

GROUND TEST REPORT (SINUS/VIRUS)

Aircraft: ALPHA Trainer	SN: 479 AT 912	Date: 17.07.2012	Take off mass: 420 kg
OAT: 25 °C	Airport elevation: 117 m	QNH: 1013 mbar	
Pilot-static lining testing and compass calibration (date):			
Initial indicated altitude: 1500 ft	Initial indicated airspeed: 150 km/h or Mph		
Indicated altitude after 1 min.: 1500 ft	Indicated airspeed: 150 km/h or Mph		
Static lining condition: OK	Dynamic system condition: OK		

ALTIMETER			AIRSPEED			VARIOMETER			COMPASS	
Altitude	Indicated value		Airspeed	Indicated value		Actual	Indicated value		N	Aviation
m	Climbing	Descending	km/h	Climbing	Descending	m/sec	Climbing	Descending		
500	500	500	70	70	70	+1	+1.0		N	11
1000	1000	1000	100	100	100	+2	+2.0		S	12
2000	2000	2000	130	130	130	+3	+3.0		E	13
3000	3000	3000	150	150	150	+5	+5.0		W	14
5000	5000	5000	200	200	200	-1	-1.0			
			250	250	250	-3	-3.0			

TAIL	
Surface	<input checked="" type="checkbox"/>
Vert. stabilizer & rudder	<input checked="" type="checkbox"/>
Horiz. stabilizer & rudder	<input checked="" type="checkbox"/>
Tail wheel/steering	<input checked="" type="checkbox"/>
Registration markings	<input checked="" type="checkbox"/>
Flags	<input checked="" type="checkbox"/>

RIGHT WING	
Surface	<input checked="" type="checkbox"/>
Aileron	<input checked="" type="checkbox"/>
Wingtip	<input checked="" type="checkbox"/>
Airbrakes	<input checked="" type="checkbox"/>
Fuel reservoir & cap	<input checked="" type="checkbox"/>
Drain holes	<input checked="" type="checkbox"/>
NAV/strobe lights	<input checked="" type="checkbox"/>
Pitot tube	<input checked="" type="checkbox"/>

LEFT WING	
Surface	<input checked="" type="checkbox"/>
Aileron	<input checked="" type="checkbox"/>
Wingtip	<input checked="" type="checkbox"/>
Airbrakes	<input checked="" type="checkbox"/>
Fuel reservoir & cap	<input checked="" type="checkbox"/>
Drain holes	<input checked="" type="checkbox"/>
NAV/strobe lights	<input checked="" type="checkbox"/>
Pitot tube	<input checked="" type="checkbox"/>

OTHER	
radio	<input checked="" type="checkbox"/>
GPS	<input checked="" type="checkbox"/>
Transponder	<input checked="" type="checkbox"/>
Gyro	<input checked="" type="checkbox"/>
autopilot	<input checked="" type="checkbox"/>
EFIS	<input checked="" type="checkbox"/>
Placards	<input checked="" type="checkbox"/>

NOSE	
Engine cowlings	<input checked="" type="checkbox"/>
Cooling openings	<input checked="" type="checkbox"/>
Nose wheel strut	<input checked="" type="checkbox"/>
Engine mount	<input checked="" type="checkbox"/>
Oil & cooling liquid level, bottle	<input checked="" type="checkbox"/>
Landing light	<input checked="" type="checkbox"/>
Propeller	<input checked="" type="checkbox"/>
Spinner	<input checked="" type="checkbox"/>

FUSELAGE	
Surface	<input checked="" type="checkbox"/>
Drain valve	<input checked="" type="checkbox"/>
Glass surfaces	<input checked="" type="checkbox"/>
Antennas	<input checked="" type="checkbox"/>
Land. gear strut, wheels, fairings	<input checked="" type="checkbox"/>

GROUND CHECK-UPS	
Safety harnesses	<input checked="" type="checkbox"/>
Doors, glass surfaces	<input checked="" type="checkbox"/>
Instrum. panel, instruments	<input checked="" type="checkbox"/>
Engine ignition	<input checked="" type="checkbox"/>
Brake check	<input checked="" type="checkbox"/>
Fuel select & block. system	<input checked="" type="checkbox"/>
Throttle lever	<input checked="" type="checkbox"/>
Tail aerodynamic controls	<input checked="" type="checkbox"/>
wing aerodynamic controls	<input checked="" type="checkbox"/>
Elevator trim	<input checked="" type="checkbox"/>
Battery	<input checked="" type="checkbox"/>
Fuel low sensor	<input checked="" type="checkbox"/>
Engine hours	<input checked="" type="checkbox"/>

GROUND RUN		
	Idle	Full power
Engine revolutions RPM	1750	5600
Oil pressure (bar) PSI	5.1	52
Oil temperature (°C) °F	123	151
Water temperature °F	144	176
CHT (°C) °F	171	203
EGT (°C) °F	1013	1380
Magento test at 4000 RPM	Left drop	Right drop
	200	200
Propeller vibration	No	OK
Prop. pitch lever/unobstructed move.	OK	OK
Rudder pedals on gnd. Left/right	OK	OK
Rudder pedals in flight Left/right	OK	OK
Airbrakes lever	OK	OK
Factory flight hours count	OK	OK
Factory engine hours count	OK	OK
Starts	OK	OK

TEST FLIGHTS				
Date	Pilot	hours	Eng.	Flight
11.7.12	E. Fagan	2:03	1:58	3
15.7.12	E. Fagan	2:38	0:28	1
Totals:		2:41	2:26	4

FLIGHT TEST REPORT (SINUS/VIRUS)

	eng. rev. RPM	EGT (°C)	Oil temp. (°C)	Oil PSI press. (bar)	Water temp. (°C)	CHT (°C)	IAS (km/h)	Climb (m/sec)	Fuel flow (kg/h)	remarks
Take off	5600	1360	151	52	176	203	100	4.8		
Climb	5000	1469	183	54	174	208	110	3.5		
Level flight	5000	1519	152	55	153	190	153	0	1.7	23 min of MAP 2500m RNA

TASKS	value	unit	Remarks
Lowest maintained speed along a 500m straight course with flaps +2	53	km/h	
Lowest maintained speed along a 500m straight course in clean configuration	62	km/h	
Aircraft shows signs of stall with flaps at	60	km/h	
Aircraft shows signs of stall in clean configuration at	64	km/h	
Cruise speed with flaps in negative stage at 4800 RPM min. pitch	153	km/h	
Max. level flight speed with flaps in negative stage	206	km/h	
Min. sink rate, propeller feathered at 110km/h (flaps in negative stage)	—	m/sec	
Max. sink rate with flaps in 2nd stage and airbrakes extended fully	1.0	m/sec	
Best average rate of climb from 100-1100 metres with flaps in natural position at Vy	—	m/sec	
Time elapsed climbing from 100m to 1100m	—	sec	
Trimmer efficiency	54-125	sec	
Time elapsed rolling 45° bank to bank	2.5	sec	

Other (vibration, etc.) ☒ roll tendency: **LEFT** **RIGHT**

Final test pilot's signature: **P. Fagan**

Date: **15.07.2012**

Datum: 01.07.2012