February 2004

DUE WEST

The Newsletter of the Orienteering Association of British Columbia

Due West or not?

At the recent OABC Planning Meeting, I raised the question of the costs versus benefits of a provincial orienteering newsletter given that the major clubs and OABC all have web-sites and several clubs have their own newsletters. The executive were split on whether to continue the newsletter or not so we decided on the following strategy to let the members, themselves, decide.

This will be my last Due West. If someone else wants to take over as editor then the executive is prepared to keep supporting the newsletter. I want to focus my efforts on promoting the growth and development of athletes, coaches, and officials in a more direct manner, through increasing the number of training clinics we offer and developing new material, e.g. instruction in the SportIdent system.

If you are interested in being the Due West editor or have some questions before committing to it, don't hesititate to contact me at margellis'AT'shaw.ca.

Don't forget to renew your membership using the membership form included in this mailing. Our funders are more likely to continue supporting mapping grants, etc., if they see stable and/or increasing membership.

Thanks to the contributors to this issue: two new presidents, Alex Kerr (OABC), and Alan Vyse (Sage), John Rance, and Magnus Johannson. Magnus' article shed a lot of light on the issues around the development of electronic punching. I hope you'll enjoy reading it as much as I did!

Margaret Ellis

In this issue:

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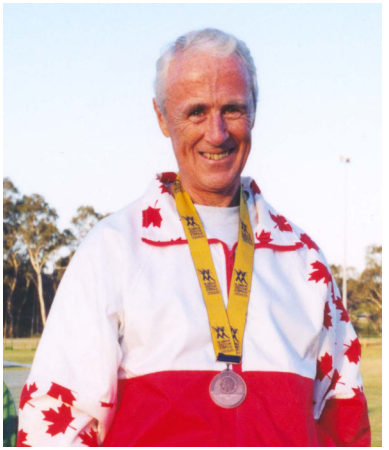
PREZ SEZ

At the recent OABC Planning Meeting I agreed to take over the President's chair, which had been so ably filled by Doug Smith of SAGE for the past two years. For those of you who are not familiar with the name Alex Kerr, I am the old, grey-haired plonker seen at the occasional Determinator desperately trying to keep ahead of the mothers with strollers. I am



Alex Kerr with his silver medal at the World Masters' Orienteering Championships in Australia, 2002

also known for the odd article written under the pseudonym of The Peripatetic Orienteer, where I have chronicled my orienteering disasters at events around the world with the latest effort, hopefully, coming this summer from Kazakhstan.

In 2004, we are planning on holding two major events, with SAGE putting on the 19th edition of Sage Stomp on the May holiday weekend, consisting of a couple of orienteering events and a rogaine. Then from September 24th to 26th GVOC will host the BC Championships in Vancouver and North Vancouver with races in a more urban environment than is usual. This is an effort to expose local orienteers who are reluctant to travel to sample the delights of orienteering in the BC Interior, to a major competition.

Most of the Board's focus, however, is on 2005. At the end of July, the World Masters Games is coming to Edmonton, and orienteering will be one of the sports included. At the 2002 Games in Melbourne there were 25,000 competitors participating in 23 different sports, and Edmonton is hoping to increase both those numbers. The International Orienteering Federation has decided that the orienteering at the Games will be designated as a World Masters Orienteering Championship, which means about 2000 orienteers are expected to show up in Edmonton. To enhance the program, OABC was asked to host the Canadian Orienteering Championships the weekend after the Games, and we agreed to hold a three day competition in Williams Lake. However, early in the New Year we found out that the competition would clash with the World Championships in Japan, so it has been decided to move the COC's to July 14-17th, which will lead off the orienteering rather than finish it.

To give competitors enough travel time between events, the start of the Barebones will be delay by one day to July

19th. I would greatly appreciate it if as many OABC members as possible keep that weekend free on their calendars so that they can go up to Williams Lake to help and compete. It will be a much bigger project than the recent Canadian Championships we organized at Savona, but will be just as rewarding. You will be hearing much more on this topic in the coming months.

Lastly I would just like to thank Doug again on behalf of all the members for his excellent work over the last two years. I would also like to thank Marg Ellis for taking over my former role of Secretary and Vice President, and in case you have the impression that the board consists of only grizzled veterans, I wanted to let you know that we are pleased to have some young blood join the board in the form of Marta Green and Thomas Nipen.

Orrabest orratime, Alex Kerr.

OABC's mandate is to promote and support the sport of orienteering through the development of athletes, coaches and officials and by supporting the organizations associated with the promotion of orienteering. The elected Board of Directors of the OABC consists of volunteers who are members of orienteering clubs within BC.

ORIENTATION CUES

During the year I lived in Peterborough, England, I felt lost all the time. The land there is very flat for many miles around, clouds generally hide the sun, very few tall buildings exist, and the road network has virtually no grid system. Even after several months of walking, cycling, driving and riding transit, I had only the vaguest idea of where my place of work was in relation to my house.

I have often wondered about this because I generally feel that I am good at forming a mental image of my position and how it changes as I move. I think we take many cues from our surroundings which help us keep this mental image updated and correct. Shadows, wind direction, distant hills, the sun, slope trends, major drainages etc. all contribute to our sense of orientation. In Peterborough, these cues were often absent or masked and I was frequently confused.

Some of these ideas are applicable in orienteering because the map and the compass are not the only cues we use to keep oriented. The sun, major hills, wind direction, rail lines, even the sound of a distant industrial process can help us keep oriented. As we move through an orienteering course, the more information from the environment we assimilate, the more likely we will keep in good contact and have a successful run.

John Rance

CLUB CORNER ~ Accent on SAGE

Due West interviews Alan Vyse, new president of SAGE

DW: Give us a brief biography I was born in the NE of England and somehow found myself taking forestry at Aberdeen University, graduating in 1964. I came to Canada immediately after graduation. I arrived green, with $30 but without my rubber boots (they weighed too much and I couldn't afford the excess baggage fee … I still have this image of abandoned boots weeping silently in a dusty airport corner). To my surprise, I arrived in Canada in the midst of Beatlemania and the great flag debate. Since my hair was shaggy, my nose was beaky, and I talked with a funny English accent, I was a clearly a close Beatle relative to certain impressionable Canadian girls. Naturally I was too dumb to take advantage of this. I wasn't a Beatle, I told them. They came from Liverpool and I was a Geordie. This must have put them off, because the swooning girls soon disappeared, never to be seen again. The flag debate, however, went on and on.

I completed a second degree at Toronto in Forestry Economics and then worked in forestry research for the Canadian Forestry Service in Victoria and for the BC Forest Service in Williams Lake and Kamloops. I retired last year, but I have an emeritus appointment with the Forest Service and I have a research scientist appointment with the University College of the Cariboo.

Frances and I met at Aberdeen in a popular student bar called the Blue Lamp. To my amazement she drank Whisky and Crabbie's Green Ginger. She could also high jump 4'6" using the scissors technique. I was impressed with the long legs and her nerve. Anyone who drinks whisky with green ginger wine in Scotland has to have Nerve. Since I could pay for the drinks she followed me to Toronto in 1965 and we got married there. Thirty-eight years later we have two kids and two grandchildren, in that order, and all because of Whisky and Crabbies

Alan, happy (before Kooyora!)

DW: How and when did you start orienteering? Am I allowed three answers to this question? I began orienteering in the "modern" sense in the summer of 1986. A running friend told me about an event being held on the Kamloops Joyce Gulch map. I won the open class beating my friend by an hour, and I thought I was bloody marvellous. (He hasn't been seen since.) But my very first competition was at Blair Atholl in Scotland in 1963. I ran

in the 2nd Scottish O Championships on a 1 inch to 1 mile map. I had no idea what I was looking for within the circles on the map but I found 6 of 9 controls in 2 hours and finished second …. of three. The third person may still be out there on the fog-bound moors. However, I really began O in Boy Scouts. At summer camp we competed in patrols and one of our tasks was to hike around set courses on a 1 inch ordnance survey map. I found I could read maps better than most of my peers and so our patrol always did well. This made up for the fact that my camp cooking was nothing to write home about. In fact my mother would have been horrified. So I didn't write.

DW: What do you like about orienteering? This one is easy : reading the maps and running the woods. What a great combination!

DW: What kind of physical training do you do? Alone or with someone else/group? Mostly alone, or with Frances. I'm not a fan of group training. I guess I take the "loneliness of the long distance runner" seriously. Besides, groups mean organization and I do enough of that already. I cross-country ski in the winter and run trails in the summer. I hate gyms, and I never did any stretching until recently. I'm probably the least flexible person in the Western hemisphere. I can see my toes, but I can't reach them.

DW: What kind of technical training do you do, if any? Nothing serious but I loved the Blue Lake camp with those zany Alberta folks.

DW: What is your favourite kind of terrain? I can tell you my least favourite terrain … all those damn granite boulders and rocks amidst the fog of 3 m high wattle bushes at Kooyoora State Park in Australia. Roughly translated Kooyoora means the land of many many granite boulders that are very very hard to find.

DW: Why do you think that you are successful in orienteering? I'm not sure I am successful in a competitive sense. But I'm successful in that I enjoy myself every time I go out on a map (with the exception of Kooyoora State Park of course).

DW: What are your plans for the club in your first year as President? Since I didn't run for election on a platform, and my election expenses were zero, I'm still contemplating the answer to this one. Get through the season without losing anyone? Our biggest problem in the club is avoiding burn-out. I think I'll be good at that. We'll also have fun figuring out how to use the SI system in club events and getting a new map started. We'll also try to get O back on the Summer Games program for Kamloops in 2006.

DW: Do you have any longer term goals for SAGE? If so, what are they? I'd really like to see O grow in the Kamloops area, especially among young people. We need more people to help put on events for one thing. But I'm a realist. I believe we have to do a good job of presenting O to the potential audience but do this within our volunteer resources. And then we have to stop worrying. Life is too short. If the demographics and social trends are with us, great, if not, too bad.

ELECTRONIC PUNCHING

Past, present, and future

History

Before the computer was introduced at orienteering meets, the administrative part of organizing a competition required huge amounts of manual labor. Many Scandinavian events have thousands of participants. Today it almost seems like a mystery how they could pull off even the registration for an event like O-ringen using only pen and paper. Not to mention manually calculating the time for more than fifteen thousand runners and checking a quarter million punches on the day of the race. The large number of people that were required to handle these tasks has now been replaced by a small group of computer engineers and their amazing machines.

In the early eighties the computer was starting to be used to handle registration and to calculate running times at orienteering events, but it wasn't until 1993 that the entire competition administration was computerized with the introduction of the Norwegian Regnly electronic punching system, which was developed in association with the Norwegian and Swedish orienteering federations. The system added a new dimension to the sport and despite many initial problems with the technology, it was clear that it was here to stay. The definite breakthrough came in 1995 when the two companies, Regnly and Timetech, merged to form Emit and the system was used at the World Championships in Germany and at the Tiomila relay in Sweden.

Emit enjoyed several years of uncontested presence on the market and in addition to being used at the really big events it was also starting to be used at smaller local meets all over Norway and in parts of Sweden and Finland. Then suddenly in 1997 there were rumors of a competing system being developed in Germany called SportIdent. A prototype version of the system was displayed at O-ringen in Umeå and it was very well received by the orienteers that tried it. It was evident that the developers had focused on making their system easier to use for the runners, which was where the Emit system had its weakest points. The new system was aggressively marketed in 1998 and before the year was over it had gained dominance in continental Europe. When O-ringen decided to use SportIdent in 1999 it was clear that this system was going to take a huge part of the market in Sweden as well.

Today Emit is still used at all events in Norway and in some districts of Sweden and Finland that invested in the system in the mid-nineties, but the company has far from given up. In fact, both SportIdent and Emit are aggressively developing their products, introducing improved control units, punch cards with displays and online control units that can send

data to the competition centre using radio. SportIdent has had problems with failures of their new online units and Emit recently signed a deal with the organizers of the world championships this year in Sweden, so it is probably a safe bet that both systems will live on and compete for the good graces of the orienteers in the world.

SportIdent - Emit Comparison

The two competing punching systems are actually significantly different in their design and use. Emit was originally designed to replace the needle punches, eliminate the manual punch control process and give the runners split times. The official timing was done with a separate race clock and a person pressing a button on the finish line, the same way timing was done with manual punches. In fact, most races I have run with the Emit system up to this day have been timed this way, even though you can use a finish punch just like with the SI system. Both the Emit control unit and punch card come permanently sealed with a non-replaceable battery. When the battery runs out you have to buy new equipment. The control units and punch card come with a five-year guarantee and an expected lifetime of eight to ten years. The latest version of the punch card, incorporating a display, has an expected lifetime of ten to twelve years or 600 races, whichever comes first. Emit has received a lot of criticism for their non-replaceable battery approach and their response has been that this choice has made the product cheaper and simpler to use. They also argue that within the expected lifetime of the product, the system will have evolved and improved so much that you would invest in new equipment anyhow - an argument that does make sense when you consider the furious rate of evolution of electronic and computer technology.

Figure 1: The Emit system.

The Emit control unit is smaller and simpler than the SI unit. It doesn't contain a clock like the SI unit does. Instead the runner's punch card has its own clock inside. The Emit unit doesn't beep or blink when you punch it and it cannot be programmed. It comes preprogrammed with a code number and there is no way to interact with it in any way. When the first runner punches the unit it turns on for ten hours. Since the unit cannot confirm that you have actually punched the control, it is possible to place a small spike in a unique position in the unit that makes an imprint on a piece of paper that you place in the punch card. This is the manual backup

in case the unit fails. From an organizers point of view it's as simple as it can get. The only thing you have to do is place the right unit at the right control; you never have to bring all the units back to the finish area for reprogramming at multi-day events. The system is even used in permanent courses where the units stay out in the terrain year round. The control unit really is as simple as an old fashioned needle punch.

The weakness of the Emit system is the punch card. It's much bigger than the SI card, almost the size of a credit card, but thicker. You normally hold it in the palm of your hand and you cannot hold a compass with the same hand. When you punch you have to place the card in the unit in the right direction and with the paper side down, so that the spike can mark the paper for manual backup. The problem with the paper backup that you attach to the punch card is that it is quite easy to lose during your adventures in the forest. Even though Emit supplies a special type of paper it is especially vulnerable in rainy weather. In races like Tiomila that have used Emit since 1995, the ground around the controls is usually littered with lost backup paper! The manual backup system and the fact that the unit itself doesn't give any punch confirmation is the second thing that Emit has been massively criticized for. The answer from the company is that it was a "political decision made together with the Norwegian and Swedish Orienteering Federations". The reasoning behind their decision was:

1 Without a confirmation signal the runner will not know if there is a unit failure and will thus never be disturbed by it. The manual backup will take care of the failure. Also, this will eliminate the need for standard punches to be placed at every control for backup.
2 A confirmation signal will make punching slower since the runner has to listen to and/or look for the signal.
3 Signal confirmation becomes a problem when many runners punch at the same control (holding several units) at the same time.

When SportIdent started to develop their system they looked at the Emit system and focused on making the punch card smaller and the punching process non-directional. The solution to the latter problem is obviously a circle, so they decided to go with a small stick that you place in a circular hole. To make the punch card small enough to fit on a finger, they could not afford to put a lot of logic in it, so they moved all intelligence and the power supply to the control unit. The punch card only holds a small memory and the power is supplied to it through induction from the unit when you punch. The control units give confirmation in the form of a light and a beep when the time of the punch and the code of the control have been transferred to the card.

There are more runners than organizers in the world and SportIdent marketed their system aggressively to this group, and it really is superior to Emit from the runners' point of view. The punch card is small enough to wear on a finger on the outside of the hand. It doesn't interfere with holding the map and the

Figure 2: The SportIdent system.

compass and it's easy to punch from whatever direction you come into the control. The confirmation signals from the unit do have a psychological effect that Emit underestimated. The box seems more alive and runners feel more secure that they have actually punched. The paper backup system Emit use doesn't create the same level of security.

The weakness of the SI system is instead the control unit. Each unit has to be programmed before the event with a control code and the time the unit will turn on and off. All the units have to be programmed from the same computer so that the clocks will be synchronized. Programmable units do create flexibility, but also complexity, which we have enough of already in organizing orienteering events. There are endless examples of organizers who have made mistakes programming the units or simply mislabeled them with the wrong code. SportIdent tried to make this procedure simpler by introducing a new mode in which you can program the units, called training mode. This mode makes it possible to give the unit a permanent code so that you don't have to program it before use. Unfortunately, the unit cannot turn on automatically when the first runner punches it. Instead you have to swipe it with a magnet to activate it, which limits the usability of this mode at bigger meets.

Also, since there is no manual backup built into the system itself, the organizers have to place needle punches at each control beside the SI unit, creating a lot of extra work. Recently, though, it has been approved to skip the manual needle punches if every control has at least two units. But how many clubs can afford to invest in double the number of units they actually need? Finally, the unit comes with a relatively short term battery pack that is very awkward to replace.

Future

Some people in the orienteering community are of the opinion that the new technology is now controlling the organizers, rather than the other way around, that the development has gone too fast, and that it has changed the sport in the wrong direction. No matter

what your opinion might be on this matter, there certainly doesn't seem to be a slowdown in the development or a lack of new ideas. The driving force is to make the sport more accessible and attractive to the media, to orienteers in their homes through the web, and to the spectators at the actual meet.

Many of the major European events have professional announcers, who demand fast and accurate information from the controls in the forest to do their job. Both SportIdent and Emit have been working on developing online control units that use radio to automatically send punch information to the announcer at the finish area. The first tests were carried out in the mid-nineties, but it hasn't been until now that this technology seems to have matured and is being used regularly. This equipment is still very expensive, though, so some organizers have used a simple wire to transmit data from nearby controls (like spectator controls) to the finish.

The focus for future development of the control units is now shifting to cell phone technology. This industry is huge in Europe and especially in Scandinavia, where the Swedish Ericsson and Finnish Nokia are dominating the entire economy of the area. New cell phone standards are being developed that will allow much higher data transfer rates and almost 100 per cent coverage. It is not unlikely that the future control unit will in fact be a cell phone that can automatically send data to the competition centre and also be programmed remotely by calling it up from a normal personal cell phone or a computer.

Another exciting area of development is to use the web for live coverage of big meets. Last year I followed several events live from my desk here in Vancouver. Most meets offered text comments and results that were updated at regular intervals and in a few cases even the sound from the announcer was broadcast live. For example, I was able to follow last year's Tiomila listening to Per Forsberg, the leading announcer at big meets in Sweden, broadcast live on the Internet from the dark forests of Sweden. Pretty amazing!

SportIdent in BC

The clubs of British Columbia invested in SportIdent equipment about a year ago. The major goal for OABC was to use the system at the Canadian Championships in August. To prepare for this, the system was first tried out by GVOC at their Weekly Evening Training (WET) events, at the Determinator final, and at the Aspen Grove two-day meet. All these events were very useful learning experiences but it wasn't until the BC Championships in May that we had a full-scale test of the system.

I won't go into much detail on the BC Championships, but overall everything went very well. Even though there were times when I felt we were unprepared and disorganized, everyone involved did an amazing job to solve all of our problems. The most difficult issue turned out to be sending people off at the right time at the start. The vacant spots on the start list created confusion and many runners were called up one minute early. The correct thing to do to avoid this is to have a clearly readable clock at the start

line, so that the runners can see the current race time and detect the error. Later in the year the system was successfully used at the Canadian Championships and at the GVOC Championships.

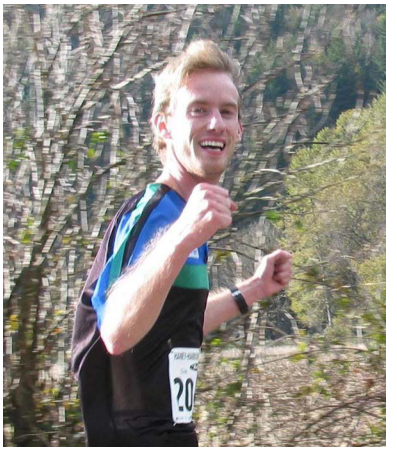
The key to being successful with the SI system is to be educated and prepared. A recent study in Sweden showed that almost all failures depend on the human factor rather technical problems. The two dominating factors were incorrect programming of the units and not testing out the computer network before the day of the race—things that are easy to avoid if you know what you are doing. In the future, SI training will be included in the Level 1 Clinics to get the knowledge out to as many people as possible.

Since there are not that many big meets organized in BC every year, the SI system sits idle for much of the time. It would make sense to use the system at local training sessions but many hesitate to go through the hassle of programming the units and bringing a computer out to the forest. To avoid all this you can program the units in Training Mode with a permanent code number. When the units are swiped with the magnet they are activated for a preset amount of time. The thermal printer that comes with the SI system can be used to give results instead of a computer. As long as individual starts and a start punch are used, this setup works really well. Of course, this setup will not give automatic punch checking because you need the computer to do that, but this is probably not needed for a training session anyhow.

GVOC has a training kit, containing an SI case containing the thermal printer, four control units, one clear unit, one start unit and one finish unit. This simple use of the SI system was tried out at the WETs, but it turned out to be a bit awkward because of the mass start format, for which a computer is needed to get the correct running times. However, you can program zero time of the units to be the estimated mass start time, and provided that your event starts on time, the competitors will receive accurate splits and finish times. You probably want to manually time the event as well, because unless you collect everyone's thermal printout, appropriately identified, you won't have a results to post on the club website!

Even if the system is not used on a weekly basis, it's still a great investment for the orienteering community of the province. It's the future of the sport and it's very important to be a part of it.

Magnus Johannson



Magnus Johannson in Haney to Harrison Relay, fall 2003

SPLITS & SPIKES

GVOC'er, Louise Oram takes to the waves. Louise is sailing the Pacific aboard the traditional wooden 115 foot gaff-schooner, the Pacific Grace. The Grace is owned by the SALTS (Sail and Life Training Society) organization in Victoria, BC, and left Victoria in September for its maiden offshore voyage in the Pacific. Louise boarded in Puntarenas, Costa Rica in mid-January for Leg 3 of the voyage. The ship's planned itinerary includes Cocos Island, The Galapagos, Pitcairn Island, The Marquesas and Hawaii, where she will disembark in mid-April.

At www.busunsmate.org you can see the ship's current position on a satellite image, read the ship's log entries, and have a virtual tour of the ship.

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