

On Sept 2, 2013, Tom and Elaine Huf died together when their T-50 Bobcat went down in Northern Pennsylvania. They were not discovered until 6 days later.

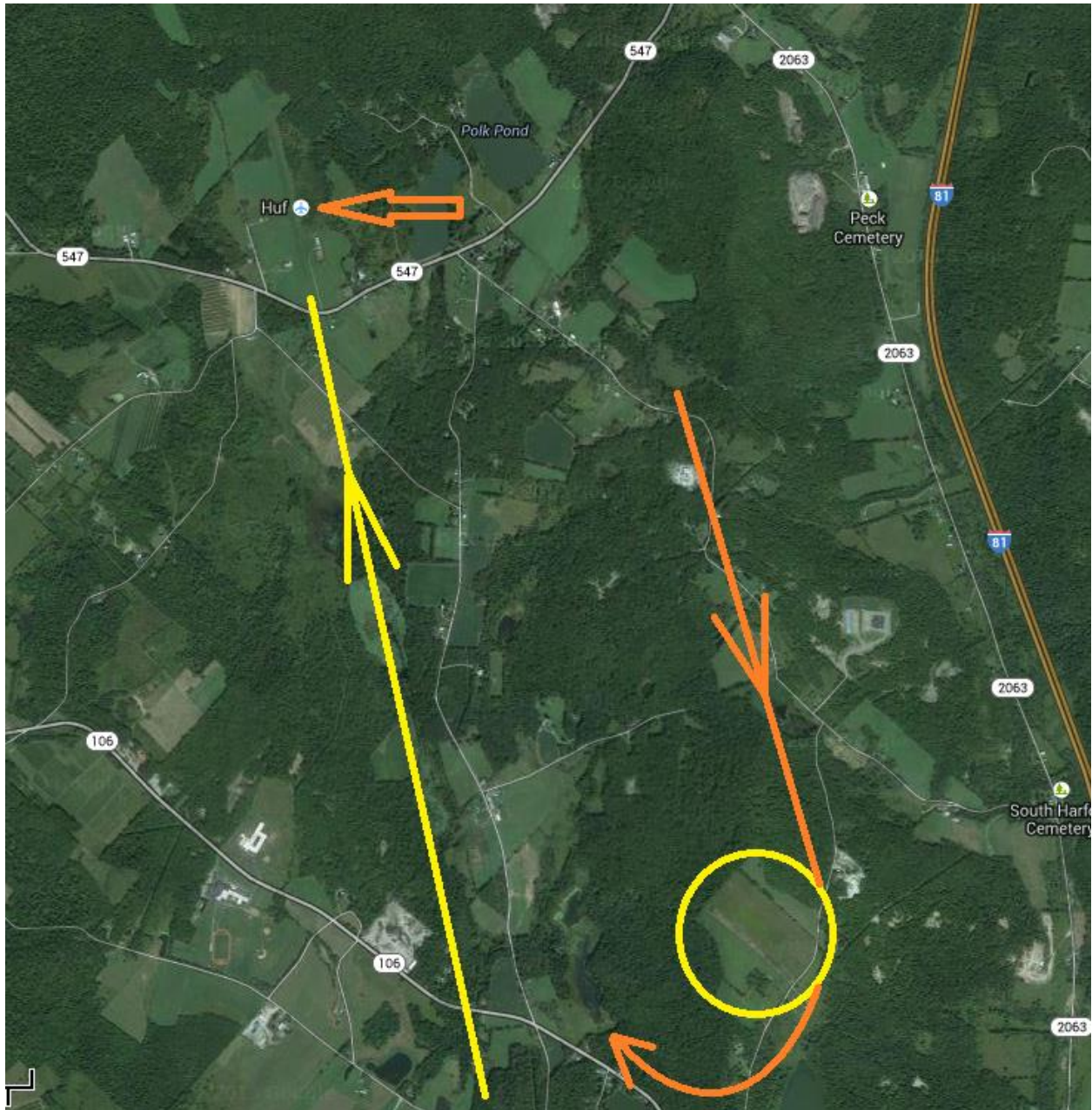
On that day, Tom and Elaine flew nearly 1,000 miles to fall only 1.5 miles short of their home.



Here is my theory on what happened....

Tom and Elaine Huf, both very skilled and experienced pilots were returning home following an aircraft convention in Iowa. The trip home took them through Ohio, where after departing, they stopped at Williamsport, PA for fuel. The two then departed Williamsport and headed for the private airstrip located at their home in Kingsley, PA, located in Harford Township.

Huf field is located 2.3 miles off of Rt. 81 in Harford, PA. It is depicted on Google maps shown at the arrow on the top. This is where Tom was returning to.



The yellow circle indicates where the wreckage of the plane was found six days after the plane crash.

I contacted the reporter who published a story about the crash. Her report states: "The woman who owns the property where the plane went down believes she heard the crash."

She continues...

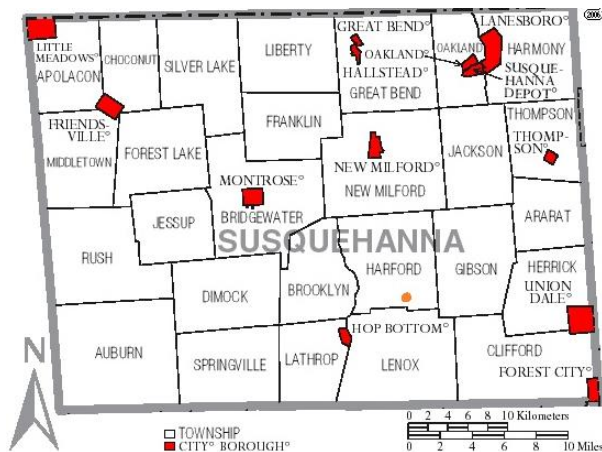
"I heard an airplane overhead and the plane didn't sound right to me," says Barbara Sloat. "It sounded like it was hovering, it went on for 3 or 4 minutes but it sounded like forever, then I didn't hear it anymore."

If there is a time at which Tom's plane was heard, radar data can be pulled from the archives to determine if weather had a factor.

I asked the reporter if she knew of the time in which Barbara Slot heard Tom's plane. She replied back to me stating Mrs. Sloat heard Tom's plane "between 9:00 and 9:30."

**This time is crucial and reveals that Tom crashed between 9:00 and 9:30 PM.**

Tom's field, and the crash site are located in Southeastern Susquehanna County shown by the orange dot.



**Weather:**

The National Weather Service Storm Prediction Center issued several outlooks on September 2nd, the day of the crash. There had been much discussion throughout the day, in previous outlooks of the potential of severe weather over NY and Northern PA.

The last SPC (Storm Prediction Center) advisory was issued at 3:34 PM local time. Tom would not have departed Ohio at this point.

In the outlook, talk of a short-wave trough was approaching Western NY. A short-wave trough is associated with a cold pool, or cold front. The outlook synopsis discusses an increase of convection and storms as the cold front approaches from the West.

Highlighted in yellow are the key points from the advisory on Sept. 2:



DAY 1 CONVECTIVE OUTLOOK  
NWS STORM PREDICTION CENTER NORMAN OK  
0234 PM CDT MON SEP 02 2013 ← Issued 3:34 PM local time

VALID 022000Z - 031200Z

...THERE IS A SLGT RISK OF SVR TSTMS NY/PA VICINITY...

HAVE MADE MINOR CHANGES TO 1630Z OUTLOOK...NAMELY TO SHIFT BACK EDGE OF HIGHER SEVERE PROBS EAST ACROSS WESTERN NY. LATEST WV IMAGERY CLEARLY DEPICTS SHORT-WAVE TROUGH PASSAGE AND RADAR DATA SUPPORTS THIS WITH DEEP CONVECTION NOW APPROACHING 77W LONGITUDE. WHILE THERE ARE TWO MAIN CLUSTERS OF SEVERE THAT HAVE DEVELOPED OVER CURRENT WATCH...ERN LAKE ONTARIO AND OVER NWRN PA...A GRADUAL UPWARD TREND IS EXPECTED WITH CONVECTION AHEAD OF SHORT-WAVE.

OTHERWISE...EARLIER THOUGHTS REGARDING CONVECTIVE EVOLUTION REMAIN WITH MUCH OF TSTM ACTIVITY DIURNALLY DRIVEN ACROSS THE CONUS.

..DARROW.. 09/02/2013

.PREV DISCUSSION... /ISSUED 1130 AM CDT MON SEP 02 2013/

...SYNOPSIS...

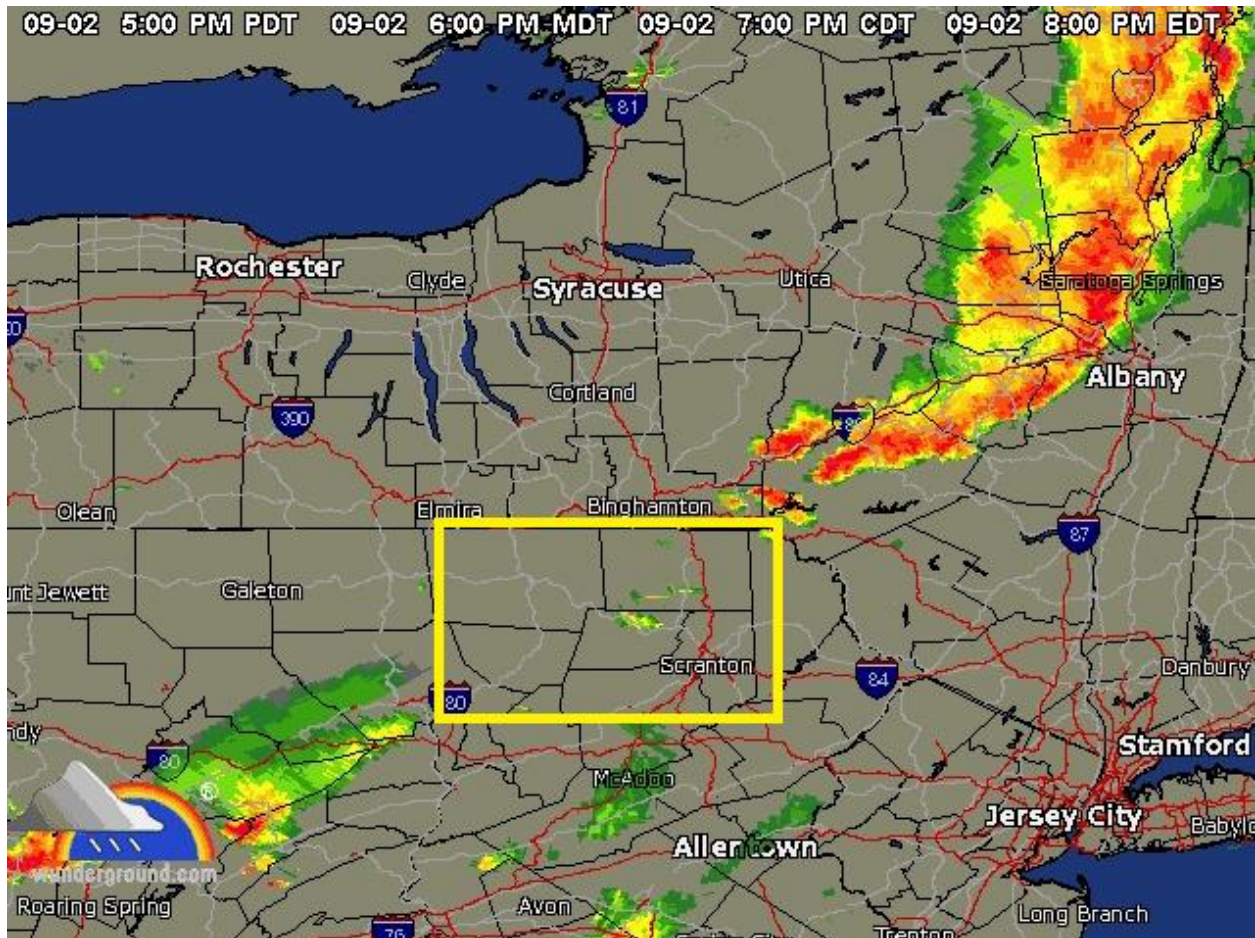
A LARGE UPPER RIDGE IS FORECAST TO PERSIST ACROSS THE ROCKIES AND ADJACENT PORTIONS OF THE PLAINS STATES THIS PERIOD...FLANKED BY TWO TROUGHS -- ONE NEAR THE PAC COAST AND THE SECOND MOVING SLOWLY EWD ACROSS THE GREAT LAKES/NORTHEAST. AT THE SURFACE...A COLD FRONT WILL MOVE ACROSS THE PAC NW AHEAD OF THE WRN UPPER SYSTEM...WHILE A SECOND FRONT CROSSES THE NORTHEAST/OH VALLEY REGION IN CONJUNCTION WITH THE ADVANCE OF THE ERN UPPER TROUGH. THE ERN U.S. FRONT IN PARTICULAR WILL FOCUS THE MAIN AREA OF SEVERE WEATHER RISK THIS PERIOD.

...NY/PA VICINITY...

AS UPPER TROUGHING GRADUALLY INCREASES ACROSS THE REGION...WEAK COOLING ALOFT AND SUSTAINED LARGE-SCALE ASCENT WILL REMAIN FAVORABLE PRE-CONDITIONS FOR AN INCREASE IN CONVECTION THIS AFTERNOON. FAIRLY WIDESPREAD CLOUDS WILL LIMIT HEATING TO SOME DEGREE ACROSS MOST OF THE NORTHEAST...BUT RELATIVELY DIMINISHED CLOUD COVER FROM SRN NY SWWD ACROSS PARTS OF PA SHOULD ALLOW MODERATE DESTABILIZATION OF THE MOIST PRE-FRONTAL AIRMASS. AS SUCH...AN INCREASE IN STORMS ALONG/AHEAD OF THE COLD FRONT IS EXPECTED THIS AFTERNOON.

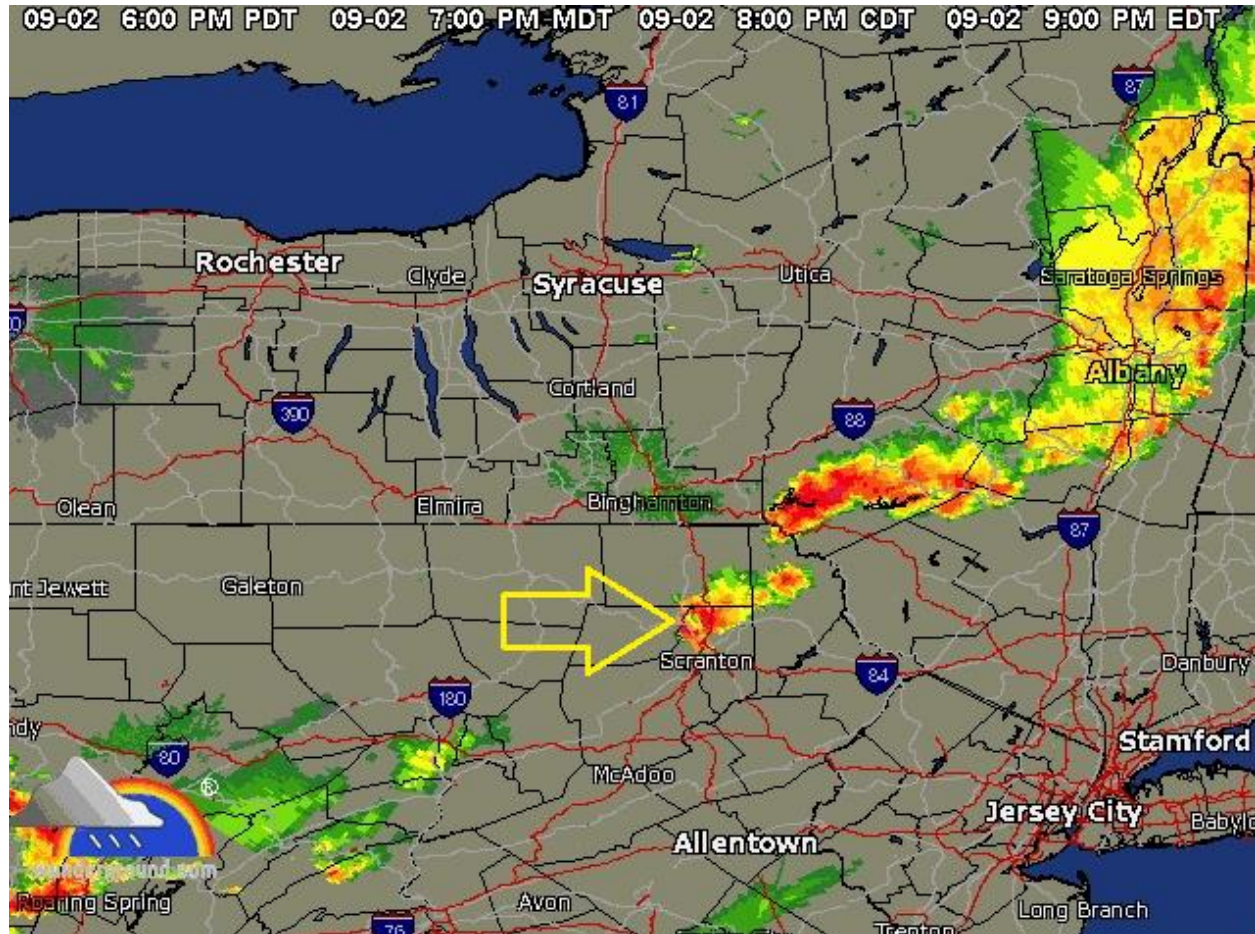
FLOW ALOFT REMAINS MODEST...BUT AS THE UPPER LOW CENTERED OVER SRN ONTARIO SLOWLY ADVANCES...SOME INCREASE IN WLY FLOW ALOFT IS EXPECTED -- WHICH MAY AID IN POTENTIAL FOR STORMS TO LOCALLY ORGANIZE. EVENTUALLY...A COUPLE OF STRONGER STORM CLUSTERS APPEAR LIKELY TO EVOLVE...WITH ASSOCIATED/LOCALLY ENHANCED POTENTIAL FOR MARGINALLY SEVERE WIND GUSTS. GIVEN THIS POTENTIAL...A SLIGHT RISK/15% PROBABILITY WIND AREA IS BEING INTRODUCED FOR THIS

It is worth noting that at 8PM local time, there was no thunderstorm activity in the vicinity of where Tom would have been located shown in the yellow box. Take note the cold front is broken - it extends from NY, to Southwestern PA. Tom, being in the yellow box would not have experienced rough weather and likely made the decision to push for his home destination.





But the radar data shows a sudden change. Although clear at 8PM, only one hour later, an intense cell had formed directly where Tom would have been located. This is the radar data at 9PM. Tom would have been located in the severe cell North of Scranton.

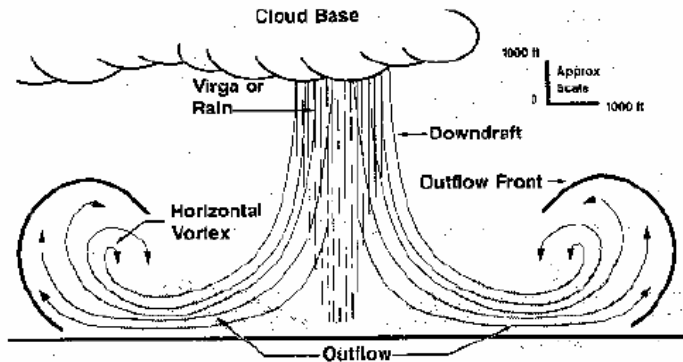


This cell was in the dissipating stage – a stage which produces a microburst. A microburst is a rapid column of descending air which is very hazardous to aircraft, both large and small.

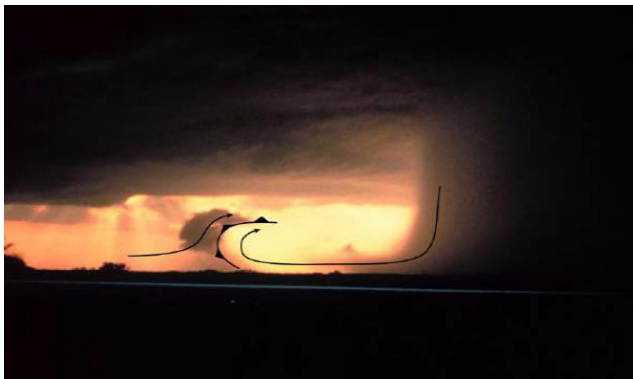
Couldn't wind data from nearby weather stations determine if a microburst occurred? No. The reason is because microbursts can typically be less than a mile in diameter. Unless a weather station was situated directly nearby, there would be no record of this event.

The two nearest weather stations are located in Avoca, PA and Scranton, PA – both over 30 miles from the crash site. Neither site would have recorded a microburst event over Kingsley.

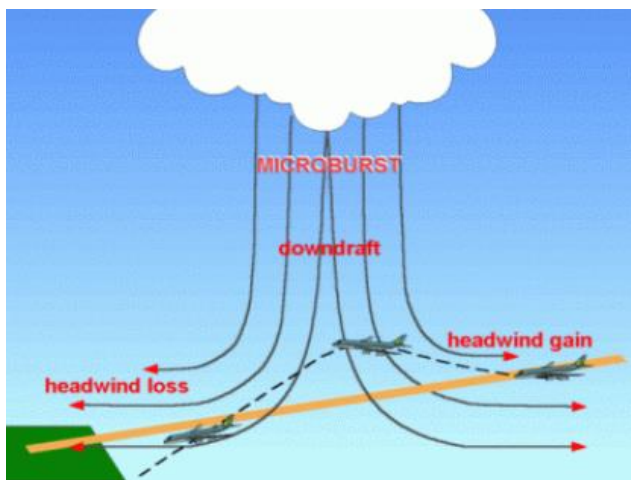
The rapid down draft of cool air associated with a microburst fans out when reaching the ground and travels outward. The cold pool of air drops like a rock and exits the storm.



They can be visually recognized in the daytime as shown.



Microbursts are hazardous to aircraft not as they approach them, but as they enter and exit them. Upon entering a microburst, the aircraft sustains strong headwinds. This would explain Mrs. Sloath's mention of the aircraft sounding like it was hovering for several minutes. Tom was likely entering the microburst and making very little ground speed, giving the audible effect of the plane not moving.





But as Tom entered the microburst, the rapidly descending air pushed the plane to the ground. Being Tom was setting up for landing and turning for final approach, he would have also been fairly low.

In aviation, it is important to understand that some microbursts cannot be escaped with any known technique. The following video illustrates what happens when an aircraft approaches and flies through a microburst: [https://www.youtube.com/watch?v=0uD\\_eeKsrc4](https://www.youtube.com/watch?v=0uD_eeKsrc4)

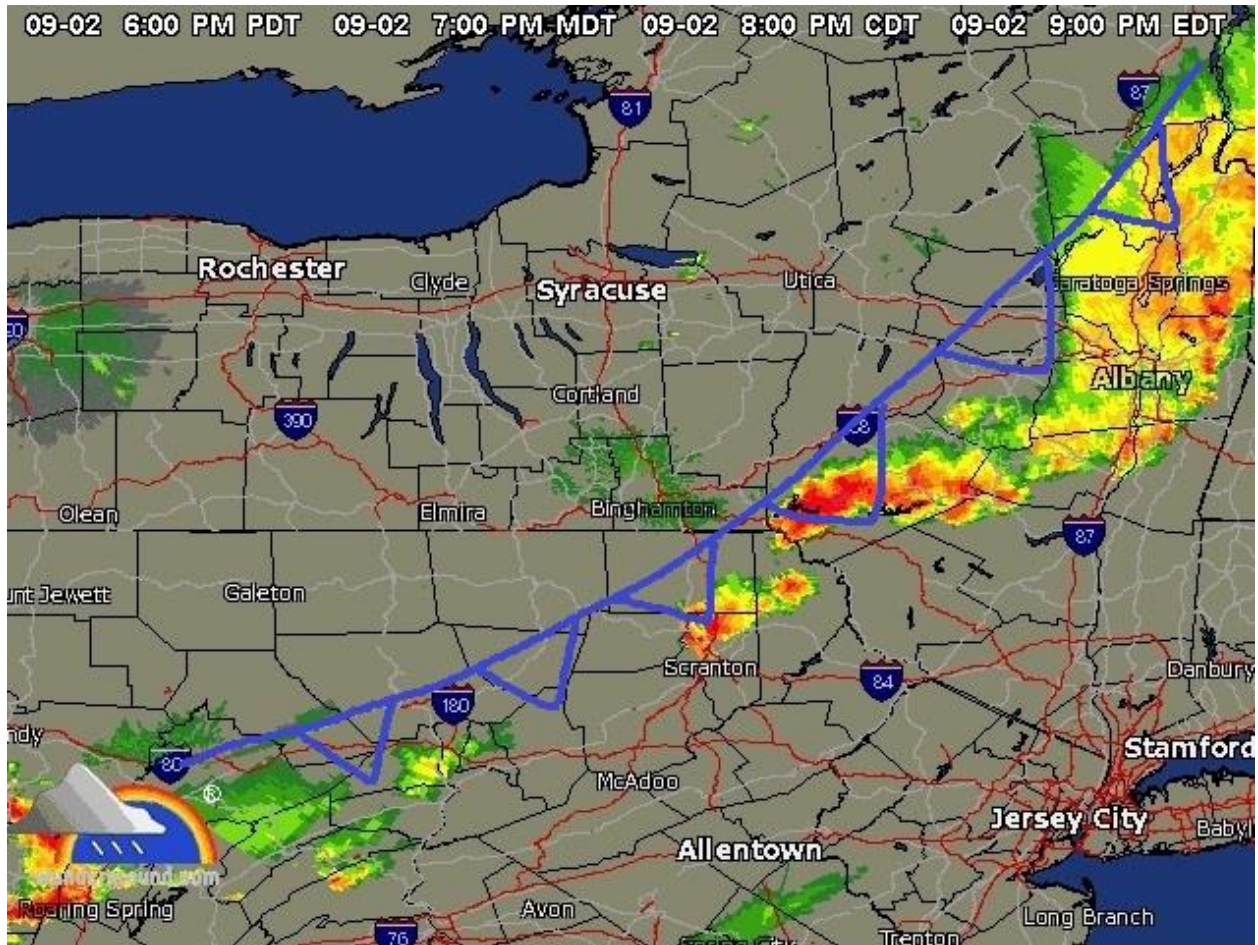
The cell later connected with the Northern line of storms.



As it progressed east into New York, the cell produced what resembles a narrow but intense bow echo. The cell left the Kingsley area as quickly as it developed.



The timing of Tom's arrival over Kingsley coincided with the passage of a short-wave trough. A thunderstorm resulted.

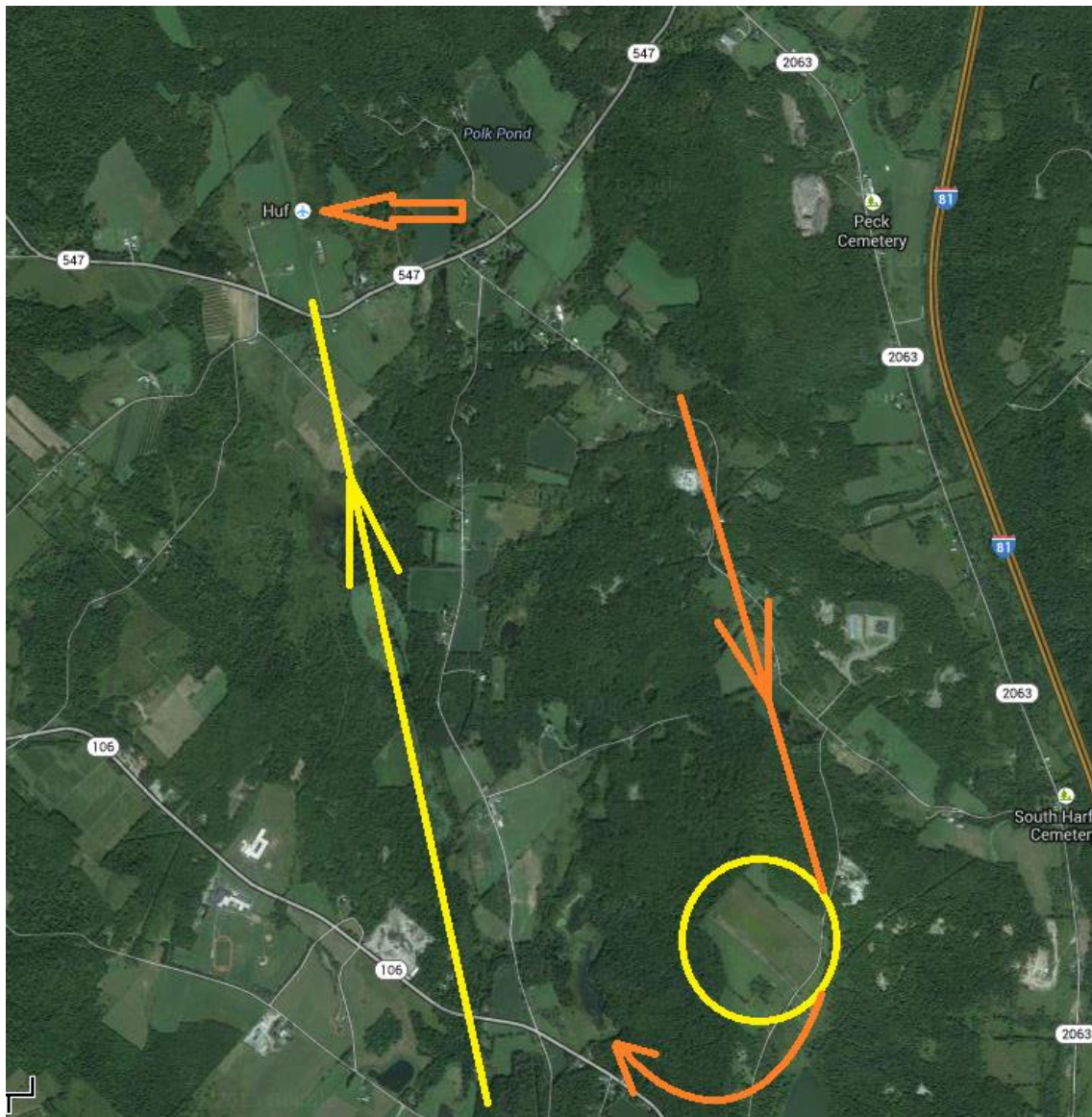


The yellow circle indicates the field on Bartholomew Road where the wreckage was found 6 days later.

Tom's air strip is non-lit for night landings. Equipped with a landing light, Tom likely paralleled I-81 (shown in orange) for his downwind leg before turning base to final approach (shown in yellow.)

Tom likely experienced a microburst from his downwind to base leg. Initially, the plane would have experienced very strong head winds. His resulting ground speed would be very slow. For example, a 60 MPH head headwind on an aircraft traveling 70 MPH results in a true ground speed of only 10 MPH. This could be the very reason Mrs. Sloat heard the aircraft for several minutes. Tom knew there was trouble at this point.

Sadly, Tom and Elaine likely entered the microburst and was pushed to the ground.





Accident report [\[click here\]](#)

Last update: 9/18/2013 - Tom Bartman