

*Clues for accident of Extra 400 N13EP
owned and piloted by Tim Valentine
Accident site, Ponca City, OK 08/06/18
Five fatalities*



The clues below are being submitted to the NTSB in an effort to provide clues which may help determine the cause of the crash of N13EP near Ponca City, OK Saturday 08/06/18

- Problems discovered by previous owner - Tim shared with me one time that he learned after he purchased the airplane that the previous owner had problems with the engine. I do not recall what those issues were.
- Owner shared limitations of engine options- In casual discussions with Tim, he told me that the Extra had an unusual engine and that there were no other options for engines.
- Near emergency landing - Tim conducted a VMC safety meeting for our EAA group (I believe the date was 04/16/18) He included in the meeting an incident that he had where he was forced to land because of engine problems. In his meeting materials (MS Power Point) he included photographs of issues found during the repairs. (These photographs are probably still on his laptop that he used for the meeting. Also he may have discussed this issue with Dale Wilkens)
- Cylinder repair enroute to OSH - I learned via Dale Wilkens that Tim had an issue with one of the cylinders enroute to OSH a few weeks ago. (Dale Wilkens may have more information on this)
- Photo of engine analyzer screen - Dale Wilkens told me that Tim had sent him a screenshot from an engine analyzer recently that shown information of concern. (Dale Wilkens may still have this screenshot)
- Odd engine sound - Brad Foster who you have already talked to shared with me that the engine of the Extra sounded strange. He said it sounded like it may have had a loose

Clues to the accident of N13EP Owned and piloted by Tim Valentine

exhaust or something. (Could it be a cylinder going bad again? Is it possible that Tim V. had ANR headsets on that prevented him from hearing the problem?)

- Mushing on takeoff - Brad Foster tells me that he watched the Extra take off and it appeared to struggle for altitude. He said each time the use came up, the nose appeared to be forced down to gain airspeed. Brad watched the airplane take off to the south and make a right hand traffic turn. He did not watch it beyond the departure turn to the west.
- Aircraft circling over crash sight - Brad Foster heard on the radio someone being told to “hover” over the crash sight so that emergency crews could find the crash. (I just learned that this person was Jim Roberts - [REDACTED] who you have already spoken to.)
- Speculation - My speculation of the incident was that Tim realized that the aircraft was having issues and was attempting to return to the runway since the witness on his mower heard the airplane so low. Because the airplane was low and slow, it stalled on the turn to the base leg.

Summary - if any of us can be of further assistance, please call us.

Thank you

Bret Chilcott
Pilot
Neodesha, KS

=====

Contact information:

Bret Chilcott

Cell phone [REDACTED]

Email: [REDACTED]

Pilot. Writer of this document. Friend of Tim Valentine, coordinator of VMC safety program at local EAA chapter

Dale Wilkens

Cell phone [REDACTED]

Email: [REDACTED]

Clues to the accident of N13EP Owned and piloted by Tim Valentine

Pilot. Friend of Tim Valentine. Has ridden in the Extra 400. Tim had sent screenshots of engine analyser

Brad Foster

Cell phone [REDACTED]

(The NTSB has talked to Brad Saturday) Pilot. Saw Extra land, took photo of aircraft just prior to takeoff, heard engine sounding strange, saw Extra takeoff, struggling to get out of ground effect. Did not see actual accident.

News media:

In an effort to find a video or witness of the crash I found an interview from a TV news station per this link:

<https://kfor.com/2018/08/04/two-children-among-five-killed-in-ponca-city-plane-crash/>



NTSB RECORD OF CONVERSATION

OFFICE OF AVIATION SAFETY

Person Contacted: Bradley Foster ([REDACTED])
NTSB Accident Number: CEN18FA310

Narrative:

Private pilot Bradley J. Foster called the NTSB Communication Center to report having information concerning the airplane accident involving N13EP, an Extra EA-400 airplane. The following details were relayed:

He had flown in to the KPNC fly-in breakfast and had observed the airplane land. He thought that the engine sounded unusual and speculated that there was an exhaust leak.

He later observed the airplane as it departed KPNC. He recalled that the airplane seems to “mush” as it took off. The airplane did not appear to be climbing normally and the engine did not sound normal.

The airplane took off with the wind to the south and began to slowly gain altitude, he estimates that the airplane was about 100 ft above the ground when it turned right and departed the area to the west.

He did not observe the airplane further.

---END---



NTSB RECORD OF CONVERSATION

OFFICE OF AVIATION SAFETY

Person Contacted: Shannon Spurgeon ([REDACTED])
NTSB Accident Number: CEN18FA310

Narrative:

Private pilot, Shannon Spurgeon, called the NTSB Communication Center to report witnessed the accident sequence involve N13EP, an Extra EA-400 airplane. He had been at the fly-in breakfast at Ponca City and had departed the airport. While climbing out from the airport, he recalled seeing an aircraft at his 10 o'clock position, it was far enough away that he couldn't quite make out the specific model of airplane. The airplane was maneuvering erratically (banking and pitching), he said that the airplane did a steep nose down maneuver, followed by an equal nose-up maneuver. He estimated the airplane's attitude as 30° nose down and 30° nose up. He momentarily lost the airplane in the haze and didn't re-acquire the airplane for about 2 minutes while scanning instruments and piloting his own airplane. The second time he saw the airplane it was maneuvering and pitching up and down. He said the airplane appeared to be flying too fast to be performing a slow flight type maneuver. He scanned his instruments and the third time he saw the airplane it was nose down and turning, but not like a spin. He saw the airplane's wings level and the airplane impacted the ground. Smoke obscured the crash site. He radioed KPNC on CTAF about the airplane crash. He flew over the accident site to provide an accurate position of the accident site for first responders. He stated that during the accident sequence, the airplane initially was travelled north, then south, and then turned east towards KPNC.

When asked if he witnesses any smoke or vapor from the airport, Spurgeon said that he did not observe anything like that.

When asked if any parts had departed the airplane prior to the crash, he said that he did not observe any parts departing the airplane.

---END---

Dear Mr. Lanou

Thank you for taking my call today in reference to the Extra 400 aircraft accident at Ponca City OK on 4 Aug 2018. When we talked, I told you that I had some firsthand knowledge about the owner and additional pilot, had walked around the aircraft a few minutes prior to engine start, and that I had observed the takeoff immediately prior to the accident. I also mentioned that I departed in my aircraft and orbited over the crash site immediately after the crash site was noticed by another departing aircraft. You asked that I send you this written statement outlining what I had observed during the events leading up to the accident and while overhead the accident scene. About me. I am a civilian air traffic controller working for the US Air Force at Air Force Flight Standards Agency. My office is in building 4 at the Mike Monroney Aeronautical Center. I am an aircraft owner and private pilot with 45 years and approximately 2000 hours of experience.

This is what I recall.

- About 15 minutes prior to the aircraft accident, I met the aircraft owner, Mr. Valentine, and a second pilot by the name of Bill. Both individuals seemed to be in good spirits, smiling and outgoing.
- The accident aircraft was parked with other aircraft on the northern most ramp on the west side of the airport. This ramp is in front of what looks to be a large corporate hangar that is on the west side of the ramp.
- When I walked up to the aircraft before meeting Mr. Valentine and Bill, I noticed a man who was dressed like a mechanic or line attendant stepping away from the entry door of the accident aircraft. He was dressed in a blue work shirt that you associate with auto or aircraft mechanics and had either his name or the name of a company on a patch on his left side of his chest. As I walked up, he passed around the back of the aircraft and was walking toward the large hangar on the west side of the ramp. I don't know if the man was performing maintenance or was just looking at the plane.
- I briefly talked with on the right side of the accident aircraft. He introduced me to Bill who was standing next to us. Mr. Valentine told me about his aircraft
 - o He bought it about a year ago
 - o He had it repainted sometime after purchasing it
 - o He had a new "glass cockpit" installed and was proud that it was the only one in North America with this
- After leaving Mr. Valentine, I briefly looked at the front of the aircraft as I passed from under the right wing where we had been talking. The only negative thing I noted was the propeller had an unusually deep nick in one of the blades that had been dressed out. The nick was about half to two thirds way out on the blade from the hub. Including the dressed area, the nick was about as wide at the tip of my small finger, perhaps 1/4th to 3/8ths inch across. The nick did not start exactly on the leading edge of the blade. It was maybe 1/4 to 3/8ths of an inch down the blade from the leading edge. The prop, in general, didn't seem to be up to the same excellent condition of the rest of the aircraft and had paint erosion on the blades. There were black fabric or rubber-like cuffs on each blade near the hub, which I assume were part of the anti- or de-ice system. The edges of the cuff on the nicked blade seemed worn or slightly frayed and had looked like it had been repaired or re-glued. I have no experience with propeller de-icing

systems, so this may be normal. After looking at the prop I walked straight to my airplane, did a walk around, and then started up.

- Runway 17 was in use and the winds were reported as 160 at 13 with no gusts as I recall from the AWAS broadcast. The visibility was good with no clouds between the surface and at least 6000 ft. After I departed the airport and the accident site about 20 minutes after the accident I recall hearing a weather report that the ceiling was at 10,000. While I don't recall the specific temperature, I estimate that it was in the mid 80's at the time of the accident. The altimeter was 29.99.
- I began to taxi out from the south exit of the EAA ramp, which is the next ramp south of the ramp where the accident aircraft was parked. My aircraft was pointing due east and was facing the runway at the time, so I had a clear view of the accident aircraft as it passed by. I first noticed the accident aircraft after it lifted off. The aircraft was about 25 ft above the runway and the gear started to retract at that altitude as it passed immediately in front of me. I did not see the takeoff run, the rotation of the aircraft, nor the actual lift off. The aircraft did not seem to be climbing at a normal rate and was flying slower than I would have expected given the shallow angle of climb. I made a comment to my step son about the long takeoff roll and seemingly sluggish performance of the aircraft as it passed by. To be clear, it did not appear to me that the aircraft had become airborne earlier and was being intentionally held down close to the runway while flying past my position, which was a little more than halfway down the runway from the approach end.
- After the accident aircraft passed by, I turned on the parallel taxiway and taxied north. I had no further visual contact with the aircraft.
- While doing my run-up at the approach end of runway 17, I heard an aircraft on the CTAF frequency announce that they saw what appeared to be an aircraft accident site. The pilot of the observing aircraft made a comment that there was a fire at the site and that "the debris field was small, so the aircraft must have hit the ground at a steep angle".
- After the radio call, I looked to the west and saw a heavy plume of dark black smoke that was just appearing over the tree line that was a considerable distance from the runway
- An FBO employee came on the radio (CTAF) at that time and asked for the location of the crash site so he could call emergency services.
- I departed runway 18 and turned to the northwest and arrived overhead the accident site and coordinated the location of the site with the FBO employee who relayed the info to emergency services. Another voice came on the CTAF frequency and asked that I orbit overhead and help guide first responders to the accident site, which I did. I orbited the crash site at approximately 3000ft until the first two emergency vehicles arrived on site, then I departed the area to our destination, Sundance Airpark. From my overhead vantage point there was nothing recognizable as an aircraft at the accident site. The area was a mass of flames and smoke. The wind at the accident site was from the south based upon the direction the smoke was traveling.
- As I mentioned to you on the phone, Mr. Lanou, at least five minutes elapsed between the time the accident aircraft lifted off and I heard the initial radio call that the aircraft was down. I mention this because it is about 5 to 6 flying miles from the departure end of runway 17 to the accident site. I was surprised that the Extra 400 was the accident aircraft given the elapsed time from when I saw the aircraft pass in front of me until I had taxied down to the approach end of

17, had completed most of my takeoff check list, and then observed the plume of smoke just beginning to rise above the trees that were quite a distance west of the run-up area.

If you have further questions, you may call me at [REDACTED]

Regards,

 Digitally signed by
ROBERTS.JAMES.B.1089422945
Date: 2018.08.06 19:07:26
-05'00'

JAMES B. ROBERTS