International Civil Aviation Organization
Standardizing Aviation Regulations

JACKRABBIT MUN VI
L.B. Poly – May 25th, 2024

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HEAD CHAIR LETTER

Dear Esteemed Delegates,

My name is Quinn VanWagner, and I am a junior at Long Beach Poly. This is my fourth Jackrabbit MUN and I have been in the MUN program at Poly for four years. My favorite part of MUN is the collaborative aspect of working together to solve real-world problems. In addition to MUN, I am the captain of the Poly varsity golf team. In my free time away from school and golf, I love doing escape rooms, playing video games, and listening to music. I have done over 115 escape rooms with my family all around Socal and even one in Belgium. I am very excited to be your head chair and to see the collaboration you all will participate in during this committee. As a lover of airplanes and all things aerospace, I had a great time helping to create this committee, and I hope that you all have as much fun participating in this room as we did in making it. I look forward to meeting you all at the conference!

Quinn VanWagner

ICAO: Standardizing Aviation Regulations | Head Chair

qvanwagner@verizon.net

VICE CHAIR LETTER

Hello delegates!

My name is Adrian Klenz. This is my first year in the MUN program and my first time as Vice-chair. I'm currently a junior at Long Beach Polytechnic High School. I really enjoy the realism and relation to real-world events this program explores every day. The Model UN program helps you build confidence, organization, and work habits that will greatly benefit you as you move on to college. As well as Model United Nations, I am involved in the Poly Chinese Club and enjoy waking up early to volunteer in my community. In the near future, I hope to get EMT certified and move into a career in trauma and tactical medicine. I had a great time researching the background for this committee, and I look forward to meeting all of you at this year's Jackrabbit MUN!

 Sincerely,

Adrian Klenz

ICAO: Standardizing Aviation Regulations | Vice Chair

adrianklenz27@gmail.com

RAPPORTEUR LETTER

Hello delegates!

My name is Abigail Hall. I'm the rapporteur for the International Civil Aviation Organization Committee. As a freshman, this is my first time serving on a MUN dais, and I'm very excited to work on this committee. For me, Model UN offers an opportunity to gain insight into the complex forces that shape the world we live in. I believe learning about the issues present in different nations can help you develop knowledge of and empathy for people across the globe. At Poly, I play on the Girls Varsity Golf Team, and am also a member of the Equity and Inclusion Club and the Poly Green Team. Outside school, I'm a huge fan of hand drawn art, character design, and reading (especially sci-fi). I look forward to meeting all of you, and hope I can help you to have a fun and enlightening experience at JackrabbitMUN!

Sincerely,

Abigail Hall

ICAO: Standardizing Aviation Regulations │Rapporteur

abbyh1257@gmail.com

POSITION PAPER GUIDELINES

- Position Papers are due at 11:59 PM on **Sunday, May 19th**.
- Delegates **must** submit position papers to be eligible for **research AND committee awards.**
- Position Papers can be submitted through the google form:
    - https://forms.gle/9Y2CJygwoAwKXPmw7

- At the top of each paper, include your character/country name, first and last name, school name, and appropriate committee.

    > Country Name
    > First Last
    > School Name
    > ICAO

- Papers should be submitted as a PDF file
    - Please name the file [Committee_Country]
        - Ex. **ICAO_United States**
- Papers should be 1-2 pages in length with an additional Works Cited page in MLA format
- Papers should be single-spaced in Times New Roman 12 pt. font and include no pictures or graphics
- Please include the following sections for each committee topic:
    - Background & UN Involvement
    - Position of your Country
    - Possible Solutions

    If you have any questions or concerns, please email one of your chairs.

COMMITTEE DESCRIPTION

The International Civil Aviation Organization (ICAO) is a United Nations agency which helps 193 countries to cooperate together and share their skies to their mutual benefit. Since it was established in 1944, ICAO's support and coordination has helped countries diplomatically and technically realize a uniquely rapid and dependable network of global air mobility connecting families, cultures, and businesses all over the world, and promoting sustainable growth and socio-economic prosperity wherever aircraft fly. As air support enters a new era of digitization and incredible new flight and propulsion innovations, ICAO's expert support and technical and diplomatic guidance are needed to help chart a new and exciting future for international flight. ICAO is innovating itself to answer this call, and expanding its partnerships among UN and technical stakeholders to deliver a strategic global vision and effective, sustainable solutions.

TOPIC SYNOPSIS

In 2019, there were 38.9 million airplane passengers globally, and that number is trending upward. As the aviation industry continues to grow, the issues of safety and sustainability for air travel are more important than ever. Airplanes are also responsible for 35% of global trade. In the wake of growing numbers of global incursions and crashes both on the ground and in the air, the dangers and inadequacy of civil aviation standards are more apparent than ever. In 2022, in the US alone, there were 1,732 runway incursions, which was one of the lowest incident rates in the world. Although there are 193 member nations in the ICAO, many of these member states have vastly different domestic regulations making international flight logistics problematic and prone to accidents and near misses. Delegates will have to work together to update and maintain a global standard of aviation encompassing every aspect of flight.

BACKGROUND

Civil Aviation Regulations, Standards, and Treaties Pre-ICAO:

The very first meeting discussing an international air code was in Paris in 1910, attended by 18 European states with the purpose of outlining some basic principles. In the early days of flight, aviation was primarily utilized for the transport of mail, but after the use of airplanes in WWI demonstrating their potential for destruction and warfare, it was clear that international coordination was necessary.

Aviation regulation was a topic at the 1919 Paris Peace Conference, which established the terms of the peace after WWI. The International Air Convention was founded, which consisted of 43 articles detailing the technical, operational, and organizational elements of air travel. 1919 also saw the year when the International Air Traffic Association, the precursor to the International Air Transport Association (IATA), was established, the organization leading and representing airline companies. IATA has cooperated with the ICAO in both the past and present to implement standards and regulations. For example, they recently collaborated to write guidelines on the regulation of dangerous goods.

Although early to mid 20th century flight wasn't accessible to the average person and typically didn't transport cargo, higher speeds, range, and reliability propelled the field into the post–WWII landscape. On both national and international levels, technical regulations including standardization of cockpits, fire prevention, marine airports, ice accumulation, and traffic management were developed during the 1930s, a time of rapid growth for aviation that would later culminate in the creation of the ICAO.

The most important event that influenced the current principles of modern international aviation regulation was the Convention on International Civil Aviation, more commonly known as the Chicago Convention, on
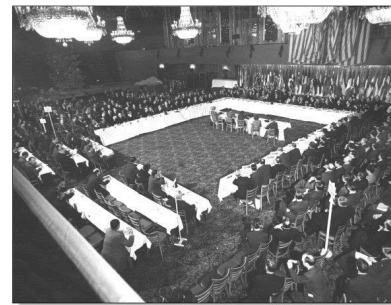
December 7th, 1944. WWII created an urgent need for a technology as powerful as flight to both face regulation and be overseen as it evolved for civilian use. By the proposal of the United States, 54 states came to Chicago, Illinois for the conference. They aimed to "make arrangements for the immediate establishment of provisional world air routes and services" and "to set up an interim council to collect, record and study data concerning international aviation and to make recommendations for its improvement." This agreement outlined principles and guidelines that grew into the current International Civilian Aviation Organization under the UN. The Chicago Convention formalized the idea that an organization such as the ICAO would be established to regulate and manage the complexities of international cooperation for air travel's growing global network. Like the ICAO, its core mandate was the uniformity of standards, procedures, organization, and regulations in civil aviation across the world. Delays in ratification led to the creation of a Provisional International Civil Aviation Organization, which served as a temporary advising and coordinating body. Starting in June, 1945, the PICAO convened in Montreal, until April, 1947, after the creation of the UN, where ratifications to the Chicago Convention birthed the modern ICAO which still serves today.

Current Regulations and Discrepancies:

The ICAO is responsible for the security of commercial flights, the impact of civil aircraft on the environment, the regulation of international air law, and more for its 193 members. The sovereign body and council (with a circle of 36) contain its Standards and Recommended Practices (SARPs) in 19 Annexes or a series of recommended

CONTRIBUTION OF MEASURES FOR REDUCING INTERNATIONAL AVIATION NET CO_2 EMISSIONS

amendments. The sovereign body, or assembly, meets every 3 years to discuss current issues. This assembly also elects 36 countries to be on the council who delegate and assess aviation needs when the assembly is not in session. ICAO currently regulates the safety of the sky by implementing many risk-based approaches and guidelines. This can be seen in Annexes 13, which provides resources for investigating the causes of accidents, the manufacturers, and environmental factors to update and improve
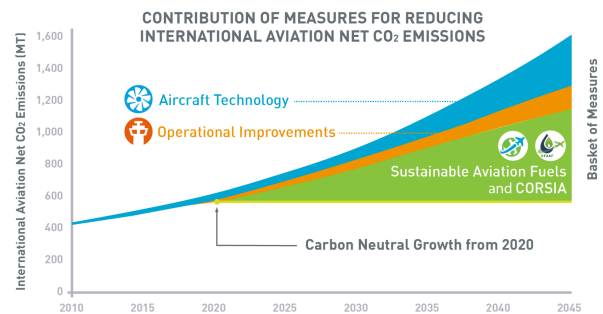
guidelines. Annex 2 details the dimensional limits of where aircraft can fly with regard to clouds, other planes, and taxiing on the runway. The ICAO also helps regulate standards on the ground and in airports. When traveling internationally, one must provide evidence of identity, subject themselves to be included in an international law enforcement database, and must provide a machine-readable travel document (MRTD) after 2015. The environmental protection benchmarks for the ICAO originally started with aircraft and airport noise regulation, which only became a concern for the member states in the 1960s. The organization is implementing the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). These new standards dictate which fuels can be used in aircraft, the total amount of pollutant output, and the program's implementation among participating member states (115 as of 2023). Currently, ICAO uses different tools to help monitor the carbon emission output of international flights, like the Carbon Dioxide Estimation and Report Tool (CERT) or CEM, the CO_2 Estimation Model. Another regulation that the ICAO uses to control the amount of pollution used in commercial/civil travel is the amount of greenhouse gas jet fuels can contain. Using CORSIA Low Carbon Aviation Fuels (LCAF) standards, fuels must reduce 10% of greenhouse gasses compared to the regular 89 grams of CO_2/MJ (megajoules), which is the standard carbon intensity of previous jet fuels. ICAO also helps regulate fuel refinement, including

implementing technologies such as Vapor Recovery Units, which help trap excess methane from being released into the atmosphere. ICAO detects harmful gas leaks and manages flaring, both environmental control methods. Since the 1950s, ICAO has advised member states on taxing companies and citizens, from tickets to fuel and parts. Its partner organization, the International Air Transport Association, helped define what taxes and fees member states should charge their citizens; this allowed for

a reimbursement period and warnings about additional costs. ICAO has been criticized for not being transparent with the UN and other member organizations, events that have been marked by the Joint Inspection Unit. ICAO is not prepared for the rising focus on CO2 emissions, starting from just handling airplane noises to tracking international flights. ICAO's CORSIA has been known to track only international flights, not domestic ones, which is a growing problem for larger countries like the U.S. or Russia. According to ICAO's 2020 safety report, only 86 member states effectively implemented 75% of SARPs, 24 states implemented 40% of SARPs, and 10 states implemented below 20% of SARPs.

Recent Accidents/Developments:
With the development of regulations and safety standards within ICAO and aircraft corporations around the world, accidents remain inevitable. Recently, United Flight 35, a Boeing 777-200's landing gear fell off before landing. No injuries were reported, however this shows the endless need for increased safety precautions in air travel. On a more tragic scale, Lion Air Flight 610 was destroyed in 2018 after wrongful calibration of the plane's autopilot and Angle of Attack (AoA) sensor, resulting in a crash only 13 minutes after takeoff. The same type of incident happened with Ethiopian Airlines Flight 302, where the Maneuvering Characteristics Augmentation System (MCAS) failed and directed the plane into a nosedive, killing 157 people. A commonly known example is the recent Alaskan Flight Beoing Max 737, which had 9 bolts on one of its emergency exit doors fly off mid-flight. There were no injuries, but accidents due to negligence remain prominent in the air travel system.

UNITED NATIONS INVOLVEMENT

ICAO Actions Post–United Nations Adoption:

Since the International Civil Aviation Organization was founded in 1944 at the Chicago Convention, it was not originally part of the United Nations, which had not yet been formed. However, the planners of the Chicago Convention had anticipated the formation of an international body such as the UN, and included a provision on the possibility of the organization someday being adopted. As predicted, in 1947, the president of the ICAO, Edward Warner, signed the agreement formally making the ICAO a Specialized Agency under the UN.

Within the UN, the ICAO interacts with many other Specialized Agencies, some of which include the International Telecommunications Union, the International Atomic Energy Agency, the International Labour Organization, the International Maritime Organization, the Universal Postal Union, the World Meteorological Organization, the World Health Organization, and the World Tourism Organization. Most importantly, as a Specialized Agency, the ICAO does not have the power to enforce or impose standards, but can serve to advise and assist in their implementation. Member States still have the authority to institute their own aviation regulations, but are encouraged to model theirs after ICAO's guidelines, which are detailed below.

With many states becoming increasingly involved in private air travel, the ICAO saw a need for a more localized approach to accomplish its mission and solve the myriad problems facing international aviation. This led to the establishment of ten regional air navigation regions in 1945. Differing regions face unique air navigation problems, resulting in a need for Region Supplementary Procedures (SUPPS). The overlapping and exclusion of certain areas, and the advent of jet aircraft in the 1950s led to a rising irrelevance of the current system. Thus, in 1964, the ICAO created the current amended version, which consists of:

1. AFRICA–INDIAN OCEAN (AFI) REGION;
2. ASIA (ASIA) REGION;
3. CARIBBEAN (CAR) REGION;
4. EUROPEAN (EUR) REGION;
5. MIDDLE EAST (MID) REGION;
6. NORTH AMERICAN (NAM) REGION;
7. NORTH ATLANTIC (NAT) REGION;
8. PACIFIC (PAC) REGION; and
9. SOUTH AMERICAN (SAM) REGION.
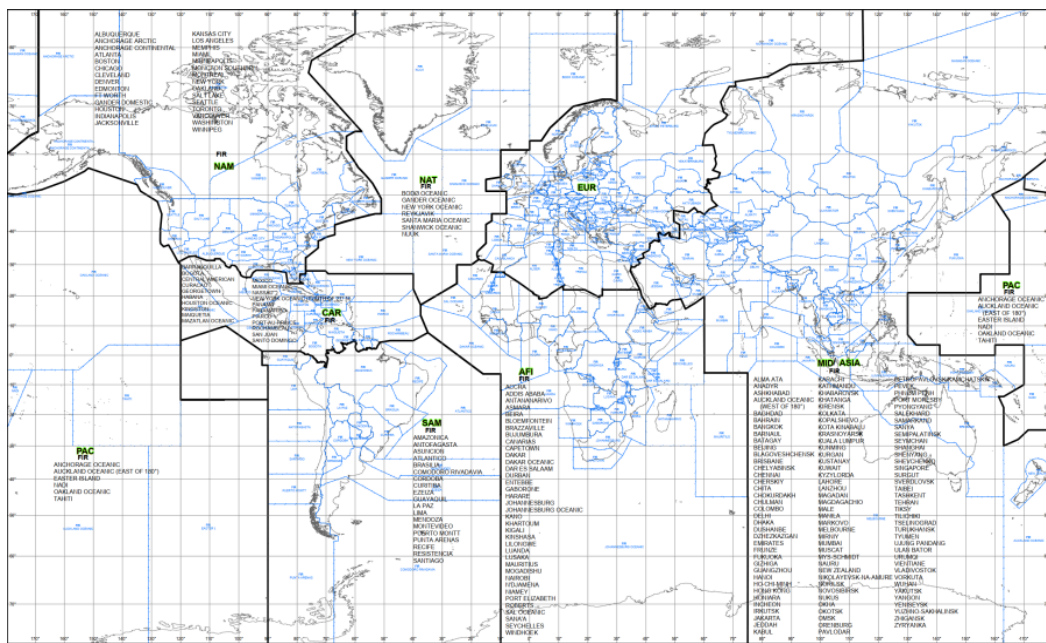
The ICAO also currently possesses Plans of Action for certain member states with serious safety deficiencies, offering guidance to States and to assistance providers to aid them in developing solutions to aviation problems.   This can be a useful resource for some delegates in researching the ICAO's interactions with their nation.

Additionally, the "No Country Left Behind" Initiative (NCLB) assists States in implementing the ICAO's SARPs. Its goal is to ensure that SARPs are utilized across the world, so States can have access to the socio-economic benefits of reliable and safe

air transport. A major priority of NCLB was more direct assistance in fixing discrepancies across States' implementation of SARPs, focusing on States with higher accident rates or security threats. This is done through helping to stir up political will for States themselves to pool resources, participate in voluntary efforts, and supply funds. The ICAO has also outlined a Global Aviation Safety Plan (GASP), the mission of which is to reduce the number of commercial/civilian aviation related fatalities to zero, and which States are encouraged to model their national regulations after.

BLOC POSITIONS:

African Bloc:

Major African countries have been pushing for more advanced aviation commissions. Member states from around the continent have signed agreements for future plans, including airport and flight security, advanced training, and implementing alternative fuels. However, countries like Mali, Ethiopia, and Sudan have conflicts with rebel groups, coups, or governments that periodically close airspace, attempt to shoot down civilian aircraft, or close airports entirely.

Asia-Pacific Bloc:

There are currently 39 member states of the ICAO Assembly in the Asia-Pacific region. Cooperation in the area is crucial for the safe travel of millions per year. The Asian/pacific subdivision of ICAO, referred to as the Asia and Pacific Office (APAC), helps tailor ICAO policies to individual states of the region. Like Africa, states like Indonesia and Myanmar have had multiple terrorist attacks on airports, jamming international frequencies/radio waves and civilian aircraft being targeted. North Korea has been inconsistent with notifying ICAO/APAC representatives about missile launches and a high chance of opening fire on perceived reconnaissance aircraft, which can put civilian airliners at risk.

Western European and Developed Bloc:

Western European and developed nations have set the groundwork for ICAO and made a majority of council states of chief importance. Many developed countries such as the U.S., Germany, the U.K., and Japan have outperformed the global average in accident investigation, legislation creation and implementation, and organization.

Middle Eastern Bloc:

In 2019, governments within the Middle East increased their participation in SARPs from 70% to 75% and had an accident rate of only 1 per 2.3 per million, which is better than the global average. In recent years, however, the bloc has been plagued with violence and has 6 countries listed as do-not-fly zones for civilian aircraft in the area. Flights are often diverted due to missile strikes, GPS spoofing (broadcasting fake signals, interfering with international flight tracking), and the absence of available air traffic controllers.

Latin American and Caribbean Bloc:

Member states in the Latin American and Caribbean region have needed significant help from ICAO advisors and guidelines to develop their policies. However, they have taken great steps to implement SARPs and environmental policies. Countries like Cuba have helped gain newer aircraft with a lower emission rate, and Venezuela set a decibel cap for major airports. The majority of nations in the bloc have taken significant steps towards implementing CORSIA standards, such as limiting CO_2 emissions, and developing nations are drawing up guidelines they would like to implement. Currently, countries have been issued caution statements due to high crime waves for the safety of travelers and security in airports.

QUESTIONS TO CONSIDER

1. What are the problems with current aviation regulations?

2. Why are the current regulations structured how they are?

3. How can aviation regulations be updated to promote safety?

4. How would increased international cooperation improve safety in aviation?

5. How can stricter environmental regulations be implemented while maintaining efficiency and affordability?

6. How will the implementation of new technology affect aviation safety and regulation?

7. How can environmental regulations be implemented, managed and maintained to promote a unified effort against the effects of climate change?

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