

Promotion of secure mountain exploration by the Anna Pasek Foundation.

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ABSTRACT: The Anna Pasek Foundation (www.annapasek.org) was established at the beginning of 2008 in memory of Anna Pasek – a Polish student from the Jagiellonian University in Cracow, Poland. One of Anna's major passions was mountaineering. She went climbing both in low and high mountains as well as in broadly understood polar regions. Anna's last challenge was to climb the Mont Blanc, the highest peak of Europe. It was the journey she never returned from. One of the most important aims of the Foundation is preventive, informative and promotional activity in the area of safe mountain exploration, especially the high-mountains and polar exploration. The aim is to reduce the accident rate in mountain and polar exploration to the smallest possible extent through comprehensive education and direct assistance. The Foundation is planning to teach people how to avoid accidents in the mountains and how to behave in critical situations so as to increase the odds of self-rescue actions as much as possible.

A very important prevention activity is snow avalanche education. The Foundation organizes avalanche trainings and seminars. At the end of August 2009, the Foundation opened Alpine Training Base in the Olympic Village – Pragelato, Italy. The Foundation collaborates with science and rescue institutions e.g. Mountain Rescue Services from Poland, Soccorso Alpino from Italy and the Jagiellonian University in Cracow, Poland.

KEYWORDS: avalanche education, alpine training base, Anna Pasek

1 INTRODUCTION

The Anna Pasek Foundation was established at the beginning of 2008 in memory of Anna Pasek – a Polish student from the Jagiellonian University in Cracow, Poland. One of Anna's major passions was mountaineering. She went climbing both in low and high mountains as well as in broadly understood polar regions. Anna's last challenge was to climb the Mont Blanc, the highest peak of Europe. It was the journey she never returned from.

The Foundation became the successor and promoter of ideas pursued and put to practice by its Patron in her academic, artistic and travelling activity.

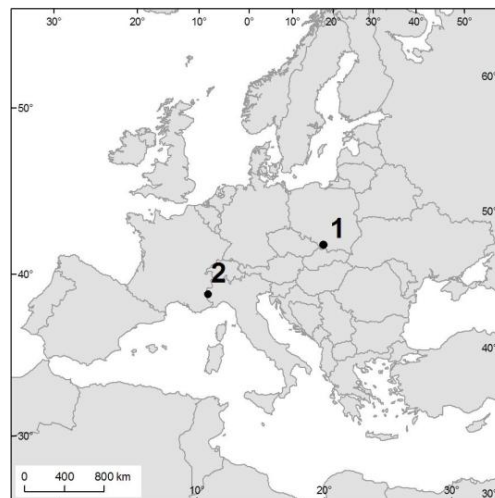


Figure1. Location of Foundation's headquarters – Poland (1) and Alpine Training Base – Pragelato – Italy (2)

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2 MISSION AND OBJECTIVES

"We create opportunities to follow academic and mountain passions and make sure that young people can pursue them for as long as possible."

The above quotation is Anna Pasek Foundation's mission. The main objectives of the organization are:

- Promotion of geographic information systems and remote sensing of the environment (and related sciences) by providing support to young scientific talents.
- Prevention, information and promotion in the field of secure mountain exploration with a special emphasis on high-altitude and polar exploration.
- Activity in the area of promotion, publication and exhibition of the artistic work of our Patron and supporting young people dedicated to similar artistic activity.

We pursue our objectives by:

- Providing financial support to young talents
- Education and research in the areas of natural sciences and other disciplines related to GIS, remote sensing of the environment and high-altitude and polar exploration
- Promotion of the practical application of geographic knowledge
- Organization of lectures, conferences and meetings in Poland and abroad
- Support in organizing secure mountain and polar exploration in terms of organization, training and technical issues
- Organization and support for the awareness initiatives and education of young people related to discovery and exploration of mountainous and polar regions
- Financial support to people whose achievements contribute to the development, dissemination and promotion of activities related to the development of geographic information systems (GIS) and remote sensing of the environment and discovery and exploration of mountainous and polar regions in Poland and abroad
- Partnership with local governments, national and EU authorities, NGOs and private individuals regarding our objectives
- Organization of photographic competitions and exhibitions of travel photos with special attention paid to mountain and polar themes

- Publications and other media activity regarding our objectives
- Supporting initiatives in line with our objectives in terms of organization and funding

3 PROMOTION OF SECURE MOUNTAIN EXPLORATION

As mentioned above, one of Anna's major passions was mountaineering. Her last trip had a tragic ending for her and her two Friends. As the weather broke down, they were caught in an avalanche which caused many injuries and prevented them from descending to a shelter. Anna and her Friends paid the ultimate price for their love of the mountains, and the mountains showed their might once again.

Accidents occur in low, medium and, above all, high mountains, which abound in potential dangers. Accidents can happen to trekkers and mountaineers with varying degrees of experience, as well as to professionals for whom the mountains have become a way of life. All accidents, especially with tragic end, bring great pain and an extreme feeling of loss. This feeling of loss is very often related to young talents who could have achieved a lot in their lives. This reflection brought us to establish the Anna Pasek Foundation. One of its primary objectives is "Prevention, information and promotion in the field of secure mountain exploration with a special emphasis on high-altitude and polar exploration".

The aim of this area of our activity is to reduce the mountain and polar accident rate to the smallest possible extent through comprehensive education and direct assistance. Foundation is planning to teach people how to avoid accidents in the mountains and how to behave in critical situations so as to increase the odds of self-rescue actions as much as possible.

The rich mountaineering and scientific experience of Foundation's members qualifies us to provide mountain and polar education by sharing scientific knowledge and technologies for practical needs, thus significantly helping to improve the level of security in the mountains.

4 PARTNERSHIP

The Foundation puts a strong emphasis on cooperation with institutions sharing the same principles. It is worth mentioning continuous collaboration with Polish and foreign institutions, among them Volunteer Mountain Rescue Service;

Soccorso Alpino e Speleologico Piemontese; a circle of mountain guides; mountain rescue services and academic institutions.

The cooperation with academic institutions is closely related to another Foundation's objective which is Promotion of Geographic Information System (GIS) and remote sensing of environment. GIS and remote sensing are "digital geography", which does not only serve scientists, but also gives methods and tools for better space localization and safer mountain trip planning.

In the second half of 2009, the Foundation officially started a strategic partnership with ESRI Poland company, which is the Polish branch of the world leading company in GIS technology – Environmental Systems Research Institute (ESRI), Inc; Redlands, California.

ESRI company is known not only because of its products, that, among other uses, are widely utilized in avalanche research, but also because of broad educational actions promoting GIS systems, which are, as mentioned earlier, very valuable in accidents prevention.

5 ALPINE TRAINING BASE – PRAGELATO

At the end of 2008, the Foundation started the "Alpine Training Base – Pragelato" project whose first objective was to organize Alpine training base enabling people to take first safe steps in their mountain adventure in the Alps.

Finally, the Alpine Training Base – Pragelato was opened on the 29th of August, 2009, with Honorary Patronage of Comune di Pragelato and Soccorso Alpino e Speleologico Piemontese XIII Delegazione - Torino, Stazione di SESTRIERE – PRAGELATO.

The main objectives of Base activities are:

1. Organization of trainings in secure mountain exploration.
2. Organization of international trainings and exchanges between mountain rescue institutions, avalanche warning services, circles of mountain guides and science institutions, related to secure mountain exploration issues.
3. Organization of science seminars and courses on mountain safety, promotion of GIS and environment teledetection systems in the context of technology transfer for increasing mountain exploring safety.
4. Organization of exhibitions of the works created by the Foundation Patron and people involved in similar artistic activities.

As mentioned above, the basis for Foundation's activity is integration of institutions and environments – and also of their activities. The Foundation team strongly believes that such joined activity will result in popularizing worthy ideas and making them more effective and successful.



Figure 2. Olympic Village – Pragelato, Italy – the place where the Foundation opened Alpine Training Base.

6 AVALANCHE EDUCATION

Snow avalanches are considered to be the greatest objective threat in high mountains. Each year sees dozens of avalanche casualties throughout the world. Analyses carried out by mountain rescue services show that the substantial proportion of accidents is caused by a fundamental lack of knowledge regarding mechanisms causing avalanche flows.

One of the basic ways to prevent this, are practical trainings. Such trainings are and will be organized on a regular basis by the Foundation, with close cooperation with mountain guides and specialists from avalanche centres.

One of the significant elements of Foundation's preventive activities in this area, will be promoting the technologies which, in significant way, help to plan winter mountain activities, increase chances of surviving when engulfed by an avalanche, support quick auto-rescue actions or support specialist avalanche warning and forecasting.



Figure 3. Avalanche training organized by Anna Pasek Foundation

Rescue statistics show that the common cause of avalanche accidents is a difficulty of spatial risk factor evaluation. Problems with location in space can be related to the lack of knowledge and experience, as well as objective causes (e.g. weather conditions), which may affect both amateurs and specialists. For this reason, it is a very important task to supplement snow avalanche education with the knowledge from the field of Geographic Information System (GIS) and remote sensing of environment, which gives methods and tools for better space risk and hazard location.

Considering current technological progress (GPS receivers integrated with handheld computers or mobile GIS software implemented into cell phones are brought into general use in mountain exploring), it seems that e.g. complex avalanche mapping showing a range of avalanche risk/hazard areas, might be very useful in safety context not only for planners, engineers or recreational areas' administrators, but also for mountain rescuers, specialists during their field work and ordinary tourists performing a wide range of winter mountain activities.

It is obviously impossible to perform such type of analyses for all mountain areas (from technological and rational point of view), but for areas of an increased risk of accidents or for small mountain ranges this approach seems to be legitimate. Considering previously mentioned modern mobile technologies, practical use of digital data does not present significant problems.

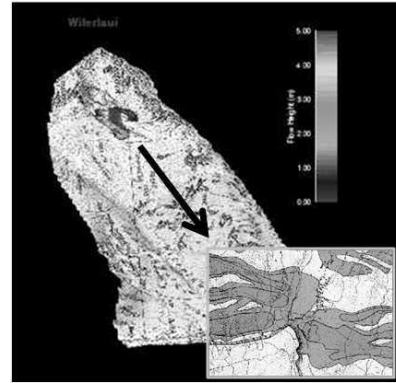


Figure 4. Avalanche mapping and its digital results – can these be helpful in improving field work safety for specialists and ensuring safety of mountain activities for “ordinary people”? (picture source: www.slf.ch)

It is worth emphasizing that even the most advanced technologies cannot divert attention either from basic education regarding snow and avalanches or from promotion of obtaining valuable mountain experience.

The task of the Foundation is, therefore, to promote, to help in development and transfer of new technologies, but only along with basic education which is its intrinsic component.

7 SUMMARY

One of the primary statutory objectives of the Anna Pasek Foundation - a non-profit organization is prevention, information and promotion in the field of secure mountain exploration with a special emphasis on high-altitude and polar exploration. The aim of this particular activity is to minimize the accident rate in the mountains in every possible way, through comprehensive education and direct help. How to avoid accidents in the mountains, how to behave in critical moments, how to maximize the chances of successful self-rescue action – those are the main lines of education.

Anna Pasek Foundation welcomes all types of assistance or partnership in pursuing initiatives related to its objectives.

For more detailed information please visit www.annapasek.org.