑ The 1919 Paris Convention recognized two basic principles of sovereignty:

(a)The principle of the **full and absolute sovereignty of each state over the air above its territory and territorial waters**, carrying with it the right to exclude foreign aircraft and impose its jurisdiction over the air.

(b)The **recognition of the greatest freedom of international air navigation subject to the principle of sovereignty** insofar as the freedom is consistent with the security of the state, enforcement of reasonable regulations relative to the admission of the aircraft of contracting states, and the domestic legislation of the state.

ICAO AND THE AVIATION SAFETY

- ❑ **Objectives: (Article 44):**
- ❑ The aims and objectives of the Organization are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to :
 - ❑ (a) **Insure the safe and orderly growth** of international civil aviation throughout the world;
 - ❑ (b) **Encourage the arts of aircraft design** and operation for peaceful purposes;
 - ❑ (c) **Encourage the development of airways, airports, and air navigation** facilities for international civil aviation;

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- ❑ (d) **Meet the needs of the peoples** of the world for safe, regular, efficient and economical air transport;
 - ❑ (e) **Prevent economic waste** caused by unreasonable competition;
 - ❑ (f) Insure that the **right of contracting States are fully respected** and that every contracting State has a fair opportunity to operate international airlines;
 - ❑ (g) **Avoid discrimination** between contracting States;
 - ❑ (h) **Promote safety of flight** in international air navigation;
 - ❑ (i) **Promote generally the development** of all aspects of international civil aeronautics.

ICAO AND THE AVIATION SAFETY REGULATIONS

The optimum level of safety is provided by various Annexes:

- Personnel Licensing
- Rules of the Air
- Meteorological Service for International Air Navigation
- Aeronautical Charts
- Units of Measurements to be used in Air and Ground Operations
- Operation of Aircraft
- Aircraft Nationality and Registration Marks
- Airworthiness of Aircraft
- Facilitation
- Aeronautical Telecommunications
- Air Traffic Services
- Search and Rescue
- Aircraft Accident and Incident Investigation
- Security; The Safe Transport of Dangerous Goods by Air.

THE ICAO AND SAFETY OVERSIGHT PROGRAM

- ❑ The contracting states, individually or as a group, have the responsibility to ensure that an effective and efficient safety oversight system prevailed worldwide.
- ❑ This can be best achieved through the adequate harmonization and pooling of individual and regional safety oversight initiatives and the implementation of a global strategy for safety oversight.
- ❑ The ICAO's vision of safety oversight is a uniform, internationally standardized programme, aimed at ensuring the adequacy of each state's oversight of civil aviation. It is founded on the premise of an expanded safety oversight programme, properly implemented, harmonized and supported by safety audits of the states.
- ❑ **Art. 12 Rules of the Air; 30 (Aircraft Radio Equipment); 31 (Certificates of Airworthiness)**

AIR SAFETY: SOME LEGAL ISSUES

Aviation safety and liability are interrelated because tougher safety measures enhance the confidence in air travel and reduce accidents involving liability to damages.

Of the different aspects of aviation liability - the **carrier's liability**, the **operator's liability**, the **liability to third persons in collusions** on the surface, and the **liability of air traffic controllers** and **manufacturers** the main focus shall be on the **passenger's liability** as under the Warsaw system.

ENHANCING SAFETY OVERSIGHT

- ❑ One of the main pillars of ensuring and enhancing safety depends considerably **on the ability of States to establish and maintain effective safety oversight over the industry.**
- ❑ With an expanding industry, it is important **that regulatory safety oversight keeps pace with its growth. Efficiency and effectiveness of safety oversight has benefited from the conduct of mandatory safety oversight audits by ICAO.**

EFFECT OF LIBERALISM

- ❑ Liberalization has become one of the defining features of modern-day aviation and it requires that the relationship between the industry and its governmental authority be redefined.
- ❑ Under such a regime of increasing liberalization, **all parties, governments, service providers and airlines alike must fully understand and fulfill their respective obligations for safety and security oversight and compliance.**
- ❑ This is particularly important in situations where an airline operation involves **multiple parties from** different States, or where an aircraft is based and operated from States other than the State of Registry or the State of Operator of that aircraft. **Yet the ultimate responsibility for safety and security remains with States, irrespective of changes in economic regulatory arrangements.**

STRATEGIC ACTION PLAN

- ❑ Recently ICAO has framed a Strategic Action Plan which it reviews regularly according to the advancements in the industry. The first two strategies are related to safety and security.

- ❑ **Strategy Objective**

- ❑ Enhance Global Aviation Safety:-Enhance Global Aviation safety **through the following measures-**

- ❑ 1. **Identify and monitor existing types of safety risks** to civil aviation and develop and implement an effective and relevant global response to emerging risks.

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- ❑ 2. **Ensure the timely implementation** of ICAO provisions by continuously monitoring the progress toward compliance by States.
 - ❑ 3. **Conduct aviation safety oversight audits** to identify deficiencies and encourage their resolution by States.
 - ❑ 4. **Develop global remedial plans** that target the root causes of deficiencies **ETC.**

SAFETY OVERSIGHT MANUAL

- ❑ **This manual provides guidance on the establishment and management of a regional safety oversight organization (RSOO) and outlines the duties and responsibilities of ICAO Contracting States, individually and/or collectively, with respect to the establishment and management of a regional safety oversight system.**

□ Critical elements of safety oversight in general address issues related to:

- — Primary aviation legislation;
- — Specific operating regulations;
- — state civil aviation system and safety oversight functions;
- — Technical personnel qualification and training;
- — Technical guidance, tools and provision of safety critical information;
- — Licensing, certification, authorization and/or approval obligations;
- — Surveillance obligations; and
- — The resolution of safety concerns.

SAFETY MANAGEMENT SYSTEMS (SMS)

- Performance based approaches to management of safety are best exemplified by Safety Management Systems (SMS) and the maturity achieved by the SMS concept allows for its implementation on global basis.

ICAO: GLOBAL AVIATION ACTION PLAN

- ❑ The worldwide rate for fatal accidents in air transport operations has been stagnant at a low level for a number of years which makes the civil aviation the safest mode of transport in the world. However, the controlled flight into terrain (CFIT) continues to be a very significant cause of accidents in airline operations. Moreover, the public's perception of aviation safety is largely based on the number of aircraft accidents rather than the accident rate. The improvement of the confidence of the public needs a sustained effort from all participants in the aviation industry, including ICAO, States, aircraft manufacturers and operators in order to reduce the accident

CONCLUSION

To enhance Global Aviation Safety there is a need for ICAO to take steps.

THANKS TO ONE AND ALL

END SLIDE