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ELEMENTS OF SAFETY IN PARAGLIDING

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ABSTRACT

Paragliding is an opportunity for tourism development, depending on what position the sport has place in the local community, the restrictions for paragliders and the safety components of the region. The paper explores the phenomenon of paragliding and safety elements in the Upper Soča region, one of ten best paragliding sites in the world (Placestoseeinyourlifetime, 2015). The purpose of the research is to analyse the safety elements, the development and the risk of paragliding.

The goals of the research are to propose solutions in order to improve the safety conditions for paragliding and to make suggestions on the further development of paragliding within the framework of tourism in the Upper Soča destination. According to the interviewees, paragliding is becoming safer from year to year. This is also supported with the ever-growing numbers of pilots, and on the other hand, the number of accidents that do not follow the same trend. The identified causes for the accidents are human errors or weather conditions. The statistical data confirmed the paragliding in the Upper Soča region, with its unique geographical location, has a positive impact on local tourism and its development. The results of the study are useful for paragliders, local tourism stakeholders, researchers of sport tourism, as well to municipalities in the Upper Soča region.

Keywords: paragliding, safety, tourism, the Upper Soča Valley.

ELEMENTI VARNOSTI V JADRALNEM PADALSTVU

IZVLEČEK

Jadralno padalstvo je lahko, odvisno od odnosa lokalne skupnosti do tega športa, omejitev, ki so jim jadralni padalci podvrženi in varnostnih elementov na destinaciji, kjer se izvaja jadralno padalstvo, priložnost za razvoj športnega turizma. Članek raziskuje pojav jadralnega padalstva in z njim povezanih varnostnih vprašanj na območju Zgornjega Posočja, ki ga poznavalci uvrščajo med 10 najboljših območij za letenje z jadralnimi padali na svetu (Placestoseeinyourlifetime, 2015). Namen raziskave je analizirati varnostne elemente, razvoj varnosti in tveganja v jadralnem padalstvu.

Temeljna cilja raziskave sta priprava predlogov za izboljšanje varnostnih elementov jadralnega padalstva in priprava predlogov za razvoj turističnega jadralnega padalstva v Zgornjem Posočju. Jadralno padalstvo je po oceni intervjuvancev iz leta v leto varnejši šport, kar posledično povečuje število pilotov, turističnih letov, vendar pa tudi število nesreč. Najpogostejši vzroki nesreč so človeške napake ali vremenske razmere. Podatki kažejo, da je Zgornje Posočje s svojo edinstveno geografsko lego in klimatskimi pogoji, idealna ter konkurenčna destinacija za razvoj turističnega jadralnega padalstva, ki ima neposreden vpliv na razvoj lokalnega turizma. Ugotovljeno je bilo, da je potrebno načrtovati vzpostavitev infotočk za jadralne padalce, kjer bo mogoče pridobiti ustrezne informacije za načrtovanje poletov. Rezultati raziskave so koristni za jadralne padalce in njihova društva, za vse lokalne turistične subjekte (lokalna turistična organizacija, gostinci in ponudniki prenočišč, turistične agencije, itd.), raziskovalce športnega turizma, kot tudi za občine Zgornjega Posočja.

Ključne besede: jadralno padalstvo, varnost, turizem, Zgornje Posočje

INTRODUCTION

Among cultural, spa and business tourism, sport tourism is one of the fastest growing segments of tourism. Throughout the last few years, sports, especially adventure sports, are becoming more and more interesting. For the active tourist, sport has become an integral part of life also when on holiday (Slak Valek, Shaw, & Bednarik, 2014). Some find in it relaxation, entertainment, socializing, and for some it has become the meaning of life. On the other hand, there are also some who make a living out of it, and others that have upgraded it into pure competition.

A safety audit to analyse and define safety risks should become a part of the process of developing a sport tourism product. The level of possibility of a safety risk occurrence and the level of consequences should be recognized, defined and managed

afterwards. Overall safety of a sport tourist product and the possibility of assuring personal safety are the two factors which influence the tourist's decision of using the services again. Event-specific risks and security strategies differ not only in their main causes, forms, and effects but also in their symbolism and indirect consequences (Perić, Vitezić, & Mekinc, 2016).

Paragliding is very popular and opens up a whole new world of wonderful experiences for the people who practice it. It can range from simple rides from the top of a hill, or a trek to the top of a mountain from which one can glide down the valley. For the daring that seek something more, paragliding also offers aerobatic manoeuvres, crosscountry flights and official competitions. Its appeal to all thrill-seekers throughout the world lies in its ease of use and the affordable price and it is now promoted in almost all countries around the globe. Among the most popular ones is the Upper Soča Valley. It offers excellent conditions for the implementation of this sport, where paragliders can see natural and historical places from the air (Gradišek, 2008). So it is of no surprise that paragliding has a significant impact on the development of tourism in this region. In this paper, we discuss paragliding through the perspective of safety. It is explored from its early beginnings, and into what has evolved, and where the risks are. We also review the related laws that regulate the sport, what kind of impact on tourism it brings. and present the opportunities and improvements. As stated before, the Upper Soča Valley is, with its natural resources and weather conditions, very interesting for paragliders. We have to emphasize that although the season takes place only in warmer months of the year, and although a large proportion of the region lies in the Triglav national park, it is popular with tourists. The area is, therefore, protected with the following laws and regulations: The Law on the Triglav National Park (TNP), The Law on Air Navigation (ZZraP) and the regulations in the field of paragliding. The development of sports tourism in the municipalities of Tolmin, Kobarid and Bovec are still restricted due to the poor transportation links to central Slovenia and to the north, the underdeveloped public transport and the tourist signs.

A milestone for Slovenian paragliding was set in 1984 when Dare Svetina flew from Dobrča hill (Kačičnik, 1995). Only three years later, in 1987, Svetina organized the first Slovenian championship in paragliding. In same year, 1987, Sandi Marinčič, Vlasta Kunaver and Igor Krevelj flew from Triglav, the highest Slovenian mountain. The next year there were more than 120 pilots and paragliding became officially recognized (Glušič, 2003). Now, 26 years further on, we have 1,326 registered paragliders (Humphrey, 2014). Kaniamos (2008) says that paragliding is flying where the pilot hangs below the wing, on lines in a custom-made seat. The basic equipment consists of a glider, a parachute, a seat, a spare reserve parachute and a helmet. Accessories vary from a variometer, navigational instruments, a radio station, gloves, appropriate footwear and clothing. A radio station is also defined in the third paragraph of Article 21 of the hang gliding and paragliding regulation, but it is only mandatory when training a novice pilot (Decree on Hang Gliding and Paragliding, 1999).

In the municipalities of Kobarid and Tolmin they sell permits that are obligatory for foreign pilots. They are used as the right for take-off and landing in this valley. Slove-

nians are not required to buy them as being the members of the paragliding associations automatically makes them the members of the Slovenian Free Flight Association. The alliance also offers benefits such as insurance for the liability for damages against a third party, subscription to the Ikarus journal which is designed for paragliders and hang gliders. Through the alliance, all the necessary procedures of registering the take-offs and landing sites are managed (Slovenian Free Flight Association, 2015).

In the region, we have three paragliding associations, which maintain the take-off and landing sites. The Posočje Free Flight Association was founded in 1981 as the first hang gliders were already flying from the Kobala hill in 1975. The first paraglider took off from the same hill in the year 1985. The take-off and landing points are marked with information boards and other information. As mentioned before, one needs a permit that is sold for a day (\in 4.00), three days (\in 11), ten days (\in 20) or a season (\in 35), covering takeoff and landing (Adrenalin Gornje Posočje, 2014).

Table 1: Number of permits sold / foreign arrivals, 2008-2012.

	no. of permits sold	foreign arrivals	permits sold / arrivals (%)
2008	7,181	27,088	26.5
2009	6,289	25,622	24.5
2010	6,219	24,770	25.1
2011	7,748	30,446	25.4
2012	8,454	31,887	26.5

Source: adapted from the Adrenalin Gornje Posočje and Statistical office RS, 2015.

According to table 1, through the number of sold permits and number of arrivals we can estimate a percentage of foreign paragliders who visit the area. We need to eliminate domestic arrivals from the analysis, as well as the ones from the municipalities of Bovec since the permits are not sold there, the vast majority of paragliders stationed in Tolmin and Kobarid, and competitors. From 2008 to 2012, the proportion of paragliders ranged around stable 25.6% (Adrenalin Gornje Posočje, 2014).

The regulation of hang gliding and paragliding states "the take-off and landing points have to meet the safety criteria" (Decree on Hang Gliding and Paragliding, 1999). Further it is provided that "records of organized take-off and landing places are kept by the administration". Organized flying from the official spots will be permitted upon registration. For registration, the following is required: a consent by the land owner, an expert opinion by the Management Board of Slovenian Nature Conservation body which states that the take-off point, the landing site and the flight area are not in conflict with environmental restrictions. Also, if the new take-off or landing area needs construction work or change of land use, then the municipality needs to give its

opinion. If the proposed new flying or landing area is in the zone of a sport airfield, the airport management also needs to give their approval.

The safety of paragliding is always the foremost criteria. An experienced pilot is able to assess to what extent an environment is safe or unsafe to fly – regarding his or her skills, experience, or equipment. The beginners should fly under the supervision of their instructor, who will complement their lack of experience. It should be noted that almost all accidents occur due to human error and not due to the nature of the sport. There are also test pilots who are constantly exploring the limits of the equipment in order to test the security restrictions. But there are also pilots who do not respect even the most basic safety principles (Kaniamos, 2008).

Decree on Hang Gliding and Paragliding (1999) defines the conditions for the construction, operation and maintenance of hang-gliders and paragliders, and the conditions associated with the determination of their ability to fly. Moreover, the owner or operator of a paraglider is required (every two years) to carry out a technical examination of the materials used and the construction, which must be conducted by an authorized person or the manufacturer. In accordance with the above mentioned decree, accidents will be investigated by a permanent commission appointed by the administration and carried out in accordance with the standards of the investigation of aircraft accidents, serious incidents and incidents relating to aircraft.

The Slovenia Free Flight Association (2014) has also determined a statutory height of flight in the Upper Soča Valley stating it is permissible to fly 2,895 meters above sea level. In 2014, the Ministry of Infrastructure of the Republic of Slovenia adopted the Regulation on Compulsory Registration of Paragliders and Kites. The regulation has raised a lot of questions. The Regulation provides compulsory registration of all the flying equipment in a special register. By the provisions of the Regulation, paragliders can fly only if their parachutes are recorded in a special register. This applies to both Slovenian and foreign paragliders (Rules on Nationality, Registration and Other Marks on Civil Aircraft, 2014). Even before the rule entered into force, The Slovenia Free Flight Association pointed out the economic damage to tourism since Slovenia would be the only country in the EU demanding such a rule. The Federation also argued that it does not solve or bring any additional safety features, which was the main objective when the Ministry adopted the new rule. On all of these facts, the Ministry of Infrastructure of the Republic of Slovenia was also warned by the European Hang Gliding and Paragliding Union (2014). The Slovenia Free Flight Association (2014) also added that the Ministry, with such actions complicates the position of Slovenian providers in the paragliding sport as such. A possible solution lies in Article 153 of the Aviation Act (2006) authorized by the the Ministry to define exceptions to the paragliders and hang-gliders registration.

Two Mountain Rescue Services (MRS) operate in the Upper Soča Valley. The MRS Bovec station was founded in 1947 and the Tolmin Mountaineering Association with its MRS station was founded in 1948 (Slovenian Mountain Rescue Association, 2015). The information regarding paragliding accident statistics was obtained from the archives of MRS Tolmin. MRS Bovec data with reference to paragliding accidents was negligible,

as they had only three in the last five years (Cuder, personal communication, December 15, 2014). Table 2 presents the statistics on MRS Tolmin (2014) rescues in their area, which covers the area from the Italian border on the south side of the Kobariški Stol mountain, through Srpenica, Polovnik, Krasji top, Vršiči, Krnčica, Krn, the summits of Sand, Prehodci and Bogatin, over the entire ridge from Tolminsko-Bohinj to Lajnar, Porezna-Gradiške and then down to Sežana. All paragliding rescue operations that were not performed in the Upper Soča Valley were excluded from the analysis.

Table 2: Number of interventions MRS Tolmin, 2010-2014.

	no. of rescue operations involving paragliders	Slovenian paragliders	foreign paragliders	cancelled missions
2010	28	0	26	2
2011	44	4	35	5
2012	44	5	35	4
2013	20	3	15	2
2014	23	1	19	3

Source: Mountain Rescue Service Tolmin, 2015.

In 2010, the rescue team was involved in 28 cases, among them, eight cases demanded help from a helicopter. In two cases, the intervention was cancelled as the paraglider reported he was fine and safe. All the actions involved foreign paragliders, most of them were injured, and one died. In 2011 the rescue team had 44 missions (five times they proved to be a false alarm) and only in four cases the paragliders were Slovenians. In the same year the helicopter was used 12 times. In 2012, they had 44 missions as well. They had to rescue 5 Slovenians, cancel 4 missions and rescue 35 foreigners. In 2013, the number of rescue missions was reduced to 20 (3 Slovenians, 15 foreigners), 2 of the missions were cancelled as the paragliders had already been safe. The helicopter rescued paragliders in 6 cases. In the year 2014, the MRS Tolmin rescued 23 paragliders: 1 Slovenian, 19 foreign paragliders and in 3 cases the rescue process was stopped because the paraglider reported he was fine and safe. The helicopter intervened 11 times. The results of the analysis stressed that foreign nationals were involved in 90.91% of all mountain rescue missions (MRS Tolmin, 2015).

METHODS

The purpose of this study was to obtain a snapshot of the current state of paragliding and security in the Upper Soča area.

Subjects

In the study performed in 2015, we included 5 paragliders who have experience with flying in the Upper Soča area and are also the key players in the paragliding community. The first is a paragliding instructor, a competitor, as well as someone who offers accommodation and transport for tourists, therefore, he is familiar with all the aspects of paragliding safety and tourism issues. We also included two female representatives of the paragliding community who attended formal schooling and one of them has just started to compete. The last two interviewees have lots of experience flying as well as offering tandem flights to tourists. All the interviewees went through formal education and passed the paragliding exam which gave them the right to gain the license. Their knowledge was also upgraded with a number of theoretical lectures on the topic of security, meteorology and first aid, manoeuvring and controlling parachutes at different speeds and in different difficult situations. All of this led them to master the parachute on the ground and in the air, and gave them what they needed for independent flying.

Project Procedure

The research performed in 2015 used various methods for data collection. The main method was qualitative research with a semi-structured interview. The research includes interviews with key stakeholders, a case study of paragliding accidents, SWOT analysis and the impact of paragliding on tourism in the Upper Soča destination.

Data Analysis

The main method of research was a qualitative research in the form of semi-structured interviews, which gave us an insight into the safety through the eyes of the paragliding pilots. Through the interviews, we were trying to figure out the problems that might affect the security factor and tourism in valley. The interviews contained the questions from the following topics: paragliding career interviewee; challenges in the training of new paragliders (mastering techniques of flight, flight safety); safety in paragliding; accidents in paragliding; development of paragliding in the Upper Soča Valley. Furthermore, based on the findings of our study, we made the SWOT analysis and the synthesis of the key strategic factors.

RESULTS AND DISCUSSION

The interviewees shared the opinion that paragliding was a safe sport if you followed the correct steps and had the right approach:

- They stressed that every paraglider should be able to assess his or her own abilities, know the weather conditions and patterns, as well as to know the equipment, so the risks are minimal.
- When asked about the inherent dangers associated with flying in the Alps, they all agreed that knowing the local meteorology and the techniques of flying are the two main focuses for them. Also, that is something that too many of the foreign paragliders ignore or are just not aware of. Many times such paragliders arrive to the valley from the plains, where the flight mode is completely different. It is also important that the pilot is able to react correctly when a critical situation occurs (wind closing the parachute, a strong swing ...).
- The main problem when it comes to safety is in the badly organized and inexperienced foreigners that do not know and respect the local characteristics of the weather and the air currents. Prior to buying a paragliding ticket a permit every pilot should show a certificate of insurance in the event of an accident, which could provide cover for the cost of the rescue.
- Special attention should also be paid to the foreign instructors and their students because at the moment there is no proper supervision. There should be more effort invested in informing foreign pilots about the conditions of flying here and drawing their attention to greater precaution measures.
- One of the possible measures to increase safety is enabling a local paragliding association to ban any pilots who ignore or disrespect the weather conditions when they fly. Paragliding, according to the interviewees, developed in parallel with other sports in the Upper Soča valley. Given the fact that the Upper Soča area is among the ten best paragliding destinations in the world, this should be a pathway for further development (Placestoseeinyourlifetime, 2015).

On its own, the segment of foreign paragliding tourism in Tolmin and Kobarid represents around 25% of all foreigners who visit the two municipalities. This information could accelerate the number of new take-off sites, better road communications, the organization of paragliding events and additional activities on non-flying days. With the increased number of tourists and paragliders among them, we also notice more providers who offer their shuttle or sleepover services to paragliders, but lack any knowledge about safety questions. Most of them have no other connection with paragliding. That is why they should be informed and educated, so they could provide extra information to their guests regarding flying in this area.

The interviewees take accidents in paragliding as an integral part of the risk of sport, but emphasize that paragliding associations offer enough information to foreign pilots, however, they do not abide by the instructions. This is also confirmed by the fact that among those who were injured, 90% of cases come from outside Slovenia. The basic reason for getting themselves into trouble was ignoring the meteorology and the tech-

niques of flying in the Alpine world. All of the interviewees pointed out that paragliding was safe as much as the pilot was.

Based on the findings of our study, we made the SWOT analysis and the synthesis of the key strategic factors. The SWOT analysis provides a starting point to build on strengths, addresses the weaknesses, exploits the opportunities and avoids the risks. Strengths and weaknesses relate to internal factors, whereas opportunities / threats relate to external factors. The internal factors have their own area of influence to adapt, develop, or otherwise act. The external factors are beyond our control and we can do nothing else than to adapt to them. The external factors could act in our advantage if we accept them with flexibility. The SWOT analysis allows us to identify and reflect what will be key factors in the placement of the product / service on the market (Uran, 2006). In our case, we stressed the key opportunities and the advantages of paragliding in the Upper Soča region. Stakeholders of Upper Soča region should use strengths and opportunities as advantage in the market of paragliding destinations. On the other hand, tourism stakeholders should try with different policies and actions to overcome disadvantages and convert them into advantages. Threats should be converted into opportunities. The Upper Soča region has a potential for further tourism products development and paragliding is one of the most important ones. The SWOT matrix below shows a general overview of the strengths, weaknesses, opportunities and threats of our study.

Table 3: SWOT Matrix.

STRENGTHS	WEAKNESSES	
 Ideal climate, weather and wind conditions for safe paragliding The geographical features of the region enable safe paragliding Qualified local paragliding instructors A positive attitude of local people to paragliding in the case of an accident 	Inadequate legislation regulating the safety and security of paragliding Limited activities due to the Triglav National Park protected area Misinformed tourism stakeholders regarding the main safety data for paragliding	
OPPORTUNITIES	THREATS	
Develop pilot-friendly compulsory insurance which would include rescue mission Mediate appropriate information and training for foreign pilots (flying characteristics of the region)	Ignorance of the weather and geographical features of the region Poor know-how of flying in the Alps Increasing number of new providers with strong commercial interest which often outweigh the safety factors Unsuitable paragliding equipment	

Paragliding is becoming increasingly important for tourism in the Upper Soča region due to the increasing number of competition and paragliders. Paragliding events also attract other visitors.

The study confirmed the importance of relevant information for pilots provided by tourism stakeholders or accommodation providers and other tourism stakeholders in the region. The relevant information about climate conditions and geographical features are the key elements of safety and security in paragliding. Pilots need information for the flying plan preparation and the execution of courses.

The challenge to improve safety of pilots could be seen in the workshops for tourism stakeholders. The purpose of workshops for tourism stakeholders is to provide the flying expertise in the Upper Soča region by paragliding professionals. Local paragliding clubs, in collaboration with municipal authorities, should provide that kind of workshops free of charge. Furthermore, municipal authorities should support local paragliding clubs which take care and maintain the availability and suitability of take-off and landing places. The suitability of take-off and landing places is very important for paragliding safety.

One of the advantages of the Upper Soča region is its location in the protected area of Triglav National Park. On the other hand, being part of the Triglav National Park protected area is an obstacle and weakness because the Law on the Triglav National Park (2010) defined many prohibitions. In accordance with Article 13, it is not allowed (for paragliders, hang gliders or balloons) to land anywhere else except at appointed and designated locations, where such activity does not compromise the objectives of the National Park.

Paragliding clubs could offer trainings which relate to the characteristics of flying in this region. The main safety problems of paragliding in The Upper Soča are inexperienced foreign pilots who do not know the weather characteristics and wind conditions in the region. Flying registration permit should include insurance in the event of an accident, which covers the cost of rescue mission. Furthermore, proper supervision of the foreign instructors and their pupils should be assured in the future.

Risk assessment is the foundation and a core virtue in paragliding and is the main point of safe practice. It depends on human qualities and covers the acceptance of one's limits, the care for their own safety and excessive risk when demonstrating their skills (Revenko, 2006). That excessive risk while demonstrating skills against other pilots is one of the potential hazards that affect the pilot's attention, which was also highlighted by Mole (2015). He noted that in this way the likelihood of an accident increases. An assessment of where the limit is and what constitutes the danger differs from pilot to pilot. As said by Jacobs (in Revenko, 2006), it is more likely to be an experienced pilot who embarks on dangerous adventures, as an experienced pilot's perception of danger varies throughout the experience, which is associated with a greater degree of confidence in his / her own skills. But that does not mean that even the best pilots do not make mistakes. Measures to reduce these risks of an accident are: a realistic self-assessment of one's physical and mental condition, taking advice from senior pilots, analysing the weather, mastering all phases of the flight. The hazard assessment de-

pends on the pilot's experience. Da Paixão and Tucher (2012) stated in their study that paragliders highlight the importance of the procedures and actions that can minimize and predict imminent danger. This is also confirmed with Mole (2015), who emphasizes the development of a safe routine which must be followed each time one flies. Furthermore, Da Paixão and Tucher (2012) came to the conclusion that all paragliders place great emphasis on the management of all phases of their flight, as well as on highquality equipment and its maintenance. At the same time, they give priority to established procedures over practice. The result of their research came to the conclusion that the biggest challenge paragliders face is the realization that their activity can harm or seriously injure them. In hi safety issue, Roti (2015) broke it down to these conclusions: the most important elements of a safe flight is to plan your flight first in your head and try to realize every possible scenario what could go wrong and your reactions to them, train your body and mind, and gradually upgrade your skills, know your equipment and keep in mind that most accidents in paragliding can be predicted and prevented. Mole (2015) adds the following instructions to the security features: focus your attention on the pre-take-off phase, go through a safety check, do not exceed boundaries during any phase of the flight, constantly analyse the situation, allow yourself an adequate margin of risk, do not exaggerate with excess equipment, analyse your own accident or emergency procedures and those of the others, consider and follow the warning signs and only fly using equipment adapted to your knowledge and your level of experience.

CONCLUSION

Paragliding is a recreational and a competitive sport. In recent years, the development of equipment, availability of the weather conditions data, and the web terrain analysis has transformed the sport in a way that the performance and safety have increased as well as the number of pilots that practice this sport. We have learned that many factors contribute to a safe take-off and landing. Every individual must primarily examine the conditions in which he or she flies and be aware of his or her own abilities and limits. These are the fundamental conditions for reducing the risk. But no matter how good the preparation is, it cannot overrule all the variables that can occur to the pilot during take-off, the landing phase or during the flight. Therefore, the main cause of many accidents is a sudden gust of wind or a human error.

The Upper Soča Valley is one of the best destinations to fly in the world. The study confirmed that there is a lack of inadequate expertise among those who offer accommodation to paragliders or the information provided is very poor. The opportunity to improve this situation is to provide free training for these accommodation providers. Help from the local and government authority to empower the local associations, so that they could work hand in hand with the municipality and strictly implement the control over permits and paragliders, could be a second contributing factor that would make a difference with respect to safety.

The analysis of the legislation showed that the required conditions for independent flying and those of pupils are properly defined with a licence and an instructor that has to be with his student during his initial flights. Also, the air space of Slovenia has prescribed corridors in which flying is allowed. It was also shown that the regulations endorsed by the government do not necessarily have an impact on safety. The last such rule was made in 2014 when the government wanted to indorse mandatory registration of hang-gliders and paragliders, which would represent something unique in Europe but was not implemented after the Association for Free Flying Slovenia had presented its arguments. They argued that such a rule would mean a loss of foreign and domestic tourists and not a contribution to safety (Srečko Jost, personal communication, March 11, 2015).

Paragliding tourism in the Upper Soča Valley is becoming increasingly important. An analysis of paragliding accidents has shown that this is the area where most of them happen. In the last five years, the mountain rescue services in Tolmin concluded 143 actions where a paraglider was in need of assistance, and only in 13 cases Slovenian paragliders were in need of help. The most common cause of accidents was the lack of knowledge of meteorology and flying techniques. As shown, the rescuers also had problems locating the injured paragliders. Thus, one of the aspects to look at when addressing safety is that all paragliders should use one official frequency so that rescuers could reach them easily. This is important because the pilots are flying over and in between mountainous terrain, where there is no complete coverage of the mobile signal. Currently, foreigners use other frequencies, making communication difficult. Another measure to increase security would also be the introduction of a mandatory commercial insurance similar to the ones applicable throughout Europe.

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ANNALES KINESIOLOGIAE • 7 • 2016 • 1

Janez MEKINC, Katarina MUŠIČ: ELEMENTS OF SAFETY IN PARAGLIDING, 67-80

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