THE MCCULLOCH ENGINE AT OSHKOSH

John Magnan working on a Mac in 1997.

The McCulloch four cylinder two-stroke engine first gained fame in the 1950s when it became the powerplant of choice for Igor Bensen's gyrocopter. Thousands obtained the McCulloch "Mac" engine for their aircraft. Most of those engines had flown once as a drone for the military and had been surplussed to the public. Even now EAA 172 member John Magnan owns two, former members Mark Slone and Wyman Fox have several. Even CFI/CFII Will Robertson has a Mac equipped Bensen gyrocopter. Most aviators assume that the McCulloch engine has been relegated to the aircraft scrapheap of history. But, then, there was this from Oshkosh 2011:

THE LITTLE MCCULLOCH ENGINE

PATRICK PANZERA, Editor – Experimenter

For decades, homebuilders all over the country have been enamored with the little air-cooled, two-stroke, four (and six)-cylinder, horizontally opposed, compact target drone engines built by McCulloch, most known for producing chainsaws. But not many have actually seen the drone in its full glory. At this year's AirVenture, we got the chance to look one over closely. This little gem of an engine was built to power target drones for use during WWII. The four-cylinder version's displacement is 100 cubic inches (O-100), and the six-cylinder is 150 (O-150). Since the compact size of the drones allows for the use of a small diameter propeller, these little engines are allowed to spin up to 4100 rpm, with the O-100 producing 72 hp and the O-150 making 110, or 120 hp with a turbocharger.

Beechcraft is the manufacturer of the drone we found in the Warbirds area. Its design postdates WWII by a decade or so and is generally more sophisticated than its predecessors, having the ability to tow banners and carry targets that carried scoring devices. This little Model 1001-A Cardinal is designated MQM-39A by the U.S. Navy and MQM-61A by the U.S. Army. With its incredible power-to-weight ratio, it was capable of a top speed of nearly 350 mph and had an endurance of more than one hour of flying time. A total of 2,200 of these petite Cardinals (of different variations) were built, the majority of which were for the U.S. Army, with the balance being operated by the U.S. Navy, the U.S. Marine Corps, and the country of Spain. (Information adapted from EAA e-HOTLINE July 26, 2011)

AIRVENTURE AROUND THE PATCH ...

Aviation passion flows up and down the field

By MARY JONES - EAA news

AirVenture is, in reality, a combination of little fly-ins within the larger fly-in. From warbirds on the north end to ultralights and light planes at the south end of the field - and the homebuilt, vintage, and aerobatic folks tucked in between - each community has its own special programs and activities specific to its aviation passion.

Vintage aircraft

The Warbirds of America (WOA) welcomed 367 aircraft to its compound. Rick Siegfried, president of the WOA, called AirVenture 2011 a "fantastic year." The homebuilt community counted 975 individual homebuilts on the field through Sunday morning. Obvious highlights of the week for that community were the Tribute to Burt Rutan and the honoring of Chris Heintz for his many kit designs over the years. In the Workshops area, seven different workshops attracted more than 7,000 attendees. Activity was brisk with rotorcraft on the ultralight runway, too. AutoGyro GmbH of Germany introduced its line of autogyros to the U.S. marketplace and helicopters and gyros kept the pattern busy with activity during the rotorcraft flying sessions. 112 ultralights and light planes, including trikes and powered parachutes, registered in the area. Each morning one or more hot-air balloons inflated and remained tethered on the field until it was time for the powered parachutes to fly. (Information adapted from EAA e-HOTLINE July 31, 2011)

GERMANY IS ENTERING AN AUTOGYRO INTO THE U.S. MARKET

The German company AutoGyro is adding an autogyro to the U.S. market. The gyro had first been introduced at the European AERO 2011, and had its American debut at Oshkosh this year. The company was established in 1999 and has already delivered more than 1,000 gyroplanes, manufactured at a rate of 10 per week in Hildesheim, Germany. According to Guido Scheidt and Tim Adelmann, CEO AutoGyro U.S., it is impossible to stall and spin the autogyro, and they report the machines have spectacular takeoff distances (10 to 70 yards) and can land almost like a helicopter. AutoGyro's machines sell for $75,000/ $95,000/ $110,000 respectively for MTOsport/ Calidus/ Cavalon. The standard engine is a Rotax 912S (100 hp); for high altitude operation the Rotax 914 Turbo is an option (add $9,000). All kits come pre-wired, and no special tooling is required for the assembly.

The company is interested is interested in selling its kits to law enforcement as well as the general public. According to the company, since 2006, the U.S. Department of Justice has been operating an aviation technology program to evaluate low-cost aviation assets for law enforcement, and after initial interest in powered parachutes and fixed-wing airplanes, it's now examining autogyros. (Information adapted from EAA e-HOTLINE 07/28/11)

FORMER PAL OF PHIL COLMAN CONTACTS EAA 172

Phil Colman

On July 20, Tom Livingstone, who knew Phil Colman in the 1950s, contacted EAA 172. Tom wrote **"**Just ran across an article on Phil Colman. He was my mentor and idol when checking out in the F-84D while in the Savannah Air Guard, around 1955. Is there any way I can connect with Phil? Hope he is still around." We replied to him to let him know that Phil passed away April 28, 2011. We sent him Phil's Obituary and gave Tom a description of the graveside service.

Tom replied to that e-mail:

Thanks for the reply. I'm real pleased to hear that Phil was well taken care of on his journey West. I could talk about him for hours (days) but with your indulgence will tell one story that sticks with me. There was this day I was assigned to pull the rag (target behind an F-84D) for a gunnery mission at our Savannah Range (several miles off the coast). Phil was one of 4 shooters. After all had fired out, while returning home to base (Travis Field), Phil remarked over the UHF "Tom, don't lose that rag. I think I did pretty well". Each aggressor aircraft was armed with 200 rounds of different colored ammo for each shooter. When we counted up the scores, Phil's color was identified in 198 holes, and none of them were near the edges of the target. So compact a pattern we figure that the other two passed through previous holes. None of us had ever seen air-to-air shooting like that. The guy was as fantastic a Fighter Pilot as he was a human being. Maybe you could pass this story on to others who knew the Ace.

I appreciate the response.

Tom Livingstone

SHORT FINAL

AVweb July 25, 2011

From "many years ago":

N12345: "Las Vegas Radio, this is N12345. Request airport advisory for landing Las Vegas. And would you please call Caesar's Palace for transportation?"

Las Vegas Radio: "N12345, Las Vegas Radio. Stand by for airport advisory -- and I will call Caesar's Palace if you want, but it will be 19 hours before they get here. This is Las Vegas, New Mexico!"