

## Allen H. Meyers September 4, 1908-March 15, 1976

From birth aviation has been husbanded by those who came to it bringing with them traditional skills of other trades. The Wright Brothers were bicycle makers. They employed a mechanic, Charles Taylor, who was a machinist for the Dayton Light and Power Company. Glenn Curtiss was a motorcycle rider and engine mechanic. Sydney Carom was a wood worker and self taught draughtsman from the WWI era who designed the Hawker *Hurricane* of WWII. Among those, one of the many, came Allen H. (Al) Meyers, farm boy, school teacher, sheet metal man and aircraft designer and manufacturer.

Meyers, born, in Allenhurst, New Jersey on September 4, 1908 was a first generation American born of Swiss immigrants. His father was a graduate mechanical engineer from the premier Swiss technical school ETH (Eidgenössische Technische Hochschule) of Zurich. From his paternal side he inherited the work ethic and technical logic that would serve him throughout his life.

From his early impressionable years he grew up on a farm near Middleburg, New York. That farm was below one of the earliest *air routes*. From the sights and sounds of the passage of the flights over his home Meyers developed a love of the idea of flight. But flying has always been an expensive venture for all those who choose to enter it and money for it was not in the Meyers farm financial plan. Before our society's dependency on liability insurance and its resultant legal impact killed the breed, the *Kid at the airport* or, as they were more frequently known, *rail birds*, gravitated to the local airports. That was the magical place where airplanes flew that smelled of banana oil and burnt castor oil. One of the most addictive environmental and chemical combinations on the face of the earth it changed the lives of many a young man and woman and Al Meyers was one of them.

Before he graduated from high school Meyers joined the New York National Guard. While high blood pressure and Asthma cut his military career short the summer encampment of 1925 did give him the chance to take his first airplane ride. He was seventeen years old but from then on the dye was cast. Aviation was to be Al's way of life. But to get there he first had to earn a living so he took a job teaching in a one-room schoolhouse eight miles from the farm. In the mean time he wrote to every college he could find but none that taught flying or any other course on aviation. Then, along came the magic year of 1927. Charles Lindbergh captured the Ortiz prize for flight from New York-to-Paris on May 20 and 21, 1927 creating a national atmosphere identified as *Lindbergh fever*. Very shortly thereafter Al Meyers left the schoolhouse and entered the aviation industry through the back door, the labor force.

Meyers became, what was then called, a *tinsmith*. In modern parlance he would be called a sheet-metal man. To learn and perfect the trade he worked at those places that offered the best experience for the time spent. Places such as Chance Vought's Long Island City plant, Glen L. Martin's facility at Baltimore and the Stinson Aircraft factory at Wayne, Michigan. These facilities provided the east's best opportunities for him to learn the state-of-the-art at the time.

In 1928, while employed at Vought, He began to learn to fly at Curtiss Field, Long Island. He soloed there in an OX-5 powered Curtiss IN-4. In the process he received pilot certificate number 30844. By 1932 he had logged 140 hours. By 1933 Al was flying as a *Barnstormer* with Martin (Marty) Jensen of Dole Race fame. Meyers toured with Jensen until 1936 when he went to Tecumseh, Michigan and set himself up as Meyers Aircraft Company.

The year 1933 saw Meyers' continue his eclectic schedule of barnstorming, flight instruction and working in aircraft production. The work ethic he had inherited from his Swiss father provided the impetus for the building of the skills and knowledge it would take to support his dream of designing and building an airplane of his own. That year saw his first serious efforts in finalizing the details of design for *his* airplane. In 1934 he began construction of the first of the components in a one-car garage in Wayne, Michigan. Later he relocated his building activities to space available in the Paul Keehl Foundry in Romulus, Michigan, a few miles west of Wayne.

During this period Al Meyers was, by today's standards, a *homebuilder*. Then, as now, the self-construction of an airplane was a study in the coordination and consumption of time and money. When the two ingredients became simultaneously available the production of the machine progressed. Finally, on May 10, 1936 the prototype was given its first flight at the old Wayne County Airport. Flight tests and corrections took over two years to meet the Department of Commerce requirements for any kind of certification. This resulted in the granting of Group 2 Memoranda number 2-550 for the design. Under the limitations of Group 2, every airplane built had to be physically inspected and accepted for flight by a Department of Commerce inspector. While not being granted the coveted Approved Type Certificate (A TC) the machine had been found safe for flight and eligible for sale and use. As a result, the aircraft began to sell and develop a reputation of a safe and stable trainer.

With the Civil Aeronautics act of 1938 came support for the Civilian Pilot Training Program (CPTP). Allen Meyers big chance at success was the demands the program placed on the aviation community to produce a primary trainer to meet the anticipated student loads of the program. With the granting of the Group 2 Memorandum the Meyers Aircraft Company became competitive in that market and set out to capture part of it. Meyers selected an appropriate model number based on the requirement to be picked as one of those trainers. The model number was OTW.. *Out To Win*. In the end, the OTW was one of the three aircraft selected specifically to support the CPTP. The other two were the Ryan PT-21/22 and the Waco UPF-7.

The OTW received its full type certificate (A- 736) on February 18,1941. According to Meyers publications, the OTW was in production until war-time demand for engines and materials caused production to be ceased after September 1942. Sufficient materials were made available to maintain production of spares for the existing fleet. Soon after the events of December 7, 1941 the CPTP as a mechanism for training civilians passed into history. Even then the training continued under the guise of the CAA War Training Service which itself passed into history in January 1944. By then the military training establishments had been developed well past the

need to support the supplemental training programs.

Simultaneous with the production of the OTW Meyers designed and built a prototype of another trainer. The ME-165 (NX34346) was configured as a tandem seated monoplane and manufactured from non-strategic materials. The most obvious design feature of the airplane was the inverted-gull center section providing mounting for the strut braced outer wing panels. The machine had a length over all of 21 feet 8 inches and a wing span of 30 feet. By the time the prototype flew the major aircraft production companies were producing machines such as the PT -19 and PT -23 in sufficient numbers as to make the selection of another development aircraft unlikely at that stage of the game.

Pending the development of his advanced follow-on aircraft design, the Model 126, Al Meyers kept the company alive by using its aluminum forming capabilities. The firm built a well received aluminum boat and winterization tops and heaters for Jeep vehicles. This was not a rare circumstance during the post World War II years. When war production died Vought built washing machines. After the Korean War, Bell Helicopter built motorized wheel-barrows for the construction industry. Never employing more than 200 people Meyers did his best to keep them employed until the new airplane could be made marketable.

The ME-126 (NX34358) of 1947 represented a paradigm shift in Meyers design. The machine was a streamlined, all metal low-winged monoplane featuring side-by-side seating and a retractable landing gear. On August 8, 1947, Al Meyers was performing spin recovery tests required for certification. One of the tests resulted in the aircraft entering into an unrecoverable flat spin. Eventually failure to gain control and loss of altitude forced Meyers to *bailout* of the proto-type which crashed in a field not far from the factory. Myers, in a surplus military parachute, came down hard, not far away, badly shattering his ankle in the process. The injury was so severe that by 1947 standards it was determined he might never walk again. With typical Meyers will and drive he did recover. The proto-type did not.

A second prototype was built within six months of the crash. With the design changes resulting from the addition of a larger engine and the aerodynamic reconfiguring of the vertical fin the airplane emerged as the MAC-145. Type Certificate 3A1 was issued on November 2, 1948. Simultaneous with the development of the two place 145 was the four place MAC-200. The Meyers Aircraft Company built 22 MAC-145 and 45 of the MAC-200 series of airplanes before the design was sold to North American Rockwell in 1965.

Meyers produced a major design change every ten years he was in the business. Ship #1 of the OTW series was given the name *The Old Gray Mare* during her life at the factory. Although museum bound, at the Combat Air Museum of Topeka, Kansas, the airplane still exists. Given that analogy, in its production life the little factory at Tecumseh, Michigan produced a great stable. Its products ranged from a good and honest dray horse to real Derby winners. The 200 series airplanes were world-class winners in closedcourse racing and set a world's around-the-world record for its class.

The aviation industry is not always kind to the creators of great designs. The Meyers organization was never *large* enough by industry standards to be truly competitive. It lacked the tooling and production capabilities of the major manufacturers. As a result its production was limited to the building of essentially custom built airplanes. The system worked as long as a small, highly skilled and motivated work force was available to bring it off. The genius of the man and the success of the firm were built on the craftsmanship they built into their products. The skill that was missing was the industrial engineering it took to build the infrastructure and support systems it would take to allow a lesser skilled and motivated organization to build the same machine in volume. It would be of little comfort to Al Meyers to know he shared many of the same limiting factors that plagued such greats as Bellanca, Bowlus and Northrop. Bellanca and Bowlus were both builders of beautiful and complicated custom-built airplanes but were not great industrial engineers. They never developed the skills it took to mass produce their products. Northrop dreamed of and built fantastic designs that did not come to fruition for decades. He lacked the political skills to create the political machinery to beat the system into submission.

One other limiting factor was the health of Allen Meyers. As a child he was stricken with Asthma and required frequent rest when walking or exercising. At an early age he had developed hypertension and dealt with its effects all of his adult life. The injuries suffered in the 1947 crash of the ME-126 resulted in a long and exhausting recovery period. The fact that he did regain his mobility and return to flight was an inspiration to all who knew him. In 1971 he underwent surgery for complications resulting from the hypertension that hospitalized him for months. When he emerged from it he was partially disabled, had difficulty speaking, and required frequent assistance for the next five years. Al Meyers met destiny in his sleep in March 15, 1976.

Prior to his death he was inducted into the Pioneer Aviation Hall of Fame and the hall of honors of the Curtiss Aviation Museum where he is honored along with Lindbergh, Earhart, Stinson and Rickenbacker. He is further memorialized by Al Meyers Airport and the Allen H. Meyers Foundation that supports grants-in-aid for students in the sciences and aviation.

May God grant him clear approaches, gentle cross winds, long flat runways and soft grass.