GRZEGORZ KRZYZANOWSKI'S TRAGIC ACCIDENT THE CAUSES

On the 16th of June 2014 the current world paramotor slalom champion Grzegorz Krzyzanowski died in a tragic accident whilst flying a tandem trike (but without a passenger, as he had taken ballast instead). Grzegorz fell from a height of about sixty metres after a failure of the attachment points.

The Polish authorities have already published a report, which clearly puts the responsibility for the accident on the unauthorised manner in which Grzegorz was attached to his tandem spreaders. No doubt to bring the pilot and/or centre of gravity nearer the attachment points, he used a loop designed to be pulled upwards to attach his harness. The loop was, therefore, not being loaded in the correct direction and the force overloaded stitching which ended up breaking. The paramotoring world has lost a champion and a pilot who was equally well known for his human qualities.

This accident will perhaps be a valuable reminder to us all when taking children on a tandem paraglider and are tempted to clip-in in a non-authorised way: Never use a loop in a way other than that which it was designed for… ■

GRZEGORZ KRZYZANOWSKI 1977 – 2014

A beautiful tribute to Grzgregorz written by the women's paramotor champion Emilia Plak, with informations translated by Adam Paska.

Grzegorz learnt to fly in 2005. His instructor Leszek Mankowski saw from the very beginning that he was a very talented and dedicated pilot. Whilst training for his first Polish champs he broke his leg ... but still he attended the event just to watch and learn. Bad luck and mistakes accompanied Grzegorz for a long time in his paramotoring career. Although Grzegorz did improve his skills very quickly and as early as the 2008 European Champs was competing in the Polish national team with very good results, something always happened, which significantly lowered his position.

2006 – His first Polish championships, and first place on the podium - 3rd. That was the worst result that he ever got in the Polish champs.

2007 – Polish Champions and World Championships in China, Beijing, the first medals in the history of the Polish national team. Grzegorz fought until the end, finished 7th in the overall results. He won one of the slalom tasks but the task was cancelled and Grzegorz lost his chance of a world record.

2008 – He became Polish Champion for the first time. Later in July he participated in his first international competition – the European Championships in Lomza, Poland. Grzegorz finished 4th overall and his team was 3rd. This was when he realized his weak point for the first time – his memory and bad stress management. At the end of a navigation task he couldn't remember which deck to land in, so he landed in between the 2 decks. He got a penalty, which kept him off the podium.

2009 – World Air Games Turin. Grzeogrz finished 10th. Again bad luck. One of the tasks involved releasing paper tape and catching it in flight. Grzegorz dropped the tape which immediately broke and the whole roll of tape fell to the ground. Zero points.

2009 – The World Championships in the Czech Republic. Grzegorz finished 5th. Another big mistake in a navigation task, he came back too late from a navigation task because he forgot to write down the exact time to close the gate. He got "0" instead of max points. He had to wait until 2012 for the next World Champs.

In the meantime Grzegorz took part in several precision competitions like Parabatix in France (where he suffered a knee injury), Fly Games in Brazil (he cut his

finger on the takeoff but flew the task anyway!). He won the Polish Champion title several times and became the German and Czech Republic open class champion. His most significant result was Slalomania in France, where he finished 2nd - for the first time the French had to learn how to spell and pronounce his name correctly: Grzegorz Krzyzanowski!

In **2012** he took part in the World Championships in Spain and gained 7th place in the final classification. This time his equipment failed. In the economy task he had a problem adjusting the injection system in his Top 80 so he ended up with a very bad result. In the slalom task the pole kicked his propeller and Grzegorz lost his chance of a place on the podium and another world record.

Waiting for the next World Championships classic competition Grzegorz started to seriously prepare himself to become Slalom World Champion with extraordinary determination. He was passionate about slalom flying. He started to help Dudek Paragliders to develop a proper wing for slalom flying. Their new slalom wing - Snake - was the ultimate weapon for Grzegorz. He trained every day weather permitting. He not only reached an incredible level of skill and performance but also helped to teach and train all the rest of the Polish team. Together with Adam Paska the Polish team manager and Dudek Paragliders, they created a champion team, which won first team and individual place in the Slalom World Champs in 2013 in France. The entire paramotor World was amazed by Grzegorz and the Polish team victory.

His World Champion title was not a mistake or just good luck; it was certainly a well deserved award. He was confident of his skills. It was his competition and his year. After winning, he finally felt he had accomplished something, for the first time in his sporting paramotor career. Grzegorz certainly had tremendous talent, but it was all backed up by a titanic amount of work and commitment.

Competing in Paramotor competitions was just a small piece of what Grzegorz did in his life. There was much more. Who was Grzegorz? He was a husband, father, son, company manager, he was a gentleman and an incredibly kind person. It didn't matter if it was his family, employee, friend or a man who was selling morning newspapers, he was always smiling, always nice, open, making contact, like it was always not enough… whenever you approached him asking for anything, even when he was busy and focused on something, he always had time, a smile, an explanation, the answer to your question. I always wondered where he got all this energy and patience from! He could always find time and energy for everyone and everything. I can't remember if Grzegorz ever refused to help someone. Furthermore, he could see the needs of others before they asked anything… And he never expected anything in exchange.

He impressed many people with his professionalism and knowledge. He had an incredible sense of humour, he loved jokes and laughing. He was stubborn, a fighter and somebody who always looked for the right solution.

He followed in his parents footsteps and took over their big family business and was responsible for its development supporting fully his elderly parents and taking care of his whole family: his wife Małgorzata, 3 beautiful kids Rose, Alexander, and Blanka. He loved them very much and they supported him incredibly in his passion for paramotoring and his career. Many of his closest friends heard him saying that he felt very complete in his life, his work, his family and his passion for flying.

He was a happy person and he had a habit of sharing this happiness with others around him.

He left suddenly. He left doing what he loved. All the people, who were close to him: family, friends, many, many people, we all feel the same, this empty space he left after he is gone. He will be remembered and very much missed. Fly away Grzegorz, blue skies.

Link to the comments about Grzegorz: http://www.kadrappg.pl/?p=1442#more-1442 ■

State Commission on Aircraft Accidents Investigation

Traduction en Anglais non-officielle, pour la version originale en Polonais se reporter à la fin de ce document

Non-official translation from the Polish document (Polish version see last pages)

INFORMATION

of 23rd June 2014

concerning a PPG accident with SNAKE canopy (ref. PKBWL 870/14)

(nr ew. PKBWL 870/14)

On 16th June 2014 an accident with a trike PPG involved took place in Piastów near Radom.

Flying equipment consisted of:

Trike – double seat Cruise Carbon, manufactured by Nirvana

Canopy – Snake 18 manufactured by Dudek Paragliding

Suspension – tandem spreaders manufactured by Nirvana

Pilot was equipped with a rescue parachute

Injuries:

Injuries:	Crew	Passengers	Other persons
Fatal	1	-	-
Serious	-	-	-
Minor (none)	-	-	-

Facts:

Pilot was an experienced competitor flying powered paragliders, competing in PF1 class with considerably lower experience in double-seated crafts (PL-2 class).

Flight was executed as one-man operation, with ballast fixed in passenger seat.

Pilot was going to get acquainted with a new type of trike. In order to do that he used the canopy well known from this year's trainings and a competition (finished a day before).

While the paramotor was doming down to land, at height of ca. 60 meters, following sequence of events happened:

- tear of the right suspension (spreader bar) of the pilot's side
- getting the right harness' carabiner out of the suspension

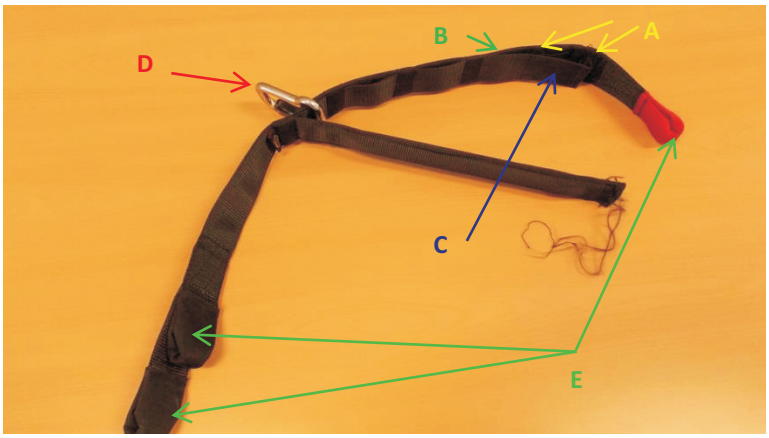
- tear of the suspension loop's seam where the right riser carabiner was placed
- getting the right riser's carabiner out of the suspension
- tear of the left suspension (spreader bar) of the pilot's side
- impact

Rupture of the speed system line most probably happened after the right carabiner got off the suspension.

No attempt to use the rescue chute was noted.

Despite immediate reanimation pilot died due to injuries sustained.

The pictures below show the damage and information on the suspension design.



Spreader bar – <u>right</u>

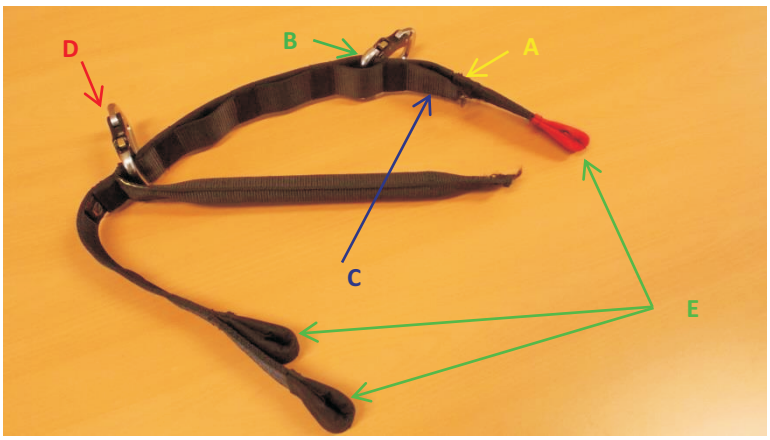
A – tear points

B – place where right canopy riser was attached

C – place where the pilot harness was attached

D – carabiner where the passenger harness was attached

E – correct places of attaching pilot/passenger harnesses



Spreader bar – <u>left</u>

A – tear points

B – place where left canopy riser was attached

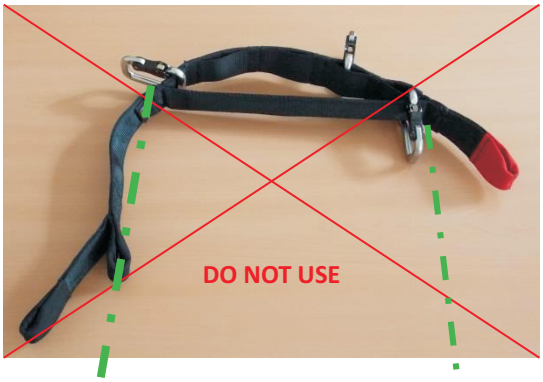
C – place where the pilot harness was attached

D – carabiner where the passenger harness was attached

E – correct places of attaching pilot/passenger harnesses

Type of the damages, their placement as well as stated so far circumstances of the flight's preparation and execution suggest that the pilot arranged the suspension set in different way than planned by the manufacturer. Probable reason for this action was a wish to lower the suspension point of the paraglider.

Pictures below show different arrangements of the suspension. For the display a nearly identical spreader bar was used – the difference lies in seams and sheaths' execution, which is of no importance for the information presented.



Placement of the carabiners on the spreader bar as used by the pilot

INCORRECT

Typical placement of the carabiners on the spreader bar

CORRECT

The commission reminds that each aircraft, including all parts comprised in the powered paraglider set, must be operated according to all recommendations and limitations of the manufacturer, as given in manuals published in by him. Any modifications not agreed with the manufacturer are liable to great risk of incorrect operation or even destruction of particular parts.

Państwowa Komisja Badania
Wypadków Lotniczych

KOMUNIKAT

z dnia 23 czerwca 2014 r.

w sprawie wypadku na motoparalotni ze skrzydłem Snake 18
(nr ew. PKBWL 870/14)

W dniu 16 czerwca 2014 r. miał miejsce wypadek lotniczy z udziałem motoparalotni, w miejscowości Piastów k. Radomia.

Zestaw paralotniowy użyty do lotu:
Wózek motoparalotni – prod. Nirvana, Cruise Carbon, dwuosobowy
Skrzydło – prod. Dudek Paragliding, Snake 18
Podczepienie skrzydła poprzez rozpórki tandemu prod. Nirvana
Pilot był wyposażony w spadochronowy system ratowniczy

Obrażenia osób:

Obrażenia ciała	Załoga	Pasażerowie	Inne osoby
Śmiertelne	1	-	-
Poważne	-	-	-
Nieznaczne (nie było)	-	-	-

Ustalenia:
Pilot był doświadczonym zawodnikiem latającym na paralotniach z napędem (PPG), startującym w klasie PF1, ze zdecydowanie mniejszym doświadczeniem w lotach na motoparalotniach dwuosobowych (klasa PL-2)[1].

Lot wykonywany był w załodze jednoosobowej, na miejscu pasażera pilot zamontował obciążenie. Pilot odbywał lot w celach zapoznawczych z nowym modelem wózka. Do lotu wykorzystane było skrzydło, na którym pilot wykonywał loty podczas tegorocznych treningów i zakończonych dzień wcześniej zawodów.

Podczas zniżania do lądowania, gdy motoparalotnia była na wysokości około 60 m, następowały kolejno:

- rozerwanie, od strony pilota, prawego podwieszenia (rozpórki tandemu)
- zsunięcie się z podwieszenia prawego karabinka uprzęży

[1] Klasa PF1 – paralotnie z napędem ze startem z nóg pilota
Klasa PL2 – motoparalotnie (wózki dwuosobowe)

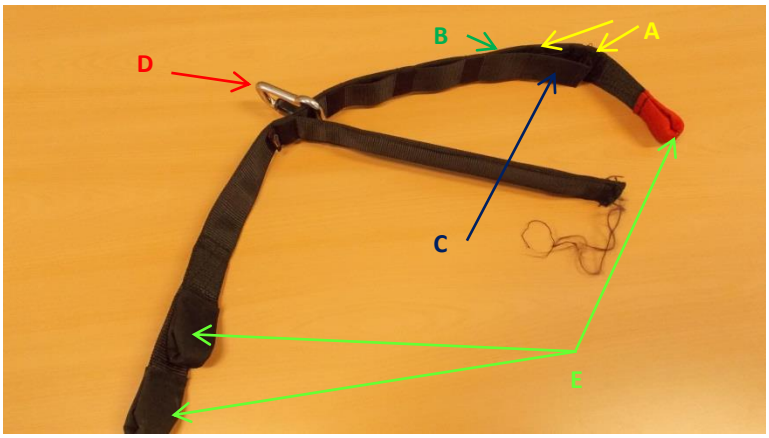
- rozerwanie zszycia „oczka” podwieszenia w miejscu podczepienia karabinka prawej taśmy nośnej
- zsunięcie się z podwieszenia karabinka prawej taśmy nośnej skrzydła,
- rozerwanie od strony pilota lewego podwieszenia (rozpórki tandemu)
- zsunięcie się z podwieszenia lewego karabinka uprzęży
- zderzenie z ziemią

Pęknięcie linki speeda nastąpiło najprawdopodobniej, wskutek zaistnienia siły niszczącej (obciążenie linki), która wystąpiła po zsunięciu się karabinka prawej taśmy nośnej z podczepienia.

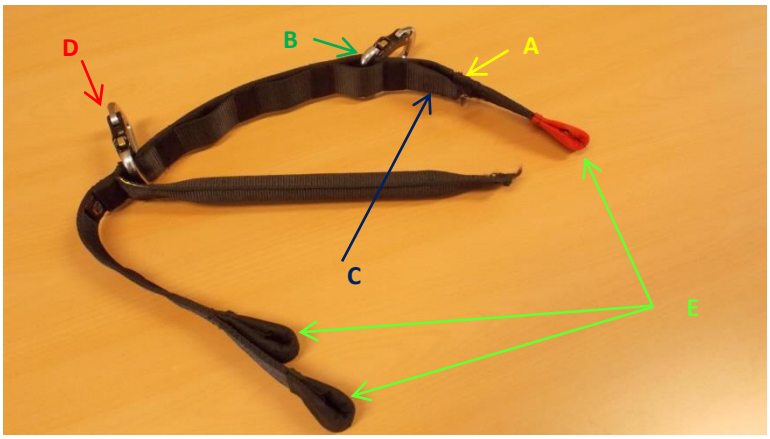
Nie stwierdzono podjęcia próby użycia spadochronowego systemu ratowniczego.

Pomimo podjęcia natychmiastowej reanimacji, pilot zmarł wskutek odniesionych obrażeń.

Na zdjęciach poniżej przedstawiono obraz uszkodzeń i informacje o miejscach podczepienia.



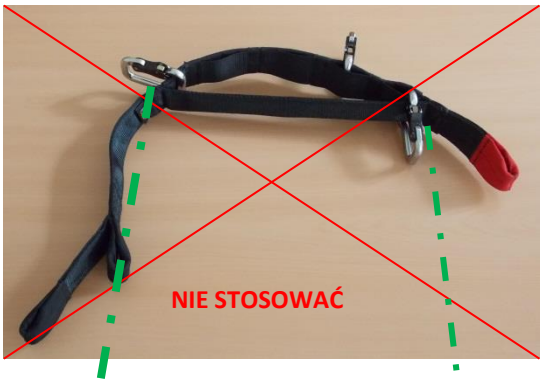
Rozpórka tandemu – <u>prawa</u>
A – punkty rozerwania
B – punkt podczepienia prawej taśmy nośnej skrzydła
C – punkt w którym została podczepiona uprząż pilota
D – karabinek do którego podczepiona była uprząż pasażera
E – punkty poprawnego podczepienia uprzęży pilota / pasażera



Rozpórka tandemu – <u>lewa</u>
A – punkt rozerwania
B – punkt podczepienia lewej taśmy nośnej skrzydła
C – punkt, w którym została podczepiona uprząż pilota
D – karabinek do którego podczepiona była uprząż pasażera
E – punkty poprawnego podczepienia uprzęży pilota / pasażera

Charakter stwierdzonych zniszczeń, ich umiejscowienie oraz ustalone dotychczas okoliczności dotyczące przygotowań do wykonania lotu oraz samego przebiegu zdarzenia wskazują, że pilot podczepił rozpórki tandemu (podwieszenie układu skrzydło-pilot+pasażer) w miejscach innych niż przeznaczone do tego celu. Powodem takiej decyzji była chęć obniżenia punktu podczepienia skrzydła paralotni.

Na zdjęciach zamieszczonych poniżej wskazano miejsca podpięcia uprzęży i skrzydła. Do prezentacji użyto zdjęcia rozpórki tandemu (podwieszenia układu skrzydło-pilot+pasażer) o niemal identycznej konstrukcji – różnica polega na innym sposobie wykończenia poszczególnych szwów, zaszyć i ich osłonek, co jest bez znaczenia dla prezentowanej informacji.



Rozmieszczenie karabinków na podwieszeniu (rozpórce tandemu) zastosowane przez pilota

NIEPRAWIDŁOWE

Przykładowe rozmieszczenie karabinków na podwieszeniu (rozpórce tandemu)

PRAWIDŁOWE

Komisja przypomina, że każde urządzenie, w tym każdy element wchodzący w skompletowany do lotu zestaw paralotniowy, musi być eksploatowane zgodnie z zaleceniami i ograniczeniami producenta zawartymi (opisanymi) w wydawanych przez niego instrukcjach i podręcznikach dla użytkownika. Wszelkie nieuzgodnione z producentem modyfikacje są obciążone ogromnym ryzykiem nieprawidłowego działania czy wręcz zniszczenia użytkowanych elementów.