RECORD OF COMMUNICATIONS

Michael Huhn
Air Safety Investigator
Western Pacific Region

Date: December 8, 2015
Person Contacted: Mr. Scott Tubb (Pilot/Owner)
NTSB Accident Number: WPR14LA185

Narrative: After the original Factual Report of this accident was posted on the NTSB web site in October 2015, the pilot read that report, and on November 16, 2015 sent an email to the NTSB investigator. The email contained a copy of a previously unknown (to the investigation) power setting/fuel burn rate chart. As part of the investigative follow-up, the communications below are verbatim extracts of additional investigative questions and pilot responses from two email exchanges on this date.

NTSB Question Set 1

In digging through all the info, I have more Q's

a) Can you tell me the source of this chart?
b) Can you tell me why you used this chart for your planning instead of the chart that was in the POH in the airplane?
c) Do you have any info or records that document the installation of the fuel injection system?

Pilot Response 1

I am attaching the logbook entry for the fuel injection and both pages of the power setting guidelines I used.
To answer your questions.
1. Barrett Precision Engines sent this to Mr Mulligan [The original owner of the airplane, who sold it to the accident pilot] to aid him in breaking in the new cylinders.
2. As the POH was based on a carbureted engine I thought it would be prudent and more accurate to use this chart for planning purposes. According to the EIS, these numbers did seem to agree and I believe I indicated to you before I saw flows in the low 11's gph in cruise later with RPM's of 1730 and 23 in. Hg. She ran flawlessly there and I believe CHT's never got over 370.
3. The logbook entry is the only thing I have left as I sent everything else to the insurance company. I am sure that Allen Barrett can verify it also if you need or Dean Riley of Sound

Maintenance who worked on it 4/21/14 and Terry Burch who also worked on it for me on 5/1/14. I can get phone numbers if you need for all these people.
Again, I hate to keep you on this as I'm sure you have more important things to work on, but I have played this over in my mind and on paper,I can't say how many times, trying to find a hole in my fuel calculations but they come out the same based on my actual engine operations. I do now however, carry a minimum of an hours fuel reserve in daytime and generally much more.
One more thought, I have gone back through all the Model 12's actually flying and it seems there is an unusually high number of accidents due to engine related issues.
I am totally pleased with the strength of the airframe as I believe it saved our lives.

NTSB Question Set 2

Ive been digging around (Barrett, Jim Kimball, etc) and at this point i think that the airplane was constructed from the start with the M14P injected engine, completed in December 2009

The break in stuff you sent was for some cylinders that got repaired due to some TBD event- I suspect Mr Mulligan and maybe Barrett or the mech who installed the cyls would know what prompted their repair(s.) I don't even know what the repairs were yet. But the log entry (attached) I do have shows "broken" base studs

Near as I can tell there are multiple versions of the engine out there, BUT only 2 designations, "P" and "PF"
The various Barrett changes (injectors, electronic ign etc) are sold separately and therefore you can have different engine configs & power & fuel burns that all get lumped under either the "P" or "PF" designators. Im still trying to get to the bottom of that

FYI, the 'stock' (carbureted) "P" and "PF" engines are rated at 360 & 400 Hp respectively.

I don't expect that Ill have to go to your mechs, but I might go back to the insurance Co

Some Questions
a) Did Mr Mulligan show you the burn chart in the "Larry King" POH in the airplane/ (see pix)
b) Did he suggest that you use any particular burn chart, or did you not discuss those?

Pilot Response 2

I did see the POH in the plane and I can't remember exactly when I got the Barrett chart, but I believe it was right when Mr Mulligan was breaking in the new cylinders.
The cylinders were being replaced because several studs were found to be broken when I had the aircraft pre-inspected. Barrett engines recommended all cylinders be replaced due to potential long term issues from the numerous broken studs.
I believe my engine was originally a P model with fuel injection added later.