

FLIGHTWATCH

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THE BATTLE OF MIDWAY AND THE 2010 GREAT GEORGIA AIRSHOW

I. GETTING BACK IN THE SADDLE

As all pilots know, flying is a dynamic activity that requires flexibility and the capacity to adapt to change. With a slow airshow season for much of the year, October 2010 felt somewhat like being shot out of a canon. Shaking off the summer doldrums involved flying at Crossville, Tennessee, at Dobbins Air Reserve Base, with several performances of the Battle of Midway at the Great Georgia Airshow in the middle thrown in for good measure.

When Jim Buckley, the Commanding Officer of the Dixie Wing of the Commemorative Air Force could not fly in the Great Georgia Airshow, he found a substitute in the form of Capt. Skipper Hyle, a former Air Force fighter pilot and current airline captain. Skipper had to lead the fighter element in our Battle of Midway air battle reenactment. Being a quick study, this was no real challenge for Skipper. Not only was there a change in the pilot lineup, but Mike Schwab of the Commemorative Air Force pyrotechnics unit worked with us for the first time in our Battle of Midway performance. When you work with people who are seasoned and professional in their approach to flying and related activities, you find the experiences to be pleasurable and predictable. This obviously lessens the stress of airshow flying.



The reality that the doldrums were over and the action was back on was very clear as we reported for the 12:00 p.m. pilot briefing on the Friday before the airshow began. There was the usual banter among pilots, checking in and signing appropriate documents with the FAA inspectors, and the series of briefings from the air boss and safety officials. The sequence of acts was discussed along with the airshow schedule, and we had to set a time to walk through the Battle of Midway sequence in sufficient time before the practice session on Friday afternoon. Since the Great Georgia Airshow takes place the second weekend of October, it was not unreasonable to assume that the winds would be from the northwest and that Runway 31 would be our active runway. Obviously, that was not the case. In our Battle of Midway briefing and walk-through session, we had to turn portions of the act around because the runway in use would be the southeast runway, Runway 13. Again, flying is a flexible and adaptive activity. While the pilots and our air boss, Travis Reynolds, made adjustments for the wind, I was giving thought to how a change in the direction of the bombing and strafing runs would impact on the work of the pyrotechnic people. Generally, our rehearsal performance on Friday went off without a hitch.



One of the biggest concerns I had operationally was the proximity of our aircraft to middle rods holding up barricades or netting behind the aircraft. Because of the long fuselage of the Kate, making tight turns in the vicinity of these metal rods was a concern to me throughout the airshow weekend. This is a matter I discussed with the ground marshal personnel who are also aware of my concern, since they had to ensure the Kate's

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tail would not impact the rods when I made the sharp turn into my parking space. There were literally only inches to spare when the turn was made. It may seem like a small point, but when you are taxiing aircraft into a tie down area and there is one aircraft beyond your spot, and you then have to pirouette in a confined space realizing that your tail is moving in the direction of a steel pole, you tend to act cautiously and carefully. This was of more concern to me than flying at 200 mph 200 feet above ground level with explosions going off below my airplane.

II. SPENDING TIME WITH RAY FOWLER AND MIKE SPALDING

In between the flying and the briefing, I got to spend some time with Ray Fowler, who is flying a P-40E Kittyhawk, and Mike Spalding, who is flying a Spitfire Mark IX. As one examines these aircraft carefully, you can appreciate the differences in the design philosophies of the aircraft designers.



The P-40 is a rugged, durable airplane. The wing structure has no less than five spars. Ray gave me a cockpit tour of the P-40, and by today's standards, the cockpit layout is antiquated. It is, however, very functional and straightforward. Like the AT-6 Texan, the flap and landing gear systems are operated hydraulically. The original aircraft had a Curtiss electric propeller. In the interest of safety and practicality, the P-40 is now flown with a Hamilton Standard (hydraulically actuated) propeller.



Ray commented that basically, if you can fly an AT-6 Texan, you can fly a P-40. He also commented that on the ground the rudder forces are significant, and on take-off, it takes quite some time for the landing gear to retract. Ray noted that

he routinely sees the aircraft flying in cruise flight at about 215 mph. Apparently, once airborne, the P-40 is a delightful airplane to fly.

Mike Spalding gave me a cockpit tour of the Spitfire. While the P-40 is a large, robust fighter plane, the Spitfire is more like a European sports car. It has quite a lot of wing area, a long nose, narrow tracking landing gear, and the pilot is enclosed in a small cockpit. The spade grip stick in the Spitfire with the machine gun firing button on top and a number of the other controls in the Spitfire are a bit foreign to those viewed in the cockpit of the P-40. The cockpit placard in the Spitfire refers to the chassis, not the landing gear. Rather than seeing inches of manifold pressure on the manifold pressure gauge, power is expressed in terms of boost. The Spitfire is such a clean design that when the flaps are deployed, they are designed to create a large amount of drag. The aircraft enjoys very good low speed flying qualities. According to Mike, without deploying the flaps, the aircraft will not decelerate very well.

In spending time with Ray and Mike, it was very interesting to consider the different philosophies of Donovan Berlin (the P-40 designer) in contrast to Reginald Mitchell (the designer of the Spitfire).



III. FLYING THE BATTLE OF MIDWAY SHOW

While flying both the Saturday and Sunday show, I could tell that Jack Van Ness flying the Zero was right on my tail. When I would glance back to look for Jack, he would be right there. I knew when we made our low passes and Jack was right behind me that it would look exciting. After each pass, I would pull up fairly smartly then bank away from the crowd climbing skyward and as my energy bled off, I would do a course reversal and turn back toward the airport and the pyrotechnics. The idea was to keep the show moving and be in front of the crowd as quickly as possible, given the constraints of the aircraft and basic principles of physics.

On the Saturday show, the B-25, the two S&J's, the LT-6 Texan and the Dauntless formed up into a nice formation which is referred to in the script as the "Victor's Parade." The B-25 flown by Stan Bloyer and Max Hodges flew a tighter flight

sequence on Sunday than on Saturday after we discussed the importance of keeping the show moving and the performance tight.



In the portion of the script dealing with the Japanese attack on Midway Island, the intent is to have the American fighter planes taking off at the same time the Japanese aircraft are attacking. In doing so, you have aircraft converging in opposite directions at similar altitudes suggesting to the audience that a mid-air collision could be in the offing. Obviously, when we fly this sequence, we displace the Japanese aircraft laterally away from the crowd and away from American airplanes. However, when this sequence is flown well and the timing is good, I can hear the engines and propellers of the opposing aircraft as they pass by. Now that is a thrill. During both performances on Saturday and Sunday, the American fighter planes were a little late getting off or the Japanese aircraft were a bit early turning in, since the aircraft were not at co-equal altitudes at the time they passed by one another.



I can recall as we taxied in to the ramp after the Saturday performance there was a considerable portion of the audience standing behind the barriers. They were waiting for the Battle of Midway aircraft as they taxied inbound. They were waiting to meet the pilots who had flown this routine. It was related to me that one person at attendance at the airshow was a World War II veteran who was in such ill health he had to be accompanied by a nurse or assistant. I was told that at the

conclusion of our Battle of Midway performance, he was in tears.



One of the great assets in the Battle of Midway is Matt Jolley, our announcer. Matt is extremely capable. His narration, together with the music, the sound effects, the pyrotechnics and the flying holds the show together and conveys the emotion to the audience as I intended when I wrote the Battle of Midway script. The comments I received on our last performance of the Battle of Midway show have all been positive. In fact, the following weekend at Dobbins Air Reserve Base, a person came up to me and told me how much he enjoyed the Battle of Midway performance. With any luck, we will be performing the Battle of Midway show in Columbus, Georgia, in March 2011. Thanks to Robert Head, a pilot and film producer, we did capture some footage of the Midway performance at the Great Georgia Airshow.



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