



1960s, passengers at the airport terminal ticket counter

Chapter 3: From Agency to Administration

On March 3, 1961, **NAJEEB HALABY [TERM: 03/03/61 – 07/01/65]** became the second FAA Administrator. A lawyer with significant experience as a military and civilian pilot, and a Kennedy family friend, Halaby took over an agency



Administrator Najeeb Halaby

reputed, after just two years in existence, to be one of the strongest in the U.S. Government.

During the new administrator's swearing in ceremony, President Kennedy asked Halaby to define the technical, economic, and military aviation

objectives of the federal government, for the next decade and for a broad spectrum of aviation interests. Five days later, Kennedy requested the administrator to also conduct a scientific, engineering review of aviation facilities and related research and development (R&D) and to prepare a long-range plan to ensure efficient and safe control of all air traffic within the United States. To undertake the resulting studies (called Project Horizon and Project Beacon, respectively), Administrator Halaby quickly created two separate task forces comprised of recognized experts in aeronautic and related technologies.

Within six months, the White House released both the Project Horizon and Project Beacon reports. The 239-page Project Horizon

report defined 24 national aviation goals and outlined various programs to achieve the objectives. The major recommendations included:

- Maintaining U.S. leadership in world aviation;
- Reorienting the federal government's approach to the economic regulation of the airlines to avert the threatened collapse of the industry's financial structure;
- Developing a Mach 3 supersonic commercial transport;
- Emphasizing the aeronautical, as opposed to astronautical, aspects of the federal R&D effort;
- Undertaking a comprehensive study of international aviation relations; and
- Continuing efforts to achieve a common civil-military air traffic control and air navigation system.

The Project Beacon task force on air traffic control concluded that substantial improvements were needed to meet the future challenge of aviation's projected growth. The report urged expanded use of general purpose computers rather than special computer systems formerly under development for air traffic control. The task force also recommended a variety of changes involving airports, the segregation of controlled traffic, navigation and all-weather landing systems, a new category of flight known as controlled visual rules, and the extension of positive air traffic control.

The agency found itself faced with an unexpected challenge in 1961 when the first series of aircraft hijackings in the U.S. occurred. In May 1961 a passenger on a flight to Key West, Florida, forced the pilot to fly to Cuba. Four other skyjacking incidents took place over the next few months. In August, for the first time, the federal government began employing armed guards, border patrolmen recruited from the U.S. Immigration and Naturalization Service, on civilian planes.

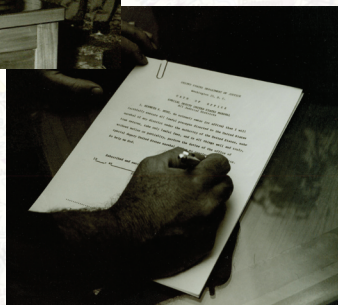
In concert with other agencies, FAA actively supported congressional efforts to remedy a lack of criminal laws applicable to hijackings and other threats to air safety. In September President Kennedy signed Public Law 87-197, an amendment to the Federal Aviation Act of

1958, which made it a crime to hijack an aircraft, interfere with an active flight crew, or carry a dangerous weapon aboard an air carrier aircraft.



1962, Robert Kennedy swears in the first “sky marshals”

The law prescribed death or imprisonment for no fewer than 20 years for interfering with aircrew members or flight attendants in the performance of their duties.



“Sky marshal” signing oath

To help enforce the act, a special corps of FAA safety inspectors began training for duty aboard airline flights. In March 1962 Attorney General Robert Kennedy swore in FAA’s first “peace officers,” as special U.S. deputy marshals. All of these men, who graduated from a special training course at the U.S. Border Patrol Academy, worked as safety inspectors for the FAA flight standards organization. They carried out their role as armed marshals on flights only when specifically requested to do so by airline management or the Federal Bureau of Investigation (FBI).

Reorganization

During his first year in office, Administrator Halaby focused attention on restructuring FAA. In May 1961 he disclosed his intention to decentralize the agency’s operational responsibilities and broaden the authority of regional executives. He selected FAA Region One, with headquarters in New York, for a pilot program, and chose the head of the agency’s bureau of flight standards to develop a transition plan that would be used as a model for reorganizing the other regions. A few weeks later, Halaby announced plans for a new regional office headquartered in Atlanta, Georgia. The Southern Region office had responsibility for FAA activities in Georgia, Florida, North Carolina, South Carolina, Tennessee, Alabama, Mississippi, Puerto Rico, the Virgin Islands, and Swan Island — areas currently under the supervision of FAA Region 2 headquartered at Fort Worth, Texas. At the same time, the administrator changed the way FAA identified its regional offices. The offices were now identified by geographical designations. Thus, Region 1 became the Eastern Region; Region 2, Southwest Region; Region 3, Central Region; Region 4, Western Region; Region 5, Alaskan Region; and Region 6, Hawaiian Region (subsequently changed to Pacific Region).

By July an extensive agency reorganization began. With the changes, termed evolutionary and keyed to a revised



1963, new FAA headquarters building, Washington, DC

concept of Washington-field relationships, Administrator Halaby centralized the development of programs, policies, and standards in Washington and delegated broad operational responsibilities to



1963, FAA headquarters

the regional offices. The seven regional offices, headed by assistant administrators, had responsibility for the executive direction of all FAA programs in the field. To assist in the overall management of specific functional areas, Halaby created the posts of deputy administrator for plans and development and deputy administrator for administration. The statutory deputy administrator served as general manager of the agency's operations and coordinated the activities of the regional offices as well as the operating programs in Washington. Except for the bureau of national capital airports, Halaby redesignated as "services" the former bureaus and the office of international coordination. Other changes involved the former budget division of the office of management services, which became the office of budget.

With no dedicated office space for the FAA, employees of the growing agency were housed in several widely dispersed buildings around Washington, DC, including some "temporary" buildings of World War II vintage. Halaby and his team worked to obtain a headquarters building to consolidate employees in one location. They succeeded in their efforts, and on November 22, 1963, FAA's Washington headquarters staff began moving into the newly completed Federal Office Building 10A, at 800 Independence Avenue, SW. Excitement about the new building quickly evaporated on move day as employees heard the news that President Kennedy had been assassinated in Texas.

Improving Safety and Capacity

Upon assuming office, President Lyndon Johnson convinced Kennedy appointees, including Najeeb Halaby, to remain in his administration for the interim. In the early years of the Johnson Administration, Halaby continued to stress the need for continued safety enhancements and system modernization. For example, in September 1964, FAA mandated more rigorous safety standards for air-taxi operators and commercial operators of small aircraft weighing



1960s, aircraft inspector at work

12,500 pounds or less. A large increase in the complexity and volume of air taxi operations necessitated the new rules. The scheduled air taxi had become a popular means of transportation at small airports located near industry or population centers, or where scheduled carriers did not meet local need. Aircraft manufacturers also contributed to the growth by designing small aircraft especially suited for air taxi operations.

Realizing the need for continued air traffic control system modernization to keep up with technological developments, Administrator Halaby lobbied long and hard for increased funding. In September 1964 the Bureau of Budget released the first significant amount of procurement funds for modernizing the national airspace system (NAS). The funds were specifically designated for installing the first complete NAS En Route Stage A configuration



1965, technicians flight check ILS equipment

(a semiautomated system for en route air traffic control) at the air route traffic control center (ARTCC) at Jacksonville, Florida.

NAS En Route Stage A was based on the military defense system known as SAGE (semi-automatic ground environment). Designed to protect the United States from long-range bombers and other weapons, the SAGE system sent information from geographically dispersed radars over telephone lines and gathered it at a central

location for processing by a newly designed, large-scale digital computer. As the system evolved, SAGE broke new ground in radar, communications, computer, information display, and computer programming technologies.



1960, air traffic controller training at FAA Aeronautical Center, Oklahoma City, Oklahoma

The civilian air traffic control system being replaced by NAS En Route Stage A was essentially a manually operated system employing radar, general purpose computers, radio communications, and air traffic controllers. In the mid-1960s only five ARTCCs (New York, Boston, Washington, Cleveland, and Indianapolis) had computers capable of

processing flight data, calculating flight progress, checking for errors, and distributing flight data to air traffic controllers. The old system used a two-dimensional radar display, which permitted controllers to view only an aircraft's range and bearing. They obtained information such as altitude and identity through voice contact with the pilot or from the flight plan. To retain the correct identity of an aircraft target, controllers placed plastic markers (known as "shrimp boats") on the radar display and moved the markers by hand. When completed, the new system would electronically perform these functions faster and more accurately than the manual procedures. Properly equipped

aircraft would report their altitude, identity, and other flight data automatically at any given time. The computer-processed messages would appear on the radar display next to the aircraft they identified, in the form of alphanumeric symbols.

Prior to leaving the agency, Administrator Halaby also oversaw completion of the codification of previous aviation regulatory issuances into a single body of rules, the federal aviation regulations (FARs). FAA reorganized and streamlined the regulations to eliminate duplicate, obsolete, and unnecessary provisions of multiple regulatory systems inherited from the Civil Aeronautics Board and the Civil Aeronautics Administration. The FARs consolidated and simplified the former civil air regulations, civil aeronautics manuals, and regulations of the administrator.

Federal Aviation Administration

On July 1, 1965, retired Air Force General **WILLIAM F. McKEE** [TERM: 07/01/65 – 07/31/68] became the third FAA Administrator. A career military officer, McKee was the first FAA Administrator with no aviation experience. Known for his integrity and management skills, McKee quickly surrounded himself with technical aviation experts.



Pictured in the center, Administrator William McKee

McKee began his tenure during a boom period for the aviation industry. The introduction of jets had dramatically increased the capacity and efficiency of airline

operations. Lower fares lured many Americans to the skies. Industry success, however, produced challenges for FAA. Rapid growth brought both airway and airport congestion. Flight delays became a part of the air travel experience. Air traffic controllers, who bore the responsibility to keep aircraft in the crowded skies safe and separated, began to lobby for better equipment, working conditions, and benefits.

President Johnson soon began developing an overarching transportation policy to tie all transportation modes together.



1960s, ARTCC controllers

The president noted that the United States lacked a coordinated transportation system permitting travelers and goods to move conveniently from one means of transportation to another. The responsibility for transportation within the federal government, he observed, was fragmented among many agencies resulting in a series of uncoordinated policies. He believed a single department was needed to develop and carry out comprehensive transportation policies and programs across all transportation modes.

On October 15, 1966, President Johnson signed the Department of Transportation Act (Public Law 89-670), bringing 31 previously scattered federal elements, including FAA, under the wing of one Cabinet-level Department. The new Department of Transportation (DOT) had responsibility to:

- Ensure the coordinated, effective administration of the transportation programs of the federal government;
- Facilitate the development and improvement of coordinated transportation service, to be provided by private enterprise to the maximum extent feasible;
- Encourage cooperation of federal, state, and local governments, carriers, labor, and other interested parties toward the achievement of national transportation objectives;
- Stimulate technological advances in transportation;
- Provide general leadership in the identification and solution of transportation problems; and
- Develop and recommend to the president and the Congress national transportation policies and programs to accomplish these objectives with full consideration of the needs of the public, users, carriers, industry, labor, and the national defense establishment.



The legislation provided for five initial major operating elements within the new department. Four of these organizations were now headed by an administrator: the Federal Aviation Administration (previously the independent Federal Aviation Agency), the Federal Highway Administration (FHWA), the Federal Railroad Administration, and the Saint Lawrence Seaway Development Corporation. The new DOT also contained the U.S. Coast Guard, which was headed by a commandant and had previously been part of the Treasury Department.

The act also created within DOT a five-member National Transportation Safety Board (NTSB). It charged NTSB with determining the clear or probable cause of transportation accidents and reporting the facts, conditions, and circumstances relating to such accidents; and reviewing on appeal the suspension, amendment, modification, revocation, or denial of any certificate or license issued by the secretary or by an administrator. In the exercise of its functions, powers, and duties, the board was independent of the secretary and the other DOT offices and officers. The new department began operations on April 1, 1967.

While the president worked to consolidate management of the transportation modes, improving air traffic control and aircraft safety remained priorities for FAA. In July 1967 a midair collision near Hendersonville, North Carolina, between a Piedmont Airlines Boeing 727 and a Cessna 310 killed all 82 people aboard the two



1967, midair collision near Henderson North Carolina

aircraft. The fatalities included secretary-designate of the Navy John McNaughton. NTSB listed the probable cause as the Cessna's deviation from its instrument flight rules (IFR) clearance. Although the accident investigators could not specifically identify the reason

for the Cessna's deviation, they cited the minimum control procedures used by FAA in handling the Cessna as a contributory factor in the accident. As a result, NTSB recommended improving the air traffic control system and imposing more stringent IFR requirements upon pilots.

Prevention of accidents, such as that in North Carolina, became a high agency priority. The mix, in terminal airspace, of high-performance aircraft operating in a radar-based system, and general aviation aircraft operating under the "see and be seen" principles of visual flight rules (VFR), created the potential for midair collisions. The aviation community agreed about the need to improve safety in terminal areas.

To help alleviate congestion around airports, the agency mandated new procedures. It banned special VFR operations by fixed-wing aircraft at 33 major airports. Special VFR operations allowed visual operations conducted under less than basic VFR weather minimums. The new rule continued to permit such operations in the control zones of other airports served by a radar-equipped control tower, though priority would be given to aircraft operating under IFR.



1960s, aircraft safety test

FAA also moved to improve crashworthiness and passenger evacuation standards in transport airplanes. New rules required air carriers, other commercial operators, and aircraft manufacturers to demonstrate that the crew of an airplane capable of holding more than 44

passengers could evacuate a full load of passengers through only half the aircraft's exits within 90 seconds. The previous rule, which did not require demonstration by aircraft manufacturers, had set a time limit of 120 seconds. Other rules developed in this era related to: the distribution and type of exits and their ratio to passengers; improved access to overwing exits; evacuation slides deployable in ten seconds; improved interior lighting and new exterior lighting; cabin linings with self-extinguishing qualities; stowage of carry-on baggage; slip-resistant and clearly marked escape routes; and better protection of fuel and electric lines.

International Activities

FAA's predecessor agency had begun working with international aviation authorities immediately after World War II. After the war, in addition to already established offices in Brazil, Peru, and Panama, the Civil Aeronautics Administration (CAA) had established new offices in France, the United Kingdom, Egypt, China, and Mexico



1940s, international students training at CAA Aeronautical Center, Oklahoma City, Oklahoma



1940s, CAA airport control tower in the Philippines

to help train air traffic controllers, install and maintain navigation aids, and improve safety. The agency also took over responsibility for the operation and maintenance of airports on the islands of Guam, Midway, and Wake. In 1949, under an agreement with the Greek government, CAA sent an aviation mission to Greece to help establish and maintain aviation facilities.

During its first year of operation, FAA expanded civil aviation work overseas. It increased the number of its representatives overseas to 139 and established an international field service division. FAA responsibilities included flight inspection of some facilities serving international routes, as well as certification of airmen and aid to foreign flag carriers to ensure compliance with U.S. air regulations. In addition, it worked with the State Department to train aviation attachés that represented the U.S. in foreign cities.

FAA also continued CAA's technical assistance program which had begun in 1949. Agency technical experts traveled to a number of



Pan American World Airways is the principal international airline in the United States

foreign countries to aid in airport construction, installation of navigation aides, air traffic control, and flight inspection. In 1965, for example, FAA technical advisors supported activities in over 20 countries. In many cases, FAA provided technology such

as communications equipment, instrument landing systems, and radars as part of its program to encourage wider adoption of U.S. technology, procedures, and rules.

Labor Unrest

By the late 1960s air traffic controllers began to protest publicly about the aging air traffic control system and their own working conditions. In January 1968 New York controllers formed an employee organization, the Professional Air Traffic Controllers Organization, or PATCO. Within six months, PATCO had a national membership of over 5,000 controllers. To highlight difficult working conditions and growing NAS congestion, on July 3, 1968, the PATCO chairman announced "Operation Air Safety," which he described as a campaign to maintain FAA prescribed separation standards between aircraft. He said that FAA supervisors had been violating the standards to accommodate high levels of traffic.

FAA had been looking for new technologies that would help to increase capacity and developing new procedures that would rely on improved inter-facility communications to help handle increasing volumes of traffic. On July 15, 1968, the New York Common Instrument Flight Rules Room at John F. Kennedy International Airport began limited operations. The new facility consolidated the manual IFR operations controlled by the Kennedy, La Guardia, and Newark terminal radar approach control (TRACON) facilities. Prior to consolidation,



ILS operations

each of three control facilities controlled flights within airspace delineated by inviolable boundaries and separated by large buffer zones. Because of the slowness of communications between the facilities, boundaries and buffer zones could not be easily shifted to meet changes in traffic flow. In the Common IFR Room, however, controllers who worked different control areas were within easy reach of each other, and, when necessary, they could shift boundaries and buffers almost instantaneously.

Four days after the Common IFR facility opened, 1,927 aircraft in the vicinity of New York City faced major delays in taking off or landing, some for as long as three hours. Local air traffic congestion reached critical proportions, and the jam spread to other major transportation hubs. The inability of the air traffic control and

airport system to accommodate the heavy tourist season traffic exacerbated the situation. A PATCO slowdown on that day contributed to the problem.

Despite unstable and shrinking budgets, growing labor unrest, and an outdated air traffic control system, when William McKee resigned as FAA Administrator on July 31, 1968, the commercial aviation accident rate was declining and the commercial aviation industry was growing. Upon McKee's departure, the first Secretary of Transportation, Alan Boyd, quickly designated FAA deputy administrator David Thomas as acting administrator. With just five months left before a new president would assume office, Thomas remained in this role through the remaining months of the Johnson Administration.



1969, New York Common IFR Room