

# TANDEM NEWS

A PUBLICATION BY STRONG ENTERPRISES FOR TANDEM INFORMATION

## TANDEM PASSENGER FATALITY

On 27 November 1992, at a small airstrip in New Cuyama, California, north of Santa Barbara, a local skydiver, Bill Norman, made a tandem jump with a young lady passenger on a Strong Enterprises Dual Hawk Tandem System.

Although drogue deployment was normal, Norman said that he could not find either main ripcord handle, which were both on his main lift web. At what appeared to be a very low altitude—some eye-witnesses say a couple of hundred feet above the ground—Norman pulled the reserve ripcord handle. “The reserve opened immediately, the slider was down, and we hit the ground,” stated Norman. The reserve canopy was fully inflated but it appeared the descent was not completely arrested. The passenger was still breathing moments after the landing and her brother, who was a tandem passenger on the same load, administered CPR. She was evacuated by helicopter to the hospital where she died of internal injuries the next day.

Norman received a crushed right heel and a broken hip. He was released from the hospital within a week of the mishap.

While in California, Bill Morrissey, Tandem Program Director, did the investigation of the accident just one day after Strong was notified.

The gear was inspected by the Sheriff’s office, the FAA and Morrissey and all agreed the incident was not equipment related. Further investigation by Morrissey discovered that Norman had never earned a tandem rating on a Dual Hawk Tandem System. The rig’s owner, Milt Burton of Santa Barbara, **who is not a Tandem Examiner for Strong Enterprises**, briefed Norman on the Dual Hawk Tandem System and made one jump with him just before the accident. The accident was Norman’s fifth total jump on a Dual Hawk. (Norman earned a Vector tandem rating in February 1992).

Morrissey suspended Burton’s tandem operation and grounded his Dual Hawk Tandem Systems. The FAA in Washington, DC, and Van Nuys, CA, were notified accordingly.

**The most glaring issue in this fatality is the fact that a Dual Hawk owner allowed a non-certified person to use his tandem system. In addition, the other skydivers that were knowledgeable of the ongoing violation (two of his five jumps were made with other experienced skydivers), gave it their tacit approval by choosing to do nothing about it!**

Let’s review some of the prerequisites necessary for Tandem Instructor (Tandem Master) Candidates:

FAA requirements:

- a] 3 yrs. experience in sport parachuting.
- b] Minimum of 500 free-falls of which 300 must be on ram-air canopies.
- c] FAI Expert parachutist license.
- d] Jumpers must be employees or representatives of the manufacturer.

Strong Enterprises requirements:

- a] 50 jumps in the last 12 months.
- b] Jump Master or Instructor rating.
- c] 4 hours of freefall.
- d] 1 intentional or emergency cutaway.

FAA requirements may not be waived, but a manufacturer may modify or waive the manufacturer’s requirements.

Having made his first freefall on 21 April 1990, Mr. Norman, who is Tandem Vector rated, was in violation of that part of FAA Exemption 4943B which stipulates that a tandem instructor candidate must be in the sport at least three years before earning the rating.

Violations of the tandem exemption are, in fact, violations of the Federal Aviation Regulations, and therefore affect the persons making the jump as well as the pilot of the aircraft! By involving a jump pilot in a FAR violation these skydivers are going to make pilots everywhere less inclined to fly skydivers. In addition to relying on the policing powers of the FAA,

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the tandem exemption holder can revoke the privileges of making tandem jumps, as well as ground the equipment.

Be reminded that the exemption can be discontinued by the FAA at any time, without any discussion or hearing. Whether we like it or not **we are all the keepers of this exemption**. If anyone witnesses infractions to the exemption, stop them, educate the persons involved, or report them! Jim Wallace said it quite well: "...we have to get away from this peer pressure to keep quiet".

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## **Passengers come to us with an implied sense of their own safety.**

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Besides dealing with the technical aspect of tandem jumping, we must think about the obligation owed to the public who jump as passengers. They are unknowledgeable regarding what qualifications their tandem instructor must meet, and what could go wrong on a tandem jump. They come to us with an implied sense of their own safety; that the people with whom they are jumping are qualified to do the job; that the equipment they are using is safe and properly maintained and packed; and we must protect their interests. We owe it to them to conduct tandem operations in a professional, responsible manner. Tandem is different and it requires a different set of rules, self imposed or otherwise.

### **TANDEM AFTER THE EXEMPTION**

During the PIA Symposium in March 1993, Strong Enterprises will be discussing "Tandem After The Exemption" in an effort to obtain as much input from the field as possible on how tandem should be conducted when the FAA decides to change the way tandem is allowed.

Tandem jumping can certainly be viewed as "taking a passenger for hire". Comparing that concept with how the FAA deals with Commercial pilots using airplanes to "take passengers for hire", perhaps we can get a feel for how the FAA thinks by looking at how they regulate the latter.

The FAA requires a pilot to possess a Commercial rating when a passenger is being carried for hire. It seems reasonable to speculate that the FAA may view the act of taking a passenger on a vertical flight as being the same as taking them on a horizontal

flight. If they do, then we may be looking at a different set of rules, if and when tandem comes off the exemption.

With the increased number of people depending on tandem as their livelihood, a more focused awareness of the tenuous existence of tandem is necessary. Perhaps this latest tandem fatality will provide us with a new perspective.

The discussion on "Tandem After the Exemption" will give you, the tandem community, the opportunity to explore your needs and to contribute to the development of a unified plan for presentation to the FAA once the Notice of Proposed Rulemaking is published in the Congressional Record. We must help to shape it rather than allowing ourselves to have to react to it. Ideally, we should be able to present this plan to the FAA before they formulate one for us that we may not like.

Those who have input to this subject do not necessarily have to be present to be heard. Mail your opinions to Bill Morrissey at Strong Enterprises, immediately for inclusion in the discussion.

### **STRONG AND BOOTH MEET**

Ted Strong and Bill Morrissey of Strong Enterprises met in Deland, Florida, with Bill Booth, T.K. Donle and Bobby Overby of the Relative Workshop to discuss tandem operations and the Exemption. The half day meeting gave all present the opportunity to identify the potential ramifications of this recent tandem fatality and how it could affect all tandem operators.

The meeting left everyone with the conviction that tandem issues must be discussed, and the satisfaction that both manufacturers can work together to solve mutual tandem problems.

### **USPA INVITED TO SYMPOSIUM SESSION**

Strong Enterprises has invited USPA to address the attendees of its session on "Tandem After The Exemption", during the PIA Symposium in Orlando, FL., 9 March 1993.

This lecture/workshop was developed to focus the awareness within the tandem community on the fact that the FAR Exemption under which tandem jumping is allowed will one day be changed. We feel that day could be very soon.

As our national body, USPA will likely play a very

significant role in tandem at some point in the future. USPA has agreed to take this opportunity to briefly outline what they see their role as being, as well as listen to the input of those "tandem practitioners" in attendance.

## ***SOUTHERN CALIFORNIA'S ANNUAL TANDEM MEETING***

During Bill Morrissey's trip to Los Angeles last December, he had the opportunity to meet with a group of the most active tandem instructors and examiners for Strong Enterprises on the west coast.

Hosted by Artie Patton at a local restaurant in Perris, the group included jumpers from Albuquerque, NM, Cal City, Elsinore, Hemet, Palm Desert, Taft, CA, and Buckeye, AZ. Over 50 tandem instructors and other skydivers actively involved in tandem, including seven parachute center owner/operators, participated. It resulted in a most informative, productive meeting for all.

Highlight of the evening was the showing of Artie's video tape on "tandem incidents" gathered from local freefall photographers during ordinary tandem jumps. It was a stark reminder that a lot happens on tandem jumps that could otherwise result in a catastrophic outcome if it were not for the correct, immediate (or lucky) action of the tandem instructor.

Other items discussed included: Updates to the tandem equipment and changes to and evaluations of the equipment by authorized representatives in the field; and, Tandem jumping with physically handicapped students.

The value of this type of gathering cannot be understated. Similar to a jumpmaster/instructor seminar that should be conducted at parachute centers on a regular basis, SE encourages this type of forum for every skydiving operation.

## ***EQUIPMENT CHANGES NEW FOR '93***

As part of our ongoing program of product improvement, we have taken advantage of the slower winter season to develop several of your ideas and suggestions to enhance the Dual Hawk Tandem System. While many of the functional and structural changes to the harness, container, canopy and drogue may not be obvious, some high-visibility items will stand out. The distinctive new 3-D ring

is now nickel plated, type VII webbing is now standard on the main risers, the canopies are extensively reinforced with 1-inch tape, and the six-gore drogue now utilizes a heavier fabric. All these changes are aimed at extending the service life and minimizing the down-time of the gear, which translates to a greater return on your investment. In addition, the availability of three exciting new Cordura colors (smoke grey, fuschia and teal) is designed to make the adventure more attractive to your students.

## ***PROFIT PICTURE***

One of our roving Tandem Owner/Operators reported recently that he made 546 jumps with one Dual Hawk Tandem which netted him in excess of \$25,000. between 1987 and 1992.

He traveled all over the US and Europe making Tandem Jumps, and it should be noted that he attributes his zero malfunctions and low maintenance to the fact that he does all his own packing. I believe that there is a message here.

## ***1000 TANDEM JUMPS A PIECE WITH NO MALFUNCTIONS***

Mike Driver of Denver, CO., and Cliff Dobson Jr., of Clewiston, FL., have both notified Strong Enterprises that they have reached the rarified environment of having made 1000 Tandem Jumps. What makes this significant achievement even more exciting is that neither of these gentlemen has had a malfunction. NO MALFUNCTIONS? Incredible considering that during the development of Tandem Jumping, the manufacturers were seeing one malfunction about every three hundred jumps. Hopefully this is a sign that today's equipment, and the procedures that the Tandem Instructors are being trained to use are making Tandem safer. Strong Enterprises is proud to have these gentlemen as Tandem Examiners, and we congratulate them on their achievement.

## ***UNNECESSARY CUTAWAY?***

Scenario: The passenger was steering the canopy as the instructor adjusted the side connectors. The passenger let go of the toggles and they moved up against the rings on the rear risers, where they were blowing around just out of the reach of the Instructor. The Tandem Instructor could not reach the toggles, nor turn the canopy with the risers (not strong enough). The canopy was flying stable but could not be steered, so the landing could not be directed.

Action: The Instructor opted to cutaway, rather than risk an injury or worse upon landing.

Question: What would you have done? We would

like to hear your comments.

Understand that we are not questioning the decision of the Instructor. It's a judgement call that should be interesting to receive comments on, and may help others in the future.

### **WHAT! NO LEGSTRAPS?**

A Tandem Instructor recently told me that he experienced this event. As he had been trained to do when going thru the Tandem Certification Course, this Instructor was inspecting his and his passenger's equipment just prior to hooking up as they approached jump altitude. He did not want to believe what he clearly saw, the passenger's legstraps were not hooked up. "I was uncomfortable so I opened them" said the passenger.

Students are capable of doing anything! We have always known that, but perhaps this is a new twist that we should be thinking about. We certainly should be thinking about what would have happened if this Instructor didn't have the good habit of following the same procedures on every jump.

### **SPEAKING OF MENTAL LAPSES**

I choose to believe my source on this incredible story, even though he refuses to name names for fear of Tandem ratings being revoked (the persons involved have made hundreds of Tandem Jumps safely, so he is willing to live with that.)

#### Scenarios:

1. Two cases of failure to hookup the passenger at either shoulder.
2. A second case where only one shoulder snap was attached.

In none of the cases was the passenger injured, **BUT**, let's pause for thought. What caused it to happen, and what could have happened as a result:

In the Certification Course we focus on the need for following procedures on every jump. One of the procedures is that once the hooking up process is started, it must be completed. This procedure is aimed at preventing this type of error, and it was prompted by the fact that this very error resulted in the first Tandem fatality.

#### On these jumps:

Case #1. On one of the jumps the error was discovered after exit and it was not possible to fasten the shoulder snaps in freefall. This is no surprise because in the fatality mentioned above they impacted with the Instructor still trying to hook up the passenger shoulder snap. On the other jump without either shoulder snap attached, the error was discovered during the opening.

Without speaking with the Instructors involved I could not get the details of the opening, descent and

landing.

I am horrified at the thought of this occurring at all, never mind twice. These guys should hide their heads.

Case #2. We teach that in an emergency exit at least one shoulder snap must be connected. On the Dual Hawk the shoulder snaps are rated at 5000 lbs. each and the side snaps are rated at 2500 lbs. apiece. I was not surprised that everything ended with no injuries on the jump where only one shoulder snap was hooked up. I am disappointed that this type of mental lapse is happening. We must focus on the need to follow set procedures every time.

B. Concerning the exemption. If these types of errors continue, we can count on more fatalities. We are trying to demonstrate to the FAA that Tandem Jumping is safer for the students. How many fatalities are we going to be allowed before the FAA decides that Tandem jumping is not safe? It's our future, take care of it!

### **VIDEO MAKES ITS DEBUT**

The Strong Enterprises Tandem Instructor Certification Course video was previewed at the recent USPA BOD meeting in Phoenix, AZ., and received a genuine round of applause. Tandem Examiners Don Balch and Jim Sprinkle offered their credit cards in order to get a copy ASAP.

Jim and Don, along with all of the other Tandem Examiners, will be using this video as a training aid when certifying new Tandem Instructors. The intent of this video when used in a TICC is to supplement the training. It is not meant to replace the Examiner.

The Tandem Instructor Candidates will purchase this video for use in preparation for the course, during the course, and for later reference as a refresher. We expect that drop zone operators, and everyone owning a Dual Hawk will require that all Tandem Instructors review this video at least once a year, preferably in a seminar environment.

This video will be shown at the Strong Enterprise booth during the PIA Symposium, March 7-11, in Orlando, Fl. It will be available for purchase at that time in both NTSC and PAL formats, for \$49.50 each.

### **INSTRUCTORS CONFERENCE AT PIA**

To address the need for the Tandem Instructors attending the Symposium to have a general discussion where they can ask questions, raise issues, review what happening out in the real world, etc., Strong Enterprises has reserved a conference room for Tuesday, March 9th, at 7 PM in room number number 7.

