

THE TALE OF SWISS MISS by Brannan Johnson

11:47 AM May 17, 2008

Walking out of the shadowed hanger the stark brightness forces me to squint even though my eyes are shielded by aviator glasses. A relic from a previous era sits proud before me, a twin-boomed jet fighter. It looks uncomfortable just sitting there, probably because it was made to fly and fly fast.

Inhaling, the smell of jet fuel enters my nostrils triggering a smile. Damn you Pavlov. That smell means that even though it's not my day job, today I am a jet fighter pilot. I fly the *Swiss Miss*.

Looking at my watch I am reminded of my son who is helping me launch today. His wife and my two year old firecracker of a granddaughter, Keira, have also come to the airport to see me off and take pictures.

The summer breeze blows almost perfectly down runway 29R from the Rocky Mountains. The Colorado sun is high and bakes the ramp tarmac causing it to feel like taffy under my military issue boots. Every time I wear them I think of my days as a marine. That was a lifetime ago.



Without a crew ladder I pull the step concealed from within the fuselage, locking it into position. It will serve as a place for me to stand, retracting with a loud thud once my weight is removed. Grabbing my helmet, oxygen mask and nylon-leather flight gloves I carefully step down into the tiny cockpit. My shoulders graze the cockpit sides and I fall into a sea of instruments marked in the Swiss language. Eyes pointed down I am reminded where the parachute ripcord handle is. I've never had to bail out and never plan to. Next I assemble the olive

drab nylon webbing and heavy stainless buckles that will join me to the airplane.

I bought this jet in the mid 1980's and first flew it in 1989. A look at my early logbook entries would divulge some exciting times:

- 6 Oct 1989 - 0.8 hrs - First flight test hop by Mike Paradise.
- 6 Oct 1989 - 1.3 hrs - Second flight-formation with Kay Eckhart/Mark Johnson in T-33.
- 12 Oct 1989 - 2.0 hrs - Mark Johnson in BKF A-7D simulator.
- 12 Oct 1989 - 0.5 hrs - Third flight Emergency return idle flameout approach by Mike Paradise. High rear bearing temp cause by rag left in air duct.
- 14 Oct 1989 - 1.2 hrs - Fourth flight engine test OK. 420 KIAS and 6 g attained.

- 14 Oct 1989 - 1.0 hrs - first solo by Mark Johnson. Mike Paradise supervises in BJC tower. Rating issued by FAA observing.

On my starboard side a line boy tends the auxiliary power unit and starts it up, the voltage dials spiking. With a flip of the gang master switches my cockpit comes to life, lights flashing, needles swinging and instruments wobbling into position. My gloves begin their dance around the cockpit like a conductor to his orchestra. From left to right they move as my eyes simply play a spectator; oxygen – price check, pylon tank jettison lever – secure, gear handle – down, speed brake – in, throttle – closed, low pressure fuel cock – on, high pressure fuel cock – three quarter position, trim – neutral, radios – off, boost pump – toggle with light, canopy jettison – forward, manual bomb release lever – back. I refer to my checklist, but mostly out of habit. I know what it says because I have done this a hundred times before in the last twenty years. Somehow still butterflies have been playing in my stomach for the last hour. At the end of the song the right glove pulls the arm high and whirls like mixing an upside down coffee cup, spinning a circle; warning to onlookers. I feel ready and the butterflies subside. It is time to start. As the left glove engages the throttle the right brings the arm forward and pushes the starter button.

Like a child spinning a jack-in-the-box I am never quite ready for what happens next. There is one short hiss before the cannon fires, breaking the air shooting dark black smoke straight upwards. My jet is built to start with an explosion from a quart sized brass shotgun shell, a powder-keg ignited to spool the turbojet through a series of gears. It is coming alive. The smoke blows away and through a series of clunks and clicks the jet begins to whine. I read the *exhaust gas temperature* gauge as it swings clockwise, 200, 400, 450 degrees centigrade. My gloves return to their orchestra: RPM 3,000 – check, high pressure fuel cock – on, boost pump – on, radios – on, flaps – set 30 degrees, altimeter – set, attitude – set, navigation lights – on.



With a slight push the tachometer needle climbs to 6,000 revs and she rolls out of the flat spots on the tires. A slight pull of the brake lever stops the roll, dipping the nose on its strut. The 10 combustion chambers work in unison. Like the arm bone connected to the shoulder bone, the fire turns the turbine which turns a compressor to mix and push fuel and air together. At the business-end the flames turn from orange to blue and burn the grass 30 yards back at the ramp's edge.

The power unit is no longer required, so with a quick gesture the line boy pulls the oversized connector plug and my son closes the access panel. Despite his headphones, the whine of the Rolls Royce Ghost turbojet penetrates his eardrums. He might as well have gone to a rock concert today.

The tachometer is set at 35 percent it's capable RPM and the exhaust temp has settled at 440. While the jet exhaust is whining behind me, abeam my ejection seat I can hear the intakes screaming, sucking all the air they can swallow. With a flip of my finger the strobes and lights are on. Even in daylight I can see the under-belly beacon send light reflecting off the brilliant red tip tanks and drop tanks. With a pull and turn of an archaic yet simple knob I roll the canopy closed allowing the sun and engine to conspire to cook me. The fire retardant flight suit isn't helping and I feel a bead of sweat race down my forehead.

I flip a switch to cool the cockpit.



As I glance through the heads up display I have the control tower in my sights. My right thumb curiously taps the ordinance selector and the sight changes from crosshairs to a dotted circle. My imagination wanders like a daydream and I speculate what a mess the original four 20 millimeter cannons would make ripping through the tower base at a cyclic rate of 14,000 rounds per minute.

Inside the control tower, I know, all is cool and serene. Today I will fly a formation with

Roy Halladay in his T-33. We are scheduled to make two low approaches at two veterans' events; the first at a new park in Westminster and the second at Platte Valley Airport. Jeffco is calm so our flight will most likely be the highlight of the day. Once we depart it will be quiet again until we return.

12:04 PM May 17, 2008

I've done my checklist and all is right in my world. With a look and a nod to Roy who is beside me, my right glove twists the dials on the COM radio to frequency 118.6 and my left thumb depresses the transmit switch on the throttle, "Metro tower, this is Venom jet flight of two ready for north departure."

Metro Tower... What a joke. I still can't get used to it. It will always be Jeffco to me.

"Venom Jet flight of two, number one cleared for takeoff, number two position and hold."

"Venom jet flight of two, cleared for takeoff."

Roy looks dead at me and I swear I can see him smile through his oxygen mask. I smile back and strap my mask to my helmet. He loves this too and gives thumbs up. With a nod I nudge the throttle swinging the Venom into position, poised on the centerline. Filling my windscreen the majestic Rocky Mountain foothills are staring right at me.

I squeeze the control stick handbrake and ease the throttle forward. The jet fights against the friction of the tires on the runway. The tachometer spins its way past 10,000 RPM and the Rolls Royce Ghost snarls. All looks good. With a release of the brake the fury of 7,000 horses unbridles.

There is no launch. No lunge. It is smoother than that. I feel only a slight pressure that holds my helmet against the ejection seat pad. The white stripes are coming faster now, one by one until they start to blur into a solid line. The airspeed needle lifts and passes 50, 60, 80... The jet feels light and I nudge the stick back bringing the nose wheel off the ground. My eyes dart back and forth between the runway and airspeed indicator. At 110 knots the main gear struts extend. Now off the ground I release back-pressure leveling the jet. At 140 just off the deck my left glove finds its way to the gear lever, pulling it out and up. Three green lights snuff out and the undercarriage makes a dull thud as the wheels find their way into their respective gear bays. I raise the flap lever and the hydraulics kick into action. She lunges and accelerates hard now that the undercarriage and flap drag is gone. Everything starts to blur as I hurdle towards an imaginary point of focus on the distant mountain.

The instruments look good so I hold her low and wait for the airspeed needle to pass 200. Wait. Wait. At 200 knots I steal a look alongside my hangar and then roll wings right with a solid pull, entering a 2G arching climb at a modest 3,000 feet per minute. Twisting around as much as my harnesses will allow me and I can see Roy following me down the runway, almost abeam the control tower. The Venom is smaller and faster than the T-33 so I pull the throttle back to 8,000 RPM and check my systems again. I am flying a jet fighter!

12:11 PM May 17, 2008



At the first event I am in the lead. “Roy, you ready to go?”

Roy replies with two simple transmit clicks so I drop the right wing and start the approach. For this event we are actually flying inside a very large pattern at Jeffco airport because the park is just east of the threshold of the east-west runway.

Low and turning I can see the dots of people below. With a glance I spot my family’s car with a smile. I can’t find them but I know they are

videotaping my pass. It’s the first time my granddaughter has seen me fly the Venom. I probably wouldn’t have smiled if I could foresee that it would be the last.

12:21 PM May 17, 2008

My De Havilland Venom DH-112 served with the Swiss Air Force. The Venom was a follow-up to the Vampire. Originally designed in the 1940’s and first flown in 1949 it is like the Vampire with swept wings, tip tanks, and a big engine. *Swiss Miss* had been built under license in Switzerland by the Pilatus Aircraft Company in 1955, serial J-1527.

Three years ago I installed an overhauled engine and in February I had it painted in a scheme my son and I designed together based on an authentic Swiss design. It sure looked nice. The cockpit was

constructed of an aluminum frame and covered with wood and fabric, the rest of the airframe was metal. The book said it would go to 51,000 ft. and .86 Mach or about 640 MPH; pretty good for wood and fabric.

Approaching Platte Valley, a small airport about 30 miles from Jeffco, it's time to get ready. It's Roy's turn to lead so we talk and I drop back on his wing. The first pass is clean. It is fun to follow the T-33 because it almost seems like a dogfight, and I'm on his six.



Coming around for the second pass Roy clears the area and I ease the throttle forward. *Swiss Miss* lunges again. With a press of a button on the control stick a special tank pumps smoke oil directly into the jet exhaust. A look in the canopy mirror reveals a white trail chasing me, following my every move.

My right glove brings the stick toward my left leg and then back and the *Venom* is level, flying on a rail. My eyes dart to the left as I pass the spectators. I wish I could be in two places at once and see the *Venom* when I fly it. Everything is smooth and quiet, in fact dead quiet.

The engine has quit. I don't mean missed, I mean a rapid total spool-down. I am low and slow and like any other aircraft you don't want to be in this situation. Instinctively I pull up gently to convert whatever kinetic energy I still have into altitude; a now valuable commodity.

"Roy, I have a little problem. I am going down."

Quickly I try a relight. There is no time to grab my checklist so I complete the items from memory. I realize I am holding my breath. I tell myself to breath but can't. I can feel my heart beat fighting its way out of my ear canal, clawing at the eardrum itself. Now at about 500 feet the relight seems to have worked. The engine starts to spool. "Okay, it's back!"

But it was not okay. I spoke too soon and am now back flying dead-stick. I know I have lots of fuel onboard, about 300 gallons, but can't get the fuel to the engine. The tip tanks and drop tanks use bleed air. The wing and fuselage fuel are all gravity feed and there are no fuel control valves except fuel turn off. Still I check to make sure it's on.

My mind immediately discounts the possibility of returning to the airport. Many pilots have tried and many have died. That lesson was learned and I would not be another example. I'll make a shallow turn to the left where there is less population. My only hope is to find a suitable road or field.

We've all heard about the phenomenon where time slows, but I've never actually experienced it. It's happening now and it's almost stopped. Am I even moving? Am I imagining this?

Looking around I can't find a road without structures or wires. I see a hayfield though! It has power lines running alongside, but otherwise looks good. I can breathe again, supplying me the oxygen that my face mask is offering me. Lowering the nose a bit I can see more of the area and start a left turn to line up on the field. I cannot believe how quiet it is. It sounds like when I used to fly gliders out of



Boulder, but Venoms do not glide that well.

My plan is to land over the wires with the landing gear up and slide to stop on the belly and drop tanks. The field looks perfect, at least from here. I am willing and ready. Time is still retarded so I've got plenty to develop options. If I go over the wires I might land long and slide into a row of trees to the west. NEW PLAN! I will fly under the wires to ensure enough room. That should give me at least another five hundred or thousand feet of landing length. Here we go.

On the westerly final I pull the nose up and slow to 135 knots. Now closer the details start to rear their ugly head. There is a fence below the wires, but I am too low to go back to Plan A. There is at least 15 feet between the fence and wire which will leave me about five feet on the top and bottom of the Venom. That's enough, right? My plan will work.

Passing under the wires and over the fence I am like a feature movie stunt pilot. It's going good and there's no sense in damaging the belly or risking a tumble, so I go with my gut and revise Plan B. I start the flare with my right hand and my left moves like lightning to get the gear and flaps down. In my peripheral vision I can see the Alfalfa hay whirring beneath me. The ground is so soft it feels like snow under the Venom's big tires.

Now on the ground I apply the brakes and a wrinkle appears. It will not be the last. Come to find out Alfalfa feels just like ice when you apply the brakes at 120 knots. I speak to my imaginary copilot, "Okay, stay off the brakes then." The airbrakes are out but they do little to help. I am hurtling to the west, the trees approaching.

Whatever effect made time slow has gone and I am really scooting across the field still. It's a bouncy ride, but not as much as you might think. The Venom has a good set of gear struts. With the plan back on course I am confident. How are we are going to get the Venom back to Jeffco airport? We'll probably have to take her apart. What a pain. This is what is running through my head at 100 knots in a hay field? Get back in the game!

A sound escapes from my lips. I almost can't hear it, but I can understand the murmur, "Oh no." My eyes are fixated on three irrigation ditches ahead, running left to right, rushing in my direction. Hidden

by the eight inch hay they were too small to see from the air, about three feet wide with small ten inch dikes on the banks.

Before I can react the first ditch is upon me, so without thinking I pull back and the Venom finds its way back into the air. Again I pull back clearing the second ditch. Now my heart is taking the direct route, straight out of my chest. Still, I feel somewhat calm. As the third ditch approaches I pull the control stick again but there is nothing to push back; no air, no resistance. I'm too slow and I'm stuck on the ground, along for the ride.



With a crash the tires collide with the dirt dike and the jet shudders. The right main gear snaps and is pulled off the wing. The right drop tank slows the fall but the hard point punches through the wing, like an exposed broken arm bone.

As the Venom crests the top of a hill the other two wheel struts collapse and the entire bulk skids with the right tip tank leading. Sliding sideways things go from bad to worse as the cockpit fills with smoke. I can hear a torrent of horrible sounds coming from the belly beneath me. The fuel lines must have ruptured, igniting instantly when fuel touched the super-heated turbine shell.

Thinking as clearly as one can in a haze of smoke I crank shut the fuel valves, turn off the electrical power and get ready to get the hell out. As the jet stops sliding I'm already opening the cockpit and working to clear my harness and rigging. The billowing smoke grabs for me as I climb out onto the green sunbathed field.



Crazy as it sounds I clear the wreckage and turn around to proclaim, "I just painted it!"

Reaching into my pocket I find my cell and call my family. They are waiting with the hangar door open for my arrival that will never come. They hardly believe the story and jump in the car, frantically rushing in my direction to help what cannot be helped.

Uninjured and stuck with a mixture of elation and rage I can only wait for the fire department to arrive. They do their best to contain the blaze but not even chemical foam

will put out the 2,000 degree burning magnesium engine components. I stand there and watch my pride and joy burn to worthlessness.

The next day with the help of my mechanic and the Beagles, my son and I go to the crash site and use a demolition saw to chop the jet's carcass into pieces small enough to be trucked away. Except for a small piece of the painted canvas nose-art, very little was saved.



LIVE TO TELL by Mark Johnson

I am fortunate (pilots don't say lucky). Not a scratch, bump or bruise. If I could do it again I wouldn't change a thing. The *Swiss Miss* served me well for 20 years and I think she'd say the same about me. I regret having lost a great airplane, one of the last flying of its kind.

Not many have been lucky enough to force land (pilots don't say crash) a dead-stick jet fighter without injury or death so I offer to you my thoughts for a penny...

- Planes can be replaced.
- Historically speaking, going back to the airport has proven to be a bad risk. It would not have worked this time either.
- Bob Hoover once told me, "Fly the plane until it stops moving" and he was right.
- Make a committed decision and if wrinkles appear control them best you can.
- Never give up and make it up as you go if need be.
- Positive thoughts work.
- Don't worry about what others might think, worry about survival.
- Don't try to analyze too much if you don't have a lot of time.
- Rely on your training.
- Airspeed is king, bad things happen if you get slow.
- Lastly and most important; try to never put yourself in a position where you have to use any of the above.

Life is an adventure, live it well. For now I'm looking for another warbird.

Blue Skies!

Mark Johnson