Navigating the Skies: An Overview of Aviation Law in India

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Abstract:
The aviation sector in India has been undergoing rapid growth in recent years with the increased development stages. Leading to the development of a complex and dynamic legal framework in aviation, it has given a broad way and contributed in a wide manner to economic growth as well as in the legal developments related to aviation. This framework is governed by a range of statutes, regulations, and case law designed to ensure safety and security in the aviation sectors covering all four directions for protection and safety. This article provides an overview of aviation law in India, including its regulatory framework, key legislation, and recent developments in the sector. It also highlights the need to continue improving the legal and regulatory environment for the industry’s sustainable growth, as long-term stagnancy brings unhygienic results.

Along with legal protection, the digital safety of aviation is also to be taken into the framework. The Indian aviation sector has shown tremendous graphical growth towards development. Some rules on aviation need to be more specific, considering the situational emergencies and intentions to handle and to come out from that specific emerged risk.

Keywords: Aviation, statutes, regulations, key legislation

Figure 1.
1. Introduction:
Aviation law in India includes air travel, aircraft operations, air navigation services, safety, and security. The International Civil Aviation Organisation (ICAO)\(^1\), the Convention on International Civil Aviation (Chicago Convention), and the Montreal Convention have shaped India's aviation legislation. The Civil Aviation Act of 1982 regulates civil aviation in India\(^2\). Airworthiness, flight operations, and air transport services are regulated by the Directorate General of Civil Aviation (DGCA), which was established under the Act.

More laws and regulations are needed for India's aviation industry. Air travel is made more economical and accessible by the Indian government's National Civil Aviation Policy of 2016 and UDAN (Ude Desh Ka Aam Nagrik) scheme.

This page covers aviation law in India, including the regulatory architecture, major laws, and recent revisions. The Indian aviation industry's issues, prospects, and need for legislative and regulatory reforms are also explored.

India's aviation sector has grown significantly. Due to rising airline and airport numbers, robust regulation is needed. Aviation law is a complex and vibrant field in India. This page provides a history and outline of Indian aviation law.

Figure 2.

1.1 History\(^4\) and Development: India's aviation sector has a lengthy history, beginning in 1911 with the launch of the nation's first commercial flight from Allahabad. The Indian Aircraft Act, 1934, which was later superseded by the Aircraft Act, 1952, established India's aviation regulatory structure.

In 1994, the Indian government liberalised air transport and allowed commercial airlines to enter the market via the Open Skies Policy. India's aviation industry expanded, necessitating a more extensive legislative framework.

In 2007, the DGCA issued the Civil Aviation Requirements (CAR) to ensure compliance with the Aircraft Act, of 1952. Airworthiness, flight operations, aerodromes, and pilot, air traffic controller, and engineer licencing are covered by the CASR.
1.2 Key Aviation Law Provisions in India: The primary aviation laws in India are:

- **Regulatory Bodies**: India's civil aviation regulator is the DGCA. It is responsible for enforcing safety regulations, overseeing airworthiness standards, flight operations, aerodrome design and operations, and licensing pilots, air traffic controllers, and engineers. The Bureau of Civil Aviation Security (BCAS) oversees aviation security, and the Airports Authority of India (AAI) operates airports nationwide.

- **Primary Legislation**: India's Aircraft Act, 1952 governs civil aviation. The Act establishes the DGCA and BCAS and allows aircraft registration, ownership, and operation.

- **Civil Aviation Requirements (CAR)**: The DGCA issues CARs on airworthiness requirements, flight operations, and personnel licencing in India. International best practises are continuously updated in these requirements.

- **Air Carrier Liability**: The Carriage by Air Act, 1972 holds air carriers liable for passenger damage, death, or lost baggage. The Act limits air carrier responsibility in such instances.

- **Aviation Security**: The Anti-Hijacking Act, 2016 prevents and punishes airline hijacking, while the airline (Public Health) Rules, 1954 protect air travellers from contagious diseases. The BCAS oversees Indian aviation security.

- **Liberalisation of Air Transport**: In 1994, the Indian government introduced the Open Skies Policy, allowing commercial airlines to enter the market. Through privatisation and greenfield airports, the government has also encouraged private aviation investment.
g. **Recent Developments:** The Indian government's Drone Rules, 2020, regulate drone use. The laws require DGCA licences and drone operation guidelines.

1.3 **The air and ground laws of India govern aviation.** Indian aviation legislation includes:

- [1934 Aircraft Act](#): Regulates Indian air navigation, pilot licencing, and aircraft registration.
- [1937 Aircraft Rules](#): Describe aircraft registration, pilot licencing, and airworthiness.
- [Civil Aviation Requirements](#): The Indian DGCA issues the CARs. These rules address airworthiness, flight operations, aerodromes, and air traffic services.
- [1994 Airports Authority of India Act](#): Establishes its powers, tasks, and constitution.
- [2014 ANS Regulations](#): These rules govern India's air navigation service.
- [2011 BCAS Regulations](#): These rules safeguard Indian civil aviation.
- [1954 Aircraft (Public Health) Rules](#): These restrictions avoid aircraft-borne infectious illnesses.
- [1994 Aircraft (Demolition of Building and Tree Obstructions) Rules](#): Aircraft-hazardous buildings and trees are demolished under these restrictions.

1.4 **Laws and regulations protect passengers and crew in aviation emergencies.**

**Examples are:**

- **Air India Express Flight 812 Crashed in Mangalore** on May 22, 2010, killing 158 persons. The investigation found that the pilot landed the jet too far down the runway, unable to stop. After the incident, Indian aviation authorities mandated pilot training, airline monitoring, and safety standards.
- **Jet Airways Bankruptcy:** India's largest private airline, Jet Airways, suspended operations in April 2019 due to financial issues. The airline went insolvent in June. The case showed that Indian airlines need tougher financial restrictions to avoid bankruptcy and stranding customers.
- **SpiceJet Financial Troubles:** Another Indian airline, SpiceJet, had financial issues in 2014, cancelling hundreds of flights and disrupting passengers. Investors saved the airline, and Indian aviation regulators tightened financial stability restrictions.
- **IndiGo Airlines' Safety Issues:** In 2019, the Directorate General of Civil Aviation (DGCA) ordered IndiGo Airlines to replace damaged Pratt & Whitney engines on its Airbus A320neo aircraft. IndiGo's engine issues and mid-air shutdowns prompted the move. The case showed the necessity for stronger airline monitoring and maintenance to protect passengers.
- **Kingfisher Airlines Licence Suspension:** In 2012, the DGCA banned Kingfisher Airlines, owned by Vijay Mallya, for safety and financial issues. In 2013, the airline closed, laying off thousands of workers and stranding customers. The case underscored the need for tighter banking and airline regulation in India.
- **International Civil Aviation Organisation (ICAO):** The UN's specialised aviation safety and security body. In an emergency, ICAO advises on search and rescue, communication, and agency cooperation.
- **US National Transportation Safety Board (NTSB):** Examines aviation accidents. In an emergency, the NTSB may investigate and offer safety recommendations.

Civil aviation in the US is regulated by the FAA. In an emergency, the FAA may issue emergency directives to airlines and other aviation corporations to protect passengers and crew.

Airline Safety Management Systems are critical to control safety hazards and avert emergencies, several airlines use SMS. In an emergency, airlines can use SMS to respond swiftly and reduce risks.

The laws and regulations that apply to aviation emergencies are meant to protect passengers and crew and avoid future emergencies.
Pilots may have to stray from conventional operating procedures or make situation-specific decisions in emergencies. Emergency Response Plan (ERP) guidelines are provided by the International Civil Aviation Organisation (ICAO).

1.5 Emergency exemptions\textsuperscript{7,2} for pilots include:
Deviation from flight procedures: Pilots may need to divert from regular flight procedures in emergencies. To handle the emergency, they may need to change altitude, speed, flight path, or aircraft systems.
Priority handling: In an emergency, air traffic controllers will prioritise the affected aircraft. This means that other flights may be asked to give way or the impacted aircraft may be granted priority to land or take off. In an emergency, a pilot was exempted.
Southwest Airlines had a fast depressurization and engine failure at 32,000 feet in 2018. The captain, Tammie Jo Shults, decided to drop to a lower altitude and divert to an airfield for an emergency landing. The flight received priority handling when the captain declared an emergency to air traffic control. She also used manual controls to stabilise the aeroplane, deviating from conventional protocols. The flight landed safely, and the captain was praised for her emergency response.

1.6 Steps are typically taken after a hijacking\textsuperscript{7,3}, depending on the airline and country:
Pilots will notify air traffic control and request assistance.
The airline's hijacking protocol requires pilots to stay cool, comply with the hijacker, and avoid acts that could harm the aircraft or passengers.
The crew will explain the situation and give passengers safety recommendations.
The hijackers will alert and send airport security and law enforcement.
A nearby airport with enough security and law enforcement may redirect the hijacked aircraft.
If possible, negotiate with the hijacker.
Law enforcement and security may force the hijacker out if necessary. Note that airlines and airports routinely alter their hijacking response tactics based on fresh knowledge and experience and the government what decisions they take to make safe their citizens.

Rationale:
Aviation law in India research seeks to comprehend India's aviation laws. An effective legal structure to regulate and oversee the aviation industry is vital to the economy. Aviation law involves safety, air traffic control, aircraft operations, airport administration, and accident liability.
Aviation law research in India has many benefits. First, more Indians are flying than ever before, expanding the aviation business. This rise has raised demand for aviation services, necessitating a strong legal framework. Second, aviation is complex and hazardous, so a legal structure that manages these risks and protects passengers and crew is essential.
Aviation law research in India can also identify legal gaps. For instance, loopholes in existing regulations or new legislation may be needed to meet industrial needs. Aviation law study can also reveal international best practices that India can use to strengthen its legal structure.
Aviation law in India research is to comprehend the legal framework governing aviation activities in India, identify opportunities for improvement, and ensure passenger and crew safety in this rapidly increasing industry.
Statement of the Problem:
In India's fast-growing aviation industry, legal and regulatory issues persist. These include more infrastructure and resources, unclear legislation, and regular enforcement. Thus, Indian aviation law research must assess the current legal and regulatory framework's ability to address these challenges and ensure the industry's safe and sustainable growth. The research can evaluate existing laws and regulations, their implementation and enforcement, and potential revisions to help India's aviation business.

1. To evaluate India's aviation laws and regulations for safety, security, and growth.
2. To suggest ways to strengthen India's aviation legal and regulatory system, including more transparent and more consistent legislation, better infrastructure and resources, and stricter enforcement.
3. To examine India's aviation legal and regulatory structure after the Drone Rules, 2020, and air transport deregulation.
4. To assess airline, airport, and regulatory body compliance with rules and identify areas for improvement.
5. Analyse India's aviation legislative and regulatory structure and propose reforms.
6. The research should examine India's aviation legal and regulatory structure to improve it for safe and sustainable growth.
7. Innocent travellers are at risk, notwithstanding India's aviation laws at the time of the hijacking.

Research hypothesis:
India has a strong civil aviation legal and regulatory framework, but its implementation and enforcement are complicated, generating concerns about aviation safety, security, and growth. This is due to limited infrastructure and resources, inconsistent regulation application, and a lack of regulatory transparency and accountability. India's civil aviation legislative and regulatory structure needs revision to address these concerns and ensure safe, sustainable expansion. To avoid stagnation, the rules and legal framework must be updated throughout time to address new requirements and issues. Thus, the era requires discovery-based upgradation.

Scope of the study:
Research on aviation law in India could cover several areas of the legal and regulatory framework controlling the civil aviation business in India. Within this framework, suitable areas of focus include:

1. Airlines' licencing, safety, and financial criteria.
2. Airport infrastructure, security, and environmental laws.
3. Registration, safety, and privacy rules for drone use in India.
4. India's legal and regulatory framework for air transport services, including liberalisation and its impact on the domestic airline industry.
5. Aviation accident investigations and compensation processes.
6. The DGCA's role in enforcing Indian aviation laws and regulations.

A comparative examination of India's aviation legal and regulatory framework with other nations and an analysis of recent policy and regulatory changes on the aviation industry in India can also be included in the study. The study can include interviews with stakeholders, legal document examination, and literature evaluation.
Aim and objective of the research:
Indian aviation law studies may seek:
To assess the Indian aviation industry's legislative structure and recommend changes.
To study how international laws and regulations affect the Indian aviation industry and India's compliance.
To assess the DGCA's ability to safeguard Indian aviation.
To examine legal concerns related to drones and UAVs.
To analyse the legalities of India-foreign air transportation agreements, including airfares, routes, and competition.
To examine how arbitration resolves aviation problems.
To discover and analyse Indian airline legal concerns such aircraft leasing, financing, and insurance.
To examine the legal effects of the COVID-19 outbreak on Indian aviation.
To study how government policies and laws affect Indian aviation growth.
To propose legal reforms for the Indian aviation industry based on foreign best practises and India's particular difficulty

Literature review:
India's civil aviation business has grown, changing aviation law. The legislative and regulatory framework governing airlines and airports, drones, air transport services, aviation accidents, and regulatory organisations have been studied in India.
"Aviation Law and Policy in India" by Hegde10 (2019) covers India's civil aviation law and policy. The book analyses India's regulatory landscape and discusses air navigation, air transport, airport expansion, and aviation safety.
"The Legal Regime of Civil Aviation in India" by Kothari11 (2019) covers India's civil aviation rules. The author covers the DGCA and AAI's involvement in regulating the industry and the legislative framework for airline operations and airport infrastructure development.
Saha and Singh's 12(2018) "Unmanned Aerial Vehicles and Indian Aviation Law" explores India's drone laws. The writers explore drone registration, safety, and privacy.
"Air Transport Policy and Regulation in India: Performance and Challenges" by Mukherjee14 (2017) explores the aviation industry's policy and regulatory issues. The author examines infrastructural development, pricing regulation, competition policy, and industry growth and profitability.
"India’s New National Civil Aviation Policy: An Analysis" by Singh15 (2017) examines the 2016 Indian government's NCAP. The author addresses the policy's main aspects, including the regional connection program and its likely influence on the sector.

Methodology:
Aviation law study uses doctrinal methods to analysed and interpret statutes, regulations, and case law. It usually follows these steps:
1. Followed as a researcher to choose a legal subject to study.
2. As a researcher collected statutes, regulations, and case law.
3. As a researcher, for reviewed and analysed legal sources for pertinent information, precedents, and legal concepts.
4. For writing and presenting research summarises and delivering the findings.
5. Legal sources have been analysed and interpreted objectively in the research.

**Research questions:**

**How did Indian aviation law develop?**

The early 20th century saw the birth of Indian aviation law. The British colonial government's Indian Aircraft Act, 1911, was India's first aviation law. The Act registered, inspected, and licenced pilots and engineers. After India's independence in 1947, the 1934 Aircraft Act was amended to suit its needs. The Act has been revised multiple times to keep up with the aviation industry's rapid change. The 1972 Airports Authority of India Act created the AAI, which regulates India's airports and air navigation infrastructure.

India's Directorate General of Civil Aviation (DGCA) was created in 1982 to regulate civil aviation safety. The DGCA issued licences and permits, inspected airlines, airports, and other aviation-related companies, and enforced safety standards.

To keep up with aviation changes, India has passed various new rules and regulations. The 2016 National Civil Aviation Policy promoted India's aviation industry's growth. The policy's Regional connection Scheme improved connection in remote and disadvantaged regions.

India has also implemented drone regulations. India's drone regulations were established in 2018 with the Civil Aviation Requirements (CAR) for Remotely Piloted Aircraft Systems (RPAS). The CAR requires drone operators to get permits and observe strict drone usage rules.

The necessity to safeguard the safety and efficiency of the country's aviation sector while keeping up with technology and market conditions has pushed the evolution of Indian aviation law.

**What are the primary laws and regulations governing aviation in India, including those related to airworthiness, pilot licensing, and air traffic control?**

India's main aviation legislation are:

- The Aircraft Act, 1934: This law governs civil aviation in India and sets registration and airworthiness standards.
- The 1937 Aircraft Rules address aircraft operation, maintenance, and safety.
- The 1972 Carriage by Air Act governs air carriers' liability for passenger injuries, deaths, and luggage damage.
- 2016 BCAS Act: The BCAS secures Indian civil aviation under this act.
- The Airports Authority of India Act, 1994: The AAI develops, manages, and operates Indian airports.
- Civil Aviation Requirements: These DGCA guidelines cover airworthiness, pilot licencing, and air traffic control.
- The Indian Aircraft Rules, 2020, amended the Aircraft Rules, 1937, and include aircraft operation, maintenance, and safety.
- 2020 Aircraft Amendment Act: This act revised the Aircraft Act, 1934, to raise aviation safety penalties and allow modest fines.

These laws and regulations govern civil aviation in India and define safety and security standards.
How does India's aviation regulatory framework compare to those of other countries?

India's aviation regulatory structure prioritises safety and efficiency, like others. However, regulation structure and enforcement differ. The regulatory framework's centralization differs. The FAA and CASA regulate aviation in the US and Australia, respectively. The Ministry of Civil Aviation (MoCA), Airports Authority of India (AAI), and Directorate General of Civil Aviation (DGCA) regulate aviation in India. Regulation enforcement differs. The FAA enforces laws in the US. In India, police and customs authorities work with the DGCA to enforce laws. Regulation openness and public participation vary. Stakeholders can comment on draft regulations in some nations, including the US, where public participation in rulemaking is common. In India, the regulatory process is less transparent, and stakeholders may have less opportunities to comment on proposed regulations. While aviation regulations in India differ from those in other countries, the basic principles of safety and efficiency are the same.

What are the key challenges and issues facing the Indian aviation industry from a legal perspective, such as safety, security, and liability?

Legal difficulties plague the Indian aviation industry. Some are:

Safety: Indian aviation prioritises passenger, crew, and aircraft safety. The 2020 Air India Express tragedy was one of several high-profile safety issues. Safety requirements and operator compliance are continuous issues for the sector.

Security: With terrorism and other security threats, the Indian aviation industry must maintain tight security to safeguard passengers and prevent unauthorised access to aircraft and infrastructure. Complex security regulations must be implemented and enforced by the industry.

Liability: With millions of passengers travelling annually, the Indian aviation industry confronts considerable liability risks in accidents or incidents. To protect themselves and their passengers, airlines and other operators must have proper insurance and follow liability requirements.

Infrastructure: Many Indian airports are still under construction and have capacity difficulties. Airlines and other operators may be liable for delays and other operational issues.

Regulation: Navigating India's aviation regulations can be difficult. Airlines and other operators face legal and financial risks from regulatory changes. The Indian aviation industry's legal challenges include safety, security, and compliance. To sustain and grow the sector, authorities, operators, and other stakeholders must address these difficulties.

How does India's aviation law impact international airlines operating in the country, including issues related to foreign ownership and liability?

India's aviation law impacts international carriers. Foreign airlines face ownership and liability constraints. Foreign Ownership Limits:

Indian law limits foreign carriers to 49% equity in an Indian airline. This restriction protects Indian airline ownership and control. However, cargo airlines and airlines providing technical assistance to Indian airlines are exempt.
Liability Rules:
India-based international carriers are also liable. These rules hold airlines liable for any damages or losses they cause. The Montreal Convention, Carriage by Air Act 1972, and other legislation control international carriers’ liability in India.
International airlines operating in India must also comply with various safety, security, and operational laws. This may require DGCA permits and approvals.
International airlines in India face difficult regulations. International airlines have successfully navigated India's regulatory structure to establish a presence due to its increasing aviation market and strategic position.

What role does the Indian government play in regulating the aviation industry, and how does it interact with industry stakeholders such as airlines and airport operators?
Several government agencies regulate the aviation industry in India. The Ministry of Civil Aviation (MoCA) is India's main civil aviation policymaker. Airline and airport licences and permits are issued by the MoCA.
Another prominent aviation regulator is the Directorate General of Civil Aviation (DGCA). The DGCA enforces safety, security, and operational requirements. The DGCA inspects and audits airlines and airport operators to guarantee compliance.
Apart from these entities, the Airports Authority of India (AAI) manages and develops Indian airports. The AAI manages airport safety and air traffic control.
Airlines and airport operators communicate with the Indian government through many means. Consultations, working groups, and other engagements are possible. The government discusses policy and regulation with industry organisations like the Federation of Indian Airlines and the Association of Private Airport Operators.
Several government agencies regulate the aviation industry in India. To promote safety, efficiency, and sustainability, the government works with industry.

How has the COVID-19 pandemic impacted aviation law in India, and what changes have been made to adapt to the new reality of air travel?
Indian aviation law has changed due to the COVID-19 epidemic, which has had a major impact on the industry. Key modifications include:
Flight operations: The Indian government suspended domestic and international flights for a long time to stop the virus. The government authorised internal and international flights with restrictions once the situation eased.
Health and safety: The Directorate General of Civil Aviation (DGCA) released various recommendations and circulars on health and safety, including face masks, hand sanitization, and social distance in airports and on flights.
Financial assistance: To aid the aviation business, the Indian government cut taxes and gave airlines loans. Airfare capping: The Indian government capped domestic airfares to prevent airlines from overcharging passengers during the pandemic. Refunds and rescheduling: The DGCA advised airlines to refund or reschedule pandemic-cancelled flights without additional surcharges.
Passenger limits: The Indian government initially limited domestic aeroplane passengers to maintain social distancing. This limitation was lifted. These aviation legislation amendments were meant to protect passengers and crew, stabilise the aviation industry, and keep air travel inexpensive.

**India's aviation regulatory structure vs. others?**
Many nations have aviation regulation structures like India's. India's civil aviation regulatory structure is governed by the Directorate General of Civil Aviation (DGCA). The Ministry of Civil Aviation's DGCA grants airworthiness, pilot, and air traffic control licences, certificates, and approvals. India is a member of the UN's International Civil Aviation Organisation (ICAO), which sets global civil aviation rules. India also ratified the Chicago Convention on International Civil Aviation.

**What legal difficulties including safety, security, and responsibility face the Indian aviation industry?**
Safety, security, and liability issues plague the Indian aviation industry:
Safety: Aircraft maintenance, pilot mistake, and air traffic control catastrophes have plagued Indian aviation. Safety laws, training, and technology updates have addressed these concerns in the business.
Security: Terrorism and crime have also plagued Indian aviation. The Bureau of Civil Aviation Security (BCAS) oversees aviation security, and the government has taken steps to improve airport and flight security.
Accountability: Accident liability and accountability have plagued the Indian aviation industry. The 1972 Carriage by Air Act holds airlines liable for passenger injuries, deaths, and baggage damage. However, liability and compensation disputes have resulted in lengthy court proceedings.
DGCA and other government laws apply to the Indian aviation industry. Airlines and other stakeholders may struggle to comply with these standards due to frequent changes and interpretation.
Infrastructure: Old airports and air traffic control systems plague the Indian aviation industry. Modernising airports and air traffic control systems has helped the government handle these issues.
The Indian aviation industry has made headway in tackling these concerns, but more work is needed to keep it safe, secure, and responsible.

**How does India's aviation law affect foreign carriers' ownership and liability?**
Foreign Ownership Restrictions: Foreign airlines can own up to 49% of an Indian airline under Indian law. Indian airlines are protected by this prohibition. Cargo carriers and technical help providers are exempt from this provision.
Liability Regulations: International airlines operating in India must comply with liability regulations. These regulations hold airlines liable for any damages or losses caused by their operations. International airlines operating in India are liable under the Carriage by Air Act 1972 and the Montreal Convention. Compliance Requirements: International airlines operating in India must comply with a variety of safety, security, and operational laws and regulations. Permissions from regulatory agencies like the Directorate General of Civil Aviation (DGCA) may be needed.
Foreign carriers' ownership and liability are affected by India's aviation law, which restricts foreign ownership and requires compliance with liability and operational norms. These regulations must be followed for international airlines to operate in India.
How does the Indian government regulate airlines and airports?
The following bodies and rules oversee airlines and airports in India:
The DGCA: The DGCA governs civil aviation in India. It grants airworthiness, pilot, and air traffic control licences.
The AAI manages, operates, and develops Indian airports. It monitors airport construction, maintenance, and upgrades for safety and security.
Indian civil aviation policy is set by the Ministry of Civil Aviation. It manages the DGCA and AAI.
Civil Aviation Requirements (CARs): The DGCA issues CARs for airworthiness, flight operations, and airport services. To ensure air travel safety, airlines and airports must comply.
The BCAS oversees aviation security. It creates aviation security policies and monitors airport and flight security.

Why India's aviation regulatory system has faced criticism in the past?
For several reasons, India's aviation regulation structure has been criticised:
Slow to adapt: Critics say India's regulatory system hasn't kept up with industry needs and technology. This has delayed safety and security measures and stifled industrial innovation.
Bureaucratic inefficiencies: The Indian regulatory system has been criticised for being bureaucratic and inefficient, lacking transparency and accountability. This has delayed airline and stakeholder approvals, which might hurt sector growth and competition.
Safety issues: Aircraft maintenance, pilot mistake, and air traffic control mishaps have plagued the Indian aviation industry. The regulatory system has been criticised for not addressing these concerns and ensuring air travel safety in India.
Terrorism and crime have also threatened Indian aviation. Critics say the regulatory structure has not done enough to address these problems and secure Indian air travel.
Infrastructure issues: Outdated airports and air traffic control systems plague Indian aviation. The regulatory framework has been criticised for not addressing these issues and modernising industry infrastructure.
The administration has addressed earlier criticism of the Indian aviation regulatory structure and modernised it. The Bureau of Civil Aviation Security (BCAS) and Civil Aviation Requirements (CARs) are instances of regulatory reform in India.

What adjustments have been made to Indian aviation law to accommodate the COVID-19 pandemic?
Indian aviation law has been modified to account for the COVID-19 pandemic's effects. Pandemic-related changes to Indian aviation law include:
International Flights: The Indian government halted all international flights in March 2020, save for repatriation and freight planes. This suspension was phased till July 2021 and released with restrictions.
Health and Safety: The DGCA released rules for airlines and airports to protect passengers and crew during the epidemic. Masks, social distance, and sanitization were required.
Regulations: The Indian government has eased numerous regulations to benefit the aviation industry during the pandemic. It has extended pilot and crew licences and permitted airlines to operate on domestic routes with lower capacity to preserve social distance.
The Indian government has supported the aviation industry during the pandemic. This covers airline and airport assistance and tax and fee reductions. Evacuation Flights: The Indian government organised pandemic-related evacuation flights for Indian citizens abroad. Indian and foreign airlines flew these routes with official approval.

**Analysis and conclusion:**
India's strong economic growth and rising worldwide trade have boosted aviation freight volume. However, various obstacles hinder India's air cargo industry's expansion. The Indian air freight business struggles with airport infrastructure and capacity. Most Indian airports lack contemporary cargo-handling facilities, which delays cargo turnaround and increases damage and loss. Many airports lack skilled labour and obsolete cargo-handling equipment, which slows cargo operations and reduces efficiency. The high cost of air freight services in India makes it less competitive than other means of transport. High fuel prices, inefficient operations, and regulatory restrictions hinder industry expansion. Despite these obstacles, the Indian air freight market has several growth prospects. The air freight industry is growing due to e-commerce and quick delivery demand. India's burgeoning middle class and discretionary incomes are likely to enhance air cargo demand.

The Indian government has taken many steps to strengthen air cargo infrastructure and lower costs to capitalise on these potential. The government has developed cargo airports, modernised existing airports, streamlined customs processing, and incentivized air cargo facilities. In conclusion, the Indian air freight industry has many obstacles but also many growth and development prospects. The Indian air freight business can boost the economy and global trade by overcoming hurdles and seizing opportunities. COVID-19 has altered Indian aviation law. These changes have prioritised passenger and crew safety, airline industry support, and Indian citizen repatriation that is seen taking initiative and the step toward change was the need which was followed.

**Suggestions:** Indian aviation can improve in numerous areas to boost performance and efficiency. Some ideas:

*Infrastructure development:* India's airports must expand infrastructure to keep up with aviation growth. Modernising and expanding runways, terminals, and air traffic control systems would reduce congestion, boost capacity, and improve safety.

*Modernise and streamline aviation regulations:* The government should encourage private sector aviation engagement by developing low-cost carriers and liberalising foreign investment laws.

*Skill development:* Aviation safety and efficiency depend on skilled workers. Pilots, cabin crew, air traffic controllers, and maintenance workers need training.

*Technology adoption:* Digitalization, automation, and AI can improve safety, efficiency, and customer experience in Indian aviation.

*Environmental sustainability:* To reduce carbon emissions, noise pollution, and other environmental impacts, the aviation business needs sustainable practices. The government and airlines should prioritise sustainable fuels, energy-efficient technologies, and eco-friendly practices.

Infrastructure, regulatory reforms, skill development, technology adoption, and environmental sustainability can improve Indian aviation's performance and efficiency.
Pilots' statements and intentions should be considered after a good trial and for a safe landing in emergencies. Otherwise, it would be counted as negligence.

Indian regulatory organisations, rules, and laws regulate airlines and airports of Indian civil aviation must be safe, and it is safe that its best action, secure, and efficient.

Indian aviation provides the best service and safety to Indian citizens, but timely changes in Indian law will improve citizen trust, and timely upgradation and situational changes are always needed to ensure passenger safety and security. Example: Loops and vacuums allow hijackers to operate owing to aviation insecurity. Thus, innocent citizens' lives should be prioritised before norms.

Thus, preventing hijackings need robust security measures, excellent training, innovative technology, and coordinated efforts between airlines and security agencies. These proposals help increase hijacking safety and protect passengers and crew in the aviation industry.

There is still an open path to explore more aviation, as the sky is the limit.

References:


17. 9.6 the website of the International Civil Aviation Organisation (ICAO), which is a specialized agency of the United Nations that sets international standards for aviation safety and security:

18. https://www.icao.int/Pages/default.aspx


