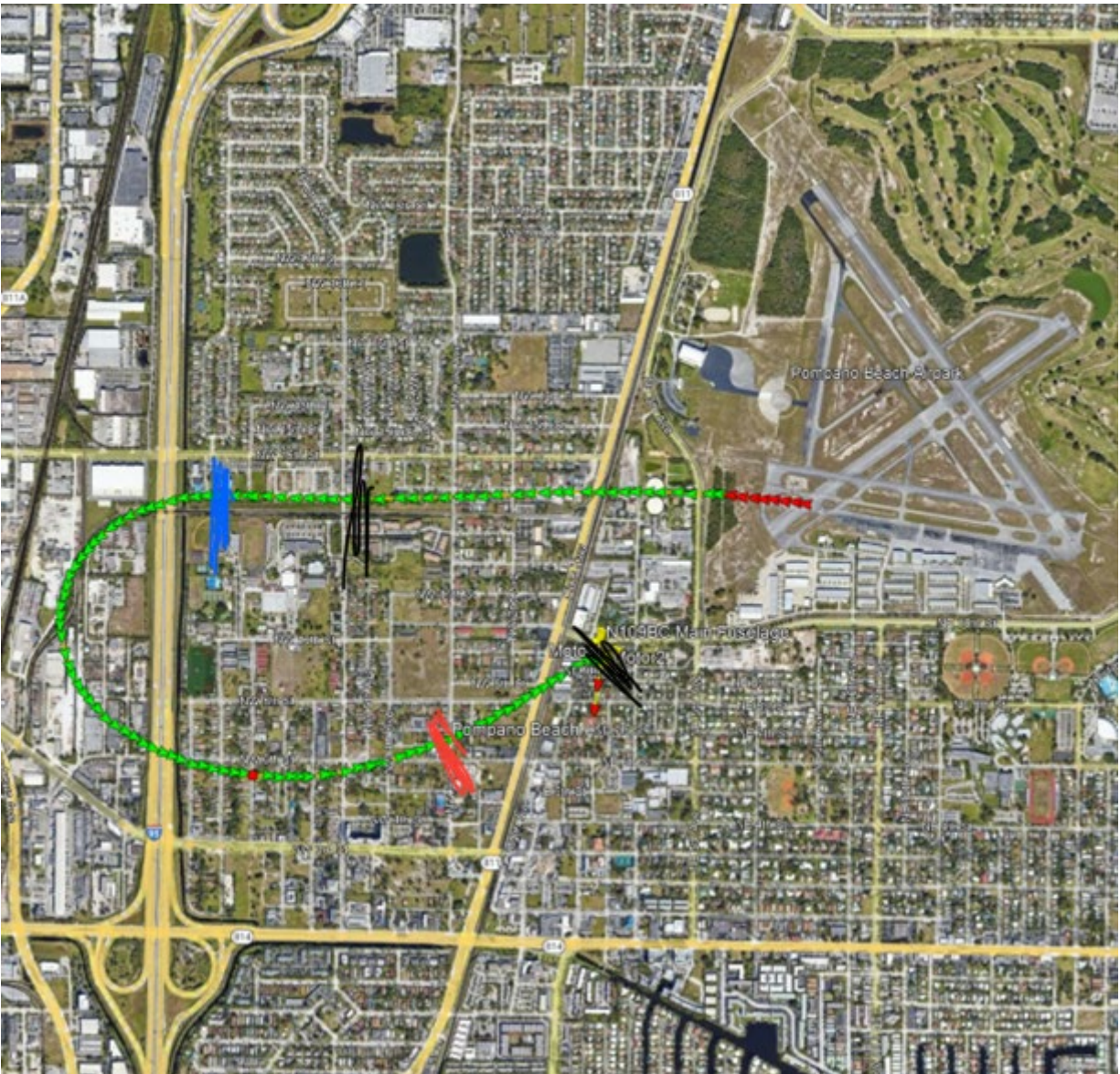


1. On the day of the accident, did he begin and/or complete any inspections of the helicopter prior to the accident flight? **Yes. No Issues were noted or observed.**
2. Did he turn on the air conditioner on the helicopter during the accident flight?
  - a. If yes, when? **Yes, It was turned on during start up procedure.**
  - b. Does he recall if the air conditioner was functioning normally? **Yes. It functioned normally and on multiple days prior.**
3. Did he smell anything odd during the accident flight? **No. The only smell was a burning smell, noticed by all crew just before the catastrophic structural failure. Before that, no smell or indications of an odd smell.**
4. Were there any annunciations (such as caution or warning lights and aural tones) after the first abnormal sound? **No Cautions and no Warnings were displayed and no audio warning/caution tone was presented after the first "Bang" to the best of my recollection.**
5. Did he shut off the air conditioner after the first abnormal sound? **No, I was more concerned about Flying the Aircraft, Alerting Tower of my Emergency, and Troubleshooting while attempting to Land as Soon as possible, in a safe location. With Engine TOT on the rise, I began to try and troubleshoot possible engine issues.**
6. Did he feel increased control forces in the pedals after the first abnormal sound, but before the second abnormal sound? **No.**
7. Other than the #1 engine TOT rising, did he see any other notable behavior with the engine gauges? (torque, engine speeds, etc). **No. The TOT was the only gauge I noticed abnormal. While others may have been high, I was reducing power and airspeed to deal with the emergency situation.**
8. Which number engine fire button illuminated? **Engine #1.**
9. Which number engine fire button did he press? **Engine #1.**
10. Does he recall seeing any messages on the CDS during the accident flight?
  - a. If so, what were those messages? **I received ZERO Caution or Warning indications or messages, until the fire light and High Overtemp Illuminated within a few seconds of each other. I then performed the Fire light procedure by pressing the FIRE/Shut off Fuel Button on the Top Left of the panel, labeled FIRE. A few seconds later the 2nd boom, was heard, and we began to violently spin.**
11. Which number engine did he put into idle? **Engine #1.**
  - a. Specifically how did he put that engine to idle? **I used my left hand, verified the switch, removed the "Flight" Guard, put it to idle, announced to the crew what I was doing. This was done by Engine Switch, not throttle or manual mode.**

12. Refer to image of the flight track below and estimate where:

Below I have indicated approximate locations for these events, to the best of my recollection.

- a. He heard the first abnormal sound. See first black line on flight path diagram, below.
- b. He put the engine to idle. Blue line on flight path.
- c. He saw the engine fire button illuminate. Red line on flight path, below. (Engine 1).



13. Does he recall shutting down the engines prior to egressing the helicopter? **Yes, the engines were shut after the helicopter landed on the building's roof.**
14. Can he estimate the time between the first abnormal sound, the engine indications, and the second abnormal sound? **First bang , TOT on ENG 1 started to rise within seconds. Time between "bangs" less than a minute. Engine 2 TOT was slightly rising but not out of Normal limits yet.**
15. Was there visible smoke or the smell of smoke within the cockpit? **Smell of burning was noticed a few seconds before the fire light, and then a few seconds later the second boom was heard, felt, catastrophic failure occurred, and we began to spin. The last few seconds before the 2nd bang, was when everything started to show itself as an indication of a FIRE.**
16. Did he consider landing immediately? **All possible landing options were considered. However, the risk of landing in a populated area with school buses, pedestrians, houses, powerlines, trees, etc. safely with an inoperative engine was determined to overly endanger civilians. I determined that the safest course of action was to do a run on landing under possible OEI on a runway, where ATC can provide immediate assistance. Without indications in the cockpit such as warnings or cautions, landing immediately in an unfamiliar and populated area would have been reckless.**

## References

**Instrument Panel (CDS, Analog Flight Instruments)**

