



JEFF SKILES

COMMENTARY / CONTRAILS



Air Show

Flying an air show routine in a B-29 Superfortress

BY JEFF SKILES

JEFF LINEBAUGH RACKS the bomber over into a steep turn to reverse course and dive back toward the windsock all the while talking his way through the performance. “Turn, dive, 300 feet, pull.” I’m not sure if this dialogue is for the crew’s benefit or his own, but it shows how in his mind he has broken this air show performance down into its component parts.

Masterfully he rolls the wings level on the exact bearing to just clear the windsock’s southeast corner. Not an easy thing to do in this 45-ton bomber. The controls are heavy, the ailerons particularly so. When they built this plane 70 years ago they installed a gear reduction for the ailerons because they were too heavy to be operated by muscle alone. Full travel for roll is more than 180 degrees of control movement in each direction. The massive amount of control movement and the need for pinpoint accuracy make Jeff look as if he is on an exercise machine as he rolls, pitches, and yaws, forcing the bomber to comply with his will.

We are at the Mid-Atlantic Air Museum’s World War II weekend in Reading, Pennsylvania, “A Gathering of Warbirds” that has been conducted every year for the last quarter century. Up and down the flightline are gathered the aircraft that protected our shores and changed the course of world history. Everything from L-Birds to the Commemorative Air Force’s B-29 *FIFI* are represented here. *FIFI*’s stablemate, the B-24 *Diamond Lil*, is parked just down the ramp, and

the Yankee Air Museum’s B-17 *Yankee Lady* has been hopping rides from dawn till dusk. It seems as if the B-17’s props have hardly stopped turning this weekend. There’s a C-46 from Monroe, North Carolina, and a barrel-chested P-47 representing the American Airpower Museum. They join a long list of other participants including a Wildcat, P-40, P-51, DC-3, a trio of B-25s, and a host of T-6s and L-Birds.

THE FRONT LINES

A Fieseler Storch even flew in to represent the enemy and provide logistical support to the encampment of German re-enactors bivouacked beyond the food stands. More than 1,700 re-enactors have built a tent city and live as soldiers eating army rations and sleeping in drab green tents. That is, with the exception of the softer re-enactors who stayed with us at the Holiday Inn and enjoyed their excellent breakfast buffet.

Franklin Delano Roosevelt rides around in the back of an open staff car and gives his famous “A Date Which Will Live in Infamy” speech on schedule. Gen. Douglas MacArthur and Lt. j.g. John F. Kennedy are in attendance as well.

The military re-enactors are accompanied by 200 vehicles of both Allied forces and German. It makes one wonder if they keep the Honda parked in the driveway to make room in the garage for the Sherman tank.

One German private confided in me over the hotel’s breakfast buffet that he keeps a set of French partisan clothing hidden for when the iron rule of Prussian military discipline becomes too great. A quick change of clothing and he is free to roam at will or simply disappear for ice cream.

The re-enactors built a battle-scarred French village that the German’s occupy early in the day. During the air show the

Curtiss C-46 *Tinker Belle* drops a contingent of airborne troops who retake the village after a battle played out before the crowd. The pop, pop of small arms fire rings through the air as our American troops vanquish the enemy. Somehow I don’t think it was quite as easy for the real GIs 70-some years ago.

THE BIG SHOW

The preparation for an air show routine begins long before at the mandatory briefing conducted by the air boss. On the field he is God reincarnate, and nothing escapes his attention. When the FAA NOTAM restricting access to the field is in effect even the control tower relinquishes control of the field to the air boss.

The briefing is full up with pilots wearing green and tan flight suits. It looks like a military operation, and it certainly is conducted with military precision. The rules are chiseled on the tablets—altitude of the

hard deck, location of the crowd line, etc. All aircraft operations must maintain a 500-foot distance from the ticket-buying public; this conveniently coincides with the runway centerline at Reading Regional. As always, safety is the number one, two, and three priority.

We are scheduled to perform for about 10 minutes toward the end of the show befitting *FIFT*’s place in history. The Superfortress will get a solo spot after the bomber parade consisting of the B-24, B-17, C-45, DC-3, and the B-25s.

Our aircraft commander, Jeff, gathers the crew together at the nose of the B-29 to brief us on the mission. Jeff flies a Boeing 757 for a major cargo airline, but on weekends he can be seen in the CAF’s P-51 *Gunfighter* or in the left seat of the B-29.

I am Jeff’s copilot today, and Ben, our flight engineer, rounds out the front-end crew. In the back will be our right scanner



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Kyle, left scanner Caren, and our APU operator Daniel. *FIFI* never moves without a crew of six, and each is an integral member of the flight crew with associated duties.

Jeff's plan is to do a high-speed pass down the runway and then two banana passes before a 360-degree overhead with a left break for landing. As always safety is the primary factor, and Jeff declares the minimum altitudes for each run. Most importantly he tells us to sing out if those minimum altitudes are accidentally violated.

The banana passes take advantage of the fact that the crowd is in one spot and can be approached with a shallow angle from behind and to the side. We will essentially fly a shallow arc around show center staying 500 feet distant and at all times keeping the energy of the aircraft aimed away from the spectators.

The two points defining this arc are an intersection of a taxiway and the ramp on one side of the show and the windsock on the other. Stay outside of those and we meet the clearance requirements.

THE PERFORMANCE

The B-29 burns gas at the end of the runway with all four engines turning while the air boss recovers the bombers flying before us. As the B-17 lands, the announcer brings the attention of the crowd to the rumbling silver bomber at the end of the runway. When the air boss clears us for takeoff, Jeff calls for 30 inches of manifold pressure and begins the takeoff roll. He advances the power using the throttles to steer until the rudder becomes effective and then calls out, "Max power." The crowd can feel the thunder of four 2,000-hp engines at full throttle hurtling *FIFI* down the runway and propelling the bomber into the air.

We come around the pattern, and Jeff calls for 30/20 opposite the numbers. Ben, our flight engineer, sets 30 inches of manifold pressure and 2000 rpm. We'll use this power setting throughout the routine.

Jeff dives *FIFI* toward the runway letting the speed build up to 220 mph. At precisely 400 feet he levels off and we sail by the crowd. Passing the end of the runway he pulls for altitude and begins a right turn to keep the plane in the crowds' view while lining up for the banana passes. He rolls the big wings level aimed precisely at the intersection of the taxiway and ramp marking the 500-foot line. He then begins the dive down to 300 feet. Jeff reaches the intersection and 300 feet of



Every line is perfect, every altitude dead on, and Jeff makes it look easy when it is anything but, the true mark of a professional. Keep in mind we're not flying a highly maneuverable aerobatic machine; this is a 70-year-old, four-engine Superfortress. We taxi back in with the usual cacophony of squealing expander tube brakes just as the air show is ending and the crowd disperses to head home.

That's air show life; well, that and three or four ride flights a day, spending an hour or two wiping all the oil and exhaust off the old girl afterward, grabbing a bite to eat, and falling asleep dead tired to begin it all again tomorrow, air show briefing at 9 a.m.! *EAA*

Jeff Skiles, EAA Lifetime 336120, is an ATP and CFII-ME who has been an airline and light airplane pilot for almost 40 years. He owned a Cessna 140 and a Waco YOC and currently flies a Cessna 185. Jeff can be reached at JeffreyBSkiles@gmail.com.

altitude at the same moment and rolls into a 45-degree turn arcing around the crowd. At the windsock he rolls level and pulls to use the energy from our 220 mph dive to rocket back to altitude. A left course reversal

brings us back around again to pass the crowd the other direction and then our 360-degree overhead for a landing. All the while Jeff talks his way through the procedure, "Turn, level, pull."

TEETH & MARKS

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