



INDIANAPOLIS

WHEN MOTORSPORT BRINGS BENEFITS AND GROWTH FOR EVERYONE: ROLLIE HELMLING TELLS US HOW THE INDIANA ECONOMIC DEVELOPMENT CORPORATION HAS HELPED TO CREATE AN ENVIRONMENT WITH ALMOST UNLIMITED POTENTIAL FOR THE COLLABORATION BETWEEN DALLARA, THE LOCAL AUTHORITIES AND THE UNIVERSITIES. AND THE NEXT STEP WILL BE TO INSTALL THE SIMULATOR AT THE SPEEDWAY

DISABILITY AND THE WORKPLACE

THE EXAMPLE OF ALESSANDRO ZANARDI SHOWS US HOW COLLABORATION AND COMMITMENT CAN LEAD TO SUCCESS, EVEN FROM SEEMINGLY IMPOSSIBLE SITUATIONS. WE PRESENT THREE EXAMPLES OF HOW DALLARA HAS MANAGED TO TRANSFORM DISABILITY INTO RESOURCE AND INNOVATION

AT THE HEART OF RACING

THE FIRST PART OF COMPLEX AND FASCINATING JOURNEY AROUND THE WORLD OF MOTORSPORT WITH ENGINEER ANDREA TOSO, WHO ACTS AS OUR GUIDE THROUGH THE HISTORY, THE HUMAN VALUES, THE PROSPECTS AND THE ECONOMIC IMPACTS OF MOTOR RACING COMPETITIONS





INDY A FANTASTIC WEEKEND

ONCE AGAIN THE 500 MILE RACE PROVED TO BE JEWEL IN THE CROWN OF THE AMERICAN MOTOR RACING CALENDAR. AN UNFORGETTABLE RACE, WON BY TONY KANAAN, AND ANOTHER CHAPTER IN DALLARA'S AMERICAN SUCCESS STORY



Indy 500

Sunday 26 May, 2013

- 1 - Tony Kanaan (Dallara DW12-Chevy) - KV - 200 laps
2 - Carlos Munoz (Dallara DW12-Chevy) - Andretti - 200
3 - Ryan Hunter-Reay (Dallara DW12-Chevy) - Andretti - 200
4 - Marco Andretti (Dallara DW12-Chevy) - Andretti - 200
5 - Justin Wilson (Dallara DW12-Honda) - Coyne - 200
6 - Helio Castroneves (Dallara DW12-Chevy) - Penske - 200
7 - AJ Allmendinger (Dallara DW12-Chevy) - Penske - 200
8 - Simon Pagenaud (Dallara DW12-Honda) - Schmidt - 200
9 - Charlie Kimball (Dallara DW12-Honda) - Ganassi - 200
10 - Ed Carpenter (Dallara DW12-Chevy) - Carpenter - 200
11 - Oriol Servia (Dallara DW12-Chevy) - Panther DRR - 200
12 - Ryan Briscoe (Dallara DW12-Honda) - Ganassi - 200
13 - Takuma Sato (Dallara DW12-Honda) - Foyt - 200
14 - Scott Dixon (Dallara DW12-Honda) - Ganassi - 200
15 - Ana Beatriz (Dallara DW12-Honda) - Coyne - 200
16 - Tristan Vautier (Dallara DW12-Honda) - Schmidt - 200
17 - Simona de Silvestro (Dallara DW12-Chevy) - KV - 200
18 - Ernesto Viso (Dallara DW12-Chevy) - Andretti - 200
19 - Will Power (Dallara DW12-Chevy) - Penske - 200
20 - James Jakes (Dallara DW12-Honda) - Rahal - 199
21 - James Hinchcliffe (Dallara DW12-Chevy) - Andretti - 199
22 - Conor Daly (Dallara DW12-Honda) - Foyt - 198
23 - Dario Franchitti (Dallara DW12-Honda) - Ganassi - 197
24 - Alex Tagliani (Dallara DW12-Honda) - Herta - 196
25 - Graham Rahal (Dallara DW12-Honda) - Rahal - 193
26 - Katherine Legge (Dallara DW12-Honda) - Schmidt - 193
27 - Townsend Bell (Dallara DW12-Chevy) - Panther - 192
28 - Josef Newgarden (Dallara DW12-Honda) - Fisher - 191

DNF

- 179° lap - Sebastien Bourdais
47° lap - Pippa Mann
45° lap - Buddy Lazier
35° lap - Sebastian Saavedra
4° lap - JR Hildebrand

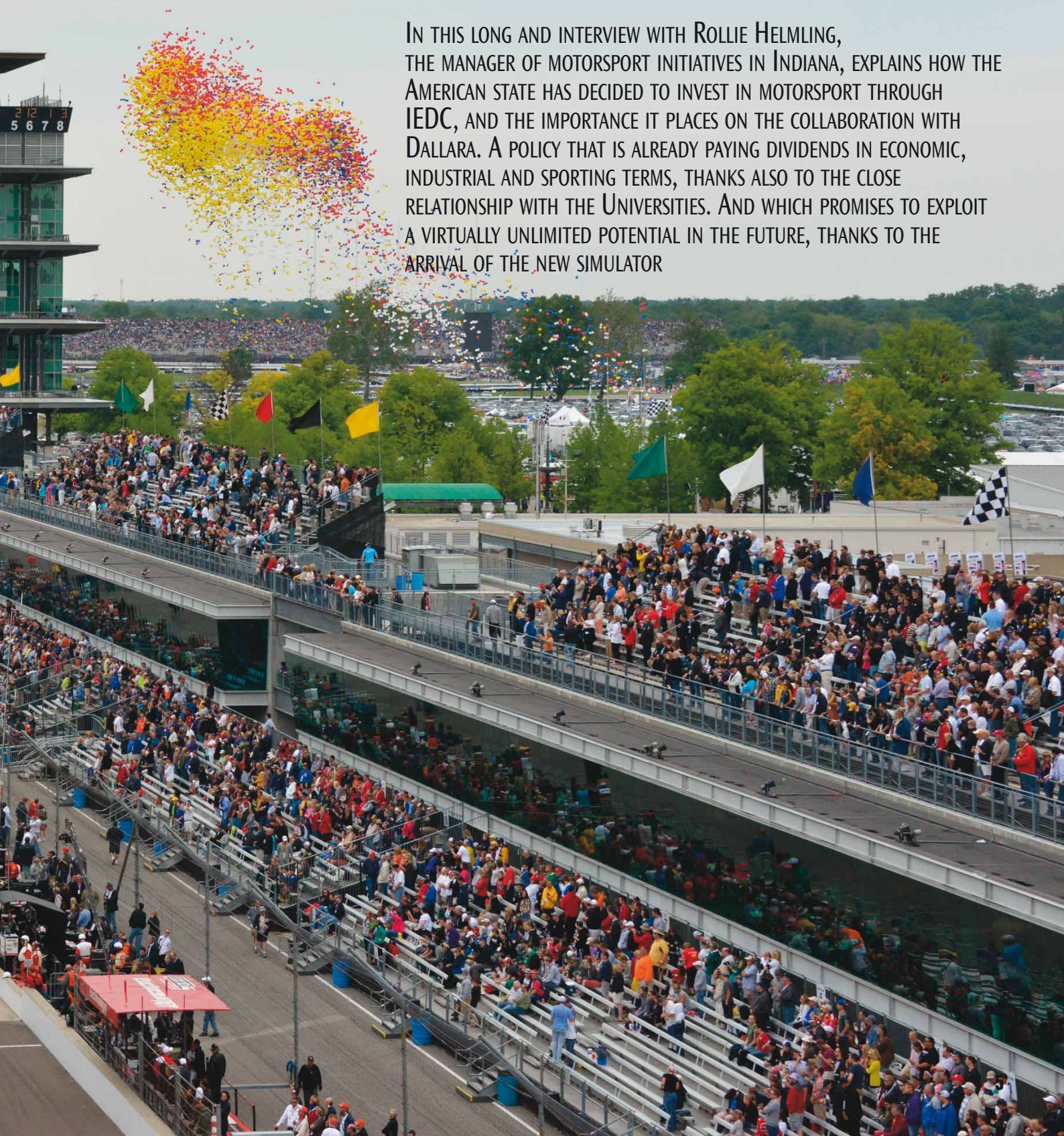


«DALLAR ADDED»



RA HAS BROUGHT VALUE TO INDIANA»

IN THIS LONG AND INTERVIEW WITH ROLLIE HELMLING, THE MANAGER OF MOTORSPORT INITIATIVES IN INDIANA, EXPLAINS HOW THE AMERICAN STATE HAS DECIDED TO INVEST IN MOTORSPORT THROUGH IEDC, AND THE IMPORTANCE IT PLACES ON THE COLLABORATION WITH DALLARA. A POLICY THAT IS ALREADY PAYING DIVIDENDS IN ECONOMIC, INDUSTRIAL AND SPORTING TERMS, THANKS ALSO TO THE CLOSE RELATIONSHIP WITH THE UNIVERSITIES. AND WHICH PROMISES TO EXPLOIT A VIRTUALLY UNLIMITED POTENTIAL IN THE FUTURE, THANKS TO THE ARRIVAL OF THE NEW SIMULATOR





Mr. Helmling, can you tell our readers what IEDC is? How many people are involved in the company?

«The Indiana Economic Development Corporation serves as the department of Commerce for the state of Indiana. The mission of the IEDC is to assist in bringing new business to Indiana. The primary objective is creation of new, good paying jobs and new investment in Indiana. Our main office is in Indianapolis and we have regional offices scattered around the state. Our tools to attract companies to locate in Indiana or to assist existing Indiana companies in their growth are primarily performance based tax incentives which are of financial benefit to the companies. We also communicate to prospective companies the strong business foundation Indiana has created. Indiana is recognized as one of America's best states in which to do business. We have low state taxes, a strong work ethic and excellent colleges and universities ».

How important is, in your opinion, the economical impact of motorsport industry in the USA and in the Hoosier State in particular? Can you give us any numbers about that?

«Former Governor, Mitch Daniels recognized the value of motorsports in Indiana and asked the IEDC to create an initiative dedicated to building the motorsports industry in Indiana. This has continued with the new administration led by current Governor Mike Pence.

Motorsports in Indiana are documented as vital to the economic well being of our state. A recent study conducted by Purdue University identified motorsports produces over 23,000 jobs directly related to the industry. In addition the average annual wage for these jobs is \$63,000.00. This substantially exceeds the average for all jobs in Indiana. The economic impact created by motorsports exceeds \$3 billion dollars coming into the state each year. For a state that only has a little over 6 million people this is significant. ».

Can you give us a brief vision of the IEDC's activities, present and future?

«Our ongoing vision is to continually attract all aspects of the motorsports industry to locate in Indiana or grow their current business here. We are open to every form of the very diverse American motorsports industry but our strongest opportunity lies within open wheel and drag racing. Obviously with Indiana being the home of the Indianapolis Motor Speedway, the IndyCar series and all but three of the IndyCar racing teams this is a high priority but it is just the tip of the iceberg. Much of the total open wheel racing market is in Indiana from Sprint Car builders and teams to more race tracks per capita than any other state. We also are the home to

most of the top drag racing teams as well as the biggest drag racing event, the US Nationals. By having this foundation for motorsports Indiana can offer a knowledge of what the Industry needs to flourish such as a knowledgeable and trained work

force, a central location in the United States which minimizes travel and an educational/ training system which accommodates the Industry with a trained workforce.

We continually work with our existing business to assist in their growth. The technology of racing can apply to other industries such as defense and aerospace so we work to link these areas together. In many cases one of our best recruiting tools is our existing Indiana motorsports companies. We also try to coordinate all aspects of the Industry. Indiana currently has 49 race tracks, parts manufacturers, sanctioning bodies, companies which provide needed services and a host of racing teams located here. Looking out for their needs is a big component to stimulating future growth».

We know IEDC and Dallara USA are working together, can you tell us in which ways?

«When it became apparent that IndyCar would be creating a new chassis Indiana →

«OUR ONGOING VISION IS TO CONTINUALLY ATTRACT ALL ASPECTS OF THE MOTORSPORTS INDUSTRY TO LOCATE IN INDIANA OR GROW THEIR CURRENT BUSINESS HERE. WE ARE OPEN TO EVERY FORM OF THE VERY DIVERSE AMERICAN MOTORSPORTS INDUSTRY BUT OUR STRONGEST OPPORTUNITY LIES WITHIN OPEN WHEEL AND DRAG RACING. OBVIOUSLY WITH INDIANA BEING THE HOME OF THE INDIANAPOLIS MOTOR SPEEDWAY, THE INDYCAR SERIES AND ALL BUT THREE OF THE INDYCAR RACING TEAMS THIS IS A HIGH PRIORITY BUT IT IS JUST THE TIP OF THE ICEBERG»





KANAAN AND DALLARA, HISTORIC RESULTS



Indianapolis provided the setting for the first 500 Miles victory for Tony Kanaan, the veteran Brazilian who looked like he was never going to get lucky in the most prestigious Izod IndyCar race of all. It was an important and popular victory, and was equalled only by the milestone achieved by Dallara at the Barber Motorsports Park, where the reigning champion, Ryan Hunter-Reay, took the Italian constructor's car to its 200th win in the category. Dallara has been building chassis for the American championship since '97. *«It's like Dallara and IndyCar have been have always been together»*, commented Engineer Andrea Toso, head of research and development at the factory. *«This is a very long time in the context of the motor racing world. And it represents a solid and fortunate partnership that goes beyond being simply a commercial relationship. Partnerships are usually measured in terms of profits, but this is more than just business»*.



«HAVING A HIGH TECH AUTOMOTIVE COMPANY SUCH AS DALLARA HERE IS CRUCIAL NOT JUST TO STIMULATE OUR RACING BUSINESS BUT INDIANA IS ALSO ONE ON AMERICA'S TOP STATES FOR AUTOMOTIVE PRODUCTION. THE AUTO INDUSTRY IS OUR LEADING MANUFACTURING JOB AND INVESTMENT PRODUCER»

saw this as a huge opportunity. Bringing this business here and closer to the source is very important not just to our state but to the entire industry. We immediately contacted IndyCar to inquire what we could do to bring as much of the new chassis here as possible. We provided an incentive package which I believe was good for Dallara, the IndyCar teams who are their customers, the IndyCar series and the Indianapolis Motor Speedway. Obviously the presence of Dallara in Speedway is good for the Indiana economy too because of the new jobs and investment it is bringing to the state. We work very closely with Dallara both here and in Italy to explore additional business development for them. We try to make them aware of new business opportunity and they in turn help us by recommending Indiana to contacts they may have. We are very proud to have them here and the facility they have built brings tremendous recognition to our Indiana motorsports industry».

Which is in your opinion the most valuable aspect of Dallara's activities in the US?

«Having a high tech automotive company such as Dallara here is crucial not just to stimulate our racing business but Indiana is also one on America's top states for automotive production. The auto industry is our leading manufacturing job and investment producer. We also have some of the best engineering colleges in the US in Indiana and Dallara works closely with them. We are very excited about Dallara bringing their new simulator here. This will be of tremendous benefit not just to racing but to our industries and colleges. I know of one Indiana company, Hoosier Racing Tire which has been sending its engineers to Italy to use the simulator. Now they can just come to Indianapolis when this is completed. This will be a significant savings in cost and much more convenient. We can see other Indiana and American companies doing the same. We also assisted in connecting Dallara with the Indianapolis campus of Indiana University/Purdue University to create a new curriculum for simulation.

This is the only college in the US which offers both a bachelors and masters degree specific to motorsports engineering. The opportunities this will create for Dallara and engineering students is tremendous. We really are just at the beginning stages of exploring what Dallara USA will bring to racing, the auto industry and Indiana. The potential is unlimited».

In which direction do you think the global motorsport business will develop in the future? Are green technologies a chance to find new deals, markets, audience...?

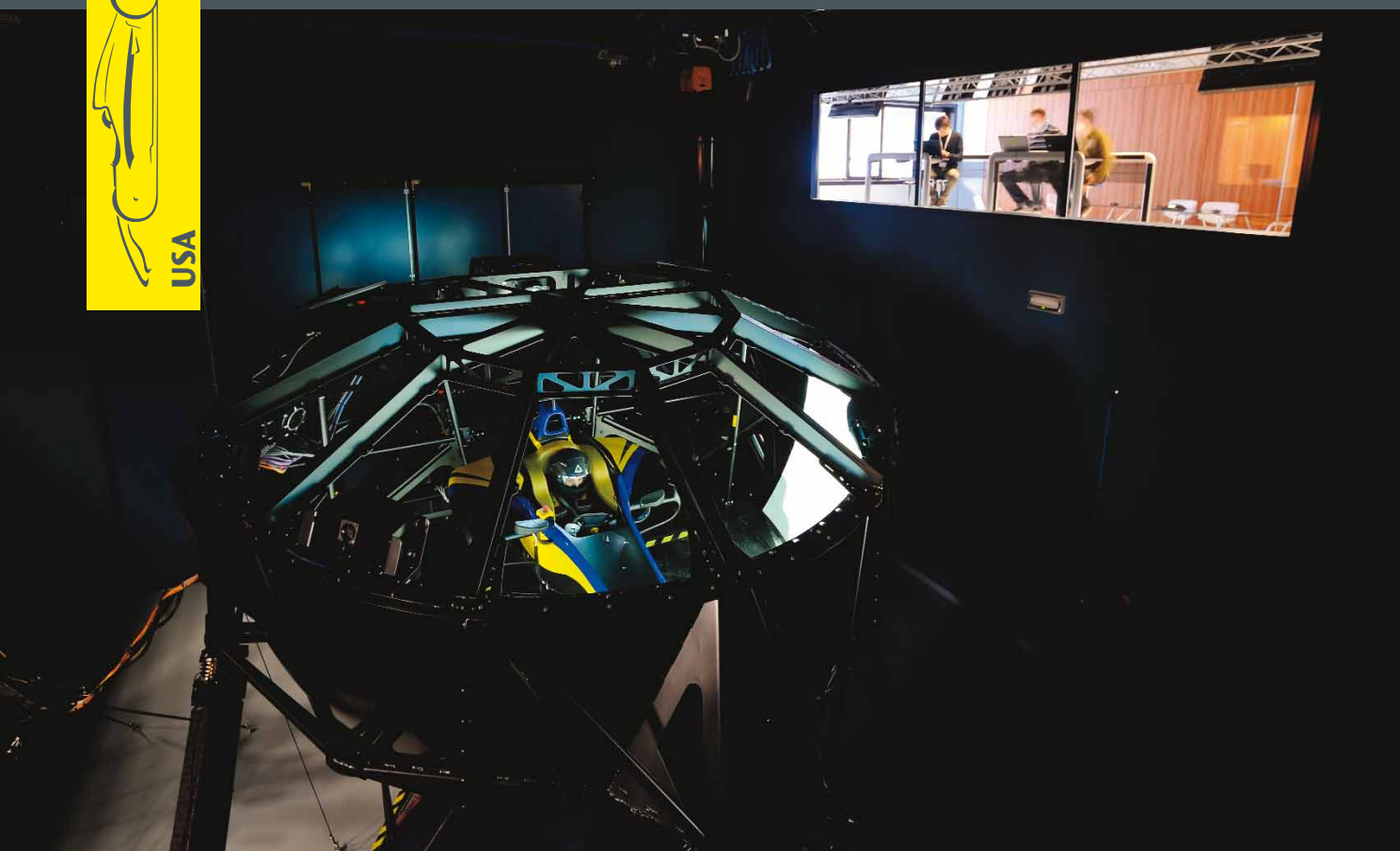
«We all know this is a fickle business. It is hard to predict where motorsports will be going in the future and how it can be positioned to best serve the racing fan, the people who make their living in the industry and future automotive and transportation technology. We do know for a fact that having a company like Dallara in Indiana will create opportunity we would not have without them. Their presence and the supporting industry components Indiana can offer with Dallara will position all of us to explore and develop the technologies, systems and components which motorsports can create. When you think back what motorsport and racing have provided to the auto industry, transportation and basic technology it is amazing. This will only accelerate as future technologies develop. Companies such as Dallara will position us to be on the leading edge not just in providing fast, exciting and safe racing but in exploring and exceeding boundaries in future automotive development».

Which are your best memories of your motor racing career? We know you met a lot of great drivers and that you've been not only a car owner but also the President of USAC.

«Wow...now you are asking the hard question. Like so many I became fascinated with racing as a child when my dad took me to Sprint and Midget Car races here in Indiana. While so many youngsters want

to be drivers, I wanted to become a car owner plus I love to work on cars so I wanted to learn the mechanics of racing. All of my racing was done in the various USAC divisions. It is great racing and has been the spring board for some of America's greatest drivers. I was very fortunate to be able to own and maintain the cars that were instrumental in building the careers of John Andretti, Ken Schrader, Jeff Gordon and Tony Stewart. I also was fortunate to have drivers like Mel Kenyon, Stan Fox, Larry Rice and Johnny Parsons. We were able to win many of the major «short track» races across the United States. It was a great pleasure to be able to be associated with these icons of American racing and to win many major races and Championships. I would have to say my biggest thrill in racing came in May of 2012 when Governor Daniels was asked to wave the green flag to start the Indianapolis 500 and he requested I accompany him on the starters stand. The thrill of watching those 11 rows of 3 coming at you for the start of the world's greatest race is unbelievable. In 2001 I had sold my business and was devoting almost all my time to racing when I was approached by the United States Auto Club (USAC) as they were seeking a new President/ CEO. USAC was no longer the sanctioning body for the Indy cars but still is the major short track sanction in the US. We also were the host FIA delegate for Formula One when it ran at Indianapolis and responsible to the FIA for any world land speed record attempts conducted in the US. After leaving USAC at the end of 2007 I was approached by the IEDC about the motorsports initiative which Governor Daniels had started. It is noteworthy that a state recognized the importance of a vibrant and growing motorsports industry for its economic value. Racing is part of the fabric of Indiana and Indianapolis is recognized worldwide in racing so it is important that we take advantage of what we have and help it to grow and prosper».

by Stefano Semeraro and Stefano De Ponti



THE AMERICAN VERSION OF THE DALLARA SIMULATOR OPERATIVE IN 2014

The twin brother of the futuristic Dallara simulator, an important feature at the factory in Varano Melegari (Parma), will be inaugurated in Dallara's IndyCar Factory, a stone's throw from the legendary Indianapolis Speedway circuit. The opening is planned for May 2014, leaving plenty of time for team practice before the start of next year's 500 championship.

The project is being developed in partnership with the prestigious University of Indiana, IUPUI (Indiana University-Purdue University Indianapolis), and in particular with the «Purdue School of Engineering and Technology», who will be using the simulator to carry out basic and applied research into vehicle dynamics. The project is being part-financed by the State of Indiana, the IEDC (Indiana Economic Development Corporation), who recently announced an investment of 1.15 million dollars in IUPUI's motorsport engineering program – the only one of its kind in America.

The project aims to improve engineering techniques in motorsport, promote economic development in the State of Indiana and increase collaboration

between the teams, the motorsport industry in Indianapolis and Indiana's academic community. «The simulator will not only increase the technological level of motorsports competitions, but it also aims to go beyond the motorsports industry by promoting the use of these innovative concepts in other hi-tech sectors» declared Andrea Pontremoli, Dallara's general manager and executive director.

«This concession moves our collaboration with Dallara up to a new level. Thanks to the advanced modelling techniques, made possible by access to the simulator, we will be able to reduce drastically the time it takes to validate the results of research carried out by our students and our faculty, and transform them into reality, said David Russomanno, rector of the «Purdue School of Engineering and Technology».

«I'm really excited about the Dallara simulator coming to Indiana», enthused Ed Carpenter, owner of the Ed Carpenter Racing team, and driver number 20 of the Fuzzys Vodka Chevrolet. «I've been in the simulator a couple of times over in Italy and I think it's going to be a fantastic tool for the IZOD IndyCar Series teams».



PROFESSIONAL DRIVING SIMULATOR

BARCELONA MONACO MONZA HOCKENHEIM SPA NURBURGRING SILVERSTONE BRANDS HATCH



MID-OHIO INDIANAPOLIS BARBER SEBRING LONG BEACH SONOMA SUZUKA



... E TANTI ALTRI CIRCUITI!



A GLIMPSE OF F1 IN MONACO



AS USUAL, GP2 EXPERIENCED A WONDEFUL WEEKEND IN MONACO. SAM BIRD AND ITALO-MONEGASQUE COLETTI TOOK TOP HONORS, AND BOTH RACES WERE A SHOWCASE FOR DRIVING SKILLS AND AMAZING TRACK ACTION. FOR DALLARA, SOLE CHASSIS SUPPLIER FOR THE BEST F1 FEEDER SERIES SINCE 2005, THE MONTE CARLO ROUND WAS ANOTHER PROOF THAT THANKS TO ITS PERFORMANCES THE CAR IS THE BEST LEARNING TOOL FOR F1, CAPABLE OF CREATING A BREED OF FUTURE CHAMPIONS.

GP2 Monaco

Friday 24 May, 2013 - Race 1

- 1 - Sam Bird - Russian Time - 42 laps 1.36'15"919
- 2 - Kevin Ceccon - Trident - 22"077
- 3 - Mitch Evans - Arden - 23"225
- 4 - Felipe Nasr - Carlin - 23"416
- 5 - James Calado - ART - 29"588
- 6 - Stefano Coletti - Rapax - 1'00"519
- 7 - Rene Binder - Lazarus - 1'02"449
- 8 - Adrian Quaife Hobbs - MP - 1'08"400
- 9 - Stephane Richelmi - Dams - 1'12"107
- 10 - Daniel De Jong - MP - 1'22"410
- 11 - Tom Dillmann - Russian Time - 1'29"356
- 12 - Jon Lancaster - Hilmer - 1 lap
- 13 - Simon Trummer - Rapax - 1 lap
- 14 - Jake Rosenzweig - Addax - 1 lap
- 15 - Sergio Canamasas - Caterham - 2 laps
- 16 - Daniel Abt - ART - 2 laps

Best lap: Sergio Canamasas 1'22"169

DNF

- 26° lap - Rio Haryanto
- 0 laps - Johnny Cecotto
- 0 laps - Fabio Leimer
- 0 laps - Jolyon Palmer
- 0 laps - Julian Leal
- 0 laps - Robin Frijns
- 0 laps - Marcus Ericsson
- 0 laps - Alexander Rossi
- 0 laps - Nathanael Berthon
- 0 laps - Kevin Giovesi



GP2 Monaco

Saturday 25 May, 2013 - Race 2

- 1 - Stefano Coletti - Rapax - 30 laps 42'50"707
- 2 - Adrian Quaife Hobbs - MP Motorsport - 1"869
- 3 - Mitch Evans - Arden - 2"218
- 4 - Felipe Nasr - Carlin - 2"538
- 5 - James Calado - ART - 3"747
- 6 - Rene Binder - Lazarus - 19"293
- 7 - Kevin Ceccon - Trident - 20"015
- 8 - Stephane Richelmi - Dams - 20"576
- 9 - Daniel De Jong - MP Motorsport - 21"197
- 10 - Jake Rosenzweig - Addax - 31"720
- 11 - Sergio Canamasas - Caterham - 34"105
- 12 - Jolyon Palmer - Carlin - 35"775
- 13 - Fabio Leimer - Racing Engineering - 36"488
- 14 - Julian Leal - Racing Engineering - 36"913
- 15 - Robin Frijns - Hilmer - 42"125
- 16 - Rio Haryanto - Addax - 43"235
- 17 - Jon Lancaster - Hilmer - 1'03"893
- 18 - Marcus Ericsson - Dams - 1'04"258
- 19 - Alexander Rossi - Caterham - 1'04"735
- 20 - Kevin Giovesi - Lazarus - 1'05"044
- 21 - Nathanael Berthon - Trident - 1'05"468
- 22 - Daniel Abt - ART - 1'06"174
- 23 - Simon Trummer - Rapax - 1'07"413
- 24 - Sam Bird - Russian Time - 1 lap
- 25 - Tom Dillmann - Russian Time - 3 laps

Best lap: Sam Bird 1'22"375



A VICTORY MADE IN ITALY

THE THRILLING SERIES HELD IN THE PRINCIPALITY AND ORGANISED BY RENAULT AND DALLARA WAS WON BY THE SWISS DRIVER NICO MULLER, BUT THE TEAM SUCCESS WENT TO THE ITALIAN DRAGO RACING OUTFIT. THE TEAM IS OWNED BY THE BRAZILIAN GUTA NEGRAO, BUT IT IS BASED AND HAS GROWN UP IN ITALY, AND ITS EMPLOYEES ARE 100% ITALIAN. THE LATEST IN A LONG LINE OF DEMONSTRATIONS OF HOW OUR COUNTRY IS CAPABLE OF ACHIEVING EXCELLENT RESULTS AT EVERY LEVEL



WS Renault 3.5 Monaco Sunday 26 May, 2013

- 1 - Nico Muller - Draco - 32 laps
- 2 - Marco Sorensen - Lotus - 3"484
- 3 - Jazeman Jaafar - Carlin - 7"184
- 4 - Kevin Magnussen - Dams - 14"549
- 5 - Antonio Felix Da Costa - Arden Caterham - 15"378
- 6 - Carlos Sainz - Zeta Corse - 21"230
- 7 - Will Stevens - P1 by Strakka - 22"135
- 8 - Mikhail Aleshin - Tech 1 - 22"555
- 9 - Stoffel Vandoorne - Fortec - 23"403
- 10 - Arthur Pic - AV Formula - 32"031
- 11 - Oliver Webb - Fortec - 33"746
- 12 - Andre Negrao - Draco - 34"283
- 13 - Daniil Move - Comtec - 34"936
- 14 - Nick Yelloly - Zeta Corse - 41"652
- 15 - Carlos Huertas - Carlin - 50"278
- 16 - Lucas Foresti - Comtec - 1'17"314
- 17 - Nigel Melker - Tech 1 - 1'19"965
- 18 - Yann Cunha - AV Formula - 1'28"176
- 19 - Matias Laine - P1 by Strakka - 1 lap
- 20 - Zoel Amberg - Pons - 1 lap

Best lap: Nigel Melker

DNF

- 0 laps - Marlon Stockinger
- 12° lap - Christopher Zanella
- 17° lap - Norman Nato
- 27° lap - Pietro Fantin
- 29° lap - Sergey Sirotkin
- 30° lap - Nikolay Martsenko





Trevor Carlin

ONE OF THE MOST ACCOMPLISHED AND VERSATILE TEAM PRINCIPALS, TREVOR CARLIN, HAS BEEN A LOYAL CUSTOMER OF THE FACTORY IN VARANO FOR ALMOST TWENTY YEARS AND RESERVES AN ALMOST FILIAL AFFECTION FOR ENGINEER DALLARA. IN THIS IN-DEPTH INTERVIEW, CARLIN TELLS US ABOUT HOW HIS RELATIONSHIP WITH DALLARA BEGAN AND WHAT HE THINKS ARE THE SECRETS BEHIND THE INTERNATIONAL SUCCESS ENJOYED BY THIS ITALIAN COMPANY, AS WELL AS GIVING US HIS VIEWS ON THE HIGHLY SUCCESSFUL NEW GP3 SINGLE-SEATER

«THE ENGINEER'S SECRET? COMPETENCE AND FORESIGHT»



E



Trevor Carlin

The owner of a team that competes in five different championships (GP2, F.Renault 3.5, GP3, Euroseries and British F3), Trevor Carlin is one of Dallara's most important customers in the motorsport world. The British team manager's relationship with the company in Varano goes back to 1993. «After 20 years - smiles Carlin – Engineer Dallara is almost like a father to me, I have an enormous amount of admiration and respect for him. It's no accident that, over the years, we have become one of Dallara's biggest customers in the world of motorsports. Since 1996, the year I founded my team, we have purchased around forty cars from Engineer Giampaolo, and we currently have around twenty in our factory».

What's your first recollection of Dallara?

«It was back in 1992, at the time I was working for Bowman Racing, and a close friend suggested I take a trip to Italy to have a look at the new Dallara for the '93 season. I sent a fax to arrange a meeting with Engineer Dallara, then, a few days later, I left for Varano. I have really warm memories of that day, especially because of how much time Giampaolo was prepared to spend with me. At the time we were competing in the British F3. championship with Bowman, and getting some good results with a car that we had designed ourselves; so I took a large, framed photo of our single-seater along with me to ask Engineer Dallara what he thought of it. We had a lengthy discussion about where the team could make improvements and then he took me to see the car they were preparing for the 1993 season. As soon as I saw the F393 it was obvious that it was superior, not only to our own Bowman, but



also to all the other cars in the category».

So, when did you first start racing with it?

«Giampaolo even offered us a discount on the purchase price and favourable deal with Fiat for the engines, on condition that we were able to attract a top level driver. I wanted Steve Robertson, but we were unable to reach a deal and the project came to nothing. As it happens, though, I only had a few more months to wait: in fact, in 1993, I moved to West Surrey Racing and immediately told the team owner, Dick Bennets, that I thought we should abandon the Reynard in favour of the Dallara. He wasn't convinced to start with, but it soon became apparent that the F393 was a much better option, and the team placed its first order».

As a British team manager you witnessed Dallara take on the British constructors and conquer the market. What do you think were the reasons behind this success?

«I think it was a question of foresight. At the time when Dallara was making its big push

into F3, Lola and Reynard were making a lot of money from the senior competitions, principally from IndyCar, but also F3000. For them F3 represented only a very small part of their business, so they tended not to dedicate sufficient resources to research and design. In the long run, this weakened their position in other sectors too, because a tree can't survive without its roots. Engineer Dallara understood this well: he has always dedicated a vast amount of attention to the design and development of the F3 cars, which were like the roots of his company, and the success in that field enabled the company to obtain contracts to provide the cars for single brand categories and produce increasingly competitive cars for the more senior categories too. He knew how to take the long view».

All your teams currently use only models built by Dallara: does this make your technical personnel's job easier?

«Absolutely. Our team is divided into independent units that work on the different championships, but sometimes it is necessary

«AFTER 20 YEAR ENGINEER DALLARA IS ALMOST LIKE A FATHER TO ME, I HAVE AN ENORMOUS AMOUNT OF ADMIRATION AND RESPECT FOR HIM. IT'S NO ACCIDENT THAT, OVER THE YEARS, WE HAVE BECOME ONE OF DALLARA'S BIGGEST CUSTOMERS IN THE WORLD OF MOTORSPORTS. SINCE 1996, THE YEAR I FOUNDED MY TEAM, WE HAVE PURCHASED AROUND FORTY CARS FROM ENGINEER GIAMPAOLO, AND WE CURRENTLY HAVE AROUND TWENTY IN OUR FACTORY»



to transfer a handful of mechanics from one structure to another in order to help deal with workloads. And the fact that, although the cars are different, that basic production philosophy is the same helps a great deal, because they already know what to expect, and this saves a lot of time that they would otherwise spend familiarising themselves with an entirely new product».

Let's talk about the new Dallara GP3: what's your opinion now that you've

completed pre-season testing?

«Very positive: we've always felt that the chassis would have been able to handle much more power than the 280 CV generated by the original engine, which was, in fact, undersized: the car was glued to the track and the drivers didn't have to worry about going easy on the gas. The test showed that we were right, the chassis performs flawlessly even with the current 450 CV, V6 engine, but now the car is much more «lively» and the drivers really have to

be at the top of their game to get the best out of it».

After all these years using cars from Varano, which models have left the most lasting impression on you?

«There are two F.3 models that I was particularly impressed with: the F301 and the F308. They both represented a great leap forward for the category, and, at the time, they were the perfect cars in every way».

Filippo Zanier





The heart of racing

We begin our journey through the complex world of motorsports in the company of Andrea Toso, Research and Development manager at Dallara.

The journey is designed as both a guide to, and dictionary of, the world of motor racing, providing a brief but wide ranging introduction to the numerous facets of this fascinating subject in the form of a dialogue.

Over the course of twelve instalments we will be covering various aspects of motor racing: from the history of the famous teams and manufacturers, human values in motor races, and the importance

INTRODUCTION: WHAT IS MOTORSPORT. THE RULES AND THE CONTEXT.

THE PARADOX OF R



Andrea, let's start with the rules. Pietro Mennea, a great champion who had speed in his blood, always said that the beauty of sport is that it imposes clear rules. And this is why it can be viewed as school for life. Do you agree?

«Rules are the fundamental factors that, over the course of twelve installments, determine the life and death, success and failure and the growth and decline of organisations. Successful organisations, whether sporting or otherwise, have clear, distinct rules that are real, well-publicised, applied and respected. Do rules help or restrict? Are they an obstacle to be overcome or a benefit for everyone? What is our true relationship with the world of rules and the concept of discipline, and how can we reconcile this with a culture of improvisation, tolerance, compromise and favouritism? Every sport has its own specific set of rules. In football you can't touch the ball with your hands, you have to kick the ball and not your opponents; in volleyball you can only touch the ball with your hands, and you can't touch

your opponents. If you don't know the rules of baseball, you won't understand a thing if you watch a game on TV, you can't participate in the spirit of the game and you won't enjoy yourself.

This «spirit of game» is what sets sports apart from other walks of life, such as the world of commerce. If a business rival is in difficulty, everyone else is only too happy to take advantage of the situation. In sport, if a top cyclist falls during a race, his main rival will wait for him rather than taking advantage because there would be no honour in such a victory. True sport, that which comes before business, is educational by definition; it teaches us that the results do not matter unless we achieve them through our own merits, self-discipline, and total commitment, that we should respect our opponents and accept defeat with good grace, and that sport should mean competition not war. In another sense, «rules» were the foundations that enabled medieval religious orders to establish a specific identity, a recognisable institutional identity, a

common *raison d'être*. Even today, «rules» are the origin and the essence of an organisation, legitimising it and guaranteeing its survival. Rules define who you are, how you present yourself, the proposals you make about yourself and your organisation. Are rules merely restrictions and rigidity, or are they there to help and support actions? Rules represent the only way it is possible to act collectively, they give meaning to our actions».

However, motor racing, or motorsport as it's now known, throws up a paradox: it attracts us because it offers thrills and excitement, but at the same time we're always attempting to reduce the risks. Is this really possible?

«Man has always been fascinated by speed, because we associate speed with acts of bravery that are reserved for the few: a risky business. This was already true of the chariot races in ancient Rome and, even before that, the horse races at the Olympiads during the fourth century B.C. Today, more than ever, the safety is the primary concern and responsibility

and influence of marketing, from the advance of technology to the psychology of the great drivers, in order to create what we hope will be an enjoyable guidebook for anyone who wishes to find out something more about the past, present and even the future of motorsports.

In this introductory number, for example, we ask what is the value of having rules on the track (and in life), what is the origin of man's love for speed, who are today's drivers and what the future holds for a sport that combines the love of risk and the search for maximum safety. Happy reading!

RACING



Dizionario

«Team» is an English word that has its roots in farming terminology. [Old English team "set of draft animals yoked together;"] «Team-mate» is the animal we share the yoke with; a vary different concept to the «companion» we share our bread with.... More than an organisation «Team» indicates a small, tightly-knit group of people where everyone has their own specific role to play that is fundamental to the overall success of that group, close bonds with colleagues [«the harness» to continue with the analogy.], where everyone has the same objective, (without necessarily being aware of the reason...). The word «team» indicates the function rather than the organisation.

«Squad» comes from the Latin «quadratum», a military term that indicates a particular formation of soldiers arranged in parallel rows under a single commander. Compared to «team», «squad» places the onus more on the organisation of the soldiers than on the function.

Unsurprisingly, the term «Stable» comes from the world of horsemanship comes to us via the Old French etable from the Latin stabulum meaning "standing room". The equivalent term in Italian «Scuderia» also has equestrian connotations since it derives from the French «écurie» («stable»). This, in turn, is related to the word Scudo («shield»), from «Skutos», meaning «leather» in ancient Greek: horse hide and, by extension, protection.

«Stable» indicates not only the organisation as a "team" of people, but also includes the equipment, the cars and the people themselves. «Stable» also evokes the more romantic origins of the sport itself, still recalled in the name «Scuderia Ferrari», when «sport» still meant «disport» (a pastime, game, relaxation, recreation). Other equestrian terms to be found in motorsports include «race», grand prix», «horsepower» used to express the power of a motor, «trim», (the position assumed by the rider in order to guide the animal correctly while retaining his equilibrium), «box» (where horses are housed at night), «paddock» (an enclosure for horses), «pit» (where horses drink). Last, but not least, it is worth remembering that the oval tracks used in America are derived from hippodromes; races on oval tracks are always run in a counter-clockwise direction because horses prefer to run counter-clockwise.

of motorsport and the companies who manufacturer the equipment used in this field (engines, vehicles, tyres, brakes etc.) However, increased safety generates a greater sensation of invincibility in the drivers/heroes, and reduces the distance between the man in the street and the professional drivers to the point where, using modern simulators, it is possible to experience the adrenaline of racing without any of the risks. Thus, the tendency of motorsports, in its guise as an entertainment industry, to reach out to ever wider audience in order to increase profits has generated the reasons underlying its own crisis. And here's the paradox. Motorsport is, or should be, the sport where you use a car to compete with – not against! – your rivals to win a prize that is, essentially, symbolic. For the public, the collective tension when facing the risk of challenging death has become part and parcel of an entertainment business that also includes cinema and videogames and is, perhaps, the most profitable industry of current times».

Who are today's drivers? The fans of popular championships like Formula 1, or Nascar in America, come from all social classes. But unlike football, or athletics, the drivers who make their way in motorsports almost always have significant financial resources to draw on.

«Let's be honest: it's a sport for the rich, the sons of the rich or for young drivers with wealthy backers, such as the government of Venezuela or certain industries in specialised high-technology sectors. Unlike athletics, swimming or football, to compete in motorsports drivers require costly "equipment" and "infrastructure" (circuits, personnel, laboratories, etc.) that become obsolete within the space of a year or so. Maybe today's racing drivers are in search of the exclusiveness of a sport that is accessible only to the select few».

The recurring – and predictable – controversies that affect Formula 1 when a driver's «rights» are sacrificed on the altar

of team orders raise another question: should we motor racing to be a sport for individuals or acknowledge that even the most egotistical of drivers must bow down before the good of the team?

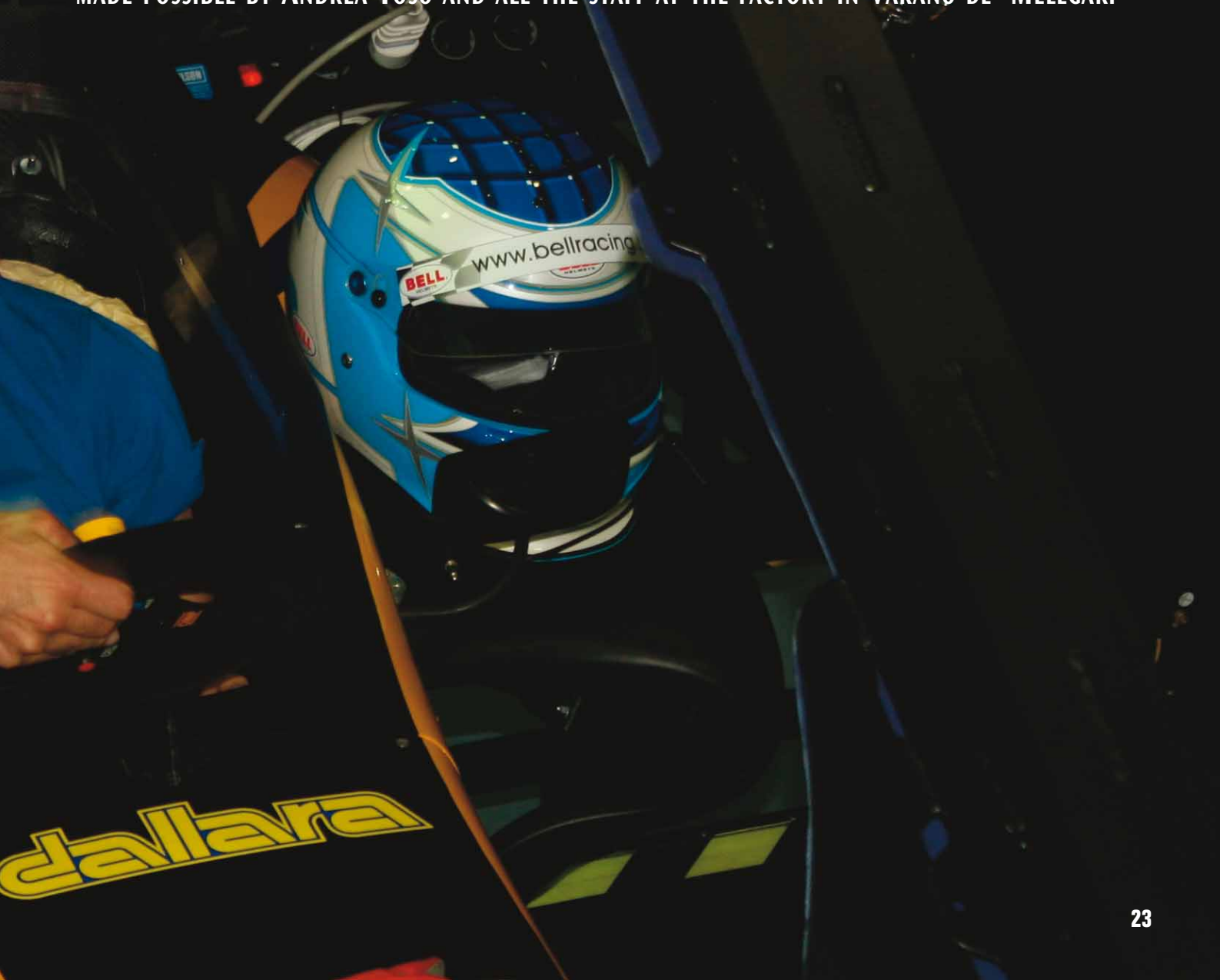
«One of the most difficult concepts for drivers to accept is that they are part of a team. Despite appearance, motorsport is not an individual sport. A lot of drivers are unsuccessful because they don't respect the job and fail to acknowledge the contribution of the other people who work behind the scenes and behind the cameras. A driver can never win or achieve significant results all on his own, in the same way that the pilot of a military aircraft could never complete his mission if he didn't have his ground staff to ensure that his plane is in perfect condition, and ready to fly and perform at the highest level; the whole team must be coordinated and share the same aims and objectives».

by Stefano Semeraro and Andrea Toso



ON TRACK WITH THE CHAMPIONS

AT THE BEGINNING OF MAY, THE DALLARA FACTORY PLAYED HOST TO THE EDITORIAL TEAM OF F1PASSION.IT, HEADED BY EZIO ZERMIANI, AND ACCOMPANIED BY A GROUP OF REGULAR VISITORS TO THE WEBSITE, THREE OF WHOM WERE LUCKY ENOUGH TO TRY OUT THE SIMULATOR, PITTING THEIR SKILLS AGAINST THE TOP DRIVERS FROM IZOD INDYCAR CHAMPIONSHIP. AN UNFORGETTABLE EXPERIENCE MADE POSSIBLE BY ANDREA TOSO AND ALL THE STAFF AT THE FACTORY IN VARANO DE' MELEGARI





Two days to sample the thrill of racing against the world's best drivers, visit the factory and chat to one of the greats of motor racing: Jean Alesi. A dream came true for a group of enthusiasts on the 2nd and 3rd of May this year, thanks to an initiative promoted by F1passion.it, which opened the doors to the Dallara factory and the famous Simulator, the hyper-technological tool used by drivers from all over the world to test drive their cars on all the main circuits. The architects of the initiative were Ezio Zermiani, for years the «voice» of motor racing on the RAI television channels, and the driving force behind F1passion, together with Mauro Coppini, who were able to count on assistance from Engineer Andrea Toso, the simulator engineers Alessandro Moroni, Luca Bergianti and Mireno Rossi, and the other Dallara engineers who accompanied the visitors on their tour of the factory, as well as Alessandro Santini from the marketing office, Andrea Meneghetti, who coordinates visits to Dallara, and Dario Marrafuschi from Pirelli. The participants were able to uncover the secrets of the Varano factory during the initiative, which included a visit to the wind tunnel and the various different sectors of the company. Franco Bortuzzo prepared a report on the two day event, which was broadcast by the RAI during the «Numero 1» program.





AN EXCITING TEST

The honour of trying out the simulator, and completing 20 laps of the legendary oval circuit at Indianapolis, went to Claudio Tocchi, Francesco Prisco and Stefano Bondani, with full support from the Dallara staff.

And the new drivers certainly gave a good account of themselves, competing against adversaries such as Dario Franchitti, Scott Dixon and Ryan Hunter-Reay, and demonstrating their ability to hold the line without ending up against the wall. Before starting, all the participants spent the time to set-up the seat and the pedals, and then they were off! Starting from the back of the grid, they began to study their opponents, gradually getting to grips with driving conditions that are impressively similar to the real thing. While this was going on, the F1passion editorial team were able to follow the progress of the tests from the control room, thanks to the monitors and the video camera mounted on top of the simulator roll-bar, which relayed the images of the circuit and the behaviour of the car.

At the end of the session, the best performance came from Claudio Tocchi, who achieved a highly impressive average speed of 214 mph on his fastest lap, the ninth, just two tenths of a second off the fastest times.

The participants were given the opportunity to talk to Jean Alesi, who was his usual charming and approachable self and provided everyone with an insight into what it means to be a true champion. The event was an unqualified success and was summed up by Ezio Zermiani, enthusiastic and competent as ever. «Mauro Coppini and I wanted to increase the awareness of the Italian expertise in this sector among motorsports fans through F1Passion.it – the journalist explained – this is the mission that we share with Dallara. And we couldn't have got off to a better start. Engineer Gian Paolo Dallara, and his company, are more famous in America than in Italy, and this is one of the reasons why we are striving to bring the work of the factory in Varano de' Melegari to the notice of the wider public here too. Dallara has been asked to create a new centre in Indianapolis, along the same lines as the one that currently exists in Italy, and this is an acknowledgement of the expertise of a company with an excellent reputation that is not limited solely to the American market».

The visitors who got the most out of the event were the young people who were granted first hand experience of the level of technology represented by the Dallara simulator. «The stress was on youth – continued Zermiani – and we wanted to give the youngsters who took part something to fuel their fantasies. It was a thoroughly enjoyable two days, full of events that everyone took part in willingly and with enthusiasm, filled with a desire to participate that you could see from the smiles on their faces, the endless photographs, and the pleasure of spending time and exchanging ideas and opinions with people who share the same passions. Jean Alesi's participation was very welcome, and he was moved by the expressions of affection and recognition for everything he has achieved in his career. I was particularly pleased to have been involved in introducing a figure like Jean to a younger public, many of whom had never even seen him race».







A RESOURCE, NOT A LIMITATION

THE EXAMPLE OF ALESSANDRO ZANARDI REMINDS US THAT THERE IS NO ADVERSITY THAT CANNOT BE TRANSFORMED INTO A WINNING RESOURCE, BUT DALLARA'S COMMITMENT TO INTEGRATION IS NOT LIMITED TO TECHNOLOGICAL RESEARCH. WE PRESENT THREE STORIES THAT SHOW HOW, IF WE DON'T LOSE SIGHT OF THE HUMAN FACTOR AND THE VALUE OF WORKING TOGETHER, EVEN THE GREATEST CHALLENGES CAN REPRESENT AN INCENTIVE FOR INNOVATION AND PROGRESS

L The extraordinary achievements of Alessandro Zanardi, and the overall success of last year's Paralympic Games in London, helped to raise global consciousness of disability. Perhaps for the first time on such a truly international level, sports fans from all over the world were able to admire the qualities of disabled athletes. Thanks to the collaboration with Zanardi, Dallara Automobili was directly involved in that unique experience, and the images of the hand-bike, designed and produced in Varano for the driver from Bologna, were beamed all around the world, creating a great deal of interest. But Dallara has always been sensitive to the needs of disabled people, initially concentrating on the sporting sector – designing solutions for everyone from grass roots level competitors right up to top level athletes – before also becoming involved in the workplace, designing and producing projects that combine high technology, research into materials, and social responsibility with attention to company organizational requirements. The experience with Handimatic, the exhibition concerned with the application of technologies to disabilities organised by Aldini-Valeriani Technical High School in Bologna, which included a detailed presentation about Zanardi's adventures in London, demonstrated Dallara's continuing commitment to this issue.

For this reason, this issue offers an overview of Dallara's work with disabilities, concentrating on three different stories; three examples of how, nowadays, disability should be regarded above all as a resource, a project without any limits that society, and the industrial and production sectors have an obligation to invest in. Behind the purely competitive aspects of the first story, which concerns Zanardi himself, there is a lengthy and fascinating collaboration that resulted in the construction of the high performance hand-bike that Dallara now places at the disposal of all the athletes interested in using it. Engineer Dalmia Zinelli, the man responsible for coordinating the hand-bike project, reveals the technical aspects, the secrets and the possible applications of the bike in an interesting interview. Following on from Zanardi's success, Dallara is now involved in another project aimed at producing a wheelchair specially modified for another athlete who goes by the name of Alessandro; the shot putter for the CUS Parma team Alessandro Straser, a triple silver medal winner at the Fispes championships in Ancona in 2012. Francesco Savi, an engineer from the Dallara Research and Development department, is working side by side with Straser in order to ensure that the end product suits his every need. Engineer Savi, who has also been a shot

putter himself and so has a good understanding of the specific technical problems associated with this project, explains how the collaboration is progressing.

As we already mentioned, the human and the productive values of disability are by no means confined to the sports field, and once again Dallara is able to demonstrate the effectiveness of the efforts and measures taken to support, highlight, and integrate the resources of its disabled employees into the social and productive life of the factory to the full. And who better to tell us about his experiences than Gianluca Molardi, an engineer for whom Dallara has created a tele-working station, complete with pedestal and face recognition software, which enables him to get the best out of the text elaboration and CAD drawing programs? Together with the personnel manager, Filippo Di Gregorio, and Fabrizio Arbucci, the ICT manager, he explains the positive aspects of this experience, both in terms of the human relationships within the context of the company, and of the innovations in the design of computers that use this type of technology. Three different stories but, just like Zanardi always reminds us, three stories that encourage us to take our dreams, together with the right dose of realism, and transform them into reality in order to maintain a sense of enthusiasm and fulfilment every day of our daily and working lives.



Di Gregorio

«The key is having the right people in the right positions»

Doctor Di Gregorio, Zanardi's achievements in London did a lot to raise awareness of the problems associated with disability, a subject that has always been dear to Dallara's heart: are companies doing enough, or is it also time to rethink the legislation?

«Although I don't think we should expect the private sector to take the place of the State or the relevant authorities, companies will always have a part to play, and this includes ensuring that they employ significant numbers of disabled people in terms of percentages. If I may make a suggestion, this could be incentivised by reducing company taxes and employee contributions. Up until now such concessions have always been granted on an one-time basis. Generally speaking I think the Italian legislation is adequate: sometimes the problem lies in the difficulty of reconciling the various rules and regulations with the individuals they are supposed to serve».

What are the advantages of integrating a disabled person fully into the working life of a company?

«We are talking about people here, in the fullest sense of the word, and this means that the benefits are the same for everyone: increased motivation and a sense of belonging that favour the capacity to work as part of a team. This is fundamentally important when dealing with today's increasingly challenging work environment. Moreover, integration provides us with positive examples. I have various disabled colleagues who, thanks to their professional and personal contributions, represent an example for the rest of us, both for their approach to the obstacles they encounter in the work place, and in life in general».

What strategies could be used to ensure that integration is as complete as possible, including on a personal level, within the

context of a company, and what are the contributions a firm like Dallara can make in this field?

«Since we are talking in terms of strategies designed to achieve a good level of integration, the first step is to ensure that the company management structure is sufficiently sensitive to such issues. In particular, we believe that the best strategy is to ensure that the right people are placed in the right positions (whether disabled or not). This ensures that people are appreciated for their merits, which is obviously a positive from the point of view of the individual, but also for the Company, in the broadest sense of the word.

Our Company is expanding the technical area, so we tend to insert new personnel (including disabled personnel) in these departments. Typical candidates will have a technical-scientific based education, to engineer level, and an aptitude for working in a given specialised sector. We are committed to using all the hardware and software technologies that are available to us (with the onus on information technologies) in order to enable people to work as efficiently as possible. We don't think there's any point in employing a mechanical engineering graduate with a physical disability to perform menial, everyday tasks simply because «It's the law, and at least it keeps him busy...» It wouldn't benefit either the individual or the company. Naturally there's a lot less room for manoeuvre in the case of personnel with psychological disabilities, since it is necessary to take into account an entirely different set of considerations».

What areas of the company are most widely affected by this issue? How was the software that enables Engineer Molardi to interact perfectly with the rest of the company developed? And how does it work?

«We first encountered Gian Luca Molardi

when he was preparing his thesis at the University of Parma in 2008. Shortly thereafter he received a scholarship through the Spinner Project (investment in education, research and training in order to promote the development of young people and businesses), financed by the Emilia-Romagna regional government. On a personal level, we were struck by his indomitable spirit and the tenaciousness they enabled him to graduate in mechanical engineering and produce a thesis on structural analysis, despite having to overcome enormous personal difficulties. We were also impressed by his passion for motor racing and in particular his interest in our company; I have fond memories of a visit while he was still at senior school. And now, several years after first meeting Gian Luca, we are fully satisfied with the outcome of the project, which has enabled him to exploit his abilities to the full and find his way in a world that he had always dreamed of being part of, as well as expanding his own technical skills and knowledge. In fact, he is now employed in our Structural Analysis department, taking advantage of a flexible working schedule and the possibility of working from home, the better to suit his personal needs. As far as the software is concerned, we have supplied Gian Luca with an «off the peg» program that enables him to write documents and emails, and provide instructions using voice commands, i.e. without having to use his hands. We have also acquired a second "dedicated" software for people with limited mobility (which has been developed by a company run by a disabled engineer) that enables them move and click the mouse simply by moving their face or their eyes. In addition to the software, we have also purchased a customised support designed to create a more comfortable, ergonomic working position for Gian Luca, who was not slow in letting us know how versatile it was, and how much he appreciates it».



Zinelli: «Zanardi's handbike represents an opportunity for everyone»

Engineer Zinelli, what are the technical features that made the Dallara hand-bike so successful?

«I think that, rather than the technical features, it was the approach to the project that made all the difference: everything was done using the same processes that we use when designing a racing car; the same working practices, and the same controls on the contents as well as design and production times. Although the end product was an unusual one, the decision making process at Dallara was the same as always, and we used all the same tools too: Cfd, Fem, Cad, carbon. In a nutshell, the same things that we do all day, every day».

Although Zanardi made it famous, this is a piece of equipment that is designed for everyone to use: is it possible to customise the Dallara hand-bike like you did for Alessandro?

«Even before his success at the Olympics, Zanardi and the hand-bike were already a hot news item: it's an exceptional piece of equipment and suitable for everyone, able-bodied or otherwise. Naturally, Alex's bike was designed with his specific disability in mind, but the same basic model could easily be customised to suit other users with entirely different needs».

If I want to order one, who would I have to contact, and how long would it take to deliver?

«Apart from the obvious restrictions depending on the physical abilities of the user, the hand-bike is not an exclusive product: we would be more than happy to satisfy the requirements of another parathlete. Obviously, delivery times would depend on the type of customisation and the company's other commitments».



Molardi: «Thanks to a software special I can work from home or at the company»

Engineer Molardi, could you describe your typical working week?

«I spend part of my week at the company and the rest of the time tele-working from home, which allows me a degree of flexibility in organising the activities I carry out in connection with the company».

How does your workstation function?

«It consists of a professional notebook that allows me complete access whether I am at the company or at home. I am also starting to use a software that enables me

to work by operating the mouse in hands-free mode at times when otherwise it would be impossible for me.

In your opinion, what are the next steps that need to be taken in order to improve the integration of disabled people in the workplace?

«I have to say, that the people at Dallara have excelled themselves, yet again (I won't mention any names for fear of leaving someone out)! They have provided me with highly advanced tools that enable me to work in

the best possible conditions. I'm currently trying to get faster at using the auxiliary software, there's lots of room for improvement».

What do you think are the main benefits for companies, and society as a whole, of providing disabled people with greater access to the workplace?

«I think that inserting disabled people in the workplace should be an investment rather than a drain on the resources of a company. If they are employed in the right position they can be much more



Savi: «The important thing is to design simply and effectively»

Engineer Savi, what are the features that distinguish a normal wheelchair from the one you are designing for Alessandro Straser?

«Actually, it is not a wheelchair at all; the wheels are only necessary when transporting it. It's really a seat that the athlete uses to throw from, it rests on the ground and is held in place by four tie-rods secured by stakes. The most important characteristics are stability and rigidity. The seat is also fitted with a fixed rod that the athlete pulls on with his free hand in order to generate greater thrust».

Are you using any special materials in the production process?

«We have only designed a small proportion of the components so far. We intend to use various materials that are typically used on competition cars, such as lightweight alloys. The seat doesn't need to be light, but it will certainly make it easier to transport: Alessandro will almost certainly be competing abroad, and it he will have to take the seat with him».

What was the most difficult problem you encountered during the design stage? Are there any special parameters established by the international paralympic committee?

«The parameters established by the official regulations are fairly simple. The seat may not exceed a maximum height limit, this is because the height of the seat has a direct effect on the length of the throw, also the equipment may not include flexible parts that could function as a bow or a spring and

assist the thrower. Moreover, the throw is measured from the point on the seat structure that is furthest forward, which means that it is necessary to keep the dimensions of the front section to a minimum. It's not a terribly complex object, so I wouldn't say that we encountered any great difficulties during the design stage. The important thing is to ensure that the structure is simple and effective».



What effect does a piece of equipment like this have on an athlete's performance? In other words, how much improvement is it possible to achieve?

«It's difficult to evaluate the impact a priori, I think it's better that we wait for the results of the initial tests. Our main objectives were to produce an object that is rigid and ergonomic, and that could be adapted to various different throwing positions. In fact, Alessandro competes in three different throwing events (javelin, discus and shot put): if we can adapt the seat so that he can use it for each of these

disciplines it will be a great help to him».

You're an athlete too, how much did this help you during the design process?

«It helped to be aware of the type of mechanics and forces that come into play during a throw. I compete for the same team as Alessandro (CUS Parma) and we share the same trainer (Roberto «Eddy» Cristofori); we get on really well and we are always swapping ideas and opinions about the project».

«LAST SATURDAY, THANKS THE NEW CHAIR DESIGNED BY DALLARA, I FINISHED THIRD AT THE ITALIAN CHAMPIONSHIPS IN THE SHOT PUT AND DISCUS DISCUS THROW. NOW I HAVE TO BETTER THE FEELING AND TUNE THE SET-UP, BUT I COULD ALLREADY SEE CLEAR IMPROVEMENTS. SO I REALLY WANT TO THANKS DALLARA FOR THE WORK THEY DID, AS WELL FRANCESCO SAVI WHO KEPT THE COMMUNICATIONS BETWEEN US ALL, AND ALL THE TEAM: CORRADO CIVETTA, MARIO SPIRELLI, MATTEO SERVENTI, OSVALDO SCARTAZZA, SIMONE GERARDINI, ANDREA TOSO, LUCA PIGNACCA, ANDREA BURZONI. THANKS!»

ALESSANDRO STRASER


productive than one might think, and represent a benefit for everyone».

In this context, which are the areas where the most progress still needs to be made: the attitude of individuals and society to disability, investment in the relevant technologies or improved legislation?

«Progress is still necessary on all fronts, but I think that fundamental issue is the attitudes of people and society to disability, and that all the other aspects depend to one degree or another on such attitudes».



**SAFETY IN
THE «CLA**



DURING THE MONTHS OF MARCH AND APRIL THE CIRCUIT IN PARMA PLAYED HOST TO A DRIVING COURSE INTENDED FOR THE YOUNG, AND VERY YOUNG, ROAD USERS OF THE VAL DI CENO: AN INTELLIGENT, FUN WAY OF INTRODUCING YOUNGSTERS TO THE VARIOUS ASPECTS OF ROAD SAFETY BY COMBINING THEORY WITH HANDS-ON EXPERIENCE. THE INITIATIVE WAS PROMOTED BY THE MUNICIPAL POLICE WITH THE FULL SUPPORT OF DALLARA AUTOMOBILI

N POLE POSITION IN SSROOM» IN VARANO

The circuit in Varano was transformed into an intelligent and entertaining school classroom: For five afternoons between March and April, the track in the Emilia region of Italy played host to 76 boys and girls from the Val di Ceno who learned how to behave correctly on the road, while having fun at the same time. This enjoyable and useful initiative was organised by the municipal police, their chief coordinator and controller, Enzo Viola, and the local council in Varano de' Melegari, and provided children and young

people from the ages of 5 to 15, i.e. from infant school right through to senior school age, with a free, integrated road safety education course designed to provide them with a solid grounding in the principles of road safety. Once the pupils had completed the theoretical part of the course, which was carried out in the classrooms, the youngsters in the 13 to 15 age group were given the opportunity to attend a practical safe driving stage in the paddock of the circuit at Varano de' Melegari, in

collaboration with So.Ge.Sa, the company that manages the track. A large number of volunteers were on hand to help out during the stage, including numerous personnel from the various police forces (municipal, provincial, traffic, railway, etc.), the Carabinieri and the Fire Service; naturally, Dallara was present too, because safety is just as important on the road as it is on the track, and it is vitally important to ensure that the younger generations are made aware of this.

THE POLICE ARE THERE TO HELP US

Let's take a closer look at the course itself: In collaboration with the International Centre for Safe Driving, the course featured theoretical and practical learning sessions and concentrated on identifying the various active and passive components that contribute to safety when driving in road conditions.

During the practical sessions on the track, the youngsters were provided with scooters - supplied free of charge by the Yamaha Moto Shop dealership in Parma - helmets, safety jackets and gloves, and learned how to perform a slalom through a series of bollards, practised carrying out manoeuvres such as braking, riding over speed bumps and along narrow corridors, hill starts, inclined curves, and stopping on downward slopes.


They followed a circuit featuring a vast array of road signs, and were provided with special glasses that mimic the effects alcohol has on vision, in order to illustrate how difficult it is to react correctly under certain conditions.

Thanks to an experiment designed by the paediatrician, Michael Werth, they were able to evaluate the difference between the consequences of an impact at 38 km/h with or without a helmet. The fire service gave a demonstration of how to extinguish a burning car and the first aid procedures carried out by the volunteer ambulance service in the event of an accident.

The State Police force «Pullman Azzurro» («Blue Bus»), which is a fundamental feature of «Icarus», the national road safety education program, was also present.

The driving technique lessons were led by the Deputy Commissioner of the State Police, Norberto Naummi, a qualified Italian Motorcycle Federation instructor and holder of two world non-stop endurance records. «We're very proud – said Doctor Naummi – of the numerous initiatives we have put in place over the years in our local area, aimed at providing our young people with all the latest road safety information, as well as teaching





them the driving techniques necessary to manage a vehicle correctly under road conditions. The positive feedback we receive, both from the youngsters themselves and from their parents, and the conviction that sensible and disciplined behaviour when in charge of a motor vehicle is fundamentally important for reducing the number and seriousness of accidents, are all the encouragement we need to carry on with this initiative in the future».

The chief coordinator and controller of the Municipal Police, Enzo Viola, added: «The integrated road safety project represents an investment in the future; the aim being to provide the pupils with an informative, coordinated and entertaining course that explains the principles of road safety, the correct way to behave and how to interpret the rules and regulations of the road. The course concludes with a practical session at the circuit. Over a period of five years, the town council in Varano de' Melegari has purchased helmets, safety equipment, gloves, road signs and multimedia tools, and this means that practical part of the course is not just a «ride on a moped», but a realistic simulation of what it means to be in charge of a motor vehicle, showing



the youngsters what fun it can be, while at the same time making them aware of the dangers and the consequences. I have always felt that this is part of a Local Council's duties: providing citizens with professional advice, free of charge; this is why the participation of the forces of law and order is so important, because when we invest in our children's future we should do it professionally».

DALLARA, SAFETY ALWAYS COMES FIRST

Alessandro Santini, the Dallara marketing manager, declared: «Safety has always been fundamentally important for Engineer Dallara, and the whole Dallara organisation, when designing and manufacturing racing cars. Safety is important on the track, but it's even more important on the road. It's ok to drive at high speeds on the track where there are rules and regulations, safety structures and specially designed chassis. On the road you have to be much more careful and you never know when you are going to have to react to unexpected situations, indications or potentially treacherous weather conditions. We are very pleased to sponsor this highly professional initiative that helps

the youngsters to get to grips with these very important concepts in an entertaining and practical way, because "to read is to forget, to watch is to remember, but to do is to learn"».

A BALANCE THAT MUST BE IMPROVED

It is worth remembering that Italy is the country with the highest number of fatal road traffic accidents in Europe and that, in 2011, almost 4,000 people lost their lives on our roads, while a further 300,000 were injured and/or permanently disabled. Motorcyclists accounted for 1,000 of these deaths: practically one death every eight hours. These courses are vitally important for teaching young people the value of road safety, together with increasing the safety standards they adopt when driving a moped or a car.

The courses also have significant cultural and symbolic value since they encourage the pupils to view the instructors from the various police forces not simply as law enforcers, handing out fines and sanctions for motoring offences, but above all as qualified professionals who are at the service of the public.



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THE PURSUIT OF EXCELLENCE

On the road since 1972.

- Consultancies, design and production of racing cars and high performance road cars.
- Aerodynamics: wind tunnel and computational fluid dynamics (CFD).
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