



NTSB RECORD OF CONVERSATION

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Person Contacted: Bill Shinn (FAA Inspector)
NTSB Accident Number: GAA19CA034

The following is a summary of an email conversation with the above mentioned:

The FAA inspector examined the carburetor on February 26, 2019 and the pilot had the carburetor/ fuel-metering unit on his bench. The units were pretty simple in that engine vacuum draws fuel through the center metering tube, (fuel tube), which has a series of holes in it, (progressively increasing in number moving right to left). The amount of air drawn through the venturi is dependent on the position of the slide or flat plate that moves horizontally thru the housing. This is considered the throttle or throttle plate. As the throttle plate moves, it exposes more of the holes on the fuel tube, providing more fuel to the engine. The lever on the side of the unit which has a ring type of terminal on it pulls or pushes the throttle plate back and forth, open or closed. The mixture is controlled by the other lever on the side of the housing, which looks more conventional. It is connected to the fuel tube and rotates it. When the tube rotates, engine vacuum will draw more fuel, (richer mixture), if the holes in the tube are lined up more towards the direction of airflow.

The pilot told him that he had modified the fuel tube with one or two holes near the idle side. When the throttle is completely closed, the last hole is barely exposed. Apparently, he added this hole allowing the engine to just “tick over” when landing, little or no thrust. The pilot felt that he had forced the throttle closed numerous times in the past in order to get the engine to run the slowest. He actually caused the stop bolt to make marks on the housing. Basically, by doing this and modifying the number and position of the last hole in the fuel tube, he was able to get the engine to barely run, (with no or little thrust), so he could make the short landing on the gravel bar in the river. He may have had success before doing this but on the accident landing, it must have cut off the flow of fuel enough to make the engine quit altogether without him knowing it. Once he advanced the throttle “to give it a little juice” to complete his landing, it did not have enough and into the water he went.

One item of note, he had many of these fuel tubes and a huge selection of small drill bits for making modifications to them.