



A 3-Day Educational Seminar in Havana

Dates: Thursday – Sunday

Duration: 4 days / 3 nights

Total Distance: 410 nautical miles



Highlights: While flying a private airplane to almost any destination in the world is somewhat routine, a US pilot flying to Cuba has to follow a certain set of rules because of the past relationship between the two countries.

This program is designed to provide private pilots with a firsthand education of the different aspects of flying to Cuba which are different from flying to any other country in the world.

Note: This invitation has been submitted for approval to the US Treasury Department who will be issuing us a license for this trip.

Itinerary

Day 1 - Thursday: Miami → Havana, Cuba (205NM)

We will meet at 10:00 AM at Miami International Airport (KZIA) Signature Aviation FBO for a briefing about the forthcoming flight. We recommend that you arrive a little early to refuel and collect your completed forms and survival gear.

Our flight will take us along the Florida Keys as we head south for Havana. We will be met at the airport in Havana and transferred to our hotel.

The afternoon is at leisure to relax at the hotel.

This evening there will be a meeting with the authorities of Cuba Civil Aviation (IACC) for an introduction on the Cuba aviation summit.

Hotel, Lunch and Dinner included

Day 2 - Friday: Havana

There will be a full meeting today with Civil Aviation of Cuba and learn about aviation safety, airspace review and the different corridor flying routes.

Our curriculum for today will include the following:

1. Over Flight Permit

When an airplane flies from one country to another country, a flight plan (an announcement of a flight between two points following a published route) needs to be filed with the proper authority in the departure country. This document will reflect all of the details of the airplane (type, size, color, and number of passengers onboard) and also provide information on the owner (name, address, contact number). It will also announce to the different countries along the route the time the airplane will enter and leave the foreign country (the time appears as minutes after takeoff).

A route is filed following an already designated flight route in an aeronautical environment. This route directs the airplane to enter a foreign country's airspace at a pre-designated waypoint. When the airplane takes off, the flight plan is activated within the system (that means all of the information are now being made current and the foreign countries are expecting a plane of xyz size to overfly or land at their countries airport at a given time).

Cuba is a lengthy island which spreads 476 miles east to west. Every airplane that intends to fly to either the northern coast of South America or to some countries in Central America or to even closer such as Jamaica or Cayman, will have to fly over the island of Cuba in order to maximize fuel efficiency and reduce the length of the flight. The Cuban government does require an over flight request which is most often granted with 24 to 48 hours notice in order to authorize such a flight.



The over flight granted to general aviation authorizes the airplane to fly through pre-determined corridors in the Cuban airspace. These corridors are known as the:

- Giron corridor (aka the western air corridor),
- Maya (aka the central air corridor)
- Nuevas (aka the eastern air corridor).

2. The Different Corridor Concept

Most countries have free flight between themselves which means you can fly from the Bahamas to New York or from Canada to Iceland on a most direct waypoint. You have to follow established rules but you don't have to follow a certain waypoint pattern along the way. Cuba, in order to control their airspace, has established these three corridors which you can see on map below. They basically will park the plane on this route expecting them to follow the curriculum established in their description of that particular route.

As you can see per the enclosed photo, the airplane will enter Cuba at a pre-dedicated waypoint and then follow the airways exactly through this waypoint. As you can see on the map, they are not the most direct route. In case an airplane has not secured this over flight permit, it will not be able to enter a corridor and will have to circumnavigate either through the western or eastern part of Cuba without overflying land. This will, at least in some cases, double the length of flight. In some cases this could prevent the airplane from reaching the destination safely because of the size of the plane, its speed and fuel capacity. It is extremely important to understand the over flight permit requirement, the exact situation of these corridor and how to use these corridors safely.

While the flight rules are similar to what we find in other parts of the world, some aspects of flying in Cuba and in our case, over flying Cuba, are different from what an American pilot uses here at home.

3. Regulatory History Between Cuba and the Rest of the World

The Convention on International Civil Aviation, also known as the Chicago Convention, established the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations charged with coordinating and regulating international air travel. The Convention establishes rules of airspace, aircraft registration and safety, and details the rights of the signatories in relation to air travel. The document was signed on December 7, 1944 in Chicago by 52 signatory states and the US signed the convention on August 9, 1946. It received the requisite 26th ratification on March 5, 1947 and went into effect on April 4, 1947, the same date that ICAO came into being. In October of the same year, ICAO became a specialized agency of the United Nations Economic and Social Council (ECOSOC). Cuba joined in and signed the document on May 11, 1949. The Convention has since been revised eight times (in 1959, 1963, 1969, 1975, 1980, 1997, 2000 and 2006).



The list of signatures can be found at <http://www.icao.int/icao/en/leb/chicago.pdf>.

4. Emergency Aviation Issues

There are six principals that govern international transport and communication networks: (1) free movement of commerce, 2) free movement of info, 3) efficiency, 4) transnational damage control, 5) internal political control, and 6) equity. For aviation all but the fifth principal are referred to as the "Five Freedoms". The first freedom allows for free traversal for nonstop flight across territory, a restating of the principal of freedom of movement and efficiency. The damage control principal is achieved through the second freedom, the right to land in a state for non-traffic reasons (refueling or emergency). State sovereignty is protected through cabotage rights, the control of transport rights between domestic destinations.

A need for security issues to be incorporated into the existing international civil aviation regime first emerged during the early 1960s, at a time when there was a wave of hijackings between the US and Cuba. The *Convention on Offenses and Certain Other Acts Committed Onboard Aircraft* was a cooptation of the bilateral agreements between the US and Cuba establishing obligations and jurisdiction.

5. Unique Aviation Principals Related to Cuba

c. Special Notices. A NOTAM dated April 1, 1993, contained the following warning regarding Cuban airspace: "The Federal Aviation Administration has been informed that an official Cuban government publication has issued a warning that Cuban Armed Forces will shoot down any aircraft that penetrates Cuban airspace illegally and refuses to obey an order to land for inspection. All pilots should take note; use extreme caution in the area of Cuban airspace; adhere strictly to Cuban requirements for overflight of their territory." Any aircraft that flies over Cuban national territory or jurisdictional waters may be intercepted and required to land if any of the following occur:

- Flying over national territory and jurisdictional waters without proper authorization.
- Flying without proper authorization outside of national routes or established international corridors.
- Executing inappropriate maneuvers.

Not following any of the instructions from air traffic control (ATC).

d. Legal Considerations. Aircraft that have been ordered to land, or have landed without proper authorization, will be subject to whatever penalties the Cuban authorities may prescribe, without recourse. The pilot and/or aircraft owner will be held responsible for any damage, injuries, or resulting expense. No aircraft may make an overflight carrying photographic equipment, arms, ammunition, explosives, or other articles and substances the Cuban aeronautical authority may specify. Overflights shall not be authorized if the operation constitutes a danger to air navigation or if, in the judgment of the Cuban aeronautical authority, the operator does not offer adequate guaranties to cover any liability incurred because of the overflight. These liabilities include damage and loss caused to subjacent persons or property, and payment for any services rendered or obligations that may arise in connection with the overflight. The use of Cuban radio for flight information, ATC, or other purposes is considered a service, and operators should expect to be billed for its use. Any person or corporation, partnership, organization, or association subject to U.S. jurisdiction and considering the operation of aircraft into Cuba must review current Department of Commerce and Department of State regulations relating to trade and other transactions involving Cuba. Within 1 hour of departure, the PIC must file an IFR flight plan and a written statement with the Immigration and Naturalization Service office at the departure airport. This statement must contain all of the information in the flight plan, the name of each occupant of the aircraft, the number of occupants in the aircraft (including the flightcrew), and a description of any cargo. The U.S. Naval airfield/facilities located at Guantanamo Bay, Cuba are closed to all civilian air traffic except for valid emergencies. All emergency landings will be thoroughly investigated by U.S. authorities to determine their validity and the nature of their business.

6. Miscellaneous Principal

Our understanding of general aviation flying to and from Cuban airports to an international destination is that it needs to be done under instrument flight rules. This means that the airplane will have to fly a pre-established route arriving or taking off from these airports.

In most of the Americas and especially in the US, we are used to radar vectoring in order to cut corners, save fuel and expedite the arrival. We need to learn the true main SID (Standard Instrument Departure) and STAR (STandard ARrival).

While in accordance with ICAO, we need a review and clear briefing for the true understanding of the different departure processes.

The aviation community (commercial and general) in the Americas and the Caribbean is following the same principal related to pressure altitude. The established curriculum is that the altimeter reading in an airplane sitting on the ground should be equal to altitude of that ground above sea level. Because of the pressure, the figures related to keeping that altitude at the correct figure will change during the day and need to be constantly adjusted. It has been decided in the American continent that as the airplane flies above 18,000' indicated altitude, the pressure would be set at a common 22.92" of mercury. So the commercial plane flying on airways would all be reading from the same setting and be separated by the approved separation.

In Cuba the standard pressure altitude is implemented at a lot lower altitude depending on which airport in Cuba would be used. The range is from 3,000' to 6,000'. It is extremely important for the pilot to understand the meaning of this transition altitude or transition level and the fact that the altimeter pressure window needs to be reset as the plane goes through this transition altitude reset. In a case where the rule is not followed in the ambient pressure of a big Delta, we could end up with an airplane flying in the opposite direction at the same exact altitude which will basically ruin the day. A strong emphasis needs to be put on the uniqueness of Cuban airports for a clear understanding by pilots of the risk associated with this setup.

7. Corporate Aircraft Constraints

For information on U.S. restrictions on travel to Cuba, contact the Treasury Department's Office of Foreign Assets Controls, telephone: (202) 566-2701.

8. Special Notices

1. Any airplane which flies over Cuban national territory or jurisdictional waters may be intercepted and required to land if:

- a. Flying over national territory and jurisdictional waters without proper authorization.
- b. Flying without proper authorization outside national routes or established international corridors.
- c. Executing inappropriate maneuvers.
- d. Does not carry out the instructions from Air Traffic Control.

2. Aircraft that have been ordered to land, or have landed without proper authorization will be subject to whatever penalties the Cuban authorities may prescribe, without recourse. The pilot and/or aircraft owner will be held responsible for any damage, injuries or expenses resulting from his actions.

3. No aircraft may make an overflight carrying photographic equipment, arms, ammunition, explosives, or such other articles and substances as the Cuban aeronautical authority may specify.

4. Overflights shall not be authorized if the operation constitutes a danger to air navigation or if, in the judgment of the Cuban aeronautical authority, the operator does not offer adequate guaranties to cover any liability such operator may incur on account of the overflight. These liabilities shall include damage and loss caused to subjacent persons or property and payment for any services rendered or obligations that may arise in connection with the overflight.

5. Any person subject to the jurisdiction of the United States or any corporation, partnerships, organization or association considering the operation of an aircraft into Cuba must review current Department of Commerce and Department of State regulations providing guidance relating to trade and other transactions involving Cuba. Aircraft arriving from or departing for Cuba must land at or depart from Miami International Airport. The pilot in command of the aircraft must file an IFR flight plan and a written statement, within one hour before departure, with the office of Immigration and Naturalization Service at the airport of departure, containing all information in the flight plan, the name of each occupant of the aircraft, the number of occupants of the aircraft, and a description of the cargo, if any.

7. The U.S. Naval airfield/facilities located in Guantanamo Bay are closed to all civilian air traffic except for valid emergencies. All emergency landings made will be thoroughly investigated by U.S. authorities as to their validity and the nature of their business.

Hotel, Breakfast, Lunch and Dinner included

Day 3 - Saturday: Havana

Today's meeting with the civil aviation in Cuba will cover topics related to our departure from Cuba, a briefing by Cuba Civil Aviation authorities related to our return to the US including eAPIS, weather review, procedures, SID, etc.

Hotel, Breakfast, Lunch and Dinner included

Day 4 - Sunday: Havana → Miami (205NM)

There will be one last briefing at the airport prior to our departure for a final review of the flight plan, updated flight information, the latest weather, etc.

Breakfast included

Landing Points, Identifiers and Runway Lengths		
Miami Intl	KMIA	13,000'
Havana	MUHA	13,123'

