NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMA	TION					N SILLON				ONLINE.	15.	A STATE
Accident/Incident Loca	tion	455742758	U. II N	and Louisi	A	ccident/In	cider	nt Dato/T	ime			
Nearest City/Place:		Date: 05/09/2020 Local Time: 7:30 AM										
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Latitude:		Longitude:							Tin			
(Enter in decimal degrees or degrees:minutes:seconds)						ollision wi	th O	ther Airc	raft: O	Midair	OOn-groun	d None
AIRCRAFT INFO	RMATION				e de la		ery yê		The str			* 1
Registration Number: 3/8 W H Manufacturer: 727AW						☐ IFR-Equipped and Certified ☐ Commercial Space Flight ☐ Unmanned Aircraft						
Model: TITAN	TORN	ADO Z	5		N	1aximum	Gros	s Weight	. 9	82	lbs	
Serial Number: 5/2	XXX	LOHKOS	546		v	Veight at 7	Γime	of Accid	ent/Incid	lent:	182	_ lbs
Year of Manufacture:						lumber of					w Seats:	
Amateur-Built: AYes	If Yes:	Kit/Plans Mak	e:								Seats:	
ONo		Original Design				umber of			1	_		
Category of Aircraft Airplane OBalloon OBlimp/Dirigible OGlider OGyroplane OHelicopter OPowered Lift ORocket OUltralight Type of Airworthiness Certificate (Check all that apply) Standard Special Restricted Limited Description Description Description Omega Description OF Airworthiness Certificate (Check all that apply) Standard Special Description Officer Officer OCOMMUTE OFFICER OFFICER (Check all that apply) Standard OFFICER OFFIC			rt it-Sport	Amphibian Emergency I	all that apply) Retractable cycle Tailwh aphibian High S dergency Float at Skid			O Turbo O Turbo O Turbo O Turbo O Turbo O Elect	o Prop OHybrid Rocket o Jet ONone o Fan OUnknown tric stem Type (Reciprocating)			
OUnknown Certificate of Authorization or Waive			or Waiver (COA)			Syste	em	OCarbi	uretor	Fuel	-Injected	
	None	ים	Jnknown	31 5	None			known		m . 1	T	C1
Engine Engine Manuf	acturer	Engine Model/Series	Manufacturer's Serial Number		Number	of Mfg. mm/dd/yyyy		Horsep O lbs of	ower or Thrust	Total Time (hours)	Inspection (hours)	Since: Overhaul (hours)
Eng. 1 ROTAX		912 44	S	678	3008	87/11/58	15	100	HI	230	230	
Eng. 2						-	+					
Eng. 3 Eng. 4			-				+					
			Propelle	er 1	OFixed Pito	h		Prope	ller 2	0	Fixed Pitch	
CAAIP Continuous Airworthiness OAAIP Manufacturer:				turer:	E PROP	Controllable Pitch Ground Adjustable Manufacturer:						
	1 41/2	6/2020	1.77		ALEBUR		_	Mode				
Airframe Total Time: 23b hrs hours measured at (Select one) Model or Model or				LT Manufacturer: Airframe Parachute Airframe Parachute Angle of Attack Indicator Autopilot Autopilo						t apply)		
Type of Maintenance Program (Select one) TSO No.: OC91 (121.5 MHz) OC126 (406 MHz)						714 (121.3			a Recorde		Handhald D	
Annual O Conditional (Amateur-built only) O Manufacturer's Inspection Program O Other Approved Inspection Program (AAIP) Continuous Airworthiness O Other, specify: Di				Was ELT still mounted in aircraft?						evice		
Description of Fire Ex None O Specify:	tinguishing	System		If not activated: Indicate Reason:								

OWNER/OPERATOR INFORMATION										
Registered Aircraft Owner										
Name: DAVE KESTE	R	City: State: ZIP:								
Fractional Ownership Aircraft: O Yes	₹No	State: ZIP: Country:								
Operator of Aircraft Name: TYLER PAYLS	gistered Owner	Same Address as Registered Owner								
Doing Business Ac-	60	City: BIZOKEN ANOW State: OK ZIP: 74014								
Doing Business As:	or Code):	_ State: OK ZIP:								
	er Code):	Country: WAGONER								
Operating Certificates Held (Check all that apply)	Regulation Flight Conducted Un	(Select one for each group)								
None □ Flag Carrier Operating Certificate (FAR 121) □ Supplemental □ Air Cargo □ Foreign Air Carriers (FAR 129)	OFAR 91 OFAR 129 OFAR 91 OFAR 133 OFAR 91 OFAR 135 OFAR 125 OFAR 137 OFAR 91 OFAR 125 OFAR 137 OFAR 92 OFAR 125 OFAR 137 OFAR 92 OFAR 92 OFAR 137 OFAR 92 OFAR 137 OFAR 92 OFAR 137 OFAR 92 OFAR 137 OFAR 92	431 O Non-Scheduled or Air Taxi O International 435 437 O Passenger								
☐ Rotorcraft External Load (FAR 133) ☐ Commuter Air Carrier (FAR 135)	OFAR 91 Special Flight ONon-US, Commercial	O Cargo O Mail Contract Only								
☐ On-Demand Air Taxi (FAR 135) ☐ Commercial Air Tour (FAR 136) ☐ Agricultural Aircraft (FAR 137)	O Non-US, Non-commercial O Public Aircraft (Select one)	Purpose of Flight for FAR 91, 103, 133, 137 (Select one)								
☐ Pilot School (FAR 141) ☐ Certificate of Authorization or Waiver (COA) ☐ Commercial Space Transportation Experimental Permit ☐ Commercial Space Transportation License ☐ Other Operator of Large Aircraft	O Armed Forces O Federal O State O Local O Unknown	O Aerial Application O Aerial Observation O Air Drop O Air Race/Show O Banner Tow O Business O Executive/Corporate O Aerial Application O Firefighting O Unknown O Flight Test O Glider Tow O Instructional O Other Work Use Personal O Positioning								
Revenue Sightseeing Flight	Air Medical Flight	O External Load O Skydiving O Ferry								
OYes No	O Yes O No									
AIDDORT INFORMATION (FILLIS	if accident/incident occurred on app	proach, landing, takeoff, departure, or within 3 miles of an airport)								
¥20€025 3G		Distance From Airport Center:sm								
Airport Name: HASKELL		Direction From Airport: degrees true								
Airport Identifier: 2 k 9 Proximity to Airport: O Off Airport/Airstri	On Airport/Airstrip ON/A	Airport Elevation: 588 ft. msl								
1-2 SM NE OF RUI	SWAY 35									
Runway Information		Condition of Runway/Landing Surface (Check all that apply)								
Runway ID: 7/35 (L/R/C) Length: 3	7/0 ft Width: 30 ft	□ Dry □ Snow-Compacted □ Water-Calm □ Holes □ Snow-Crusted □ Water-Choppy								
Runway/Landing Surface (Check all that a	dam Water Wood	☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy ☐ Rough ☐ Snow-Wet ☐ Wet ☐ Rubber Deposits ☐ Soft ☐ Slush-Covered ☐ Vegetation ☐ Unknown								
Dirt Ice Snow	Unknown	Linear colores								
Approach/Departure Segment (Select one)		proach ODownwind OLow Approach								
OTaxi OVFR Departure OIFR Departure Proce OInitial Climb	edure/Clearance OOn Instrument Application OLanding	OBase OGo Around OFinal OAborted Landing (after touchdown) OCrosswind OUnknown								
		VFR Approach (Check all that apply)								
IFR Approach (Check all that apply)		Rone								
None	☐MLS ☐Practice	☐ Traffic Pattern ☐ Stop and Go								
□ADF/NDB □PAR □Sidestep		☐ Straight-In ☐ Touch and Go ☐ Valley/Terrain Following ☐ Simulated Forced Landing								
DILS TILS	□ASR □Visual	Go Around Forced Landing								
□ VOR/TVOR □ Localizer Only □ LOC-back course □ TACAN □ LOC-back course	Contact									
☐RNAV	Circling	☐ Unknown								

"FLIGHT CREWMEMBER 1" INFORMATION										
right Crewmember 1" Res	sponsibilities at the	Time of A	Accident/Inc	ldent		Desker - ph				
	O Student Pilot	I Elimbet Inc	demonstrate ()	Check Pilot	O Flig	ght Engineer	O Other	Flight Crew		
"Flight Crewmember 1" was	s pilot flying	es 🗆 No						970		
"Flight Crewmember 1" Ide	ntification									
First Name: TVC	FR				'ity of R	esidence:	BROK	EN A. ZIP: 74	RROW)
Middle Initial:						4		710. 7/	14	
Last Name: PAULS	EN .			8	state:	115		ZIP: 17	0 1	
	Accident/Incident:	23	D. CD		Country:					-
g mile of	recident incident: _		Date of Bi			m	m/dd/yyyy			
Degree of Injury	C- 10 11	Cert	tificate Numl			ķ.				
O None O Fatal	Scat Occupied O Left				traint T	ype			Inflatable	Restraints
Minor O Unknown		Front Rear	O Unknow	'n	Availabl	le	Used	1		
O Serious	O Center C	Single			O None		ONone	.	Not In	stalled -d
Pilot Certificate(s) (Check all	that apply)				O Lap o		O Lap on O 3-point		Installe	eployed
□ None □ Flight Ir	nstructor	nercial	☐ US Mil	itary	4 -poi		O 4-point	2	Deploy	/ed
C. I Kecrean		e Transport	Foreign		O 5-poi		O 5-point		☐ Unkno	wn
— Брик	☐ Flight	Engineer			O Unkn	nown	O Unkno	wn		
Principal Occupation N	1edical Certificate				" 10			-		
O Pilot	None OClas	no 2				rtificate Va	2026	2000	Date of La	st Medical
O I I-1-	Class 1 Driv		e (Sport Pilot o	VO Cylno	Vithout lir Vith limits	mitations/waiv ations/waivers	vers OI	Inknown		
Medical Certificate Limitati	Class 2 Ollnk	nown	· (epoit / not t	os os	pecial Iss	uance	· Or	VA	mm/dd/y	yyy
Date of Last Flight Review or Equivalent, Including		Flight R	Review Aircr	aft						
FAR 121/135 Checks:		Make:								
	mm/dd/yyyy	Model:								
Airplane Rating(s) (Check all that apply)	Other Aircraft Rat	ting(s)	Instrume	nt Rating(s)		1	www.www.com			
□ None	(Check all that apply)	100 P. S.	(Check all	that apply)		Instructor	Rating(s)			
	None ☐ Airship		None		(Check all that apply)					
☐ Single-Engine Sea	☐ Balloon		☐ Airpland	e		☐ Airplane	Single-Eng		Instrument Instrument	Airplane
☐ Multiengine Land ☐ Multiengine Sea	Glider		Powered	ter d Lift		☐ Airplane	Multi-Engi		Helicopter	Helicopter
- Mandengine Sea	☐ Gyroplane ☐ Helicopter		PATRICIAL DESIGNATION OF THE PATRICIAL DESIGN	- Lin		☐ Gyroplan☐ Powered	ne Lie		Glider	
	☐ Powered Lift						Litt	L	Sport 1	
Type Ratings						0	CALLES TO			
						Student E	ndorsemei	nts (Include	dates)	
	T									
Flight Time (Enter appropriate	All This	Make	Airplane							
number of hours in each box)	Aircraft & N	Aodel	Single Engine	Airplane Multiengine	*0.*.		ument			
Total Time	162.4	33		Municingine	Night	Actual	Simulated	Rotorcraft	Glider	Lighter
Pilot in Command (PIC)					5		-			Than Air
Time as Instructor										
This Make/Model	13 15 5	THE REAL PROPERTY.								
Last 90 Days										
Last 30 Days										
Last 24 Hours										

FLIGHT ITINERARY INFORMATION								
Last Departure Point	-50%	e of Departure	I Double of				4 Dlan I	Filed
Airport ID: 2k9			Destinati	"2K1	_		ht Plan Filed O VFR/IFR	
City: HASKELL	Time	7:30	Airport ID	201	None		VFR	O IFR
State: OK		City:				O Company VFR O Military VFR		O Unknown
Country: 45	Time	Zone: CENTR	State:			O VFR	2000	
			Country:			Activated?	ONo OUnknown	
Type of ATC Clearance/Ser	vice (Check all that	apply)						
□ VFR	Special VFR IFR	ΠVF	ecial IFR R On Top		☐ VFR Flight Follo ☐ Traffic Advisory		☐ Crui	sc nown / NA
Airspace where the accident	t/incident occurre	d (Check all that	apply)				Altitu	de of In-Flight
	Class G	☐ Mil	itary Operations	Area (MOA)	Special			rence:
	Demo Area Warning Area		port Advisory A	rea	Air Traffic Contr	ol Area	Occur	
LI Class D	Prohibited Area	☐ TR	Training Area		Unknown		_	ft msl
Li Class E	Restricted Area	ΠFA	R 93					
WEATHER INFORMA	ATION AT THE	ACCIDEN	T/INCIDEN	IT SITE		Washing.	41.0	7 10
Source of Pilot Weather Inf	ormation				bservation Facility			
(Check all that apply)				Union terms to the	•			
☐ National Weather Service ☐ Flight Service Station	☐ Corr							
TV/Radio	☐ Mili				ime:			
Automated Report	C No.			Time Zone: _				
Commercial Weather Service	(DUATS) Unk			Distance from	Accident Site:		_ nm	
On-Board Weather					n Accident Site:			true
Basic Conditions		Light Conditi	on					
OVMC		Dawn	ODusk	ODar	k Night OUnl	known		
O IMC O Unknown	12	ODay	ONight	OBrig	ght Night	MIOWII		
5 SOC SERVINO 2025-24 M								
Sky/Lowest Cloud Conditio		Ceiling			Temperature:		(C) or	(F)
- Tim Bloken		None (Clear)	0	Obscured	1			
O Few O Thin Overcast O Partial Obscuration O Unknown		O Broken		Indefinite				(F)
O Scattered	Chknown	O Overcast	0	Unknown	Altimeter Setti	na.	100	u.
Lowest Cloud Condition Ho	eight	Ceiling Heigh			Tatameter Betti	or	—— III.	
	ft agl	Centing Treigh	•	01		A346		ā
VAN - FORMULA	_ 8	-		ft agl				
Wind Direction	Wind Speed		Wind Gusts		Visibility			
☐ Variable	Calm		Not Gustin	ng	, islamity		miles	
	☐ Light and Varia	ible	Not Gustin	ng .	RVR:		feet	
-or-	-or-		-or-		RVV:		miles	
Direction:degrees true	Speed:	kts	Speed:	kts	Density Altitud			
Intensity of Precipitation	Type of Precipit	ation (Check all t	hat apply)				W 65 W	_ ft
OLight	None	☐ Drizzle	☐ Freezin	g Rain	Restriction to V			hat apply)
OModerate	Rain	☐ Ice Pellets	☐ Snow S	hower	Blowing Du	□ F	og iround Fo	24
O Heavy	Snow	Snow Pellet	s 🔲 Ice Pell	ets Shower	☐ Blowing Sar	nd 🗖 H	laze)g
OUnknown	☐ Hail ☐ Rain Showers	Snow Grain		g Drizzle	☐ Blowing Sno	now ☐ Ice Fog		
Cikilowii	- Rain Showers	☐ Ice Crystals			☐ Blowing Spr		moke	
Icing Forecast		Icing Actual			Dust		Inknown	
Amount Type	i i	Amount	Type		Turbulence			
None O N/A		None	O N/A		Type (Check al	l that apply)		verity
O Trace O Rime	l l	O Trace	O Rime	,	Clear Air			Light
O Light O Clear		O Light	O Clear		☐ Terrain-Indu	ced		Moderate Severe
O Moderate O Mixed O Unknow		O Moderate O Severe	O Mixe		Convective 7			Extreme
O Severe O Unknown	11	O Severe O Unknown	O Unkr	nown			u	Laueme
CO-10-1- ALESCO CONTRACTOR CONTRA	VD V CO							
NOTAMs (D and FDC), A	IRMETs, SIGM	IETs, PIREPs	in effect at	the time of t	he accident/incid	lent:		

DAMAGE TO AIRCRAFT	AND OTHER P	ROPERTY		
Aircraft Damage O None O Substantial O Minor O Substantial O Unknown	Aircraft Fire None O In-Flight O On-Ground	O Both Ground and In-Flight O Fire at Unknown Time O Unknown	Aircraft Explosion None O In-Flight O On-Ground	O Both Ground and In-Flight O Explosion at Unknown Time O Unknown

Description of Damage to Aircraft and Other Property (Use additional sheet if necessary)

CRUSHED/MANGLED

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and and location, services obtained, and intended destination. Provide as much detail as possible.

SENT TO JOSH IN EMAIL FORMAT.

RECOMMENDATION (H	low could th	is accident/incider	t have been	prevente	od?)			
Operator/Owner Safety Recor								
EMAIL								
			75 16.9	A selection of the sele		narate sheet		
MECHANICAL MALFU				needed,	continue on se	sparate short		Cycles
Was there Mechanical Malfu (If yes, list the name of the part, me	nction/Failu	re? Yes No., serial no., and c	0 describe the fa	ilure.)			On Part	
A) //	myaem, e., p.							Hours
10/11								Cycles
							Time Since T	his Part
							Inspected/Ov	erhauled
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FUEL & SEDVICES IN	CODMAT	ON		- 05, (41)				100
FUEL & SERVICES IN		Fuel Type					On DOCUT	// Ad
(Convert from pounds, as necessary		O 80/87	O 115/145 O Jet A	5	O Jet B O JP8	ther, sp	Decify 92 PREMIA	//
10-12	Gallons	O 100 Low Lead O 100/130	O Jet A-1		O Automotive			
Other Services, if Any, Prior	to Departure							
NA								
EVACUATION OF AIR	CRAFT		7.0	Selfen a				
Was an emergency evacuation	of the aircra	aft performed?	☐ Yes	BNo				
Method of Exit - Describe how	the occupant	s exited and how ma	iny occupants	s evacuate	ed each location			
4NBYCKLE, CRA	WL 04	TOF PLAN	de, shu	T NO	MN FAR	- Pum	8	
				ш	III			
OTHER AIRCRAFT - C	OLLISION	(If air or ground o	ollision occi	urred, cor	mplete this sec	tion for other	aircraft)	May had
Aircraft Registration Number	Manufactu	rer:					Damage to Other Airc	Children and
NA	Model:						☐ Destroyed ☐ M ☐ Substantial ☐ No	111111111111111111111111111111111111111
Registered Owner of Other Air	craft			Pilot of C	Other Aircraft			
Name:				Name: _				
City:ZIP: _			_	State:		ZIP:		
Country:			_	Country:				

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THEREBY CERTIFY THAT	THE ABOVE INFORMATION IS COMPL	ETE AND ACCURATE TO THE BEST	OF MY KNOW! EDGE
Date of this Report Name o	f Pilot/Operator: TYCFIR PAG	ILSEN	
06/01/2020 Signatu	rey		
mm/dd/vyyy	ALTONOMIC CONTRACTOR OF THE PROPERTY OF THE PR	•	
- or -	Check here to electronically sign this	document	:
If a Person Other than Pilot/O	nerator is Filing Denort		
Name:		Title:	
Signature:			
247 52	to electronically sign this document		
	FOR NTSB	USE ONLY	
NTSB Accident/Incident No.	Reviewed by NTSB Regional Office	Name of Investigator	Data D
CEN20LA173	CENTRAL	LINDBERG	Date Report Received 6/1/2020

Lindberg Joshua

From: Tyler Paulsen

Sent: Tuesday, June 2, 2020 10:18 AM

To: Lindberg Joshua

Subject: Tyler Paulsen Statement / Part 2

[CAUTION] This email originated from outside of the organization. Do not click any links or open attachments unless you recognize the sender and know the content is safe.

(Narrative History of Flight)

I have been having yawing issues in my Titan Tornado 2 airplane. I researched on the internet if others had the same issue I was experiencing, I found a few forums of others claiming it is a short coupled airplane and different engine types, luggage pods, BDS chutes seem to create or inhace the yawing issues. One of the guys on forums mentioned adding a strake under tail of the airplane. I called and talked to John the designer and owner of Titan manufacturing and he mentioned to add a strake, try vortex generators or extend the tail and that when he designed the airplane he too had a issue that lead him to add a larger vertical stabilizer to all the aircraft. I purchased 2 vortex generator kits and applied them per instructions. This helped the issue but not enough. I could not find any pictures or data on installing a reverse strake under tail and since the aircraft without a pilot rests on tail I didn't make since how to make this possible. After multiple discussions with fellow flyers I decided to cut winglets out of 1/2 inch plywood and aircraft speed tape them to my stabalator and test fly. The airplane flew with no yawimg issues and stayed coordinated. I then made some out of composite and glued/riveted to the stabalator. Saturday morning May 9th 2020 I watched the sunrise while pre flight inspection of my aircraft. It was roughly 60 degrees, no wind, no clouds. I did all my run up checks, prayed, and called out to Haskel traffic taking the active runway 35. I called again taking off runway 35 rotated at 60 mph climbed at around 1460 feet pr minute indicated on effis, as I approached 2 thousand feet I smoothly started to level off and was headed across river to practice area over fields for a short 30 minute flight before landing for Haskell fly in for coffee and donuts. When I reached level flight a loud bang started continuously and left me with a unstable aircraft. I immediately pulled the throttle all the way closed idle and attempted to pitch down and lose altitude. I had 2 areas located for landing a field and next to the river on the west side. I had a feeling that because of the loud banging nose that my airplane could hold together for short time, as I approached around 1,200 feet I instantly went inverted my site picture changed to a group of trees and I relaxed back in my seat until I landed though trees and into ground.

(Recommendations)

Per the forums I am not the only flyer experiencing a yawing issue. I will be Candid and say I believe the 2 welds that broke was a matter of time and not solely from the winglets. I want all Tornado owners to be able to fly safe and coordinated and recommend a solution to the short coupled airplane aswell as some NDT or visual inspection of the control bracket that controls the stabalator. It is my understanding that this control part is stich welded aluminum and not done by Titan the manufacturer. I am very fortunate to have survived this incident and recommend that rather than pulling trottle back, or removing luggage pods or BDS safety chutes there be options and solutions from manufacture to help fix any yawimg issues. Other than this the Titan Tornado is a great performing LSA aircraft.

Thank you, Tyler Paulsen