

Test Date/Time

8/13/2020 9:03 AM

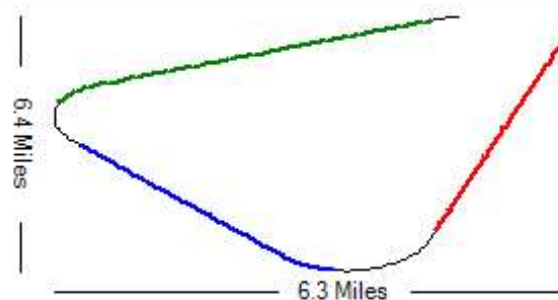
9/8/2020 5:07 PM

Notes:

IAS flight test started 9/8/2020 5:07:07 PM

Analysis run 9/18/2020 11:31:01 AM.

Add your notes here to remind you of any configuration changes you made before the flight, or will make after the flight.



SUMMARY: At an average indicated airspeed of 123 MPH your airspeed is reading 8 MPH, or 6.5%, *higher than it should be.*

Flight speed analysis: Each of the three legs was flown at a very consistent airspeed. The IAS for Leg 1 (in green) was between 120&128; leg 2 (in blue) between 118&127; and leg 3 (in red) between 119&128 MPH.

Calculations: The average ground speed for the three legs was 121 MPH. The triangle course zeros out the effect of wind speed and direction. Therefore, the actual TAS is also 121 MPH.

Next we use the average indicated airspeed of 123 MPH, the outside air temperature (68°F), indicated altitude (2,884 Feet), and altimeter setting (QNH) (30.11 InchesOfMercury) to calculate the *TAS based on the IAS*. This value is 130 MPH.

Subtract the *TAS based on the IAS* from the *actual true air speed*: $130 - 121 = 9$ MPH. This means that the indicated airspeed is reading too high.

Use the TAS difference (9 MPH), the outside air temperature, indicated altitude, and altimeter setting (QNH) to determine the IAS correction factor. This value is *8 MPH, or 6.5%*. Consult your EFIS manual for instructions on how to bias the IAS value to read 6.5% lower.

	Average	
OAT	68	F
Indicated Altitude	2,884	Feet
Altimeter Setting (QNH)	30.11	Inches...

Leg	Color	Distance	Heading	IAS	IAS Var.	IAS StdDev	GS	GS Var	GS Std Dev	TAS	TAS Var	TAS StdDev
1	Green	5.06 Miles	244	124	2.31	1.52	116	7.68	2.77	132	2.08	1.44
2	Blue	4.45 Miles	136	123	2.74	1.66	115	2.49	1.58	131	2.74	1.66
3	Red	5.38 Miles	18	123	3.13	1.77	129	2.69	1.64	131	3.24	1.8