

# Chicago Convention, Annexes and Air Law

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# The Convention on International Civil Aviation set forth the following purposes

- "WHEREAS the future development of international **civil aviation can greatly help to create and preserve friendship and understanding among the nations and peoples of the world**, yet its abuse can become a threat to the general security; and
- WHEREAS it is desirable to **avoid friction and to promote that co-operation** between nations and peoples upon which the peace of the world depends;
- THEREFORE, the undersigned governments having agreed on certain principles and arrangements in order that international civil aviation may be **developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically**; Have accordingly concluded this Convention to that end.

# Chicago Convention 1944

- Chicago convention has been divided into four parts, 22 chapters and 96 articles.
- Part 1 Air navigation art. 1-42 Covering six chapters including the schedule and non-schedule flights
- Part II International Civil Aviation Organization (ICAO) Structure, powers and functions of the ICAO are covered under articles 43-66
- Part III Int. Air Transport regulations and their implementations are covered under articles 67-79
- Part IV Final Provisions including the authentic languages, signature, ratification, amendments etc. are covered under articles 80-96.

# Chicago Convention

- The Chicago Convention's accomplishments included an agreement by the signatories to grant each other two of the so-called "five freedoms" of air transport, specifically, the right to fly across other states without landing and the right to land for non traffic purposes.
- In addition, the Chicago Convention established the International Civil Aviation Organization (ICAO) to regulate the safety, communications, and technological aspects of international civil aviation.
- Since the Chicago Convention, international civil aviation rights have developed primarily through a series of bilateral agreements between various states.

# Part I on Air Navigation

## 6 Chapters from Article 1 - 42

- **CHAPTER-I**
- **General Principles and Application of the Convention** (From 1-4) discusses the state sovereignty, territory, civil and state aircraft and use of civil aviation. Whole air law is developed on the concept of state sovereignty in civil aviation.
- According to Article I the **contracting states recognises that every state has complete and exclusive sovereignty over airspace above its territory.**

# Sovereignty and Air Law

- Concept of Sovereignty. State Sovereignty and Air Law- Roman Law maxim- Art. 1 of the Paris and Chicago Convention, Art.2 (1) of UN Charter
- A sovereign State possesses legal, executive and judicial powers and has authority over its subjects within its territory, to the exclusion of all other States.
- The principle of sovereignty of air space was reaffirmed in 1944 at the Chicago International Civil Aviation Conference, which produced the Chicago Convention. The Chicago Convention resulted in an international framework based largely on national interests, favoring bilateral air transport agreements over multilateral accords with respect to issues such as routes, frequency and capacity.
- Under Article 28 (a) of the Chicago Convention, "Each contracting State undertakes, so far as it may find practicable, to: 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".

# State Sovereignty Cont..

- Article 9 of the Chicago Convention provides that
- “(a) Each contracting State may, **for reasons of military necessity or public safety, restrict or prohibit uniformly the aircraft of other States** from flying over certain areas of its territory, provided that no distinction in this respect is made between the aircraft of the State whose territory is involved, engaged in international scheduled airline services, and the aircraft of the other contracting States likewise engaged.
- Such prohibited areas shall be of reasonable extent and location so as not to interfere unnecessarily with air navigation.
- Descriptions of such prohibited areas in the territory of a contracting State, as well as any subsequent alterations therein, shall be communicated as soon as possible to the other contracting States and to the International Civil Aviation Organization.”

# CHAPTER-II

- The international civil aviation network carries over four billion passengers around the world annually.
- **Flight over territory of contracting states Article (5-16)** discusses issues relating to the scheduled and non-scheduled air services, cabotage, pilotless aircraft, prohibited areas, landing at custom airports, air rules and regulations, airport charges etc.
- Article 6 “No scheduled international air services 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.”



# Cabotage Rights in Air law

- Cabotage in shipping terms was the right to deliver goods or passengers between ports in a country, by a ship from another country. During the eighteenth century, the increasing mobility of merchants meant they were able to begin selling their goods at shipping ports on the coast of foreign countries. This practice threatened the domestic market of the country, so rules were brought in.
- The same logic was introduced to air law in the 1930s and laid down in the Chicago Convention of 1944, with cabotage meaning the right to operate passenger flights within the domestic borders of a country, by an aircraft registered outside that country. Most countries worldwide do not permit aviation cabotage.

# Pilotless aircraft or UAVs or Drones

- UAVs and Complex Legal Questions
- With this technological frame of reference in mind, how, and under what rules, can these systems be operated in national and international airspace?
- This question is of considerable importance to scientists and researchers who wish to use this technology for civilian and commercial usages.
- This question is also of great importance to law enforcement agencies patrolling the borders or responding to situations where UAVs could save lives or prevent crimes such as piracy on the high seas or drug smuggling and trade in human cargo.
- Due to the lack of regulations, there are many questions pending, pertaining to complex questions such as their airworthiness certification, personnel licensing, classification, registration, collision avoidance, traffic management, communication protocols, security issues, environmental protection, legal responsibility, insurance etc

# Chicago Convention and UAVs

- Article 3 of the Chicago Convention: Civil and Military Aircraft
- Article 8 of the 1944 Chicago Convention introduced a prohibition against unauthorized flights of UAVs over member States.
- Consequently, before a UAV can be granted authorization, International regulations demand that it complies with the relevant airworthiness requirements, licensing and certification system security aspects and framework liability regulations.
- At an International level Article 8 of the Chicago convention requires, a set of rules agreed upon by the contracting States.
- Annex 13 has been amended to include UAS explicitly and changed the definitions of 'accident' and 'serious accident' between named and unmanned aircraft.
- Various Annexes of the Chicago Convention

# CHAPTER-III

- Chapter-III discusses about the Nationality and Registration of Aircraft from articles 17-21 of the convention.
- According to Article 17 Aircraft have the nationality of the state in which they are registered. Other important provisions of nationality of the aircraft includes dual registration, national laws governing registrations, display of marks and Reports of registration.

# Change of aircraft nationality

- At the time when the Chicago Convention was adopted, commercial aircraft were predominantly purchased directly by their operators who then retained ownership of such aircraft for use during most or all of their useful lives. Changes to aircraft nationality were not common since an aircraft tended to reside within one State for most or all of its useful life. However, over the past three decades, aircraft operators have realized substantial capital and operational efficiencies by leasing (rather than owning) a portion of their fleets for various periods of time. According to a Market Research Future (MRFR) analysis, in recent years leasing activities have increased from 2% in 1980 to more than 50% in 2016. Based on various studies, the aircraft leasing market will continue to grow.
- As a result, aircraft will most likely be transferred from one operator to another changing nationality multiple times during their useful lives. The change of aircraft nationality or registration from one State to another is referred to as cross-border transfers of aircraft. The increase in the number of cross-border transfers of aircraft globally, along with differences in States' regulations, requirements and practices has highlighted certain inefficiencies in a global system that was developed when cross-border transferability (XBT) was relatively uncommon.

# Aircraft Leasing

- Liberalization of Aviation and its potential growth
- Airlines wishing to expand their fleet may either go in for a lease or go in for an outright purchase of new aircraft if finance is available on attractive terms.
- A 'dry lease' includes only the aircraft whereas a 'wet lease' includes both aircraft and crew. The airlines are also charged for maintenance and insurance apart from the rentals.
- Considering the rapid growth of the aviation sector, it is predicted that aircraft fleet would nearly double in the coming years as India holds the rank of having the ninth largest aviation market in the world,
- Proper leasing & financing definitely requires extremely non-complicated procedures & solutions.
- Liability Issues in Leasing

# Facilitation of International Air Transport

- From the beginning of ICAO's history, the need to facilitate international air transport—to remove obstacles that would impede the free passage of aircraft, passengers, crew, baggage, cargo, and mail across international boundaries—was evident
- ICAO has therefore developed, over the years, a comprehensive facilitation program that is reflected in the international standards and recommended practices of Annex 9 to the Chicago Convention, as well as in the recommendations and statements of the ICAO Council and the Facilitation Division.
- The program is concerned with such measures as liberalization of visa requirements and entry procedures for temporary visitors; the development of machine-readable passports and visas; speedy handling and clearance procedures for cargo, mail, and baggage; and the elimination, as far as possible, of requirements for documentation or examination in regard to transit traffic.

# CHAPTER-IV

- The articles 22-26 of the Chicago Convention deal with the measures to facilitate air navigation.
- Provisions were made for facilitating the flight of aircraft engaged in international air navigation, including simplification of customs requirements, giving assistance to aircraft in distress, aiding investigation of accidents, exempting aircraft from seizure by reason of patent claims or infringements, and by the adoption of Standards and Recommended Practices (SARPs) in respect of airports, radio services, meteorological services and other air navigation facilities, standard communication procedures, codes, markings, signals, lighting and publication of charts & maps.
- Broadly speaking, the Facilitation aims at eliminating all nonessential documentary requirements, simplifying and standardizing the remaining forms, providing certain minimum facilities at international airports, and simplifying handling and clearance procedures.



# CHAPTER-V

- Articles 29-36 deal with conditions to be fulfilled with respect to aircraft including
- documents carried in aircraft, aircraft radio equipment, certificate of airworthiness, licences of personnel, recognition of certificates and licences, journey log books, cargo restriction and photographic apparatus.

# CHAPTER-VI

- Articles 37-42 deal with Adoption and implementation of International Standards and Recommended Practices (SARPs) in international civil aviation.
- the adoption and departures of international standards, procedures, endorsement of certificates and licences and their validity, recognition of airworthiness etc are covered in this Chapter.

# PART-II (From Chapter VII-XIII ARTICLES:43-66)

- CHAPTER-VII (THE ORGANISATION-ICAO)
- CHAPTER-VIII (THE ASSEMBLY)
- CHAPTER-IX (THE COUNCIL)
- CHAPTER-X (AIR NAVIGATION COMM.)
- CHAPTER-XI (PERSONNEL)
- CHAPTER-XII (FINANCE)
- CHAPTER-XIII (OTHER INTL. ARRANGEMENTS)

# ICAO

- The Chicago Convention has also established principles, structures and procedures for the International Civil Aviation Organization (ICAO) have been covered in Part II from Articles 43 to 66 of the Convention.
- The ICAO has been responsible for establishing guidelines and standards for navigational aids, technical rules for landing areas, aircraft certification, licensing of pilots and other specialized personnel.
- ICAO is responsible of Development of Int. Air Law

# The OBJECTIVES OF ICAO

- Art.44 Objectives-
- ensure a safe and orderly growth of international civil aviation throughout the world;
- Encourage the arts of aircraft design and operation for peaceful purposes;
- Encourage the development of airways, airports, and air navigation facilities for international civil aviation;
- Meet the needs of the peoples of the world for safe, regular, efficient and economical air transport;
- Prevent economic waste caused by unreasonable competition;
- Insure that the rights of contracting states are fully respected and that every contracting state has a fair opportunity to operate international airlines;
- Avoid discrimination between contracting states;
- Promote safety of flight in international air navigation;
- Promote generally the development of all aspects of international civil aeronautics.

# ICAO Assembly

- The ICAO has Assembly, Council, the Secretariat, Air Navigation Commission, and other organs to run day-to-day activities.
- The Assembly meets once in every three years.
- All contracting states shall have an equal rights and each contracting state has one vote in the Assembly.

# ICAO Council

- The Council is the permanent body responsible to the Assembly. It shall be composed of 33 contracting states elected by the Assembly. In electing the members of the council, the Assembly shall give adequate representation to
  - the states of chief importance in air transport
  - the states which makes largest contribution to the international civil aviation and
  - the major geographic areas of the world are to be represented.

# ICAO Secretariat

- Headed by Sec. General and other staff to run the day to day functions.
- It also has various commissions and Burios including Air navigation commission and legal bureau, Air transport bureau, Tech. cooperation bureau, Admin. Services bureau.
- It also has aviation security and facilitation services



# Part III Int. Air Transport

- Chapter XIV- information & Reports
- Art. 67 – File report with Council
- Each contracting state shall file its int. airlines report with the Council traffic reports, cost statistic and financial statements

# Chapter XV

## Airports & other air navigation facilities

- Articles 68- 76
- covered various airport and air navigation facilities including designation of routes and airports, financing & improvement of air navigation facilities, acquisition and use of land, expenditure and assessment of revenues etc.

# CHAPTER-XVI

## JOINT OPERATING ORGS. & POOL SERVICES

- Articles 77-79
- Deals with joint operating organizations permitted and pooling their air services on any route or in any regions with council permission, advisory function of council on the matters, states may participate in joint operating organizations.

## Part IV- final provision

### Chapter XVII

#### Other Aeronautical Agreements & Arrangements

- Articles 80-83
- States will give notice to council whether they are parties to the Paris and Habana Conventions, all pervious agreements between states shall be forthwith registered with the Council, abrogation of inconsistent arrangements and registration of new arrangements with council.

# Chapter-XVIII

## Disputes & Default

- Articles 84-88
- Council will settle the dispute between the states, against the decision of the council the state can appeal to CJI, it also deals with arbitration procedure, apples and penalty for non –conformity of airline and by state.

# Chapter XIX

## War

- In case of war the provision of this Convention shall not affect the freedom of action of any states whether the belligerents or as neutrals.
- In national emergency state will notifies the fact to the Council.

# Chapter XX

## Annexes

- Article 90 Adoption & amendment of Annexes
- Adoption of the Annexes by council will be by vote of 2/3 of the council – Art 54 (1)
- Council shall immediately notify all contracting states of coming force of any Annexes or amendment thereto.

# Chapter XXI

## Ratifications, Adherence, Amendments & Denunciations

- Articles 91-95
- Deals with the Ratifications, Adherence, admission of other states, Amendments & Denunciations



# Chapter XXII

## Definitions

- Article 96
- Air Services
- International Air Services
- Airlines
- Stop for non-traffic purpose

# Chicago Convention & Annexes

- Chicago has unique feature of having various technical annexes - proved successful so far.
- Final Act of the Chicago Convention contains 12 Technical Annexes (Now 19)
- Annexes did not requires signature covers different fields of aviation, being technical in nature.
- The ICAO Secretariat is headed by a Secretary General who is appointed by the Council and is in charge of five separate bureaux, each with its own director. Of these the Air Navigation Bureau, which deals with technical issues and the Air Transport Bureau, which addresses economic issues, are the two main bureaux of the Secretariat and are responsible for work on the 19 Annexes to the Chicago Convention containing SARPS on international civil aviation which States are obligated to follow.
- The Legal Bureau handles international treaties adopted under the auspices of ICAO and other legal issues related to air law

# CHAPTER-VI: Adoption and Implementation of Annexes

- Articles 37-42 deal with Adoption and implementation of International Standards and Recommended Practices (SARPs) in international civil aviation.
- The adoption and departures of international standards, procedures, endorsement of certificates and licenses and their validity, recognition of airworthiness etc. .
- Article 37: Adoption of international Standards and procedures.
- Article 38: Departures from international standards and Procedures.
- Article 39: Endorsement of Certificates and Licenses.
- Article 40: Validity of endorsed certificates and licenses.
- Article 41: Recognition of existing standards of airworthiness.
- Article 42: Recognition of existing standards of competency of personnel.

# Article 54 and 90 of Chicago Convention

- ❖ Annexes adopted by the Council of ICAO as prescribed by the Convention, Article 54 1) of which prescribes, as one of the mandatory functions of the Council that the Council shall adopt international standards and recommended practices; for convenience, designate them as Annexes to the Convention and notify ICAO States of all action taken.
- ❖ Chapter XX of Article 90 Adoption & amendment of Annexes
- ❖ Adoption of the Annexes by council will be by vote of 2/3 of the council – Art 54
- ❖ (1) Council shall immediately notify all contracting states of coming force of any Annexes or amendment thereto.

# ICAO's standards and Recommended Practices (SARPs)

- ICAO's standards are binding by member States.
- “A Standard is defined as any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38 of the Convention.”
- Recommended practices are viewed as merely desirable; member States need not notify the Council of their intent to comply, although they are so encouraged.
- “A Recommended Practice is any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as desirable in interest of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavor [sic] to conform in accordance with the Convention. States are invited to inform the Council of non-compliance. compliance.”

# The Process of Adopting SARPs

- Technical SARPS are reviewed first by the Air Navigation Commission.
- Proposed SARPS are “vetted ” to States for comment and consultation.
- The Council approves new SARPS by a two two-thirds majority.
- They circulated to member States four months before the Effective Date.
- A majority of States can veto the SARPS by registering their disapproval (but this has never happened).
- States also may “opt out ” by registering their differences.
- After the Effective Date, the Secretariat issues the SARPS.
- States are expected to comply except to the extent they have registered differences.

# 19 Annexes

- Annex 1: Personnel Licensing, Annex 2: Rules of the Air, Annex 3: Meteorology, Annex 4: Aeronautical Charts, Annex 5: Units of Measurement to Be Used in Air Air-Ground Communications, Annex 6: Operation of Aircraft, International Commercial Air Transport, Annex 7: Aircraft Nationality and Registration Marks, Annex 8: Airworthiness of Aircraft, Annex 9: Facilitation of International Air Transport, Annex 10: Aeronautical Telecommunication, Annex 11: Air Traffic Services, Annex 12: Search and Rescue, Annex 13: Aircraft Accident Inquiry, Annex 14: Aerodromes, Annex 15: Aeronautical Information Services, Annex 16: Environmental Protection, Annex 17: Security - Safeguarding Int. Civil Aviation Against Acts of Unlawful Interference, Annex 18: Safe Transport of Dangerous Goods by Air and Annex 19: Safety Management Systems
- The aim of most of the annexes is to promote progress in flight safety, particularly by guaranteeing satisfactory minimum standards of training and safety procedures and by ensuring uniform international practices.

# Annex-I: Personnel Licencing

- Personnel Licensing—licensing of flight crews, air traffic controllers, and aircraft maintenance personnel
- Standards and Recommended Practices for the licensing of flight crew members (pilots, flight engineers and flight navigators), air traffic controllers, aeronautical station operators, maintenance technicians and flight dispatchers, training manuals also provide guidance for the training
- Article 32 of the Chicago Convention provides that the pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licenses issued or rendered valid by the State in which the aircraft operates
- Similarly the expression “flight crew member” has the same meaning as the expressions “member of the operating crew of an aircraft” and “operating personnel” used in the Convention while the expression “personnel other than flight crew members” includes the expression “mechanical personnel” used in the Convention.



# Annexe-2: Rules of the Air

- Annex 2 consist of general rules, visual flight rules and instrument flight rules apply without exception over the high seas, and over national territories to the extent that they do not conflict with the rules of the State being overflown.
- The pilot-in-command of an aircraft is responsible for compliance with the rules of the air.
- An aircraft must be flown in accordance with the general rules and either the visual flight rules (VFR) or the instrument flight rules (IFR).
- Flight in accordance with visual flight rules is permitted if a flight crew is able to remain clear of clouds by a distance of at least 1 500 m horizontally and at least 300 m (1 000 ft) vertically and to maintain a forward visibility of at least 8 km. For flights in some portions of the airspace and at low altitudes, and for helicopters, the requirements are less stringent. An aircraft cannot be flown under VFR at night or above 6 100 m (20 000 ft) exceptby special permission.
- Balloons are classified as aircraft, but unmanned free balloons can be flown only under specified conditions detailed in the Annex.
- All these rules, when complied with by all concerned, help make for safe and efficient flight.

# Annex 3: Meteorological Service for International Air Navigation

- Annex 3 to the Chicago Convention provides in Standard 2.1.1. that the objective of meteorological service for international air navigation shall be to contribute towards the safety, regularity and efficiency of international air navigation.
- This objective shall be achieved by supplying the following users: operators, flight crew members, air traffic services units, search and rescue services units, airport managements and others concerned with the conduct or development of international air navigation, with the meteorological information necessary for the performance of their respective functions
- The Annex, in Standard 2.1.3 calls for each Contracting State to determine the meteorological service which it will provide to meet the needs of international air navigation.
- State responsibility for the provision of meteorological information is provided for in Standard 2.1.4. where each Contracting State is required to ensure that the designated meteorological authority complies with the requirements of the World Meteorological Organization in respect of qualifications and training of meteorological personnel providing service for international air navigation

# Annex-4:Aeronautical Charts

- Article 28 of the Chicago Convention requires *inter alia* that Contracting States 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 the Convention.
- Pilots engaged in air navigation depend on aeronautical charts to follow their flight plans. ICAO has prescribed standards and Recommended practices for States to follow in developing and issuing such charts to the technical crew. Aeronautical Charts—specifications for aeronautical charts for use in international aviation
- Pilots need to be informed about meteorological conditions along the routes to be flown and at their destination aerodromes.
- 21 types, each intended to serve specialized purposes
- The En route Chart, the Plotting Chart, the Plotting Chart, Standard Departure Chart, The Instrument Approach Chart, The Aerodrome/Heliport Chart, Aerodrome Obstacle Chart.

# Annexe-5: : Units of Measurement to Be Used in Air & Ground Communications

- Annex 5 was initially applicable only to those units used in communications between aircraft and ground stations.
- Many attempts to improve the level of standardization were made in the following years and a number of amendments
- It also introduced the International System of Units, known as SI from the "Système International d'Unités", as the basic standardized system to be used in civil aviation.
- In addition to the SI units the amendment recognized a number of non-SI units which may be used permanently in conjunction with SI units in aviation. These include the litre, the degree Celsius, the degree for measuring plane angle, etc
- Amendments 14 and 15 to Annex 5 introduced a new definition of the metre, and references to temporary non-SI units were deleted.

# Annex-6: Operation of Aircraft

- Prudent operation of aircraft is vital in avoiding accidents and incidents. Annex 6 addresses aeronautical aspects of the operations of aircraft. The essence of Annex 6, simply put, is that the operation of aircraft engaged in international air transport must be as standardized as possible to ensure the highest levels of safety and efficiency.
- Operation of Aircraft. Part I: International Commercial Air Transport; Part II: International General Aviation; Part III: International Operations—Helicopters. These specifications will ensure in similar operations throughout the world a level of safety above a prescribed minimum.
- The purpose of Annex 6 is to contribute to the safety of international air navigation by providing criteria for safe operating practices, and to contribute to the efficiency and regularity of international air navigation by encouraging ICAO's Contracting States to facilitate the passage over their territories of commercial aircraft belonging to other countries that operate in conformity with these criteria

# Annexe-7: Aircraft Nationality and Registration Marks

- How are aircraft classified and identified, and how can you tell aircraft nationality?
- The Annex is based on Articles 17 to 20 of the Chicago Convention.
- Aircraft Nationality and Registration Marks—requirements for registration and identification of aircraft
- Annex 7 deals with aircraft nationality and registration marks, and, in a separate table, classifies aircraft by how they maintain sustained flight in the air.
- The Annex sets out procedures for selection by ICAO Contracting States of nationality marks from the nationality symbols included in the radio call signs allocated to the States of Registry by the ITU.
- It sets standards for the use of letters, numbers and other graphic symbols to be used in the nationality and registration marks, and spells out where these characters will be located on different types of airborne vehicles, such as lighter-than air aircraft and heavier-than-air aircraft.

# Annex-8: Airworthiness of Aircraft

- Article 33 of the Convention on International Civil Aviation places the burden on the State of Registry to recognize and render valid an airworthiness certificate issued by another Contracting State, subject to the condition that the airworthiness requirements under which such a certificate
- is issued or rendered valid are equal to or above the minimum standards which may be established by ICAO from time to time pursuant to the Convention.
- aircraft must be designed, constructed and operated in compliance with the appropriate airworthiness requirements of the State of Registry of the aircraft.
- Annex 8 is divided into four parts. Part I includes definitions; Part II deals with procedures for certification and continuing airworthiness of aircraft; Part III includes technical requirements for the certification of new large aeroplane designs; Part IV deals with helicopters.
- a Certificate of Airworthiness declaring that the aircraft is fit to fly.

# Annexe-9: Facilitation

- Facilitation—simplification of customs, immigration, and health inspection regulations at international airports.
- Article 22 obliges each Contracting State to adopt all practicable measures to facilitate and expedite navigation
- Article 23 establish customs and immigration procedures
- Likewise Arts 10,13, 29 will be complied by all states
- The Annex provides a frame of reference for planners and managers of international airport operations, describing maximum limits on obligations of industry and minimum facilities to be provided by governments.
- In addition, Annex9 specifies methods and procedures for carrying out clearance operations in such a manner as to meet the twin objectives of effective compliance with the laws of States and productivity for the operators, airports and government inspection agencies involved.



# Annexe-10: Aeronautical Telecommunications

1. Aeronautical Telecommunications—standardization of communications equipment and systems and of communications procedures. Annex 10 is divided into five volumes: Volume I — Radio Navigation Aids. Volume II — Communications Procedures including those with PANS status Volume III — Communication Systems Part 1 — Digital Data Communication Systems Part 2 — Voice Communication Systems. Volume IV — Surveillance Radar and Collision Avoidance Systems Volume V — Aeronautical Radio Frequency Spectrum Utilization
  - Volume I of Annex 10 is a technical document which defines for international aircraft operations the systems necessary to provide radio navigation aids used by aircraft in all phases of flight.
  - Volumes II and III cover two general categories of voice and data communications that serve international civil aviation. Volume IV of Annex 10 contains SARPs and guidance material for secondary surveillance radar (SSR) and airborne collision avoidance systems (ACAS), including SARPs for SSR Mode A, Mode C and Mode S, and the technical characteristics of ACAS. In Volume V of Annex 10, SARPs and guidance material on the utilization of aeronautical frequencies are defined.
  - The International Telecommunication Union (ITU) has set up a framework in which the demands for radio spectrum from individual States are balanced with the interests of different radio service users to produce a planned radio environment incorporating interference-free, effective and efficient radio spectrum use

# Annexe-11: Air Traffic Services

- The SARPs in Annex 11, together with the Standards in Annex 2, govern the application of the *Procedures for Air Navigation Services — Air Traffic Management* and the *Regional Supplementary Procedures — Rules of the Air and Air Traffic Services*, contained in Doc 7030, Annex 11 pertains to the establishment of airspace, units and services necessary to promote a safe, orderly and expeditious flow of air traffic.
- A clear distinction is made between air traffic control service, flight information service and alerting service. Its purpose, together with Annex 2, is to ensure that flying on international air routes is carried out under uniform conditions designed to improve the safety and efficiency of air operation
- ❑ Air Traffic Services—establishment and operation of air traffic control, flight information, and alerting services.
- ❑ The world's airspace is divided into a series of contiguous flight information regions (FIRs) within which air traffic services are provided
- ❑ All aircraft fly either instrument flight rules (IFR) or visual flight rules (VFR).
- ❑ specifications for operational flight information service (OFIS) broadcasts, including automated terminal information service (ATIS) broadcasts

# Annex-12: *Search and Rescue (SAR)*.

Search and rescue services are organized to respond to persons apparently in distress and in need of help. Prompted by the need to rapidly locate and rescue survivors of aircraft accidents, a set of internationally agreed Standards and Recommended Practices incorporated in ICAO's Annex 12 - *Search and Rescue (SAR)*.

The Annex, which is complemented by a three-part *Search and Rescue Manual* dealing with SAR organization, management and procedures, sets forth the provisions for the establishment, maintenance and operation of search and rescue services by ICAO Contracting States in their territories and over the high seas.

After the events of 11 September 2001, it is only natural to assume that there is heightened awareness of the possibility of aircraft being used as weapons of destruction in the future.

From a social and political perspective, the world has to prepare for eventualities leading up to search and rescue of aircraft that may need to be located without loss of time and the passengers and crew rescued. Search and Rescue—organization and operation of facilities and services necessary for search and rescue

Annex 12 to the Chicago Convention elaborates on this fundamental requirement by qualifying that Contracting States shall arrange for the establishment and provision of SAR services within their territories on a 24-hour basis.

# Annex-13: Aircraft Accident Investigation

- Annex 13 provides the international requirements for the investigation of aircraft accidents and incidents. It has been written in a way that can be understood by all participants in an investigation. the Annex spells out which States may participate in an investigation, such as the States of Occurrence, Registry Operator, Design and Manufacture. It also defines the rights and responsibilities of such States.
- Article 26 of the Chicago Convention provides 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 ICAO
- Annex 13 provides the international requirements for the investigation of aircraft accidents and incidents. It has been written in a way that can be understood by all participants in an investigation
- Responsibility for an investigation belongs to the State in which the accident or incident occurred. That State usually conducts the investigation, but it may delegate all or part of the investigation to another State

# Annex-14: Aerodromes

A distinction of Annex 14 is the broad range of subjects it contains.

It extends from the planning of airports and heliports to such details as switch-over times for secondary power supply; from civil engineering to illumination engineering; from provision of sophisticated rescue and fire fighting equipment to simple requirements for keeping airports clear of birds.

Aerodromes—specifications for the design and equipment of aerodromes.

I- Deals the planning of airports, aerodrome design and operations

II- Deals heliport design

New aircraft models, increased aircraft operations, operations in lower visibilities and technological advances in airport equipment combine to make Annex 14 one of the most rapidly changing Annexes.

- Volume I dealing with aerodrome design and operations and Volume II dealing with heliport design.

- Annex 14, Volume I, is also unique: it is applicable to all airports open to public use in accordance with the requirements of Article 15 of the Convention.

Historically, it came to life in 1951 with 61 pages of Standards and Recommended Practices and 13 additional pages on guidance for their implementation.

# Annexe-15: Aeronautical Information Service (AIS).

- One of the least known and most vital roles in support of international civil aviation is filled by the aeronautical information service (AIS).
- The object of the aeronautical information service is to ensure the flow of information necessary for the safety, regularity and efficiency of air navigation.
- Annex 15 defines how an aeronautical information service shall receive and/or originate, collate or assemble, edit, format, publish/store and distribute specified aeronautical information/data. The goal is to satisfy the need for uniformity and consistency in the provision of aeronautical information/data that is required for the operational use by international civil aviation. "International notices to airmen" is a phrase which led to the birth of an early aeronautical acronym: NOTAM. In 1949, a special NOTAM meeting reviewed and proposed amendments to these procedures, which were later issued as *Procedures for Air Navigation Services* that became applicable in 1951
- Annex 15 amendments have reflected the increased need for the timely provision of quality aeronautical information/data and terrain data as they have become critical components of data-dependant on-board navigation systems.
- The Annex now contains many provisions aimed at preventing corrupt or erroneous aeronautical information/data which can potentially affect the safety of air navigation.

# Annex-16: Environmental Protection

- Annex 16 (Volumes I and II) deals with the protection of the environment from the effect of aircraft noise and aircraft engine emissions - two topics hardly thought about when the Chicago Convention was signed.
- In 1968, the ICAO Assembly adopted a resolution which conceded the seriousness of noise in the vicinity of airports, and instructed the ICAO Council to establish international specifications and associated guidance material to control aircraft noise.
- A resolution adopted by the ICAO Assembly in 1971 led to specific action on the question of engine emissions and detailed proposals for ICAO Standards for the control of engine emissions from certain types of aircraft engines. The Committee on Aircraft Engine Emissions (CAEE) was subsequently established with a view to develop specific Standards for aircraft engine emissions.



# Annex-17: Security - Safeguarding Int. Civil Aviation Against Acts of Unlawful Interference

- The dramatic increase in crimes of violence which adversely affected the safety of civil aviation during the late 1960's, resulted in an Extraordinary Session of the ICAO Assembly in June 1970. new Annexes to the Chicago Convention to specifically deal with the problem of unlawful interference, in particular with unlawful seizure of aircraft
- Annex 17 seeks to co-ordinate the activities of those involved in security programmes. It is recognized that airline operators themselves have a primary responsibility for protecting their passengers, assets and revenues, and therefore States must ensure that the carriers develop and implement effective complementary security programmes compatible with those of the airports out of which they operate.
- The latest Amendment 10 to Annex 17 was adopted by the ICAO Council on 7 December 2001 in order to address challenges posed to civil aviation by the events of 11 September 2001. The amendment includes various definitions and new provisions in relation to the applicability of this Annex to domestic operations; international cooperation relating to threat information; national quality control; access control; measures related to passengers and their cabin and hold baggage;



## Annexe-18: *Safe Transport of Dangerous Goods by Air*

- More than half of the cargo carried by all modes of transport in the world is dangerous cargo – explosive, corrosive, flammable, toxic and even radioactive. These dangerous goods are essential for a wide variety of global industrial, commercial, medical and research requirements and processes. Because of the advantages of air transport, a great deal of this dangerous cargo is carried by aircraft.
- ICAO recognizes the importance of this type of cargo and has taken steps to ensure that such cargo can be carried safely. This has been done by adopting Annex 18, together with the associated document *Technical Instructions for the Safe Transport of Dangerous Goods by Air*.
  1. Safe Transport of Dangerous Goods by Air—specifications for the labeling, packing, and shipping of dangerous cargo.
  2. 9 hazard classes explosives of all kinds, compressed or liquefied gases, flammable liquids, flammable solids, spontaneously combustible materials, oxidizing material, Radioactive materials, dangerous to human tissue, miscellaneous category etc.

# Annex 19 – Safety Management

- Safety Management Systems: Importance of Safety
- Safety and ICAO Objectives
- ICAO work on global Air Safety Management systems
- Air Safety managements and Recent Developments
- CHAPTER 1 – Definitions
- CHAPTER 2 – Applicability
- CHAPTER 3 – State safety management responsibilities
- CHAPTER 4 – Safety management system (SMS)
- CHAPTER 5 – Safety data collection, analysis & exchange
- APPENDIX 1 –State safety oversight system
- APPENDIX 2 – SMS Framework
- ATTACHMENT A – SSP Framework
- ATTACHMENT B – Legal guidance for the protection of information from safety data collection and processing systems

# Duties of States

- Under Article 12 of the Chicago Convention, it is the responsibility of every member State to keep its own regulations uniform “to the greatest possible extent” with the Standards and Recommended Practices promulgated by ICAO.
- Under Article 37, States are obliged to “collaborate in securing the highest practicable degree of uniformity ” in their domestic law, regulations and procedures with SARPs.
- But if they find it “impracticable to comply ”, under Article 38, they are to notify ICAO of differences between their own practices and those established by the SARPs

# PANS & SUPPS

- ICAO also issues Procedures for Air Navigation Services [PANS] and Regional Supplementary Procedures [SUPPS]. Still another form of rule-making that has been employed by the Council is the Technical instructions which provide detailed explanations of how Annexes are to be implemented.
- “Procedures for Air Navigation Services (or PANS) comprise operate operating practices and material too detailed for Standards or Recommended Practices - they often amplify the basic principles in the corresponding Standards and Recommended Practices. To qualify for PANS status, the material should be suitable for application on a worldwide basis. The Council invites Contracting States to publish any differences in their Aeronautical Information Publications when knowledge of the differences is important to the safety of air navigation.”
- Regional Supplementary Procedures (or SUPPs) have application in the respective ICAO regions. Although the material in Regional Supplementary Procedures is similar to that in the Procedures for Air Navigation Services, on SUPPs do not have the worldwide applicability of PANS.

# Thank you