

# Captain Harold B. Grow, USN

## Bold Pioneer of Peruvian Aviation

PERLA BACA GÁLVEZ



**I**n 1923, Lieutenant Commander (USN) Harold B. Grow was hired by the Peruvian government to reorganize and develop naval Aviation in Peru. On 21 January 1924, Grow arrived in Peru and was appointed chief of the Navy's Hydroaviation Service. At that time in our country, as in other nations, there was a mainstream that opposed the use of aviation in the Navy because it was considered a dangerous innovation of questionable value. However, the criterion of having a well-organized and equipped naval aviation prevailed.

This took place during the second term of Peru's President, Augusto B. Leguía, who supported this decision and of Grow's appointment as chief. The US officer managed and worked in the construction of workshops, hangars, administrative

offices and accommodations for officers and non-commissioned officers of the Naval Hydroaviation Service in Ancón. Meanwhile, the Peruvian government acquired three Boeing NB-1 training seaplanes with 200 HP Wright engines, the same ones used at the US Naval Aviation School. The construction of the aircraft was supervised by US Navy technical personnel.

### ***Who was Captain (USN) Harold B. Grow?***

Harold B Grow was a US naval officer born on 5 July 1881, in Greenville, Michigan. His parents were John D. Grow and Evelyn Potter and studied at the Annapolis Naval Academy between 1908-1912. Afterwards he was assigned to the battleship “Utah”, where he spent two years training in radio communications and artillery.

During WWI (1914-1918), Grow oversaw the radiotelegraph station in Sayville, Long Island. He was later assigned to the cruiser *Des Moines* in the Mediterranean Sea. In 1918, he joined Naval Aviation in Hampton Roads, Virginia, where he flew seaplanes. Between 1920-23, he served in various combat squadrons and worked in the Projects Division of the US Naval Aeronautics Office.

### **Peru and the US Sign Service Lease Agreement**

On 20 December 1923, Peru and the US signed an agreement for Lieutenant Commander (USN) Harold B. Grow to work in Peru. The agreement was signed at the Peruvian embassy in the United States by the Peruvian Charge d’Affaires “ad interim”, Alfredo Gonzáles Prada and Lieutenant Commander (USN) Harold B. Grow, of the *Active List* of the US Navy.

The “ad referendum” contract established the following:

1. Lieutenant Commander Grow will fulfill the duties and obligations of Lieutenant Commander; he would submit to and comply with the orders he receives from the President of the Republic of Peru, the Minister of the Navy, the members of the US Naval Mission in Peru, and the officers of the Peruvian Navy superior to him in rank, according to the laws and discipline of the Peruvian Navy.
2. Lieutenant Commander Grow will have under his authority, chiefs and officers from the Peruvian Navy, with grade and rank equal to or lower than his.
3. Lieutenant Commander Grow’s annual salary will be \$8,000 dollars that the Peruvian government will pay in advanced, on a quarterly basis, beginning 27 December 1923. The contract was for two years.

4. The Peruvian government will pay Lieutenant Commander Grow the sum of \$2,666.67 dollars to cover travel expenses for his family from Washington D.C to Callao. This amount will cover the cost of transportation of household goods as well as settling in Peru. This is done in accordance with the laws of the diplomatic and consular service in force in Peru.
5. Peru may renew the contract for another two years. In this case, Lieutenant Commander Grow can request a three-month permission to visit the US or any other place he chooses with the consent of the Peruvian Navy.
6. Upon his return he will be paid the same sum he received when transferred to Peru, i.e., \$2,666.67 dollars.

Washington, 20 December 20 1923

### **Accomplishments During His Assignment in Peru**

Lieutenant Commander Grow arrives in Peru and reorganizes the Navy 's Hydroaviation Service, managing the construction of modern buildings, workshops, and hangars. He drew up a new regulation for the Naval Aviation School and contributed decisively to the organization of the Peruvian Aviation Corps (today the Peruvian Air Force [FAP per its acronym in Spanish]). He worked on the unification of existing naval aviation, military aviation, and civil aviation to create a single air military organization. He drew initial routes between the coast and the mountains. After tiring and complicated actions, he established the following air routes:

- Lima- San Ramón- Masisea- Iquitos
- Lima- Trujillo- Cajamarca- Chachapoyas- Moyobamba- Iquitos

Lieutenant Commander Grow laid the foundations for the development of national aeronautics in both the military and commercial fields.

By the end of 1928, the Peruvian government appointed him as First Inspector General of Aviation. This was at the request of the Minister of Aeronautics, General Peruvian Aviation Corp (CAP per its acronym in Spanish), José Villanueva, when Captain (USN) Harold Grow, was invited to Peru in 1950 as an official guest of the Peruvian Aeronautical Corps (today's FAP).

### ***He Developed a New Regulation for the Peruvian Naval Aviation School***

Grow also develops new regulation for the Peruvian Naval Aviation School, modifying procedures to improve its efficiency and safety. Until then, what prevailed in the training of students was the spirit of adventure and verifying that the plane was a safe means of transportation, as stated by Colonel (FAP) Carlos de la

Jara in his book “History of Peruvian Aeronautics.” In contrast, the doctrinal concept that he sought to impose on the training of Peruvian naval aviators was to establish the importance and need of this new branch of service for the Navy. On 17 November 17 1924, the Ministry of the Navy approved this regulation.

As the new head of the Ancón Hydroaviation Service and the Naval Aviation School, Captain Grow aimed for students to understand the importance of aviation as a decisive factor in future naval operations. Aircraft were to serve as tactical support, carrying out exploration, bombing, combat, and other missions, as per lessons learned during World War I. With this new regulation, the learning methods followed at the Pensacola Naval Aviation School in the United States were put into practice and were adapted to the needs of the Peruvian Navy. Until then, neither the Maranga Military Aviation School, the Bellavista Civil Aviation School, nor the initial Ancón Hydroaviation School (1921-1923) had followed such a complete and structured theoretical and practical instruction plan.

The first students appointed after this reorganization were Midshipmen Leonardo Alvariño Herr, Carlos de la Jara Loret de Mola, and Luis Felipe Sologuren Gómez. Their flight instructor was Second Lieutenant Lloyd R. Moore, a professional pilot. Training began on 26 January 1925, using Boeing NB-1 seaplanes. Later, former founding officers of the service who had since been assigned to various Navy ships, returned.

To provide this training, five Curtiss HS-2L “flying boats”, that had just arrived, were assembled. US pilot-mechanic Lloyd Moore, former head of flight instruction at the Bellavista School of Civil Aviation, and aviation mechanic Walter Jagielski, also from the US, were hired. With the support of the Peruvian technical staff of the Ancón Hydroaviation Station, both began the task of assembling these aircraft, and four Douglas DT-2s, eight Keystone K-55 Pronto and three Vought UO-1s were additionally purchased.

### *Naval Aviation Inaugurates New Facilities*

On 25 August 25 1925, the new facilities of the Ancón Hydroaviation Service were inaugurated under the presence of President Augusto B. Leguía. As head of the service, Captain Grow gave a speech, highlighting: “The energy, patriotism, loyalty, sacrifice and small budget with which officers, officers of the sea and sailors have worked in these new installations. We have been architects, engineers, contractors, and operators. All have contributed the maximum of their knowledge and work. Now we need machines and pilots to fly. We need to develop and expand this new force as part of the national defense system,” he remarked.

President Leguía, after raising the Peruvian flag in the rebuilt school, stated “Peru never encouraged the thought of building its greatness on conquest... We

are a peaceful democracy... But it is an obligation not to become careless when you have the experience of a tragic past, when one has enormous wealth that must be freed from greediness and when we hear the bugle of war on our borders announcing new conquests with its procession of ruins and massacres..." He also added: "My wish is that the austere sailor who succumbed gloriously in Angamos (Admiral Miguel Grau), always strengthens in the spirit of the naval aviators, the sublime religion of the country."

By the end of 1926, naval aviation had nine trained pilots, which allowed the school to have personnel for its training tasks and the Hydroaviation Service, and to have the necessary pilots to undertake the great task of extending its horizon to the remote regions of eastern Peru (jungle) which at that time lacked fast and regular means of communication.

Between July and August 1925, Grow wrote in the "Revista de la Marina" (Navy Magazine) an article entitled: "Aviation is the Navy's New Weapon". In it he defines the doctrinal concept upon which the national aviation began to develop in Peru. In said article, Grow wrote:

Aviation is the weapon that must exist in times of peace because its effective use in times of war requires a great deal of preparation and experience on the part of the personnel. That experience cannot be acquired in less than a year of training. Aviation is a weapon exceptionally applicable to the defense of this country. It is the only branch that, if managed with success, can, in peacetime, provide a commercial service, thus becoming a source of income for the national treasury while the pilots and technical personnel would remain highly efficient and trained.

Grow also studied the types of aircraft required for the various missions, jobs, and objectives of this new branch: exploration, bombing, combat (protection against enemy aircraft). and communications.

At the same time, the Minister of the Navy, Dr. Celestino Manchego Muñoz, sought to prepare in peacetime the best air organization for war: "*Professional capability is not improvised, it is the result of a long process of preparation. That is why it is necessary to pay special attention to teaching and practicing.*"

On 27 April 1925, for the first time, the Navy assigned commercial missions to its aviation. This marks the beginning of exploratory flights and the establishment of the air route to the *Montaña*.

### ***Establishing the Air Route to the Montaña***

At that time, the Naval Hydroaviation Service covered the coast with an air service without a fixed itinerary. It offered transportation of passengers and cargo for whoever paid for it; this allowed an income to the treasury with which aircraft and spare

parts were acquired. Additionally, this commercial flight service along the three thousand kilometers of Peruvian coast gave naval pilots prestige and experience.

However, national demand was latent, and it became necessary to create an air route to the jungle, since Peru is a country in which over 60 percent of its territory is Amazon rainforest. Therefore, the government sought to unite Lima, the capital of Peru, with the isolated and disconnected populations of the Amazon.

*In October 1926, according to a government resolution, Captain Harold Grow, and Lieutenant Leonardo Alvariño began a land and river exploration trip to Iquitos, the main city in the Peruvian jungle. They were to study the terrain and everything that was required for the establishment of a regular Lima-Iquitos air route.*

*They traveled by land from Lima to San Ramón - Puerto Bermúdez and from there by river to Iquitos, stopping at Puerto Victoria, Masisea, Contamana, Requena, and houses and river ports along the Ucayali River.*

On this trip, it was assessed that “land” planes were to be used to fly from Ancón (Lima) to San Ramón and from there to Masisea, (a riverside town near Pucallpa), with eventual stopovers in Puerto Bermúdez and Puerto Victoria. From Masisea, they would continue by seaplane to Iquitos, the capital of the department of Loreto, with occasional stops in Contamana and Requena. In Iquitos, a central base would be established for the entire jungle.

On 5 November 1926, after a tiring and complex journey by land and river, they reached Iquitos. They returned to Lima in January 1927.

After the trip, the Peruvian government acquired the necessary flying equipment to begin the aerial conquest of our Amazonian territory. Four North American-made 200HP Wright engine Keystone aircraft were purchased, which arrived by boat to Iquitos. The arrival of The Marconi Wireless Telegraph Company was authorized for the printing, distribution, and sale of stamps for the air postal service between Lima and Iquitos.

### ***The First Lima- San Ramón Flight***

On 20 September 1926, the Ministry of the Navy created the Naval Hydroaviation Service in the eastern region, organizing its functions under two criteria: Military and commercial. On 26 October 1927, Captain Harold Grow and First Lieutenant. Leonardo Alvariño Herr began the first Lima-San Ramón flight in two Keystone 1-R-5 and 1-R-6 planes. They departed from the Base of Ancón, crossed the Andes Mountains through the high peaks of Mount Meigs, more than 21,000 feet high, and then descended to the edge of the mountain and landed in San Ramón, Chanchamayo, Junín region, in the central zone of Peru.

Alvariño, a native of the area, arrived at 12:20 pm, after a two-hour and 40-minute flight. He communicates to his superiors of his arrival with a laconic: *Order*



*accomplished*. Meanwhile, the fate of Captain Grow, who did not appear in the skies of San Ramón, was not known.

An hour and 15 minutes later, news was received that he had been forced to land in Huancayo, (mountain range) near San Ramón (edge of the jungle). He arrived in San Ramón at 4:15 a.m., successfully completing one of the most difficult air crossings of that time.

This is how the Ancón Hydroaviation Service and the arduous and daring task of uniting our jungle with the rest of the country began. It was a task of immense national significance: A fast, secure, and permanent link between our coast, mountains, and jungle.

While those two planes arrived in San Ramón to cover the San Ramón –Masisea route, four planes of the same type were assembled in Iquitos to cover the Iquitos-Masisea leg.

There were test flights over the *green inferno* (jungle) above the route of the rivers. Grow and Alvariño carried out intense reconnaissance flights over the Chanchamayo area, crossing the routes of the Perené, Pichis, Pachitea and Ucayali rivers. Thus, they explored the first leg of the air route to the *Montaña*, using land planes to land on runways full of mud and weeds.

Regarding this leg, Grow writes, in the “Revista de la Marina”, an article titled “Aerial Exploration over the Montaña of Peru”, which supports the historical account and value of these intrepid pilots, pioneers of Peruvian aviation.

### *Inauguration of the Air Postal Service to the Montaña*

On 3 January 1928, the other section of the route was crossed, in which Captain Grow and First Lieutenant Gustavo Cornejo Portugal, head of the *Montaña* Air Force, using seaplanes, flew for six hours, for the first time from Iquitos to Masisea. They made refueling stops at the river ports of Orellana and Contamana (jungle region).

The exploration of this leg was of great importance due to the data that the pilots obtained about the climate, the rivers, and the possibilities for water landing in the vicinity of the populated centers of Nauta, Requena, Dos de Mayo, Orellana, Contamana, and Pucallpa.

The main significance of this flight is that postal air begins between Iquitos-San Ramón-Lima. When Grow and Cornejo arrive in Masisea, they meet Alvariño who was arriving from San Ramón. In Masisea they exchange suitcases of correspondence, and the next day they return to their bases of origin, creating the first Lima-Iquitos postal air service.

To achieve all of this, they had to face and overcome various difficulties of all kinds, to include inadequate (if not non-existent) basic services, lack of resources,

surprising and dangerous weather variations, no meteorological information, and the harsh nature of the jungle, which included hard biting mosquitoes, myriad of insects, winds, and torrential rains.

However, the pilots weathered the difficulties and worked courageously hard, selflessly, and silently to get these air services going. At that time, traveling this route by land, crossing trails and rivers, lasted 45 days. This revolutionary air service would do it in just three days.

Carleton, Estremadoyro, Griva, Lecca and Barrera were the pioneering technicians who were part of the team that contributed to forging this difficult air route.



**Figure. Captain Harold B. Grow, USN**

*Source: Author*

### ***Grow is Appointed First Inspector General of Peruvian Aviation***

On 9 July 1928, the government of President Augusto B. Leguía appointed Captain Harold Grow, as First Inspector General of Aviation, due to his important service, professional quality, and exceptional ability to organize national aviation.

This new body marked the unification of military, naval, commercial, and civilian aviation. Thus, unifying the methods, training, organization, and standardization of all these organizations to create a single aviation corps as an armed institution.

At the Hydroaviation School in Ancón, Grow is replaced by Captain (USN) Ben Harrison Wyatt, a member of the US Mission in Peru, and on 20 May 1929, CAP was created.



Grow then began a series of trips to areas where planes had never flown, to start regular air transport service to different cities in Peru. He travels in his Vought Corsair to Pacasmayo (northern coast) - Cajamarca (northern highlands) - Chachapoyas (northern jungle).

On 22 August 1930, General EP Luis M. Sánchez Cerro rises in Arequipa (southern highlands) against President Augusto B. Leguía. Grow is sent to command a squadron of Corsairs to the conflict zone. He decides to land in Camaná, (Arequipa province) where he is arrested by the forces opposed to the government. Three days later, President Leguía is arrested.

The new government terminates Captain Grow's contract and he returns to the US after working intensively for seven years in Peru. In 1942, Grow returned to active duty in the US Navy, serving various missions during World War II until his retirement in 1947.

### *Harold Grow Returns to Peru After Twenty Years*

After 20 years, Captain (USN) Harold Grow returns to Peru as an illustrious guest of the Peruvian Aeronautical Corps (FAP). The institution wanted to thank him and pay tribute for his invaluable work.

Grow arrived in Lima on 19 June 1950, at Limatambo Airport (currently headquarters of the Ministry of the Interior). He was greeted by the Minister of Aeronautics, General FAP José Villanueva and various authorities.

In the following days, Grow, with little time to rest, attended ceremonies in his honor. At the hotel he received a visit from old friends, Lima personalities, and meets with the non-commissioned officers who worked under his command.

He visited the base at Ancón and walked through the resort admiring its beauty and progress, with neighbors and old fishermen who knew him came to greet him—He reminisced the old days with pleasure. At the base, the Minister of Aeronautics gave a banquet in his honor and presented him with a photograph of the then President Augusto B. Legía and Captain Grow. He was entertained with a soccer match and a music band and spent the day with officers and non-commissioned officers who worked with him. Captain Grow was happy and grateful—He reiterated his love for Peru and expressed the joy he felt at having returned to our country after 20 years.

He then visited the relatives of Lt Cdr Leonardo Alvaríño Herr, with whom he opened the Lima-San Ramón-Masisea route. He also visited First Lieutenant Gustavo Cornejo Portugal's relatives, with whom he made the Iquitos-Masisea flight. Both pilots, pioneers of Peruvian aviation, had died on various flights in our Amazon.

He also visited various aeronautical facilities. At the Officer School (EOFAP) he was accompanied by Lloyd R. Moore, who was a flight instructor during his

tenure at the School of Hydroaviation. Moore stayed to live in Peru and held a senior position in the Panagra Aviation Company.

During the lunch that the Officer School gave Grow, the Minister of Aeronautics, General José Villanueva, handed him a silver plate with a map of Peru with the air routes he had created, and the following inscription engraved in gold:

“The Peruvian Air Force, to Captain (USN) Harold B. Grow - 1950”:

- Lima-San Ramón-Masisea- Iquitos
- Lima-Trujillo-Cajamarca-Chachapoyas-Moyobamba-Iquitos

Grow, incredibly grateful, expressed his admiration for the progress achieved in our military and national aviation. He recalled the hardships he experienced on his travels to distant parts of our territory and highlighted how progress had been made by using flight instruments.

The memories of my stay in Peru are not the buildings nor specific projects in which I worked, but rather the spirit of the aviators, the faith in their destinations, the spirit with which they carried out orders, without measuring obstacles, without fear of risks, at a time when you had to wait days to know if they had reached their destination or not.

After the luncheon, Grow greeted Cadet Gustavo Cornejo Menacho, son of First Lieutenant Gustavo Cornejo, who was the first chief of the *Montaña* Airline and with whom he flew the Iquitos-Masisea route. Grow praised the cadet's father, noting that his memory honored the Peruvian Aeronautical Corps, whose service he offered his life.

Later, at a luncheon that the Aeroclub of Peru offered him, Grow, deeply moved by the hospitality received and warm expressions of appreciation, said: “I am an American by birth, but Peruvian at heart.”

On Saturday evening, 24 June 1950, Captain (USN) Harold Grow gave a reception in appreciation at the Country Club hotel in Lima, thus ending his visit to Peru. Before leaving for his homeland, he delivered a beautiful farewell note to the local press that read:

Upon my farewell, I want to express my sincere gratitude, for the hospitality and expressions of affection that I have received during my short visit to Lima, as a guest of the Peruvian Aeronautical Corps, especially, from the General of Aeronautics Don José Villanueva Pinillos, Minister of Aeronautics.

The countless phone calls, visits and telegrams received from so many friends has been a demonstration of affection that warmed my heart and that I will never forget. For those whom I have not been able to see or whose visits I have not been able to reciprocate, I beg your forgiveness. I have been completely surprised by the magnificent progress that I have seen in Lima and especially in the Peru-

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vian Aeronautical Corps. This visit has been a wonderful experience that fills me with happiness, for which I will be eternally grateful and will never forget.

Thank you to all of you and hope I will see you soon.

Captain (USN) Harold B Grow

Harold B. Grow died on 3 March 1981. Captain (USN) Harold Grow, gifted with talented a vision for the future, envisioned the development of the Peruvian Aeronautical Corp (today's FAP), something that seemed like an illusion at the time.

Today, the FAP works in support of defense and national development, with a vocation for service, professional excellence, and personal integrity, remembering the values of those pioneers and paradigms that forged our institutional identity.

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### **Perla Baca Gálvez**

Professional journalist, graduate of the Catholic University of Peru. She has more than forty years of experience. She has worked as political editor for the newspaper “El Comercio”. Ms. Galvez has been press secretary to five presidents, two primer ministers, a minister of Education, the mayor of Lima, the Commander of the Peruvian Air Force, and the Joint Commander of the Armed Forces. She is an honorary member of Peruvian Institute of Aerospace Studies (IEHAP) and has attended training courses and seminars at the University of Lima. She has also attended seminars at the American Studies Center and School of Costa Rica, the Peruvian Ministry of Foreign Affairs, the Institute of Art and Design (IPAD), and courses and seminars offered by the Information Directorate and de Operations Command of the Peruvian Air Force, among others. She was press director during a presidential inauguration, presidential meetings, national meetings with mayors, and introducing the Peruvian delegate at the United Nations. At the present time she works at the Information and Aerospace Interests Directorate of Peru (DINIA) and edits the journal “Aviación” of the Peruvian Air Force.