



# FINISH LINES

A NEWSLETTER FOR OPERATORS OF TECHNOLOGY FROM LYNX SYSTEM DEVELOPERS, INC.

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## NOTES FROM THE EDITOR

*Nora Courtney - Customer Service Co-ordinator*

At its elemental level, Lynx technology serves the very important function of ensuring fairness in competition. Using Lynx technology, a question of a false start, or a tight finish, or the accuracy of a throw or jump can all be answered with assurance.

But the benefits of technology exist on many levels. Technology is the base from which information is generated that rises above the principals of fairness, so that it can inform and entertain. Imagine tying together all the data generated at a meet and offering it to your athletes, coaches and spectators in real time. Marks, standings, start lists, running time, splits, reaction times, finish times and results...all of these can be displayed at the tap of a stylus or by a touch on the keyboard.

Lynx technology shows itself through the quality and quantity of information that is generated and disseminated.

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## FSB KÖLN

*A trip to a city with a hugely popular trade show...and sausage by the meter.*

Every two years the city of Köln in Germany hosts the FSB sporting trade fair. With the assistance of our European resellers, Lynx was in Germany at the beginning of November for the 2001 show.

This was the first time that Lynx had attended the FSB, but it clearly will not be the last. The show was a major success on many fronts. The display featured technology from Lynx and Microgate and technical expertise from the high-level staff from Imhof, Microgate and Lynx.



The FSB team comprised Sonja Kleiner and Ingo Göppert from Imhof; Federico Gori and Vinicio Biasi from Microgate; and Giles Norton and Paul Lambert from Lynx. Although the team could not cover quite as many languages as FinishLynx, thanks to the multi-national makeup they were able to communicate with prospective clients from dozens of countries.

*(continued on page 2)*

## LYNX HEADS TO MOBILE

*The USATF Convention, 2001.*

As is always the case when we get to the USATF convention, people want to know what is new in Lynx technology. Last year, LaserLynx was the standout new product. This year, it was RadioLynx. And why not? The prospect of eliminating start wire was enough to grab the attention of anyone who has ever set up a Lynx system for a meet.

RadioLynx is the new wireless start system that works with your EtherLynx system. The RadioLynx package consists of transmitter and receiver units, start sensor and the Serial Wireless software plug in. The Starter carries a small transmitter, weighing only ounces, with a short length of cable connected to a Normally-Open Start Sensor.

The Starter uses RadioLynx in the same fashion as a regular wired start. The time stamped signal is relayed back to the receiver unit. The receiver unit is connected to the serial port on your Connection Box. If there is any

interference with the signal sent from transmitter to receiver, you can resend the time stamped start signal any number of times until it is received.

RadioLynx will take over the serial port on your C-Box. If the "loss" of a serial port is going to cause you any consternation, just ask us how you can expand your technology configuration options using SerialLynx and VCPD.

## ROWING IN BEANTOWN

*The ballroom at the Copley Marriott is filled with racing "eights".*

The USRowing Annual Convention was held in Boston in December of 2001 and Giles Norton and Lucia Wade were in attendance at the event. They used the opportunity provided by the hometown location for this show to meet facility managers, coaches and race directors. Information was shared back and forth between these two groups.

Giles and Lucia were able to present the concept of Lynx technology to a number of new people and they in turn learned more about the technology needs, and desires, of the rowing community. *(cont.)*

## Table of Contents

FSB KÖLN	1
LYNX HEADS TO MOBILE	1
ROWING IN BEANTOWN	1
MILLROSE	2
FIELDLYNX	2
LYNX TIME ON THE TODAY SHOW	2
WHICH UPGRADE PROFILE DO YOU FIT?	2
TIPS OF THE TRADE	3
TECH CORNER	3
HALL OF FRAMES	4

Lynx was invited to attend the Convention by members of USRowing. We are certainly pleased with the relationship that has formed between Lynx and USRowing in the last two years.

Beyond welcoming USRowing as a Lynx client, we have trained and worked with some of their operators and through collaboration, brought Lynx a greater understanding of the sport and Lynx technology's place in it. With USRowing, we have had the opportunity to showcase the benefits of Lynx technology to many in the rowing community.

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## FSB KÖLN

*(continued from page 1)*

Besides the obvious benefits of meeting new clients, one of the highlights of the show was the opportunity to meet and talk with other manufacturers and suppliers from Asia, Europe, the Middle East and the Far East. With a full range of our products on display we were able to give hands-on demonstrations of the very latest technological advances from Lynx.

Members of dozens of National and International sporting federations also came to talk to us, and frequently the display was so busy that people had to return time and time again in order to have the opportunity to share information with one of the team members.

The evenings were almost as busy. Meetings continued over dinners where we had the chance to meet up with old friends who included Santiago Palomera and Carlos Torres from Mondo Iberica and Roger Smith from HS Sports...and where Vinicio discovered that you can, in fact, buy sausage by the meter in Köln.

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## MILLROSE

*Things go smoothly when there's a Lynx in the Garden.*



It's hard to know whether the Millrose Games at Madison Square Garden are enjoyable or not – for the officials that is. On the one hand you have the kudos and the excitement of one of the premier indoor track events in the World, and on the other hand you have the complicated logistics of setting up at the Garden.

However, when Track and Field legends

like Howard Schmertz – the Millrose Meet Director - write letters like this to you afterwards, it all seems worthwhile:

“Thank you one and all for your dedication and expertise in once again producing an exciting Millrose Games that moved flawlessly from beginning to end. You produced the meet with the precision essential for a live two-hour TV program...Thanks for the participation of the First Team and your great contribution.”

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## LYNX TIME ON THE TODAY SHOW

*Doug DeAngelis on the morning talk show circuit?*

Katie Couric of the Today Show put in a call to Lynx President, Doug DeAngelis, recently. Doug thought it was a joke of some sort when he got the message but it was Katie after all, doing some research.

In the ramp up to the Winter Olympics, the Today Show produced a segment on the sport of Speed Skating. Eric Flaim, four-time Olympian, two-time Olympic medallist and the only American to medal as both a long and short track speed skater, did his best to explain the particulars of each sport to Ms. Couric.

The onscreen conversation turned to the technology that surrounds the sport of Speed Skating, from the hooded skin-suit Katie was wearing to the technology that could determine a finish down to 1/2000th of a second.

Doug supplied a Lynx image that got some airtime during the segment. The image was from a World Cup event in which U.S. skater Apolo Anton Ohno's victory was decided by 7/1000<sup>th</sup> of a second.

Lynx operators have certainly seen such fractions of time that mean one place or the next. The time precision and what a single second in a race can mean to an athlete made an impression with Katie.

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## FIELDLYNX

*In demand with USATF Officials.*

FieldLynx is certainly in demand. Sales of the product have spiked in the last few months and show no sign of slowing. We like to think that the technology is selling itself, though it could be the fact that we have advocates in the field that are making a real push to get officials trained in using this product. Each unit that leaves this office to be used at an event increases the visibility of this powerful event management tool. Each official that learns the software can in turn teach others. This has certainly factored into the recent surge in sales.

George Kleeman was instrumental in getting almost 200 FieldLynx emulators into the hands of USATF Officials while we were at this year's convention in Mobile, AL. Lynx produced a CD that,

along with product information and software, has an emulator that will allow you to preview and practice FieldLynx Version 2.0 from your computer screen using your mouse as a stylus.

George organized an hour-long seminar in which Lynx was able to demonstrate the software to a room full of highly experienced Field Event Officials. Those in attendance had the opportunity to ask event specific questions and try various scenarios with the 2.0 emulator. It was a learning experience for all as experts in their events put FieldLynx to the test.

Jim Hume has also been busy with FieldLynx Clinics on the West Coast. Jim has recently come back to Lynx to purchase 12 FieldLynx software licenses after an initial purchase of 8 in the fall. I recently asked how his clinics were progressing. He responded that,

“The Officials Committee of the Pacific Association/USATF has conducted four clinics to teach our officials how to use FieldLynx. The association bought six Palm Pilots, and a number of other officials either bought their own, or already had one. As a former teacher, I created a nine page teach yourself document leading students step by step through using FieldLynx.”

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## WHICH EXPANSION PROFILE DO YOU FIT?

*System upgrades are in the spotlight. Read how a wide spectrum of Lynx owners have expanded their capabilities over time.*

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### UPGRADE PROFILE #1 Brewer, ME.

Brewer has been with Lynx since the early years. This is not surprising since company founder Doug DeAngelis graduated from Brewer High School. The theft, and subsequent recovery, of their system in 1997 did not stop the crew from Brewer from growing their system and their skills far beyond the day they first unpacked the system.

The team from Brewer moved the system around quite a bit timing events. This generated their solid reputation with the use of the equipment and brought them more events in turn. Their purchase of a running time clock benefited their timing services as well as the track team at Brewer High School.

The Maine Distance Festival has been a hallmark event for the Lynx operators at Brewer. It has also allowed them to generate income that was funneled back into their program. They have sold race images at the Festival for the last few years to athletes and spectators. The demand is always high for race images printed on paper, laminated or heat transferred on to t-shirts.

The operators at Brewer have made the system pay for itself and then some. In the

past few years, Brewer High School has been able to purchase 8 FieldLynx units, a two-lane ReactTime Sprint Training System, and an alphanumeric Infield Display.

This leaves the Witches of Brewer with a well-rounded system of Lynx technology. With training devices, meet management through Lynx technology at the finish line and at field event venues, to the presentation of information to inform and entertain, Brewer has it covered with the system they have built through the years.

**UPGRADE  
PROFILE #2  
Baton Rouge, LA**



One of Lynx's first customers was Louisiana State University. When they recently upgraded to the EtherLynx hardware, a few of the cameras they returned to Lynx had serial numbers in the single digits.

LSU has made upgrades to their system throughout the years. They added a Classic Color Camera when it came on the market, and did the same when Lynx began to offer the Remote Positioner and ResultTV.

In 2001, LSU sent Lynx six cameras and two Timer Boxes towards the purchase of one of the most advanced systems for Track and Field in the United States. Six EtherLynx Color Cameras could allow them to run two independent systems at one finish and cover three or four alternate finish lines at once.

The management of their field events has also taken a leap forward in technology this past year. LaserLynx, multiple FieldLynx units, and two Infield Display boards can communicate without wires thanks to the number of Wireless SerialLynx units they now have in place at LSU.



**UPGRADE  
PROFILE #3  
Boston, MA**

Boston University upgraded their SCSI hardware to EtherLynx and their software from DOS to the Windows-based FinishLynx32 in 2001.

In addition to new Finishlynx hardware and software, they will go wireless in 2002 by using two more recent Lynx products, ClerkLynx and Wireless SerialLynx. We made mention of ClerkLynx in our newsletter dated May 2001 when it was used at the Penn Relays. That was its first field test. It is now another Lynx product that fits within the larger picture of Lynx technology.

Boston University will be able to create start lists "on the fly". A list of athletes created at the start line and sent via Wireless SerialLynx can be imported into FinishLynx seconds before a race, or during one. ClerkLynx will allow the Clerk

to seed athletes at the start line from a .ppl file generated by Hy-Tek.

Ideal for an All-Comers Meet, B.U. has already put the technology to use.



**UPGRADE  
PROFILE #4  
Durham, NC**

The Durham Striders Track Club added the RadioLynx Wireless Start and a MicroTab display to their technology setup after seeing both at the USATF Convention in Mobile. They also purchased a copy of VCPD and a SerialLynx unit in order to use these latest additions to their system in a configuration of their choosing.

They are now able to run two pieces of hardware, RadioLynx and the MicroTab display board, in the infield. Despite the fact that RadioLynx is connected to the serial port on their connection box, they are able to drive their new MicroTab scoreboard by installing the VCPD software on their FinishLynx computer and connecting it to their SerialLynx unit.

The people at Durham Striders had visualized a setup and Lynx was able to help them achieve what they wanted with some discussion and by putting the right Lynx technology in place.

## TIPS OF THE TRADE

*Matsport comes up with a simple but effective solution to marking lane lines in bright sunshine.*

Ever arrived at a track only to discover that the black squares on the finish line marking the lanes were either missing or damaged? Ever wondered about the best solution?



Some operators, like Mo Haneef carry a small bottle of black shoe polish, some a spray can of black paint and masking tape. The problem is always the same in bright sunlight the sun can reflect off these temporary solutions and make the markers practically invisible.

Benoit Tanniou of Matsport gave us this tip: take a roll of black tape about 5cm (2") wide with you. Pull off a piece about 10cm (4") long and fold it as shown in the diagram above. Then place it on the finishline at the intersection of the lane lines, so that the middle portion stands up from the track facing the camera.

Repeat this process for every lane. No matter how bright the sun is, the vertical portion of tape will register as black on your FinishLynx image. The soft tape is no threat to the athletes, and even if it gets trodden on, it will spring back into position. If one gets totally destroyed, it is only the work of a moment to replace it.

## Tech Corner

### Battery Care

In order to maximize the battery life in the SerialLynx and ReactTime units, some forethought must be given to their maintenance. You will need to create a balance between not charging the units too frequently and having them ready when they are needed. To accomplish these seemingly disparate tasks, we recommend you periodically recondition your rechargeable batteries. A recondition consists of 3 to 5 cycles of full drain / full charge of the batteries. This should be done one or two times a season.

The portable units use Nickel Metal Hydride batteries. Battery memory effect is the term used for capacity loss on nickel-based batteries. Periodic reconditioning of the batteries will negate the memory effect, or the chemical reactions within the batteries that affect its capacity to charge to 100%. As an example, a battery at 60% will be fully recharged with a 40% charge. Over time, a battery will remember these partial charges, the memory effect, and diminish the charge capacity of a battery. Therefore, you could be running the batteries below 100%, though the unit indicates it is fully charged.

This can be reversed with user maintenance. In preparation for an event, between the periodic reconditioning of the batteries, we recommend that you fully discharge the batteries 2 days before an event. The day before an event, fully charge the batteries and remove the unit from the charger when it indicates a full charge. The batteries should take 8 hours to discharge if the unit is inactive and began at full charge. The charge should take 4 hours.

Fully charge the batteries before storing the units in the off-season. The batteries will slowly drain during this time and therefore we recommend a full recondition at the beginning of the next season.

*A word of warning to those new to the world of hand-held PDA's.*

Information stored on a PDA and any applications you have added will be lost when the batteries run out. Programs like FieldLynx will need to be reinstalled. No worries, but some forethought can save you time and possible frustration.

You have 1-2 minutes to change your batteries without fear of losing information or applications. Keep a pack of AAA batteries handy and change batteries with a frequency reflective of use. To plan for the possibility of program loss, keep a copy of FieldLynx on a disk or computer, have access to your serial number and pack your cradle with your computer.



# FINISHLYNX HALL OF FRAMES

## WHICH ONE OF THESE DOESN'T BELONG?

*Is this the latest in baton technology? Lynx caught this image at Millrose in 2002. Of course, a reverse angle camera was able to capture the true third place finisher, seen here obscured by a mass of cotton candy, in the PSAL Boys 4X400M Relay.*



## HIS BEST TIME YET



*The official in the foreground made numerous finish line crossings at this FinishLynx timed Cross-Country event. He is captured here with his best time of 32:26.4.*

## LEAP FOR FIRST

*Roger Jennings of Flash Results supplied this image in which a long-jump competitor seemingly beats the pack to the finish line.*



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