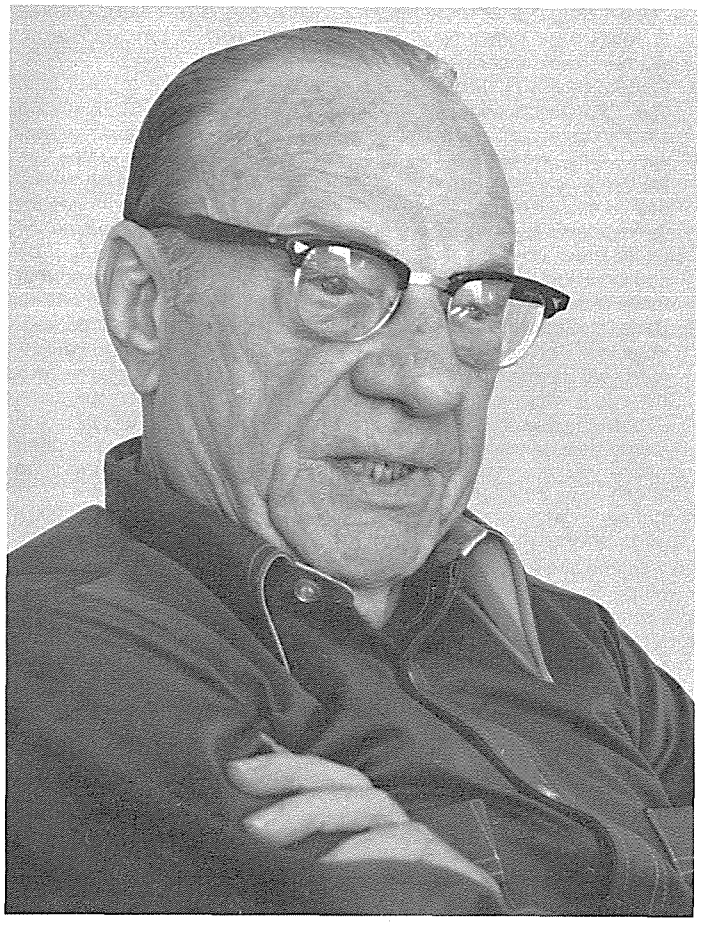


(McMahon via de Vries)

Bill McMahon, The Mooney "Flivver" and the Gray Goose

by Colonel John A. de Vries, USAF, Retd.

Bill McMahon, today. His career spanned the Golden Age, WW II and the Jet/STOL era. Beginning with Alexander Aircraft, he worked for Mooney, Crusader, Lewis-American, Monocoupe, Dart, Culver and Lockheed. A master welder, master mechanic and self-taught engineer and aviation executive, McMahon is an active OX5'er.

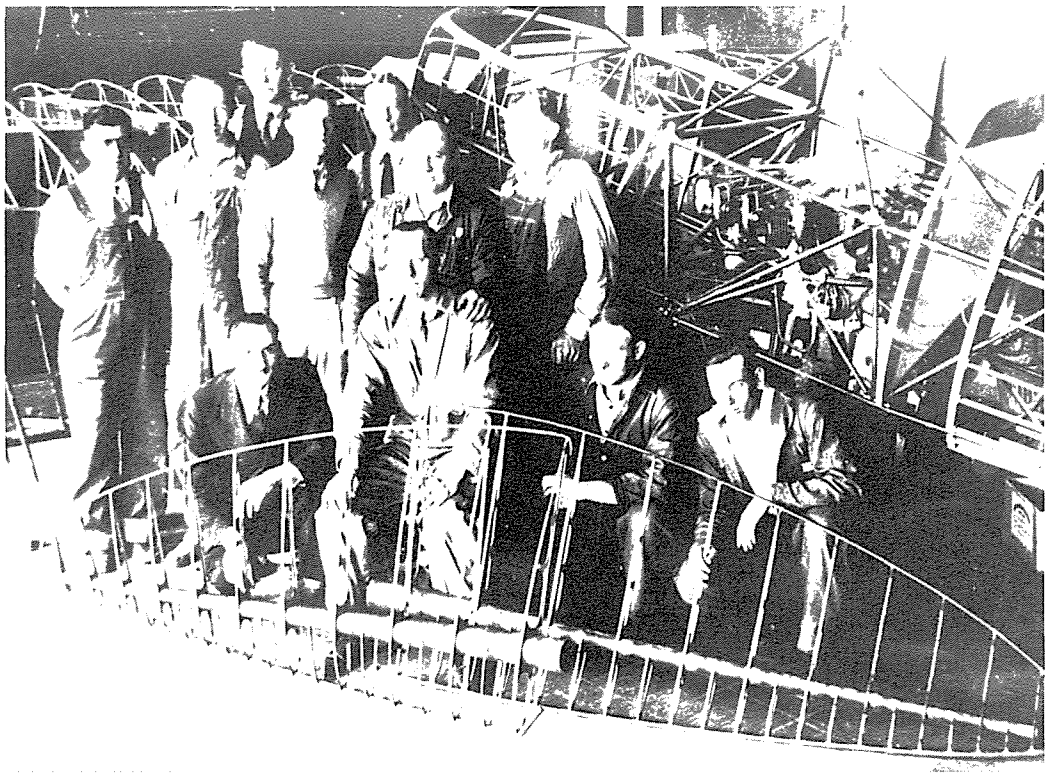
The Alexander Aircraft Company of Colorado Springs, Colorado, produced more than Eaglerocks in the late 20s and early 30s. Many of the "names" in the aircraft industry got their start with the company. Most of us know that Al Mooney, as a teenager, designed the Eaglerock and was responsible for the first Alexander "Bullet." Benny Howard, of later racing fame, was an instructor in the Alexander Flying School, a production test pilot and, more important, designed the only major modification of the Eaglerock—the center section, that resulted in the A-Series of Colorado biplanes. O.R. "Ted" Hauster, who flew for the Alexander Company, became Continental Airlines' V.P. for Operations and Proctor Nichols, the first President of Aircraft Mechanics Inc., saw the Alexander Bullet through its certification tests and designed the Alexander "Flyabout." There were a host of lesser-publicized Alexander "associates" (employees) who contributed mightily to aviation history. Among them is Bill McMahon, whose career was interwoven with that of Al Mooney and his brother Art.

Bill McMahon was an automobile electrician in Denver in the mid-20s. Business was slow, so slow that Bill applied for employment at the new Alexander Aircraft plant, out in Englewood. He was hired—as a "cadet." This status bears some explanation because it was unique to Alexander. A cadet was a probationary employee who was hired for a six-week, on-the-job training program. If a cadet "worked-out," he or she was hired by the company on a full-time basis. No money changed hands during the cadet period. Cadets were paid in flying time: one hour for each week's work. Bill worked out after only five weeks of the program and was hired at $80 a month. He'd flown with Clarence Brockman and Paul Venier in the Alexander Longrens (Alexander acquired four Longren biplanes when they bought the Longren factory in 1924) but six hours weren't enough for solo!

Bill was put to work on the first (Dan Noonan's) Eaglerock. When it failed to live up to expectations, Bill was assigned to build Al Mooney's much more successful biplane. Self-taught, McMahon became an aircraft welder. His natural aptitude led him into tool design and he was taken off the "line" to build Eaglerock production jigs. A whiz with a torch, he once built an entire Eaglerock fuselage frame in five hours, working alone!

Progressing in the company, Bill was assigned to the Experimental Department. In this position, he helped construct the unsuccessful Alexander Transport (a Wright J-5 powered 8-place high wing monoplane) and the revolutionary low-winged "Bullet." When Al Mooney left Alexander in May of 1929, Bill followed him to Wichita and became involved in producing the four Mooney "Low-Wing" aircraft, a four-place plane that was similar to the Alexander Bullet.

The Depression killed Al Mooney's first venture as an aircraft manufacturer, and Bill was out of a job. A native Coloradan, Bill gravitated back to Denver and, together with Art Mooney, operated a gas station. This diversion lasted only until Al showed up in the Mile-High city after a stint at Travelair. Al had the design for a "flivver" plane in mind and needed Bill and Art to build it for him.



The "Gray Goose" under construction. Note the McMahon-built propeller in the foreground—and the horizontally mounted J-5 buried in the uncovered fuselage. The cantilever wing is in the background. The aircraft was designed by Fred Langgraff and built by the Lewis-American Airplane Co. in 1933. Personnel shown can't be identified. Kneeling left: Fred Langgraff. (McMahon via de Vries)

It was late 1930 and the Depression had deepened to the point where financing for a new Mooney aircraft was practically unobtainable. But the trio of Al, Art and Bill McMahon were resourceful. The Vandersarl brothers were willing to lend them a corner of their workshop—enough room for a drafting table and a small aircraft. Tubing, a second-hand welding rig, some fabric and a pair of airwheels were scrounged—and the Mooney "Flivver" began to take shape. It was a low-wing monoplane with the characteristic Mooney wing plan form (a semi-elliptical shape, later seen on the Dart and the Culver Cadet). Bill and Art, true professionals, built the plane while Al drew its parts and components. Construction continued in fits and starts because the associates had to spend a lot of time acquiring materials.

Registered as 12512, the little monoplane was a very basic flying machine. Two places were provided, side by side, and a fixed landing gear was decided upon. It had a hammered aluminum cowl and plywood under the fabric from the cockpit forward and along the fuselage sides. And there it sat on the ramp of the Denver Municipal Airport, lacking one essential item for flight: an engine.

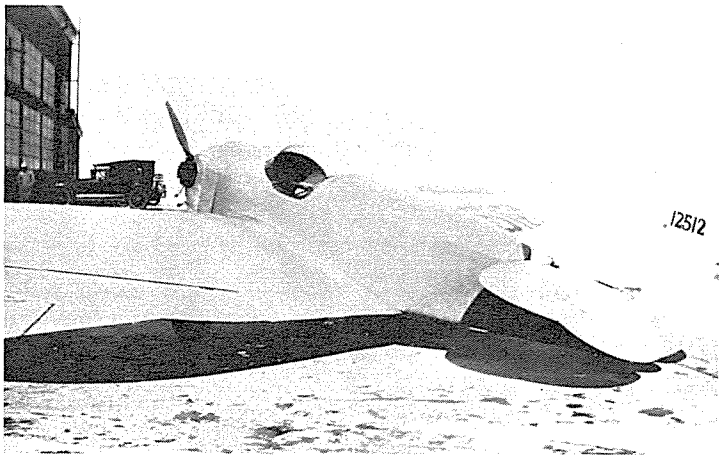
Al, Art and Bill wheeled and dealed for a power plant. Through the agency of a man named Todd, Bill contacted Proctor Nichols who, at the same time, was the chief engineer for the dying Alexander Aircraft Company (Alexander Aircraft was declared bankrupt in August 1932). Nichols had an engine—the #1 production Continental A-40 that had powered the prototype Alexander "Flyabout"—a Cub-like light high-winged monoplane. It wasn't the most reliable power plant in the world (it blew head gaskets every time the throttle was retarded for landing and then advanced to taxi!), but it had cylinders and pistons—and fit the Mooney "Flivver." Not one to look a gift engine in the spark plugs, Bill borrowed a truck and drove to Colorado Springs to pick up the Continental. Al had received an offer from Bellanca and left for the east before the Flivver flew. It's just as well, because the ship was underpowered. The A-40 was designed to produce 37 hp, but the Alexander dynamometer had said *27* when the engine was *new!* Bill and Art convinced a local Denver pilot named "Mel" (his last name isn't recorded) to test fly the little Mooney.

No. 12512 flew well, but it was an orphan. For a while, Todd kept it at the Denver airport, but its ownership soon reverted to the Vandersarl brothers (they'd never been paid for the use of their facilities). Frank Vandersarl, today in his late 80s, isn't positive what happened to the Flivver. He is sure that he sold it to "a guy from Montana who changed the engine." Beyond that, the fate of the one-off Mooney design isn't known.

Out of a job again, Bill McMahon went to work for the American Furniture Co. until he received an offer from the Crusader Aircraft Co. Until mid-1933 he helped build the twin-engined monoplane the company was constructing. As things slowed down at Crusader, he decided to go to work for the Lewis-American Aircraft Company, another Denver concern.

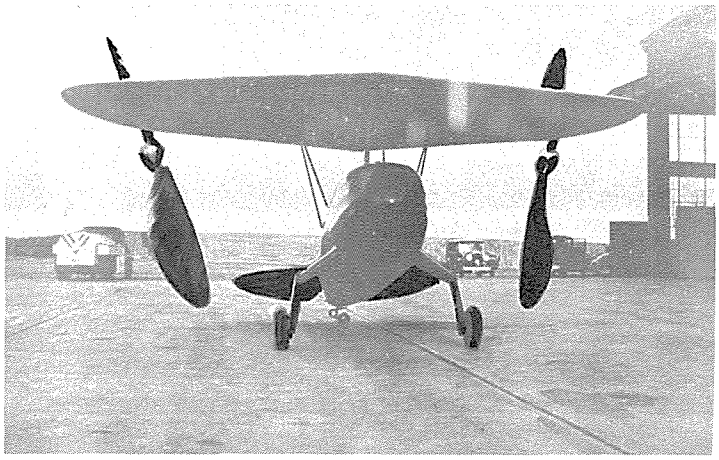
Lewis-American started business as the Gray Goose Airplane Company. Bill considered it a "shady" operation—because its

1931 Mooney two-place "Flivver." Note characteristic Mooney wing plan-form. Unfortunately, no one recorded the dimensions of this one-off Mooney design. (McMahon via de Vries)

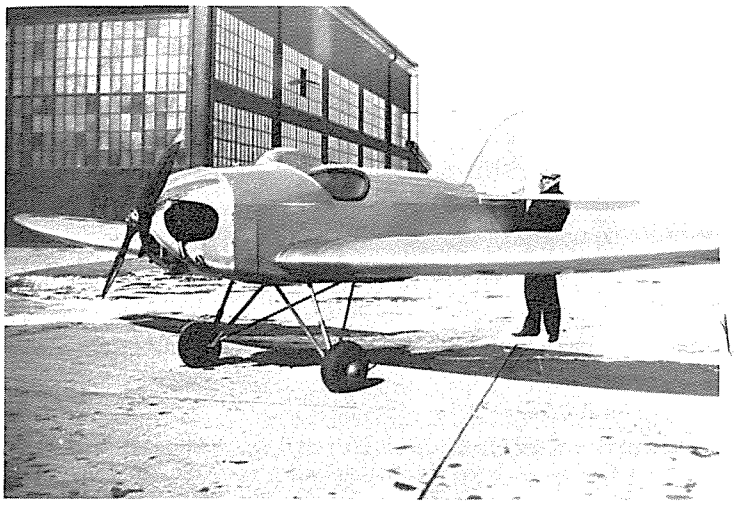


"No. 12512"—the Mooney "Flivver" was never submitted for ATC approval. Airwheels provided a landing cushion. Gear struts were welded steel tubing.

The "Gray Goose" ready for flight. Actual designation of the parasol craft is unknown. Fabric-covered, geared propellers turned at 350 rpm and, on its only flight the plane demonstrated STOL-like capabilities. Landing gear was cantilever and the tail wheel swiveled. Touring car in the background sets the era for this closed-cockpit unusual aircraft. (McMahon via de Vries)



Art Mooney holds the tail up. Aluminum cowl contains Continental A-40 production #1, also used on the prototype Alexander "Flyabout." Plywood fuselage front deck and sides, fabric-covered, hide McMahon-welded frame. (McMahon via de Vries)



primary purpose was the selling of stock. Aircraft appeared to be only incidental to the company, although two different designs were actually built.

The first of these, the Gray Goose, never did fly. When the engine was started, it vibrated itself to death on the ramp! Obviously, the Gray Goose Airplane Company had to do something to appease the ire of the stockholders and interest new investors. They hired Fred Langgraff—a competent former Alexander engineer. He was commissioned to produce a second Gray Goose. His guidance, "Make it unconventional." He did!

Langgraff designed a parasol pusher monoplane with two fabric-covered propellers. Power for this unconventional aircraft was a Wright J-5 buried in the fuselage, bolted in a horizontal position! Multiple gear boxes transmitted the power out of the fuselage, up to the wing, through the wing and ultimately to the propellers. Bill McMahon was entrusted with the delicate job of welding up the propellers. They were built on a tapered steel spar and had to be carefully balanced. Bill recalls his labors were often interrupted as stock-selling salesmen extolled the virtues to rubbernecking potential investors of the aircraft under construction.

Captain Cordner flew the Gray Goose (no other designation has been uncovered) on its one and only flight. The fabric-covered McMahon-built propellers flailed the air at 350 rpm and the plane made one circuit of the airfield. The buried engine overheated and Cordner landed the two-place craft rather than have it burn up. In any event, the Gray Goose did fly, the promoters did make their money, and the investors were "stung"—and the fate of the unconventional monoplane disappeared in the mists of time. Bill McMahon didn't stay around to watch—he had an offer from Monocoupe and left to join Al Mooney and Art Mooney in Moline, Illinois.

Bill McMahon lives, together with his charming wife, in active retirement in Colorado Springs on a Lockheed stipend—the last company for which he and the Mooney brothers worked.

ABOUT THE AUTHOR

Colonel John A. de Vries, a 5000-hour pilot, is retiring after 30 years of Air Force service. He has embarked on a "second career" as a writer on aviation subjects. His first book, *Taube, Dove of War,* was recently published by Paul Matt's Historical Aviation Album. A contributing editor to *Radio Control Modeler* magazine, he designs and builds scale radio-controlled model airplanes. His current project is a book detailing the history of the Alexander Aircraft Company—the builders of the Eaglerock biplanes during the "Golden Age" (between World Wars I and II). Research for the book is almost complete, but he asks that any AAHS members who know of the location of any surviving Alexander aircraft contact him. His address: 4610 Moffat Lane, Colorado Springs, Colorado 80915.