

From: [Anni Brogan](#)
To: [Stein Stephen](#)
Subject: Re: NTSB Investigation N91449 - PA-14 Family Cruiser - VGs
Date: Friday, May 21, 2021 2:52:09 PM

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The STC that includes the PA14 model (SA00530SE), also is for the PA18 and PA12 models. Stall speed reduction is NOT guaranteed, nor is it an FAA certified performance change.

The FAA certification flights compared performance with, and without VGs installed (on the SAME aircraft) in various power & flap settings. The aircraft model on which these flights were conducted was a PA18-150.

Anni Brogan
Micro Aero

From: Stein Stephen <[REDACTED]>
Date: Friday, May 21, 2021 at 2:20 PM
To: Anni Brogan <[REDACTED]>
Subject: RE: NTSB Investigation N91449 - PA-14 Family Cruiser - VGs

Hi Anni –

I have one more question for you. The catalogue says that the installation of the VGs can increase the airplane's stall speed up to 16%.

Since this kit is specific to the PA-14, how did Micro Aerodynamics come up with 16%? And is this guaranteed, assuming the installation was accurate?

Thanks,

Stephen

From: Anni Brogan <[REDACTED]>
Sent: Thursday, April 8, 2021 11:05 AM
To: Stein Stephen [REDACTED]
Subject: Re: NTSB Investigation N91449 - PA-14 Family Cruiser - VGs

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Hello Stephen,

I am sorry for the circumstances that cause you to reach out to us!

The STC number is SA00530SE, Vortex Generators full span on the wings and underside of the

horizontal stabilizer. Per our records, this modification kit was purchased for this aircraft in Anchorage Alaska in May 2018. As an STC, installation must be made by an I.A. licensed mechanic.

The only limitation on the STC is "if more than 5 VGs are damaged or missing, the aircraft is not airworthy". This limitation is posted on a required placard, located on the panel.

After installation of the Micro Vortex Generator kit for PA14, the pilot is to fly the aircraft to the original manufacturer's flight manual. See our website for details of our kit for this model <https://microaero.com/vgkit/pa-14-family-cruiser/>

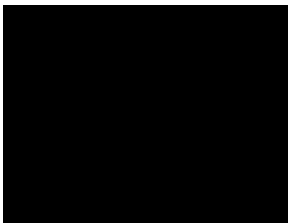
If I can further assist, don't hesitate to contact me.

I will be out of town at Sun-n-Fun tradeshow next week, working our exhibitor booth. I expect to be back in the office by April 21.

Best Regards,

-Anni Brogan

Micro AeroDynamics Inc



From: Stein Stephen <[REDACTED]>

Date: Thursday, April 8, 2021 at 9:19 AM

To: Anni Brogan <[REDACTED]>

Subject: NTSB Investigation N91449 - PA-14 Family Cruiser - VGs

Good morning –

My name is Stephen Stein and I am an investigator with the National Transportation Safety Board currently investigating an accident involving a PA-14 Family Cruise that crashed during a takeoff attempt in Susanville, California on August 15, 2020.

The airplane was equipped with Micro Vortex VGs that had been installed in 2018 per STC S0053SE.

I'm not too familiar with VGs and wanted to reach out to inquire about how the performance computations work following a VG installation. Is there performance data for the VGs specific to the PA-14 that I could get a copy of or what advice to you may provide owners or operating with VGs.

Thanks,

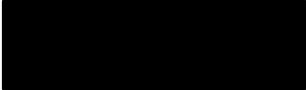
Stephen

Stephen Stein

Aviation Accident Investigator

National Transportation Safety Board

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