

Money in the Bank

BOB HOOVER'S LEGENDARY
SHRIKE COMMANDER ROUTINE

3,500 feet
Dives at maximum permitted
airspeed, 287 mph.

Inside Barnstormer's Loop
Pulling 2.5g's

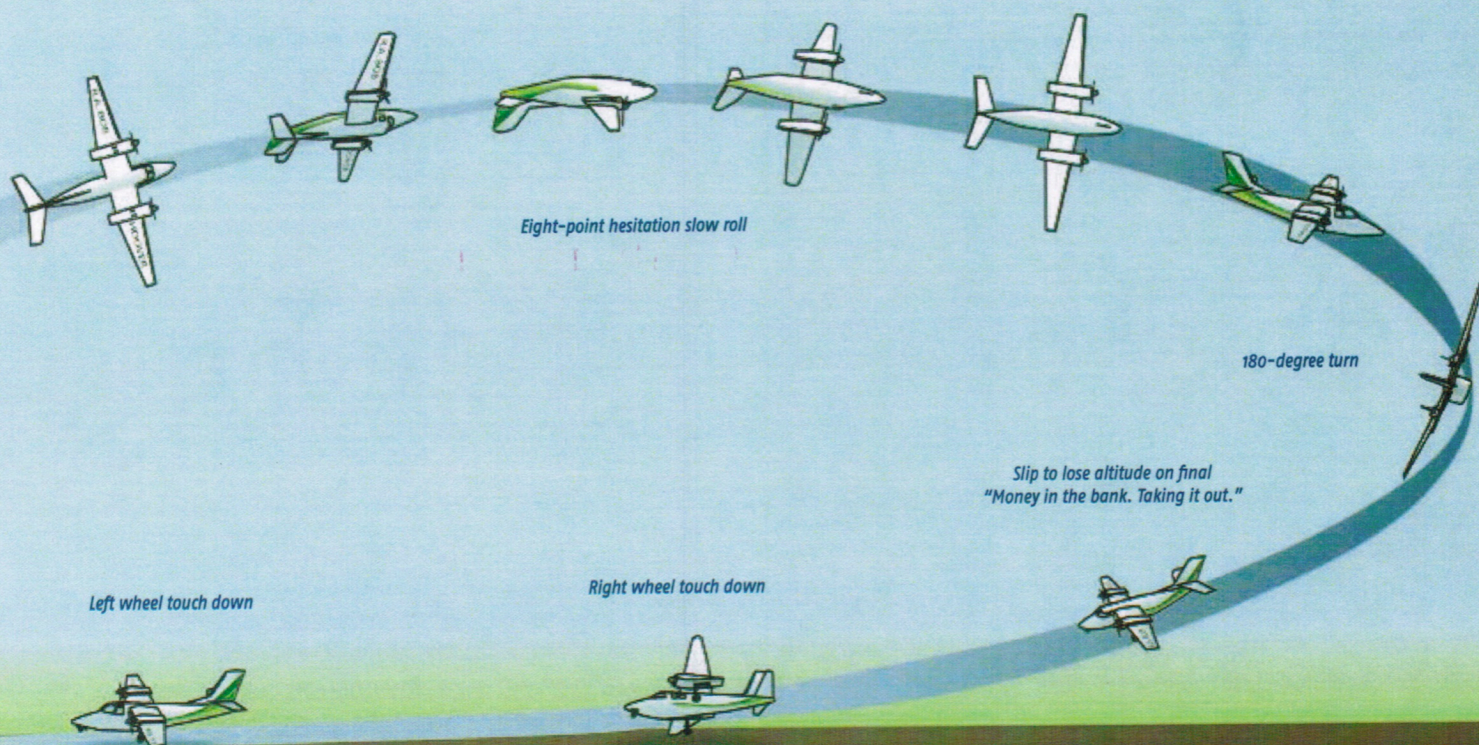
Taxi to a stop at show center

BY MARK PHELPS AND STEVE SCHAPIRO



"I start out with shutting off both engines, treating the airplane as if it were a glider. Diving steeply, building up sufficient airspeed to be able to convert the energy from the airspeed into maneuvering capability. So I'm able to go up, over the top, do a complete loop.

Now converting the altitude to speed, and then a 180-degree turn and land on one wheel then the other and roll up right in front of the speaker's platform, all with the engines dead from the time I started out. That's the energy management maneuver." —BOB HOOVER





THAT ROUTINE in the Rockwell Shrike Commander has come to epitomize more than 50 years of R.A. “Bob” Hoover’s unique blend of precise, disciplined flying and incomparable showmanship. There has never been a pilot quite like Bob, EAA 21285, or a career quite as remarkable.

“I don’t think there’s anybody in the history of the air show business who had such a sustained career,” renowned air show performer Sean D. Tucker, EAA 999780, said. “From being a military aviator, to being a test pilot, to testing and demonstrating these various jets, combat jets throughout the world at air shows; from his Reno Air Race days to flying the Shrike for Evergreen. He sustained an air show career that is unbelievable.”

The highlights of Bob’s career are well-known. He was a pilot in World War II and famously escaped a German POW camp by commandeering a Focke-Wulf Fw 190; he was part of the X-1 team that broke the sound

barrier; and he served as a test pilot for North American, flying the F-86 Sabre and F-100 Super Sabre. During the late 1950s, North American acquired a P-51 for Bob to fly in his public air show demonstrations, and *Ole Yeller* launched a career that would lead to legendary status for the airplane and its pilot.

The engine-out routine in the Shrike, however, may be what Bob is best remembered for. Over the years, many air show spectators—pilots and non-pilots alike—have wondered where Bob got the inspiration to perform his classic routine in the production twin-engine Shrike business aircraft.

LIGHTNING STRIKES TWICE

In 1968, North American Aviation merged with Rockwell—a business deal that included the latter’s Aero Commander division based in Oklahoma City. Losing some \$13 million per year, the manufacturer had a 2-acre parking lot at Wiley Post Airport full of its factory-new, twin-engine Shrikes gathering bird droppings. Bob was asked to help devise a strategy to bring sales out of the

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doldrums. “Why not duplicate the routine I performed with the P-38?” he proposed, and the idea gained traction in the boardroom.

During World War II Bob had been stationed in North Africa where his duties included test-flying new fighters after they had been reassembled from their shipping crates. The P-38 Lightning was proving a handful for some of the less-experienced fighter pilots, and it had developed a bad reputation, particularly for its often fatal single-engine flying characteristics. This made sense, given that the “fighter track” of training did not include any multiengine aircraft.

Reasoning that fear played a significant role in many of the P-38 accidents, the commanders figured that seeing Bob fly a demonstration would boost their pilots’ confidence, particularly when it came to flying on one engine.

He toured many of the bases in the theater, performing loops and rolls with one engine out—followed by a dead-stick landing with both propellers feathered to the open mouths of previously skittish Lightning pilots. These demonstrations were credited with substantially reducing the accident rate among the operational squadrons.

“The airplane really doesn’t know if it’s flying with two engines running, or one engine, or no engines,” Bob said. “With enough airspeed you can let the aerodynamics do the work. Managing the energy is what matters.”

When it came to developing the P-38 routine for the Shrike, Bob needed to account for the design differences between the two aircraft. “With the P-38, I had a 7.3g fighter. The Shrike is a 4.4g business airplane,” Bob said. “So I took it slow and committed to telling myself, ‘Take it easy.’ I started with the idea of limiting myself to 3g’s. On my first show I hit my own prop wake on the first loop and pulled



"He took a plane that's not noisy, doesn't have big smoke, not hard-core aerobatic and made it into an amazing act that everybody wanted to see."—PATTY WAGSTAFF

4g's. That's when I decided to back off even more to a maximum of 2.5g's."

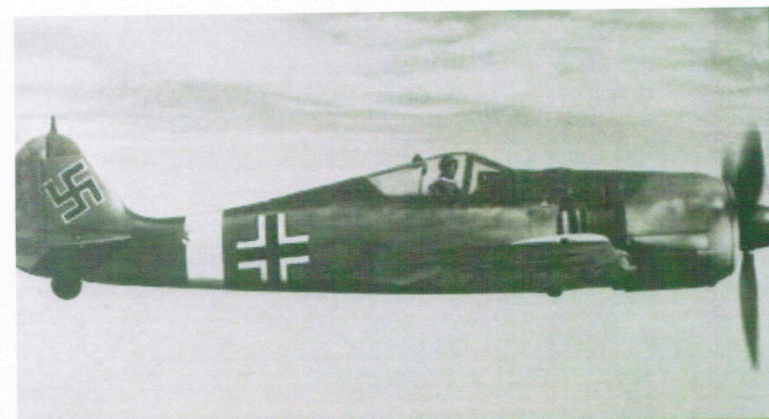
Bob said he was never nervous about shutting down both engines in the Shrike. "I always had myself in position to land at the airport," he said. "The whole object was to show that the aircraft was safe under any condition, just as I had in the P-38—to show that airspeed is what it's all about."

STOCK FROM THE FACTORY

His first demo flight in a Shrike took place at the Reading, Pennsylvania, air show. Bob didn't realize he

had flown as low as he had until he inspected the belly of the twin and found one of the antennas was about 2 inches shorter than it had been before the show. Scraped paint on the belly was "repaired" with a spray can, and Bob decided he didn't need to fly that low the next time.

"He took a plane that's not noisy, doesn't have big smoke, not hard-core aerobatic and made it into an amazing act that everybody wanted to see," air show performer Patty Wagstaff, EAA 200806, said. Bob said he flew more than 1,000 demonstrations in the Shrike. He made the routine look effortless and easy. "Every time, he did it the same," EAA Chairman Tom



'THE DUMBEST THING I EVER DID'

BY MARK PHELPS

The two escaped POWs approached the German airfield with caution. It was April 1945, and only a small contingent of Luftwaffe ground crew was left to guard two dozen or so Focke-Wulf Fw 190 fighters. But still, two Americans brazenly walking onto an enemy

airfield, on German soil, was a gutsy move. They targeted one of the fighters on the field's outskirts. By way of qualifications, this one had only a few holes in it—and full fuel tanks.

Using a small pistol they'd acquired from a French forced laborer, Jerry Ennis

eventually "persuaded" a mechanic to help prepare the fighter for flight. Despite the lack of a parachute, Ennis' companion, Lt. Robert A. "Bob" Hoover, taxied the stolen fighter and took off for freedom. He'd spent more than a year as a POW, and he was just 23 years old.

Escaping in a "liberated" enemy fighter was the daydream of every captive Allied pilot. "Gus Lundquist, another prisoner at Stalag Luft I, had flown captured Fw 190s in England before being shot down," Bob said. "From memory, he'd briefed us on the cockpit check, scratching out pictures in the sand of the prison compound. But I'd forgotten most of it."

Even so, Bob took off and headed west along the Dutch coastline. Avoiding abandoned German airfields, which he thought would be mined by the retreating Germans, he chose an open field behind the Allied lines for his landing site. He intentionally ground-looped the fighter to avoid a ditch, wiping out the gear. But the airplane had served its purpose. Bob was free, with a story that most would

dismiss as the imaginative musings of a Hollywood scriptwriter.

Though his escape was written up in his hometown paper, few people in the aviation community knew about it until Jerry showed up at an air show where Bob was performing and let the cat out of the bag.

"I wasn't proud of that flight," said Bob. "It was about the dumbest thing I've ever done. I was much more proud of the work I did [demonstrating single-engine flying technique for P-38 pilots] that helped save lives."

At this year's EAA AirVenture, Bob should get another chance to stand next to a Focke-Wulf. Among the aircraft on the guest list for the tribute to Bob Hoover on July 26 is at least one—maybe a pair—of full-scale replica Fw 190s. Rudy Frasca intends to bring his example, powered by a Pratt & Whitney R-2800 replacing the original BMW 801 radial. Dan Kirkland also plans to have his kit-built Fw 190 at AirVenture this year. His is powered by a Russian-built ASH-82 radial, a copy of the original fuel-injected BMW.



Poberezny said. "Every time it was perfect. That's the mark of a professional."

In the beginning, he would fly whatever demonstrator aircraft was available in the region where the show was held. He said, "Some people thought the air show airplanes were specially built up to be stronger, but that's not true. In fact, they were selling them out from under me so quick, I was flying different airplanes all the time—stock from the factory."

North American Rockwell took to installing a plaque in every Shrike that Bob flew, and those examples were the first ones sold. When Bob started flying his routine, the factory was building one Shrike per month, and they were still backing up on the lot. At the time the company was sold a few years later, production had been ramped up to eight per month to keep up with demand. The division went from losing \$13 million per year to making \$13 million.

THE VIEW FROM THE RIGHT SEAT

The last time Bob flew the routine in the Shrike was during his annual low-level card checkride in 2003. The next day he ferried the plane from Florida to the National Air and Space Museum's Steven F. Udvar-Hazy Center at Dulles International Airport, where the airplane is now on display.

Steve Oliver, an air show performer and friend of Bob's for 30 years, happened to be the lucky ACE (aerobatic competency

evaluator) for that flight. "The reality of it, that was just the silliest flight in the world—me riding with Bob Hoover to evaluate his capability of doing aerobatics," Steve said.

"From the time the throttles went forward for takeoff until the throttles were retarded on landing, the throttles never left the stop," Steve said. "On the takeoff roll, the instant he pulled back on the stick to rotate the airplane it was a snapshot. His hand goes over and hits the gear up handle, and it took about a quarter of a second. I've never seen anybody move so fast. Then it was full power to altitude and then start into the maneuver. And then when we started doing the single-engine work and then the no-engine work, it was just mixture back and shut it down, and props into feather."

Leo Loudenslager, the 1980 World Aerobatic Champion, had the opportunity to fly in the right seat when Bob performed the routine for an NTSB judge during Bob's successful fight with the FAA to have his certificate reinstated.

"Leo told me that he was never so impressed with somebody who has that skill," Sean Tucker said. "But also he was never so frightened in his life when Bob cut those motors at V_{NE} [never exceed speed] 10 feet off the ground and did a loop. And Leo was fearless. He was never more impressed in someone's airmanship than when he got to ride in the right seat with R.A. 'Bob' Hoover. And that's saying something."



(L/R) Air show performer Steve Oliver, attorney F. Lee Bailey, performers Bob Hoover, Sean Tucker, and Leo Loudenslager, and air show commentator Dave Weiman, in 1995.



Coming out of the loop, Bob would perform an eight-point barrel roll, do a 180-degree turn, and land—all with the engines off. “Bob would slip it; first he’d go straight, then he’d slip it a little bit, and when he was going straight he’d say, ‘Got money in the bank,’” Sean said. “Then he’d start slipping a little bit, and he’d say, ‘Taking it out.’ He’d slip it, go straight, slip it, and go straight; that’s what he’d say all the way down to final. ‘Money in the bank; taking it out. Money in the bank; taking it out.’”

EAA TRIBUTE AT AIRVENTURE

At this year’s AirVenture, EAA honors Bob Hoover with ceremonies, interviews taking place at the Warbirds in Review area, and tribute air show performances on Tuesday, July 26. Scheduled to fly are Bob Odegaard in his 1975 Rockwell Commander 500S Shrike twin (the same model Hoover flew in his air show routines) and Bob’s signature mount, the all-yellow P-51 *Ole Yeller*, now owned by John Bagley, that served as his demonstration Mustang and pace aircraft for the Reno National Championship Air Races.

The Shrike act has never been duplicated. “That’s because it’s so hard and it’s so scary and you have to be so smooth to do something like that with that engine out,” Sean said.

The routine Bob Odegaard is working on with Steve Oliver and John Mohr is planned as a tribute, not a replica of the original. Bob said the performance will include at least some of the classic maneuvers that Hoover made famous, adding, “We’re still not sure about the dead-stick landing.” *EAA*



Mark Phelps, EAA 139610, is the former editor of EAA’s *Vintage* *Airplane* magazine and owner-pilot of a 1954 Beechcraft Bonanza.

Steve Schapiro, EAA 1018168, is senior editor of EAA Publications. He owns and flies a 1968 Piper Cherokee Arrow. To see video of Bob’s air show routine and more photos, visit www.SportAviation.org.

ICED TEA AND A ROLL

BY MARK PHELPS

While flying a demonstration flight for the Air Force in a North American T-39 Sabreliner, Bob was asked if the jet would roll. He said, “Yes it will,” and performed the barrel roll so smoothly that high-ranking officers sip-

ping coffee back in the cabin never spilled a drop. Bob said, “Then I got so bold as to think I could pour a glass of iced tea from a pitcher while rolling the airplane.” The marketing folks said, “We’ve gotta get that on film,” and arrangements were made to perform the feat in a twin-engine Shrike business aircraft. With characteristic humility, Bob said, “The hardest part was pouring the tea from the pitcher backhanded, so you could see it on camera.”



To see footage of Bob pouring iced tea while rolling the aircraft, visit www.SportAviation.org.

AMBASSADOR OF AVIATION

BY STEVE SCHAPIRO

Ask anyone who has seen Bob fly, and they will tell you his ability to make an airplane do precisely what he wanted it to do was unmatched. However, if you ask air show pilots about Bob, the conversation is just as likely to be about his personality as it is about his skills as a pilot.

“He was more than an air show performer,” said EAA Chairman Tom Poberezny. “He was an asset to aviation, truly an ambassador of aviation.”

Steve Oliver, who has known Bob for more than 30 years, said, “He’s the epitome of Mr. Gracious.” At the National Championship Air Races in Reno, Nevada, Bob would fly his yellow P-51, *Ole Yeller*, to start the Unlimited category races. Some days he might fly as many as 10 times, and in between flights he tried to go to his motor home to get cooled off. “The man couldn’t walk 50 feet without someone either wanting to talk or ask for an autograph,” Steve said. “I have never, ever seen Bob refuse an autograph, refuse to talk to somebody, or even be the slightest bit rude.”

Patty Wagstaff said one of the reasons she joined the air show circuit was Bob’s graciousness. “It makes a big impact on how people feel about aviation,” she said. In particular, she and her husband thought air shows might be a little bit like traveling carnivals. “Meeting people like Bob made me realize that it is a real classy group of people. It had a lot to do with my husband’s acceptance of it, which was really important.”

Bob had famously performed in a coat, tie, and wide-brimmed straw hat before switching to a Nomex flight suit for safety. The reason for the seemingly formal dress was simple, Steve said. “It’s the proper attire for a professional businessman, and when you’re an air show pilot, you’re a professional businessman.”

That professionalism was evident in how Bob generously gave his time to new pilots as they started their careers. “He was an incredible mentor for me starting out,” Sean Tucker said. “He was this elder, the senior statesman. He had flown more shows and been around the patch more than anyone else, and he was willing to share that knowledge.”

Tom said what he learned from Bob is that you do it right every time. “No matter what the conditions, you never relax. It’s consistency, it’s preparation, it’s professionalism,” Tom said. “To the public he was a performer. To the pilot community he was the consummate pilot. We all espouse to be that good.”

Sean summed it up best: “Bob is aviation’s most beloved aviator. He has certainly made not only the aviation world, but the [entire] world a better place.”

PHOTOGRAPHY BY WES MOREFIELD