



May 27, 2011

Adding Thrills When Flying Upside Down Just Isn't Enough

By CHRISTINE NEGRONI

Air show pilots have a tough assignment. They must pull off extraordinary feats of aeronautical airmanship, sure, but the bigger challenge is keeping the attention of an audience that already receives regular doses of adrenaline from various forms of entertainment.

With Playstations, Xboxes and new movies like “Transformers: Dark of the Moon” and “Thor” raising the bar for special effects, gone are the days when flying upside down and around in loops would make a crowd ooh and aah.

New acts with fire, smoke and lots of noise are being introduced at air shows around the country. Cameras are being installed in cockpits to transmit the pilot's view to giant screens on the ground, with pilots providing their own commentary. Mike Goulian, a pilot in the Bethpage Air Show at Jones Beach this weekend, has outfitted his plane with LED lights and coordinated his routine with a 12-minute musical score.

In describing his preparations for the dozen and a half shows he will do across the country this year, he seems to have taken some advice from the competition, because he sounds like a big-budget Hollywood producer.

“We spend hours and hours in a Sony studio working to make a dedicated soundtrack that punctuates everything that we are doing,” Mr. Goulian said. “There are parts where people will be jumping and clapping, and there are parts where there will be a tear in their eyes. We're trying to evoke all of those emotions.”

The Jones Beach show, held Saturday and Sunday, has drawn capacity crowds the past few years — with estimates that more than 300,000 spectators will attend this weekend's event — though elsewhere air show producers have struggled to keep attendance up. “It's not just young people. All of us have come to expect something different from what we call entertainment,” said John Cudahy, president of the International Council of Air Shows. The Jones Beach show is free, but private V.I.P. seats are available for up to \$200, and companies can also buy hospitality tents for their employees and clients.

Military jets are often the main attraction, and this weekend the F-18 Super Hornet and A-10

Thunderbolt II are set to appear, as is the Army's Golden Knights parachute team. But the F-22 Raptor, considered the world's most advanced stealth fighter, will not. The Air Force grounded the F-22s at least temporarily this month because of concerns about pilots' oxygen supply.

Beyond the fighter jets, air show organizers and pilots have been working hard to ratchet up the thrills. Later this summer, Lt. Col. John Klatt, who represents the Air National Guard in shows, and his teammate Bill Kern will add a jet-engine-powered truck and a pyrotechnics display in their new act, which they call Max Adrenaline.

"The truck comes out and does a ground smoke show, and we end up racing the truck. He goes 350 miles an hour, and I'll race him upside down," Colonel Klatt said. The race will end with a wall of fire. "It's a choreographed, high-energy air show act."

Col. Larry Gallogly, who for 15 years was director of the Rhode Island National Guard Open House and Air Show, said a show was no longer just a string of performances, but one continuous event that unfolds like a play. "Certain scenes build up on each other and come to conclusion," Colonel Gallogly said.

The one spectacle the air show industry goes to great lengths to avoid is an accident. Regulations keep all stunts directed away from the crowd, and only the top-rated pilots can fly at low altitude. Deaths do occur, though. Over the last 20 years, 68 pilots have died performing in air shows in North America, said Mr. Cudahy, but no spectators have been killed since 1952. This is not the case elsewhere in the world. In 2002, an air show crash in Ukraine killed 77 people; two pilots were imprisoned for trying a dangerous maneuver while flying too low.

Just this week, the Navy's renowned Blue Angels canceled several coming appearances, including the Millville air show in New Jersey this weekend, while it tries to figure out why pilots flew at too low an altitude at a show in Virginia last Sunday. (On Friday, the commander of the Blue Angels stepped down.)

Advances in airplane design and materials have made it possible for performers to safely amp up their acts. Walter Extra, the designer of the planes flown by Colonel Klatt and Mr. Goulian, said engineers had opened the window to entirely new ways of flying in the last two decades. Lighter propeller blades enable the pilots to do maneuvers that involve the gyroscopic forces of the propeller, like tight loops and cartwheels performed without any forward speed, "like a pole dance," Mr. Extra said.

When Mr. Goulian flies over Jones Beach in an Extra 330SC, he says, the audience is going to know "the only way that this person is able to do what they're seeing in the sky is through blood, sweat and tears." He added: "You can't duplicate this in a video game."

