

With a little help from my friends: the evolution of the KerriKart

GTC member **Bill Kerrigan** faced a problem, found a solution, then realised it could have the potential to be marketed. Here he tells the story of bringing the 'KerriKart' to market, with a little help along the way from GTC Forum members and, in the latter stages, quite a lot of help from Matthews Studio Equipment (MSE).

Carts and sliders

Over my more than 35 years in the industry, I've worked across a range of productions and across different media, perhaps the biggest switch being from film to video. Throughout this time my production equipment has evolved dramatically – but amidst all the change, I was still using the same 4-wheel Magliner Gemini Jr cart, bought way back in the mid 70s. Various companies have added shelves and made wheel modifications to this cart, but basically not much has changed and it's still an industry standard.

Then, with budgets and crew sizes becoming ever smaller, and less time to prepare dolly moves, I became an early adopter of the slider. Faster paced editing has meant shots are typically shorter and the slider made sense. Over the years I've built one slider dolly and purchased four.

But even sliders take time to assemble so, in order to speed things up, I would mount the slider on two rolling stands with

a supporting bar attached to the bottom of each stand and roll the rig – including the camera – from location to location.

This system was far from perfect though, requiring two different sized stands for high and low camera heights – a total of four rolling stands. Also, when shooting with larger cameras, the makeshift slider wasn't stable enough, supported by just the pins of the two stands. So, my contraption became even more complicated, now incorporating four stands with two crossbars to ensure a stable slide. This, in turn, meant a second equipment cart to transport the four rolling stands for the high shots and four for the lower ones – a total of eight – plus the sliding gear ... and so it went on!

There had to be something simpler.

R & D

Every morning I typically read six different industry forums, so I decided to ask other forum members about their cart

solutions. By far the most knowledgeable and helpful were the GTC contributors. As part of the quest, I also attended the National Association of Broadcasters (NAB) trade show in Las Vegas, but was unable to find what I was looking for.

I decided there was nothing for it but to get stuck in and make my own cart with slider. At first I tried to adapt the cart I already had but soon realised this wasn't going to work. It was time to start from scratch.

I needed one piece to carry all my production equipment. It had to be strong, fast and easy to assemble, with two shelves, and should be light enough for one person to lift but also robust – meaning weatherproof and able to traverse all kinds of terrain easily – and yet still fit into a minivan or small SUV.

For the slider platform, quick set-up was a must, as was a stable base. Then I thought about the two speed rails for the slider/dolly; these had to be movable and I figured from ground level to just over 6ft was the most useful range.

This combination of features would eliminate the eight rolling stands and accommodate any size of camera and lens.

Then it dawned on me. Many of the grip parts I was already using were perfect for the job. The MSE catalogue became my bible and source of inspiration, while their dealer in Montreal was kind enough to allow me to tinker with parts in their stockroom, letting me return those that didn't work out.

The first build

I finished my first build in December of 2013 and the drawings and parts were handed over to Roger Sergerie, an expert veteran machinist of film equipment. My command of French and Roger's understanding of English are limited, so we communicated in the international language of 'Grip'! I thoroughly enjoyed the process of working with Roger and seeing my drawings come to life.

For each shoot on which I used this first prototype, I would modify the cart. I added riser pins for a softlight, which would act as a key light, and sometimes mounted a sound boom, but the most helpful addition was a support for my 17-inch monitor. Now I could focus on sliding the camera without having to look through the viewfinder.

Through use some problems became evident. For instance, the cart was too long and wide for small elevators. So, the next version was modified to 2 by 4ft. This would fit easily in the back of my minivan and I could still stow the risers, crossbars and clamps safely under the cart's wheels.

Popular in use

Meanwhile I was discovering that other crew members loved using the cart. It was a quick build once out of the van, took all the gear in one go and was easy to roll, even in the snow. On location, camera assistants would unload the cart and use the top shelf to build the camera. When we moved, they could store the lens bag and assistant kit on the bottom shelf. And clients loved the fact that, once built, the crew could move from location to location very quickly, potentially doubling the number of slides in a day.

It was at this time it began to dawn on me that other shooters might be interested in owning a cart like this. But how would I market it?

Marketing

The key to this was the Matthews parts. I knew that MSE have a reputation for nurturing new ideas, so I talked to their VP of Sales and Marketing, Robert (Bob) Kulesh. He was interested enough to ask for a brief outline: if he liked what

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Design brief for the KerriKart

The cart would need the following qualities:

- carry all my production equipment
- be quick to assemble
- strong
- two shelves
- roll over any terrain
- weatherproof
- as light as possible (one-person lift)
- easy to turn
- pneumatic tyres
- must fit easily into a minivan or small SUV.

The slider platform had to:

- be quick to set up
- give a stable base for sliding
- have two speed rails for a slider dolly
- allow the rails/shelf to be used from ground level to over 6ft
- eliminate the need for eight rolling stands
- accommodate any size camera and lens.



Final KerriKart prototype before production, with a Matthews Slider 70" mounted on its cross bars

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he saw, MSE would sign a letter of non-disclosure – and then the full design could be revealed. After receiving the NDA back, fellow cameraman Andrei Khabad helped me shoot a demonstration video and my stepbrother Scott Rogers created a SketchUp model and animation to show the full potential of the cart, including both 6 and 8ft rails.

When I met up with Bob at NAB 2014, he introduced me to the owner and president of MSE, Ed Phillips. They both said that they would like to see a prototype. What I hadn't realised was that this was an amazing coup. Many designers try to pitch to Matthews, but few make it this far!

To prepare this prototype, this time I turned to machinist Claude Fortier, who specialises in welding aluminum as I wanted version three to be lighter in frame.



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LA pitch

So, in early June 2014, I cleaned and polished my prototype, packed it up in a bicycle box and flew to LA. Now, I've pitched many film ideas over the years, but this was different. When I arrived, it wasn't just Bob Kulesh; Ed and Tyler Phillips and Rick Hansen were also there to meet me... and the cart was still in the 'trunk' of the car – in pieces.

As I hurriedly removed the parts from the car in the parking lot, Ed joked that this was one of the worst presentations he'd ever seen! Then they all pitched in – and it was together in minutes. Ed stood back and said: "I love the simplicity." I only hoped he meant the cart!

I left the parts in LA and went back to Montreal to work on version four. This time, with Scott Rogers' help, we built new 4ft and 8ft rails, which could scissor for easy packing in a minivan. We also added feet, so the rail could be used on the ground.

Meanwhile, in LA, Rick Hansen was anodizing parts, building two brackets, to attach Matthews sliders to the rails, and making two different prototype shelves from strong but light, honeycomb materials.



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IMAGES:

- 1 Standing on the KerriKart to film traditional maple syrup making for a documentary on Canada's boreal forest
- 2 The KerriKart in use as an equipment dolly to transport camera, lighting, grip and slider gear
- 3 Testing an ARRI Alexa on a remote stabiliser on the KerriKart prototype with 8ft rails
- 4 End position of an 8ft slide with Sony PXW-FS7 on a Dana dolly; the rest of the kit is stored on the bottom shelf
- 5 Bill Kerrigan demonstrating the versatility of the rail system – these can be used from ground level to 6ft



NAB 2015

MSE decided that we should test reactions to the 'KerriKart', as it was now called, at NAB 2015. When I arrived at the booth, I was quite moved to see the cart in the centre of the display. It was the first time I'd seen it with its smart new black parts. Rick had done a wonderful job.

At first I was a bit disappointed to see that most visitors seemed to be drawn towards the sexier Matthews equipment on the booth. The KerriKart, in comparison, looked rather simple and it wasn't very obvious what it could do. But once I managed to catch people's interest, they became very enthusiastic, especially when I explained it could make 8ft slides and allowed you to slide from ground level to over 6ft. If we'd had the final product in the booth, we could have made sales on the spot. Since then, the response has been steady.

This all started because I couldn't find the perfect piece of kit and so set about developing something to solve my own problem. Thanks to Matthews, I have managed to take this a stage further to develop a product that will help others in a similar situation. Together I think we have created something unique that will make the job that much easier, safer and quicker in today's fast-paced world of production.

The KerriKart is currently in production.











Fact File

Bill Kerrigan is a Montreal based DoP with more than 35 years experience. He has filmed TV series, dramas, documentaries, commercials and corporate videos in over 40 countries. A graduate of Ryerson University Faculty of Film Studies in Toronto, Bill has also taught cinematography at Concordia University and the National Film Board of Canada in Montreal.

MSE is a 45-year-old manufacturer of industry-specialised hardware, camera and lighting support in use in major studios in over 90 countries. The company has been honoured with the Presidential "E" Award for outstanding contributions to growing US exports and by the Academy of Motion Picture Arts and Sciences and the Academy of Television Arts and Sciences for Technical Achievement. MSE is the exclusive distributor of the FLOATCAM and POLLY DOLLY products throughout Asia and the Americas. See more: www.msegrip.com



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