

The *Artistic* Engineer

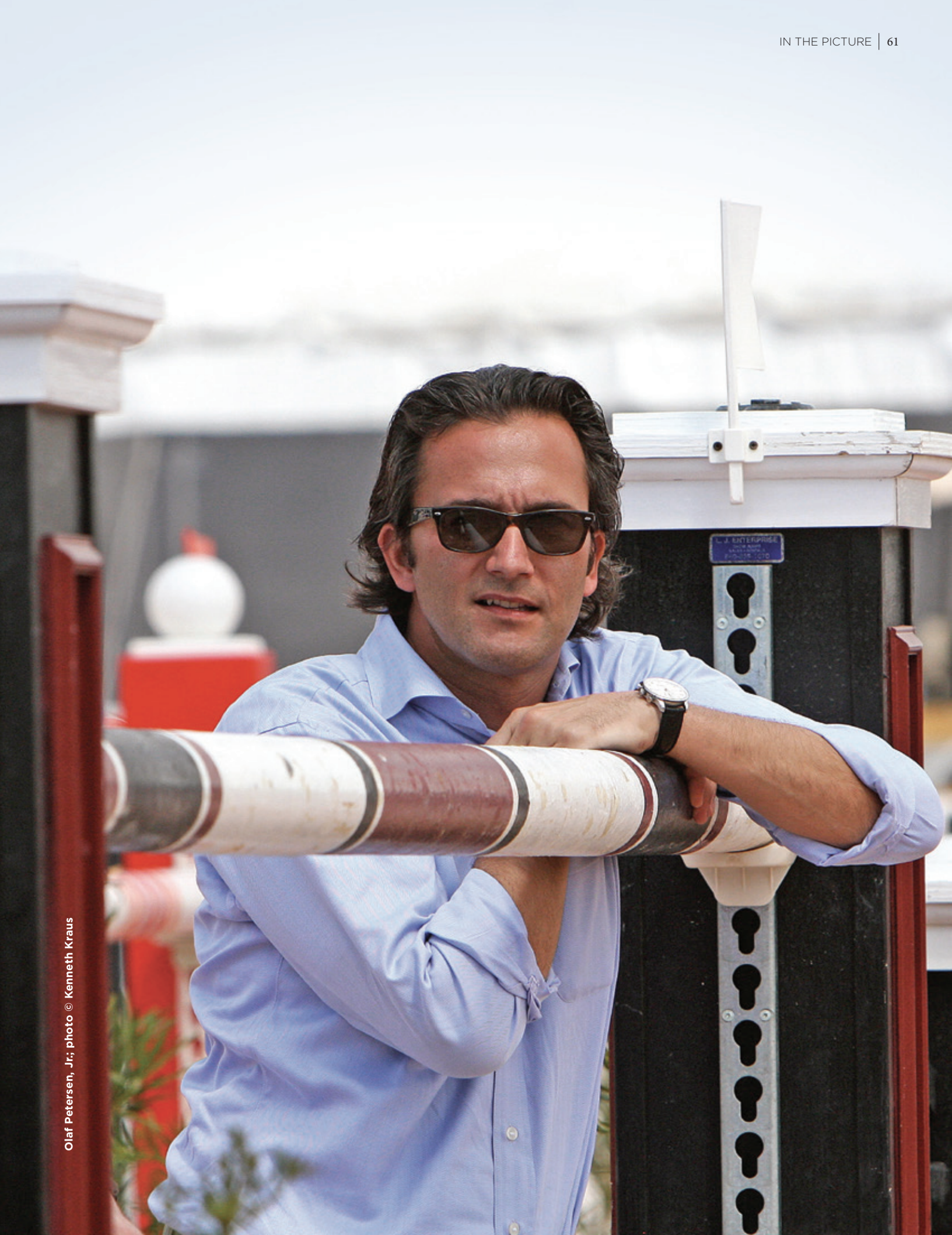
by Jackie McFarland & Nina Vogel

FEI COURSE DESIGNER, BUSINESSMAN & FATHER: OLAF PETERSEN, JR.

With fierce competition all over the globe, the sport of show jumping holds some of the most brilliant architects in the world. *Puissance America* sat down with world-renowned course designer Olaf Petersen, Jr. of Germany to hear his story and a bit about his artistic engineering.

Picture yourself as a rider about to enter the Grand Prix ring. Before you buckle your helmet and climb aboard your trusty steed, you walk the course on foot. You study the track that will test you and your horse's skills, that will demand your full attention, both physically and mentally. Based on the questions asked by the course designer, you create a plan with the goal of avoiding any and all errors, to ride the designed course of jumps fault-free.

For those who spend hours in the saddle in pursuit of jumping a perfect round – clean, quick and in first place – the course designer is an integral part of the path to success. For those who do not wear those type of breeches, the course designer may need an introduction.



Olaf Petersen, Jr.; photo © Kenneth Kraus



Having a unique combination of imagination, compassion, horsemanship, engineering expertise, hours of training in the field and a solid sense of good sport, the course designer creates the track that each horse and rider combination will follow in a particular class. Upon first glance, a course of jumps may appear to be pretty painted poles, panels and walls randomly arranged for aesthetics, but that is not the case. A highly skilled and educated individual spent hours determining where those jumps would be placed, the distance between each one and the order in which they would be jumped, all the while balancing factors like the level of competition, the ability of the horses, the quality of the terrain, the temperament of the weather, the inclusion of the sponsors and the presence of the audience. All this must be managed while devising a safe yet challenging track for the competitors as well as one that will wow the crowd.

AN INTRODUCTION

With show jumping experience up to the World Cup level, Petersen, Jr. is no stranger to jumping big courses. His father was a show jumper and his mother was a dressage rider, so horses were an integral part of his childhood. Having to attend horse shows every weekend and ride a wild dressage horse without formal lessons at a young age, however, Petersen, Jr.

was subject to a number of falls and developed a strong aversion to riding. It was not until he was sixteen that he picked up the sport with a newfound passion and interest. After gaining experience on practiced horses, he applied all he had learned to developing young horses. He had a four-year-old that he brought along all the way to the Grand Prix level. Inspired by his father, Olaf Petersen, Sr., Petersen, Jr. added course design to his repertoire at age 20.

As with every Olympic-level sport, show jumping has evolved immensely over the last century, especially in the last few decades. Similarly, course design has undergone changes and shifts to adapt to the athleticism of the horses and riders, as well as the various types of terrain and materials used to build courses.

In an earlier era of course design – around the time of the 1972 Olympic Games, as Petersen, Jr. remembered – the emphasis was on jumping high. The distances between the fences were of less importance and, relative to today, there was an overall lack of technical elegance. Petersen, Jr. cited his father as an important figure who brought a new level of technicality to the sport. This technicality, however, reached a point of difficulty that became hard to master. Petersen, Jr. remembered an

indoor championship that his father designed in the 1990s that verged on being too difficult.

“From there on I developed my philosophy, which is always the free, forward movement. A free, forward gallop should always be possible,” Petersen, Jr. explained. “Yes, of course, we have our tasks and we want to have faults here and there, but as a rider one should always be able to have that natural forward gallop.”

Petersen, Jr. has applied his philosophy to innumerable courses since his course designing start in 1990. After earning his International Course Designer status from the Federation Equestre Internationale (FEI) in 2002, he served as Co-Course Designer at the Olympic Games in Athens in 2004 before going on to design the South East Asian Games in Manila in 2005 and the Asian Games in Doha in 2006. Now an FEI Level 4 Course Designer, Petersen, Jr. has designed tracks for Longines FEI World Cup™ Qualifiers at over 13 locations in ten different countries.

HOW DOES HE DO IT?

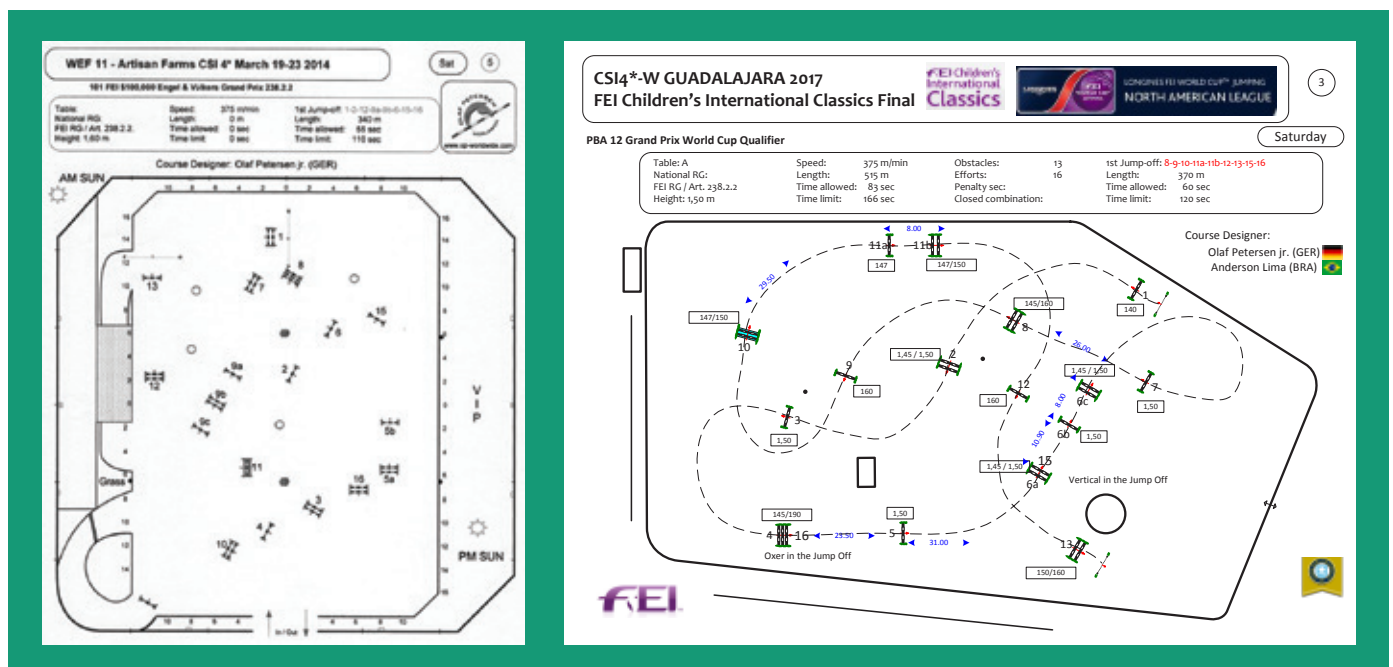
Before coming to life in the ring, courses are designed using software called Professional Parcours Design (PPD). Petersen, Jr. explained that since nearly every course designer uses PPD, they can easily exchange information – for example the specifications of a ring at a particular facility. The majority of the designing process itself happens during the days spent at the horse show, for the designer must gauge the level of

competition and build accordingly. Petersen, Jr. only prepares the first course of the show before arriving at the facility because the materials available, the horse and rider combinations competing, and even the quality of footing vary greatly. He tends to make that debut course on the easier side.

“It doesn’t matter if you have a lot of clear rounds,” Petersen, Jr. said. “You go from there. You see what you have and then you try to make the horses jump better every day until the Grand Prix.”

Years of experience are required, however, to accurately assess the pool of horses and riders present. Once the competition has been evaluated, Petersen, Jr. focuses on the flow. Though difficult, he must plan a track that encourages a positive rhythm with good lines. After that flow has been established, the details – type of jump; type of line; oxer to vertical or vertical to oxer; five, six, seven or any given number of strides – are decided. He also makes a point of using all the space available in the ring.

After all those key decisions are made and laid out, time becomes a consideration. Petersen, Jr. said that he “wheels” the course in the manner it is set, meaning in straight lines and with reasonable turns. “Wheeling” a course requires walking the track on foot using a measuring wheel to calculate distance of the course. This method determines the time allowed in meters per second. The course designer must be cautious not



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to wheel too tight, and similarly not too wide, in the turns, so the riders stay on track however it isn't too difficult to do so within the chosen time allowed.

Petersen, Jr. does value the time allowed, though, for it creates pressure for the riders to execute the tasks on course efficiently, making jumping accurately and fault-free a more challenging feat.

IT'S NOT EASY

Though the time on a course might be tight, the time it takes to design it certainly is not. Engineering different challenges with each course, without repeating the same questions asked in previous days, can take up to seven hours a day once at the horse show. Although often asked to predict just how challenging a track will be and just how many clear rounds will actually emerge, Petersen Jr. explains it is always a goal to have riders go clean, but one never knows.

"You can easily make it too difficult," Petersen, Jr. emphasized. "It's very delicate what we do, and yes, we need luck. It's the same as a rider needing luck."

He added with a laugh that you never hear riders attribute a class that went poorly to "bad riding" but always to the course designer.

Of calculating the correct level of difficulty, hoping for the best number of clear rounds, and generating enough excitement for all involved, Petersen, Jr. described the fine line a course designer walks.

"You are one against all the riders, but they should still like you in the end. So if it is too challenging they can't excel. But if they have no challenge, it's boring. They want a challenge. They want the horses to jump better and better and I think when that happens is when you are invited back as a course designer," he explained.

Along with the technical and mathematical elements, course designing also has an artistic edge to it, as each jump must be aesthetically coordinated. Colorful jumps create a warmer, more interesting visual in any ring. Petersen, Jr.'s father designs jumps, and Petersen, Jr. sells them through his OP-Worldwide company. After course designing at a long list of facilities, plus having a jump company, he values the ability to use a variety of jumps, ranging from interestingly painted rails to planks to walls to natural obstacles.

The surface of the ring is also a key factor, and Petersen, Jr. favors grass, though he acknowledged that grass fields are the hardest for a facility to maintain.

"There is nothing better than to look at a nice grass field with a beautiful setting of colorful jumps," he marveled.

PUTTING A STAMP ON IT

Like any medium of art, course designing has its properties, but the details are up to the designer.

"I think we all have our own handwriting, and that might change a little bit through time but not much.

I wouldn't change my style, my handwriting, because I see something different than another designer," Petersen, Jr. explained. "You learn from experience because even if you are at the highest level of course design, we don't have seminars where you can learn more. You learn by doing, by talking to the top riders and asking them how they see things and how they see the development of the sport."

Petersen, Jr.'s acclaimed "handwriting" has taken him all over the world, and yet he still has places he would like to go. CHIO Aachen in Germany and the Spruce Masters Tournament CSIO in Calgary are two prestigious events he has not yet added to his resume, but he is working on it.

Aside from having his own "stamp" in course design, Petersen, Jr. also runs a paper conversion company based in Poland and Germany that produces up to ten million envelopes a day. Although he can be found at horse shows up to the CSIO5* level from Europe to California (one of his favorite spots) to Canada to Guadalajara to Rio de Janeiro practicing his course designing craft, he wears his businessman hat when at home.

And above all, though, Petersen, Jr. is a parent. As passionate as he is about engineering a track that teaches and challenges, creating courses for top sport and traveling the world, he maintains that his children, Milena and Luca, are his best achievements and provide him with endless lessons of love and joy.