



NALSAR UNIVERSITY OF LAW HYDERABAD



Presentation on:

Global Aviation “Security” Regulations: An Overview

by:

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17. Conventions Relating to Aviation Security:

- i. The Convention on Offences and Certain Other Acts Committed on Board Aircraft – **The Tokyo Convention: 1963**
 - ii. The Convention for the Suppression of Unlawful Seizure of Aircraft – **The Hague Convention: 1970**
 - iii. The Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation – **The Montreal Convention: 1971**
 - iv. The Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation – **The Montreal Convention: 1988**
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v. Convention on the Making of Plastic Explosives for the Purpose of Detection – **The Montreal Convention: 1991**

1. Introduction

- ❑ **Aviation security** is the protection of civil aviation against acts of unlawful interference. This objective is achieved through a combination of measures and resources both human and material, aimed for the safety of passengers, crew, ground personnel, and the general public.
- ❑ **Airport security** refers to the techniques and methods used in an attempt to protect passengers, staff, aircraft, and airport property from accidental/malicious harm, crime, and other threats. Aviation security is a combination of human and material resources to safeguard civil aviation against unlawful interference.

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- ❑ **Airline Security:** Terrorism has been a problem for airlines and air travelers since the 1970s, when hijackings and bombings became the method of choice for subversive, militant organizations around the world. Although security at airports has always been tight, the 9/11 attacks woke many people up to a harsh reality -- it wasn't tight enough.

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- ❑ **Chicago Convention 1944: (Preamble):** 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
 - ❑ **Chicago Convention 1944 (Article: 64-Security Arrangements):**The Organization may, with respect to air matters within its competence directly affecting world security, by vote of the Assembly enter into appropriate arrangements with any general organization set up by the nations of the world to preserve peace.

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- **Threat to General Security: [Aeronautical consequences of the Iraqi invasion of Kuwait: (Res.A28-7)]:** The Resolution also noted further, Security Council Resolution 661, which calls upon all States to take appropriate measures to protect assets of the legitimate Government of Kuwait and its agencies. The Iraq's acts led to the seizure and removal of 15 aircrafts of Kuwait Airways and their purported registration by Iraq.

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- ❑ **Threat to General Security ie., Vulnerability of Attacks:** 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.
 - ❑ **Chief Priorities of Aviation Security:** The chief priorities for aviation administration and airlines is the security of passengers, general public, ground personnel and property. It also involves the protection of persons and cargo in carriage by air facilities and related auxiliary support activities.

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- ❑ **Various Forms of Aviation Security:** The various forms of civil aviation security includes; hijacking, shooting down, sabotage like explosions in aircraft, missile attacks against aircraft, armed attacks on airports, passengers and aviation property and bombings. A focus is also made on 'aviation facilities' ie., air terminals, cargo buildings, maintenance hangars, passenger buses, airline offices and travel agencies.
 - ❑ **Unlawful interference has had led to** human casualties, air services disruption and adverse economic impact which is incalculable

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- ❑ **The modern era of International Terrorism started in 1968** with the advent of modern advanced weapons and its use has brought up fresh challenges to law enforcing agencies.
 - ❑ **Some instances of unlawful interference with civil aircrafts:**
 - 1930: First Hijacking recorded in Peru
 - 1947: Rumanian aircraft was hijacked to Turkey
 - 1948: A pilot and two of the flight crew were themselves members of a 17 member strong hijacking team, which forced a Czechoslovakian Airliner to the then US zone of Germany.

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- 1970: The Pan Am 747 mid-air explosion
 - 1983: Shooting down of KAL
 - 1984: Explosion of Air France
 - 1985: Air India Boeing 747 explosion en route to Delhi from Montreal
 - 1989: Columbia Avianca Airline Boeing 727 – Bomb planted near the fuel tanks etc...
- ❑ The aforesaid instances led for the evolution of stringent measure in “security control”.**

2. Annex-17 & Resolutions Relating to Global Aviation Security

- ❑ **Annex-17 was incorporated** based on the following two Resolutions:
- ❑ **Resolution A17-10:** Implementation by States of Security Specifications and Practices adopted by this Assembly and further work by ICAO related to such Specifications and Practices .
- ❑ **Resolution A18-10:** Additional Technical Measures for the Protection of the Security of International Civil Air Transport.

3. Meaning of 'Unlawful Interference'

- ❑ **Meaning of Unlawful Interference:** These are acts or attempted acts such as to jeopardize the safety of civil aviation, including but not limited to:
 - unlawful **seizure** of aircraft,
 - **destruction** of an aircraft in service,
 - **hostage-taking** on board aircraft or on aerodromes,
 - **forcible intrusion on board an aircraft**, at an airport or on the premises of an aeronautical facility,

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- **introduction on board** an aircraft or at an airport of a **weapon or hazardous device** or material intended for criminal purposes,
 - **use of an aircraft in service** for the purpose of causing death, serious bodily injury, or serious damage to property or the environment,
 - **communication of false information** such as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility.

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- ❑ **High-risk cargo or mail. Cargo or mail presented by an unknown entity or showing signs of tampering shall be considered high** risk if, in addition, it meets one of the following criteria:
 - specific intelligence indicates that the cargo or mail poses a threat to civil aviation; or
 - the cargo or mail shows anomalies that give rise to suspicion; or
 - the nature of the cargo or mail is such that baseline security measures alone are unlikely to detect prohibited items that could endanger the aircraft.
 - ❑ **Regardless of whether** the cargo or mail comes from a known or unknown entity, a State's specific intelligence about a consignment may render it as high risk.

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- **Security:** Safeguarding civil aviation against acts of unlawful interference. This objective is achieved by a combination of measures and human and material resources.

4. General Principles

- ☐ Objectives
- ☐ Applicability
- ☐ Security and Facilitation
- ☐ International Cooperation
- ☐ Innovation, Research and Development

❑ **Objectives:**

- ❑ **Safety of** passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation.
- ❑ **Establishment of** an organization and develop and implement regulations, practices and
- ❑ **Procedures to** safeguard civil aviation against acts of unlawful interference taking into account the safety, regularity and efficiency of flights.

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- ❑ **Shall ensure** that such an organization and such regulations, practices and procedures:
 - **Protect the safety** of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation; and
 - (b)are capable of responding rapidly to meet any increased security threat.

❑ **Applicability:**

- **Each Contracting State shall apply** the Standards and shall endeavour to apply the Recommended Practices contained in Annex 17 to international civil aviation operations.
- ❑ Each Contracting State **shall ensure** that measures designed to safeguard against acts of unlawful interference are applied to domestic operations to the extent practicable, based upon a security risk assessment carried out by the relevant national authorities.

❑ **Security and Facilitation:**

- ❑ **CC 1944: Article: 22:** Each contracting State agrees to adopt all practicable measures, through the issuance of special regulations or otherwise, to facilitate and expedite navigation by aircraft between the territories of contracting States, and to prevent unnecessary delays to aircraft, crews, passengers and cargo, especially in the administration of the laws relating to immigration, quarantine, customs and clearance.

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- ❑ **Here reference is to made to Article 10 which speaks of Landing at Customs Airport i.e. Regulations on Landing: Annex-9 (Facilitation);** *defines an international airport as “ any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out”.*

Article 37 (SARPs)

Adoption of international standards and procedures

- ❑ Each contracting State undertakes to collaborate in securing the highest practicable degree of uniformity in regulations, standards, **procedures**, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation.
- ❑ To this end the International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with:

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- ☐ (a) **Communications** systems and air navigation aids, including ground marking;
 - ☐ (b) **Characteristics** of airport and landing areas;
 - ☐ (c) **Rules of the air** and air traffic control practices;
 - ☐ (d) **Licensing** of operating and mechanical personnel;
 - ☐ (e) **Airworthiness** of aircraft;
 - ☐ (f) **Registration** and **identification** of aircraft;
 - ☐ (g) Collection and exchange of **meteorological information**;
 - ☐ (h) **Log books** (management, operation, and navigation of an aircraft)
 - ☐ (i) **Aeronautical maps** and charts;
 - ☐ (j) **Customs and immigration** procedures;
 - ☐ (k) Aircraft in **distress and investigation** of accidents;

and such other matters concerned with the safety, regularity, and efficiency of air navigation as may from time to time appear appropriate..

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- ❑ **International Cooperation:** Each Contracting State:
 - Shall ensure that requests from other Contracting States **for additional security measures are met;**
 - Shall cooperate with other State in the **development and exchange of** information concerning national civil aviation **security programmes** etc.
 - Shall establish and implement **procedures applicable to aviation security.**
 - Shall establish and implement suitable protection and handling procedures for **securing information by other Contracting States.**

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- ❑ **Innovation, Research and Development:** Each Contracting State:
 - Should promote research and development of **new security equipment, processes and procedures**
 - Should ensure that the development of new security equipment takes into consideration **Human Factors principles**.
 - Should consider implementing innovative processes and procedures to allow operational differentiation of **screening and security controls based on clearly defined criteria**.

5. Organization

National Organization and Appropriate Authority

- ❑ **Each Contracting State:**
 - Shall establish and implement a written national **civil aviation security programme** to safeguard civil aviation operations;
 - Shall **designate and specify to ICAO** an appropriate authority;
 - Shall **keep under constant review** the level and nature of threat to civil aviation;
 - Shall require the **appropriate authority** to define and allocate tasks and coordinate activities between the departments, agencies etc.

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- Shall establish a **national aviation security committee**;
 - Shall require the appropriate authority to ensure the development and **implementation of a national training programme for personnel of all entities involved with**;
 - Shall ensure that the appropriate authority arranges for the **supporting resources and facilities** required by the aviation security;
 - Shall make available to its airport and aircraft operators and air traffic service providers operating in its territory and other entities concerned, **a written version of the appropriate parts of its national civil aviation security programme etc.**
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Airport Operations

❑ Each Contracting State:

- Shall require each airport – implementing airport security programme;
- Shall ensure that an authority at each airport be responsible for implementation of security controls;
- Shall ensure that an airport security committee to assist the authority;
- Shall ensure that airport design requirements, including architectural and infrastructure related requirements necessary for the implementation of the security measures.

Aircraft Operators

- ❑ **Each Contracting State:**
 - Shall ensure that commercial air transport operators providing service **meet the requirements of the national civil aviation security programme of that State;**

Quality Control and Qualifications

- ❑ **Each Contracting State:**
 - Shall ensure background checks and selection procedures;
 - Shall ensure that the persons implementing security controls possess all competencies required to perform;
 - Shall ensure that the persons carrying out screening operations are certified according to the requirements etc....

Air Traffic Service Providers

- ❑ **Each Contracting State** shall require air traffic service providers operating in that State **to establish and implement appropriate security provisions to meet the requirements** of the national civil aviation security programme of that State.

6. Preventive Security Measures

- ❑ **Objective:** Each Contracting State shall establish measures to prevent weapons, explosives or any other dangerous devices, articles or substances, which may be used to commit an act of unlawful interference, the carriage or bearing of which is not authorized, for being introduced, by any means whatsoever, on board an aircraft engaged in civil aviation.

Measure Relating to Access Control

❑ Each Contracting State:

- Shall ensure access to **airside areas at airports to prevent unauthorized entry;**
- Shall ensure that **security restricted areas are established;**
- Shall ensure that **identification systems are established in respect of persons, vehicles etc.**
- Shall ensure that **background checks are conducted on persons other than passengers;**
- Shall ensure that the **movement of person and vehicles are supervised;**
- Shall ensure **screening and security controls;**

Measures Relating Aircraft

- ❑ **Each Contracting State:**
- ❑ Shall ensure that aircraft security checks of originating aircraft engaged in commercial air transport movements are performed;
- ❑ Shall ensure that measures are taken to ensure that any items left behind by passengers disembarking from transit flights are removed from the aircraft;
- ❑ Shall require its commercial air transport operators to take measures as appropriate to ensure that during flight unauthorized persons are prevented from entering the flight crew compartment.

Measures relating to Passengers and their Cabin Baggage

- ❑ **Each Contracting State:**
- ❑ Shall establish measures to ensure that originating passengers of commercial air transport operations and their cabin baggage are screened prior to boarding an aircraft departing from a security restricted area;
- ❑ Protected from unauthorized interference from the point of screening at the originating airport to the departing aircraft at the transfer airport.
- ❑ If mixing or contact does take place, the passengers concerned and their cabin baggage shall be re-screened before boarding an aircraft.

Measures relating to hold baggage

- ❑ **Each Contracting State:**
 - Shall screen prior to loading;
 - Protected from unauthorized interference from departure till arrival;
 - Air transport operators do not transport the baggage of persons
 - Passengers who are not on board the aircraft unless that baggage is identified as unaccompanied and subjected to appropriate screening.

Measures relating to cargo, mail and other goods

❑ Each Contracting State shall:

- Screen before loading;
- Approval of regulated agents and/or known consignors, if such entities are involved in implementing screening or other security controls of cargo and mail.
- Unauthorized interference
- Enhanced security measures apply to high-risk cargo and mail to appropriately mitigate the threats associated with it.

Measures relating to Special Categories of Passengers

- ❑ Each Contracting State: (For Passengers subject to Judicial/Administrative Proceedings):
 - Shall develop requirements for air carriers for the carriage of aforesaid
 - Ensure safety on board their aircraft when passengers are to be carried;
 - Shall ensure that the aircraft operator and the pilot-in-command are informed

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- Shall ensure that the **carriage of weapons on board aircraft**, by law enforcement officers and other authorized persons, acting in the performance of their duties, **requires special authorization in accordance with the laws of the States involved**.
 - Shall consider requests by any other State **to allow the travel of armed personnel, including in-flight security officers, on board aircraft of operators of the requesting State. Only after agreement by all States involved shall such travel be allowed.**

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- If stowed(packed) in a place **inaccessible** to any person during flight time.
 - The deployment of such **officers shall be coordinated** with concerned States and kept strictly confidential.

Measures relating to the Landside

- ❑ **Each Contracting State:**
 - Shall ensure that landside areas are identified.
 - ❑ Shall ensure that security measures are established for landside areas to mitigate the risk of and to prevent possible acts of unlawful interference;
 - ❑ Shall ensure coordination of landside security measures between relevant departments, agencies, other organizations of the State, and other entities, and identify appropriate responsibilities for landside security in its national civil aviation security programme.

Measures Relating to Cyber Threats

- ❑ **Each Contracting State:**
- ❑ Ensure that appropriate measures are developed in order to protect the confidentiality, integrity and availability of critical information and communications technology systems and data used for civil aviation purposes from interference that may jeopardize the safety of civil aviation.

7. Management of Response to acts of Unlawful Interference

Prevention

- ❑ **Each Contracting State:**
 - Shall establish measures, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, to safeguard the aircraft **if it is still on the ground;**
- ❑ Shall ensure, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, **that the aircraft is searched for concealed weapons, explosives or other dangerous devices, articles or substances.**

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- ❑ Shall ensure that arrangements are made to investigate, render safe and/or dispose of, if necessary, **suspected dangerous devices or other potential hazards at airports;**
 - ❑ Shall ensure that **contingency plans** are developed and resources made available to safeguard civil aviation against acts of unlawful interference;
 - ❑ Shall ensure that **authorized and suitably trained personnel are readily available for deployment at its airports serving** civil aviation to assist in dealing with suspected, or actual, cases of unlawful interference with civil aviation.

Response

- ❑ **Each Contracting State:**
- ❑ Shall take appropriate measures for the safety of passengers and crew of an aircraft, which is subjected to an act of unlawful interference;
- ❑ **Each Contracting State responsible** for providing air traffic services for an aircraft, which is the subject of an act of unlawful interference, shall collect all pertinent information on the flight of that aircraft and transmit that information to all other States responsible for the air traffic services units concerned;

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- **Shall provide assistance to an aircraft** subjected to an act of unlawful seizure, including the provision of navigation aids, air traffic services and permission to land as may be necessitated by the circumstances.
 - Shall take measures, as it may find practicable, to ensure that an aircraft subjected to an act of unlawful seizure which has landed in its territory is detained on the ground unless its departure is necessitated by the overriding duty to protect human life.

➤ **Each Contracting State** in which an aircraft subjected to an act of unlawful interference has landed **shall notify by** the most expeditious means the State of Registry of the aircraft and the State of the Operator of the landing and shall similarly transmit by the **most expeditious means all other relevant information to:**

- ❖ a) the two above-mentioned States;
- ❖ b) each State whose citizens suffered fatalities or injuries;
- ❖ c) each State whose citizens were detained as hostages;
- ❖ d) each State whose citizens are known to be on board the aircraft; and
- ❖ e) the International Civil Aviation Organization.

Exchange of Information and Reporting

- ❑ **Each Contracting State:**
- ❑ Concerned with an act of unlawful interference shall provide ICAO with all pertinent information concerning the security aspects of the act of unlawful interference as soon as practicable after the act is resolved.

8. Annex-2: Rules of the Air

- **Article 3.7: Unlawful Interference:** An aircraft which is being subjected to unlawful interference shall endeavour to notify the appropriate ATS unit of this fact, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATS unit to give priority to the aircraft and to minimize conflict with other aircraft.

9. Annex-6: Operation of Aircraft

❑ Security:

- Security of the Flight Crew Compartment (door should be locked)
- Aeroplane Search Procedure Checklist (Operator should ensure)
- Operator shall establish Approved Security Training Programme
- Reporting acts of Unlawful Interference

10. Annex-8: Airworthiness of Aircraft

Security:

- Least Risk Bomb Location
- Protection of the Flight Crew Compartment
- Interior Designs

11. Annex-9: Facilitation

□ Contracting States:

- Shall take into account the application of aviation security and narcotics control measures, where appropriate;
- Shall take into account the application of aviation security, border integrity, narcotics control and immigration control measures, where appropriate;
- Shall not extend the validity of their machine readable travel documents.

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- Shall regularly update security features in new versions of their travel documents, to guard against their misuse and to facilitate detection of cases where such documents have been unlawfully altered, replicated or issued.
 - Shall establish controls to safeguard against the theft of their blank travel documents and the misappropriation of newly issued travel documents.
 - Inspection of Travel Documents
 - Entry Procedure and Responsibilities (Advance Passenger Information)

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- Identification and entry of crew and other aircraft operators' personnel;
 - Entry and Departure of Cargo and Other Articles;
 - Inadmissible Persons and Deportees

12. Annex-10: Aeronautical Telecommunications

Surveillance and Collision Avoidance Systems

- ❑ Code 7700 to provide recognition of an aircraft in an emergency.
- ❑ Code 7500 to provide recognition of an aircraft which is being subjected to unlawful interference.

13. Annex-11: Air Traffic Services

- **Service to Aircraft in the event of Emergency:** An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, **shall be given maximum consideration,** assistance and priority over other aircraft as may be necessitated by the circumstances.
- **Alerting Service** shall be provided to any aircraft known or believed to be the subject of unlawful interference.
- ❖ **Alerting Service:** (A service provided to notify appropriate organizations regarding aircraft in need of search and rescue air and assist such organizations as required. It lies in cooperation with Search and Rescue Centre and informing about any aircraft that are, or appear to be, in a state of emergency.)

14. ANNEX 13

AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

- ☐ **Responsibility of the State Conducting the Investigation:**
- ☐ **Informing Aviation Security Authorities:**
- ☐ If, in the course of an investigation it becomes known, or it is suspected, that an act of unlawful interference was involved, the investigator-in-charge shall immediately initiate action to ensure that the aviation security authorities of the State(s) concerned are so informed.

15. ANNEX 14 — AERODROMES, VOLUME I — AERODROME DESIGN AND OPERATIONS

- ❑ **Isolated aircraft parking position**
- **An isolated aircraft parking position** shall be designated or the aerodrome control tower shall be advised of an area or areas suitable for the parking of an aircraft which is known or believed to be the subject of unlawful interference, or which for other reasons needs isolation from normal aerodrome activities.
- ❑ **Fencing:** A fence or other suitable barrier shall be provided on an aerodrome to deter the inadvertent or premeditated access of an unauthorized person onto a non-public area of the aerodrome.

16. ANNEX 18

THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

❑ Each Contracting State:

- Shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

- ❖ **Technical Instructions means: For the Safe Transport of Dangerous Goods by Air (Doc 9284) They are intended to facilitate transport while providing a level of safety such that dangerous goods can be carried without placing an aircraft or its occupants at risk, providing all the requirements are fulfilled.**

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- **Shall establish dangerous goods security measures, applicable to shippers, operators and other individuals engaged in the transport of dangerous goods by air**, to be taken to minimize theft or misuse of dangerous goods that may endanger persons, property or the environment. These measures should be commensurate with security provisions specified in other Annexes and the Technical Instructions.

17. Conventions

❑ Conventions Relating to Aviation Security:

- i. The Convention on Offences and Certain Other Acts Committed on Board Aircraft – **The Tokyo Convention: 1963**
 - ii. The Convention for the Suppression of Unlawful Seizure of Aircraft – **The Hague Convention: 1970**
 - iii. The Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation – **The Montreal Convention: 1971**
 - iv. The Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation – **The Montreal Convention: 1988**
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- v. Convention on the Making of Plastic Explosives for the Purpose of Detection – **The Montreal Convention: 1991**

NOTE: Also please refer to the Material supplied.

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