

:update

#021

30
YEARS **SINCE**
1987

THERE IS NO "I" IN TEAM

With 2017 being the 30th anniversary of RIEDEL Communications, I have had plenty of opportunities to look back and reflect on all that has happened. Of course, there were things that worked out great and others that did not. It would be unreasonable to expect that everything would go perfectly on a 30-year journey in a business as dynamic and unpredictable as ours. And, I think you learn far more from your failures than you do from your successes. Today I am proud of what we have accomplished and still love coming to work.

The beginnings of RIEDEL were more about being aware of opportunities, and then being in a position to take advantage of them, rather than some grand plan. When I happened to purchase some radios from Motorola, an opportunity to provide specialized solutions for communications was created. Of course, this resulted in my first product, the RiFace radio interface.

My early interest in theatres soon expanded to broadcast and anywhere else in the world of entertainment. Quite suddenly, it was no longer practical to be a one-man-band and so the company began to grow. But I was always keenly aware that, while we needed a strong company that could be trusted to handle large projects, we also needed to be small and agile so that we could maintain flexibility and quickly respond to changing market needs.

But if I had to boil it all down to a single element, the key to our success has been finding great people and then giving them the freedom and tools to do what they do.

Today, this is evident throughout our organization; from the executive team, to our product management teams, to the guys in rental, back-office people, and then the professionals who are out there every day advising, teaching, and supporting our clients worldwide. We are very close to our customers and get to see them often at installations, numerous live events, and trade shows. The human element is paramount at RIEDEL because we don't want to be a box house. We want to be partners who help our customers to stay on the cutting edge of the broadcast world.

The recent launch of our new Bolero wireless intercom system has been a perfect example of how teams can come together to do great things. Creating a new product from scratch is an enormous undertaking involving market research, deep technical knowledge through R&D, expertise in design and manufacturing, and passionate champions to usher it through all of these phases. Then there's a marketing effort to plan and execute followed by the creation of comprehensive training and support materials that empower the sales staff to go out there and sell it. A failure in any one of these places would have had consequences on the timing of the Bolero launch and the deliveries that began on July 1st. We worked together and made it happen.

I started as a magician, and now almost 500 RIEDEL employees perform their magic every day.

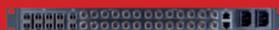


RIEDEL CROSSWORDS

As simple as that!

BRIDGE

Presenting the brand new MediorNet MicroN IP App



Building on MediorNet MicroN's ability to extend functionality through the use of apps, IBC 2017 will see the global launch of the MicroN IP App which creates a seamless bridge between MediorNet and future IP networks.

The MicroN IP system supports SMPTE 2110/AES67-compliant video and audio as well as baseband video (SDI) and audio (MADI). In combination with all the built-in glue features including audio embedding/de-embedding, frame sync, sample rate conversion, audio/video delay, signal routing, and on-screen display, the MicroN IP App turns the device into a universal tool for all of your IP interfacing needs. At the same time, the device can be fully networked with all existing MediorNet products.

The MicroN IP App includes support for up to 4 SMPTE 2110-20 inputs and outputs plus 4 baseband 3G-SDI signals and 8 3G-SDI outputs (4 dedicated to monitoring SMPTE 2110-20 streams).

Also supported are AES67 audio, 2 optical MADI ports, and sync I/O. MicroN IP also supports NMOS Device Discovery/Registration and Connection Management or manual configuration for non-NMOS devices.

MicroN IP uses range from a stand-alone SDI to IP conversion to a fully networked system with numerous different IP gateway and baseband I/Os.

REALTIME NETWORKS FOR VIDEO, AUDIO, DATA AND COMMUNICATION
Whether simple point-to-point connections or large backbone infrastructures, MediorNet provides unlimited flexibility in routing, processing, and distributing just about any broadcast signal – uncompressed and in real time.

Enabling futureproof network solutions, the MediorNet platform paves your migration path to IP-based production environments. With modular hardware and feature-driven apps, MediorNet is customizable to your specific application—from multiviewers to large-scale systems including decentralized video routing.



NEW MediorNet MultiViewer



RIEDEL PARTNERS WITH PIDSO

RIEDEL Communications has a powerful new center of expertise through its just-announced partnership with PIDSO, a leading manufacturer of innovative and lightweight antennas and antenna systems, based in Vienna. With the deal, RIEDEL assumes a majority financial position in PIDSO, accelerating development of solutions that leverage PIDSO antenna systems with RIEDEL's industry-leading family of communications systems.

PIDSO offers specialized expertise in the development and manufacture of lightweight antennas and antenna systems that can be integrated easily into existing building spaces. The company's antennas are widely used in the automotive industry, aircraft construction (particularly for unmanned aircraft), logistics control systems, and video/cinema production.

With this partnership, RIEDEL gains an experienced team and deep expertise in custom antenna systems, together with access to new markets such as automotive, aircraft, and the growth market of unmanned systems. PIDSO's addition to the RIEDEL group will create synergies between the two companies' research and development operations in Vienna that will benefit partners and customers alike.

With its innovative solutions in the field of high-performance antennas, PIDSO not only complements the RIEDEL product portfolio, but also fits right in philosophically – since embracing advanced technologies and delivering visionary solutions to real-world challenges have always been part of RIEDEL's trademark. Both companies will be able to move forward based on a very sound economic and technological foundation, giving the new collaboration the best possible beginning.



IN SLOVAKIA,
MEDIORNET
DELIVERS REAL-TIME,
DECENTRALIZED
SIGNAL ROUTING
ABOARD TELEVÍZIA
MARKÍZA'S NEW HD
OB VAN

Televízia Markíza, one of Slovakia's major TV networks, is using a MediorNet real-time media network aboard its brand-new HD OB van, Alphaline A12. Installed by Broadcast Solutions GmbH, one of Europe's foremost providers of broadcast production services and solutions, MediorNet works in tandem with the Artist digital matrix intercom solution. The result is a decentralized and redundant communications and signal routing backbone for Televízia Markíza's lineup of live sports and entertainment programming.

Alphaline A12 is Broadcast Solutions' first OB deployment of MediorNet, and it's delivering the bulletproof communications capabilities Televízia Markíza requires for its live broadcasts. The RIEDEL solutions deliver a perfect blend of high-quality output and reliability for even the most demanding productions. MediorNet's decentralized routing approach not only reduces single points of failure, but also makes things simpler and more efficient by placing physical I/O closer to where it's needed and reducing copper.

With Alphaline A12, Televízia Markíza is now able to shoot all of its live programs in full HD. The van is able to support 14-camera productions such as the network's popular "Let's Dance" reality show, and also provides critical backup support for studio programming. Broadcast Solutions worked with Slovakian systems integrator ELEKTRONIKA to design and install Alphaline A12's MediorNet network, consisting of a MetroN core router, 16 MicroN high-density media distribution network devices, and four MediorNet Compact stage boxes. An Artist 128 intercom system with 14 keypanels provides flexible high-quality communications.

With state-of-the-art systems such as MediorNet and Artist, Alphaline A12 is a critical element in Televízia Markíza's ongoing mission to attract new viewers and maintain market share. The network is now perfectly positioned for future growth at home in Slovakia and in the broader European OB market.

RIEDEL Provides Massive Broadcast Infrastructure for Eurovision Song Contest,

For the 12th consecutive year, RIEDEL communications and signal distribution solutions played a starring role in the Eurovision Song Contest, the world's longest-running international television song competition. MediorNet provided the redundant and decentralized signal routing and transport infrastructure from start to finish, broadcast live from the International Exhibition Centre in Kiev, Ukraine in May. Plus, the production relied heavily on RIEDEL's TETRA digital radio systems and the all-new Bolero wireless intercom system for crew communications, only six weeks after Bolero was introduced to the market.

Broadcast annually for 62 consecutive years, the Eurovision Song Contest is one of the most-watched non-sporting events in the world, with a current estimated global audience of more than 600 million. For all three broadcasts, including the two semifinal shows and the finals competition, RIEDEL supplied a robust, fiber-based communications backbone for its partner NEP Sweden AB, which produced the show's world feed on behalf of EBU and the Public Broadcasting Company of Ukraine. RIEDEL supported the event with a 25-member onsite engineering team.

The MediorNet backbone consisted of four MetroN core routers and dozens of MicroN high-density media distribution network devices in a mesh topology. This decentralized configuration ensured full redundancy of all video and audio signals for commentary, intercom, signal distribution, and radio communications, including the feeds for monitors in commentary booths and for displays and projectors in the International Exhibition Centre. In addition, RIEDEL Artist digital matrix intercom commentary panels were installed in 40 commentary booths.

The RIEDEL network linked numerous other production components, including critical control points for sound, lighting, and pyrotechnics. In all, more than 150 comms panels and 600 analog and digital TETRA radios were used for the show. As with last year's production, NEP Sweden AB's HD1 OB van was equipped with RIEDEL MediorNet and Artist digital intercom components.

In addition, RIEDEL subsidiary DECA provided an access control system that simplified guest and crew entry into the arena, boosting security and providing efficient visitor management. The system required personnel to pass through turnstiles where their accreditation cards, embedded with RFID chips, were swiped with stationary or wireless reading

devices, and the RFID data was matched to an online database.

Also, working with partner TPO, RIEDEL provided a comprehensive IT infrastructure, including all switches, servers, and wireless access points, for up to 3,000 journalists in the press center.

Once again, RIEDEL ensured that this immensely popular — and exceedingly complex — live production went off without a hitch. And once again, RIEDEL came through for every aspect of the show, from stage presentations to commentary and backstage interviews. The versatility and quality of the RIEDEL equipment, backed with the expertise of RIEDEL's superb engineering team, helped make the 2017 Eurovision Song Contest a huge success.



PRESS

esc

TO PARTY



MEDIORNET MICRONS DELIVER VERSATILE SIGNAL TRANSPORT FOR NEP UK'S MOBILE PRODUCTIONS

NEP UK, one of Europe's largest providers of outside broadcasting (OB) services, has MediorNet onboard to provide real-time signal transport, processing, and routing for a broad range of high-profile live productions. With 26 MediorNet MicroN high-density media distribution network devices in inventory, NEP UK is able to use the modular devices in unlimited configurations to support productions ranging from multi-season TV series to marquee sports events.

Previously, the NEP team had to create separate network paths for SDI, MADI, and Ethernet signals, a strategy that was not only cumbersome but required too many extra fiber runs. When NEP came across MediorNet and the MicroNs, the company discovered an elegant and robust solution for signal distribution — with powerful and extremely useful features like the ability to synchronise signals and distribute an analog reference signal.

NEP UK has found the MicroNs particularly useful for shows such as Channel 4's "Educating" reality series. For these types of projects, in which up to 100 cameras with integrated pan and tilt capabilities are deployed at various remote locations, the MicroNs are able to bring HD-SDI signals back to the central MCR from each camera and distribute their control

and PTZ data over an Ethernet network to allow control of the cameras. Here, MicroN provides an elegant, robust solution which has helped to reduce rigging time on these productions.

The MicroNs also play a useful role in NEP UK's legacy OB vehicles, which use separate SDI and AES audio routers. Frequently, engineers on those trucks are required to record onto SSD devices that can only accept embedded audio. In those instances, the engineers are able to bring a MADI stream from the sound desk into the MicroN device and then select the appropriate tracks of audio to embed onto SDI video for recording.

"As one of the largest OB service providers in Europe, NEP UK is a welcome addition to the RIEDEL customer family," said Graham Taylor, Broadcast Sales Manager, U.K., for RIEDEL Communications. "NEP UK has over 30 years' experience in delivering first-class outside broadcasts of all sizes. Its adoption of the MicroNs is a great endorsement of their versatility and power in virtually any type of MediorNet network configuration. We're proud that NEP UK chose RIEDEL and MediorNet based on our company's outstanding reputation and MediorNet's track record of supporting OB productions around the world."



As a technology partner for the upcoming Mission to the Moon, led by the Berlin-based PTScientists commercial space company, RIEDEL Communications will once again demonstrate its ability to deliver mission-critical systems. RIEDEL is providing the communications and signal infrastructure for the groundbreaking project in which PTScientists will aim to be the first private company to land on the Moon.

Mission to the Moon will attempt to place a spacecraft on the lunar surface, dispatch two remotely controlled Audi lunar quattro Moon rovers, and broadcast live video back to Earth in HD. Due to launch next year, the project is the work of PTScientists and their key technology partners, Audi and Vodafone.

"At RIEDEL, we're no strangers to performing under pressure, as demonstrated by our work supporting Felix Baumgartner's record-breaking free-fall jump from the stratosphere. After the massive success of the Stratos project, I wondered what would be next," said Jacqueline Voß, Manager, Corporate Development at RIEDEL Communications. "Being a technology partner for the Mission to the Moon is not just a huge testament to the reliability of our Artist and MediorNet solutions, but it also speaks volumes about our engineering teams that work behind the scenes. All of us at RIEDEL are thrilled to be a part of this project."

PTScientists chose the Taurus-Littrow valley for the Mission to the Moon, the landing site of Apollo 17 in 1972. This location will provide a unique opportunity to see how the objects left behind by Apollo 17 have survived over 45 years on the Moon. After using a commercial SpaceX rocket to reach Earth's orbit, the PTScientists' ALINA spacecraft will travel to lunar orbit, before soft-landing on the Moon and releasing the pair of Moon rovers. ALINA will also be used as an LTE base-station, enabling data connectivity between the two rovers and the lander ALINA, and could also act as a communications base-station for future missions.

RIEDEL's involvement is multifaceted. As a technology partner, RIEDEL will provide essential communications via its Artist digital matrix intercoms and Bolero wireless intercoms for Mission Control and all aspects of the live telecast. In parallel, RIEDEL MediorNet systems will be used for all signal distribution and processing on the ground, including the video data collected by the Moon rovers.

"Landing on the Moon is very complex, and it is vital that each person on the mission is working with the latest mission data and has the ability to communicate with the rest of the team without delay," said Robert Böhme, CEO and Founder of PTScientists. "We're pleased to be working with a company that has a long track record of providing services in high-pressure, live broadcast environments. The RIEDEL team already understands what we mean when we describe things as 'mission critical."

www.mission-to-the-moon.com

FLY ME TO THE MOON



ITZO EASY WITH MEDIORNET

Leading the way in preparing and inspiring the next generation of broadcast professionals

The story begins two years ago with an installation at the University of Applied Sciences in Düsseldorf (HSD) and ends at a small, yet very successful, festival this summer. Combining several renowned regional schools, the institution today is one of the largest universities of applied sciences in the region. The educational and research focus at HSD includes a strong practical and interdisciplinary approach.

Jonas Geyersberger, Andrea Sigrist, Marie Konietz, Lars Arne Emmerich, and Jonas Kaufmann. This is where the story gets good! By organizing this event, the students had the chance to put all their university experiences to practical use. So when the ITZO festival came to town, it was an easy decision to take the MediorNet gear out for the live broadcast with the students running the show.

It's no wonder that HSD recognized that media networks were the future of broadcast production so, in order to prepare students for life beyond the university, invested in MediorNet. Armed with 6 MediorNet Modular frames and a host of Performer Digital Beltpacks and Acrobat wireless for comms, students learn all aspects of production and get to experience, first-hand, the power of RIEDEL solutions. Internal capabilities at HSD include a studio, post-production facilities, a virtual studio, light lab, and a media center. Their MediorNet system also allows them to get live shots from anywhere on campus.

Two OB cars were used to capture action on the mainstage as well as live interviews in the lounge. More than 2km of fiber was installed to support the various positions. Five camera positions, an LED wall, lighting control, video feeds for the various lounges, MADI transport for the mix, and a comprehensive IP network infrastructure were also provided. MediorNet was also able to distribute timecode across the entire event to enable the eight-hour YouTube and Facebook livestreams.

Many different departments came together to make the event a success. Students and teachers from many different disciplines including media, design, and economics all worked together in a perfect example of the classroom extending into the real world to create a show that benefitted the entire community.

In July, Robert Schumann College in Düsseldorf played host to the ITZO open air festival. The event was organized by the Institute for Music and Media (IMM) with help from Düsseldorf University. The team behind this effort was Clemens Hörlbacher,

www.itzo-festival.de



RIEDEL HELPS BILDQUADRAT STAY ON THE CUTTING EDGE WITH MEDIORNET AND ARTIST ADDITIONS

BILDQUADRAT Videoproductions Upgrades RIEDEL-Based Comms Backbone on Modular, State-of-the-Art OB Van

BILDQUADRAT Videoproductions, a provider of outside broadcasting (OB) services, has completed a major expansion and upgrade of the RIEDEL systems aboard its state-of-the-art OB vehicle. The truck was launched in 2015 with a signal transport backbone powered by RIEDEL's MediorNet real-time network, including a MediorNet MicroN 80G media-distribution interface. With the upgrade, BILDQUADRAT has expanded the integrated signal transport, routing, and processing capabilities of MediorNet and enhanced communications with the installation of a RIEDEL Artist digital matrix intercom system.

BILDQUADRAT's van features a compact and completely modular design that can be adapted easily for mobile productions of all types and sizes. The onboard MediorNet and MicroN devices are connected over a 10Gbps optical fiber network to create a fully redundant, decentralized routing matrix.

"In less than two years, our OB van has handled a broad range of high-profile live sports and entertainment productions for many of Europe's biggest names in broadcast. Its success is due in large part to the pioneering solutions from RIEDEL," said Niklas Windeck, co-founder, BILDQUADRAT Videoproductions. "We built the truck from the ground up as a showcase for file-based workflows, and our partnership with RIEDEL means we can continue to support our customers in their ongoing migration to IP operations."

On board the BILDQUADRAT OB van, RIEDEL's MediorNet MicroN offers a compact and multifunctional signal interface that drives an 80G media network in only a single RU. With the upgrade, BILDQUADRAT has expanded the MediorNet decentralized routing matrix with seven MicroN high-density media distribution

network devices that can be deployed in modular fashion for a variety of functions. One of the MicroN devices operates as a dedicated multiviewer using the MediorNet MultiViewer App,

"Our customers love RIEDEL's decentralized routing approach to live broadcasting because it reduces single points of failure. Also, because physical I/O is located close to where it's needed, operations are more efficient and copper is reduced," said Moritz Wermeister, co-founder, BILDQUADRAT Videoproductions.

For pristine intercom communications, BILDQUADRAT has added a new Artist 64 mainframe as an extension to the existing Tango TNG-200 system. RIEDEL's RSP-2318 Smartpanel offers an intelligent intercom control surface that leverages the AES67 and AVB standards to provide an expandable yet simplified intercom interface for both Artist and Tango. RIEDEL MADI client cards provide a seamless interface between the Artist 64 and the truck's audio consoles, and RIEDEL's RiFace G2 universal radio interface links the Artist 64 to BILDQUADRAT's walkie-talkie-style radio systems.

"BILDQUADRAT broke new ground with the launch of its highly innovative OB van, based on a modular and compact design that offers clients maximum flexibility and a significant pricing advantage for live productions," said Katharina Kornek, Sales Team Germany at RIEDEL. "The van is also a showcase of the latest RIEDEL innovations in integrated signal-processing capabilities including one of the first deployments of our MediorNet MultiViewer. It's a privilege to help BILDQUADRAT continue to grow its OB capabilities and drive the IP-based future of mobile broadcasting."

IMPRINT

Published by RIEDEL Communications GmbH & Co. KG
Uellendahler Str. 353
42109 Wuppertal
Germany
www.riedel.net
Editorial Director: Serkan Güner
Contact: update@riedel.net

© 2017 RIEDEL Communications GmbH & Co. KG. All rights reserved. Windows is a registered trademark of Microsoft Corporation. All trademarks are the property of their respective owners. Product specifications are subject to change without notice. This material is provided for information purposes only; RIEDEL assumes no liability related to its use. September 2017.



RIEDEL'S MEDIORNET TO POWER DECENTRALIZED ROUTING INFRASTRUCTURE FOR THE SKY SPORT HQ, SKY GERMANY'S ALL-NEW SPORTS PRODUCTION FACILITY



Sky Deutschland AG (Sky Germany) has placed RIEDEL Communications' MediorNet real-time media network at the center of a decentralized routing infrastructure for Sky Sport HQ, their landmark new sports broadcasting center in Munich. Featuring the most extensive MediorNet backbone deployed to date, Sky Sport HQ has one of Europe's largest and most advanced broadcast infrastructures for live sports production. The MediorNet infrastructure is made up of nearly 150 frames, including RIEDEL's MetroN Core Router, MicroN, and MicroN MultiViewer, providing almost 1,600 video and over 1,500 audio connections.

Sky Sport HQ is the realization of our vision for the future of sports production — a facility that offers the perfect combination of high-quality design, state-of-the-art technology, and smart innovation. The scalable MediorNet signal transport and routing system gives us a new dimension of flexibility and sets the stage for us to support IP-based workflows and 4K productions," said Alessandro Reitano, Vice President, Sports Production at Sky Deutschland. With MediorNet, we can deploy tremendous routing capabilities in a decentralized real-time network that offers powerful flexibility, redundancy, and reliability. Another big MediorNet advantage is the MultiViewer App along with its other built-in signal processing capabilities, which eliminate the need for many external devices.

Occupying 4,500 square meters near Sky Germany's corporate headquarters in Unterföhring, just outside Munich, Sky Sport HQ has three studios with interconnected production, edit, and playout capabilities along with a full broadcast IT infrastructure. Sky Sport HQ went into production this summer with a wide range of live sports broadcasts including the Sky Bundesliga conference, the UEFA Champions League, golf, tennis, and Formula 1 events. Sky Sport HQ will also supply content for Sky Germany's online platforms and the Sky Sport News HD program.

Sky Germany worked with RIEDEL partner Qvest Media to design production workflows for the Sky Sport HQ and oversee turnkey implementation of the entire system, including the innovative IP backbone also provided by MediorNet.

"With this state-of-the-art new broadcasting center, Sky Germany is passing another milestone — a complete MediorNet that combines decentralized routing with signal transport and processing, including integrated MultiViewers," said Jens Miedek, Director of Sales, RIEDEL Communications. "It is an honor to support Sky Germany in this future-oriented project, a showcase of innovative and sustainable technologies that provide a reliable foundation for the IP-based operations of tomorrow."



HILLSONG CONFERENCE

SYDNEY'S MESSAGE IS LOUD AND CLEAR
WITH WORLD'S LARGEST BOLERO INSTALL
AND MEDIORNET'S HIGHLY EFFICIENT SIGNAL
TRANSPORT



RIEDEL's all-new Bolero wireless intercom system and MediorNet real-time network played the starring roles for crew communications for the Hillsong Conference Sydney, a spiritual gathering of more than 22,000 attendees that took place July 4-7 at the Qudos Bank Arena in Sydney. With 55 Bolero belt packs distributed to production team members throughout the arena and backstage, the Hillsong Conference marked the world's largest Bolero deployment to date. In addition, 40 MediorNet nodes provided the integrated audio, video, and data communications backbone for all production spaces.

Hillsong Conference Sydney is one of three large annual conferences sponsored by the Hillsong Church, a global family of Christian congregations. It's also one of the most technically advanced live events in the world, and its highly capable team seeks excellence in every aspect of production. Our German headquarters worked tirelessly to support the local RIEDEL Sydney team, delivering Bolero just in time to help Hillsong produce this world-class event.

The onsite RIEDEL engineering team deployed the MediorNet nodes throughout the Qudos Bank Arena and also integrated MediorNet MultiViewer to provide comprehensive monitoring. Up and running only five hours after the truck doors opened, the MediorNet network transported, routed, and processed every live and broadcast video signal from cameras to screens, with routing capacity of more than 1,000 Gbps over 14 multicore fibre cables. The entire backbone was centrally monitored and controlled by the RIEDEL team.

For intercom, the team deployed more than 200 Artist digital matrix ports for Bolero belt packs, RIEDEL 1100 series panels, and Smartpanel control panels. Artist and Bolero are tightly integrated, which means wired or wireless communications can be set up quickly and then easily programmed through the Director software.

Thanks to Bolero's proprietary ADR (Advanced DECT Receiver) technology, the 55 belt packs in the entire main arena were easily handled with just 6 co-located antennas — a feat not achievable with

any other intercom system on the market. On top of that, Bolero delivered outstanding RF and audio performance, which makes high-quality comms in tricky places very easy and reliable.

Hillsong Sydney had high production values and a very busy schedule, which meant the team had to be able to respond quickly to changes throughout the event. With MediorNet as the backbone interface between all involved companies and departments, it was quick and easy to make any necessary additions or changes to routing between audio, communications, and vision mixers.

The Hillside Conference proved that the combination of MediorNet, Artist, and Bolero is really unbeatable for complex, large-scale events. It also showed that there really is no other wireless intercom product on the market that can perform at Bolero's level.



TELEGENIC MAKES LOTS OF BIRDIES WITH DECENTRALIZED ROUTING FROM MEDIORNET

Telegenic's Decentralized MediorNet Network Delivers Exciting U.S. Golf Action to European Golf Fans

Telegenic, a major U.K.-based outside broadcast (OB) production company, is leveraging RIEDEL's MediorNet real-time signal transport, processing, and routing network to bring exciting live coverage of American golf to viewers throughout Europe. The MediorNet network delivers the redundant signal transport infrastructure for Telegenic's on-location golf coverage and provides one more powerful testimonial for RIEDEL's decentralized routing approach.

At each golf course venue, Telegenic deploys a MediorNet network consisting of a MetroN core router, 10 MicroN high-density media distribution network devices, and four MediorNet Compact Pro mainframes to facilitate transport of HD video and a variety of audio signals. The MediorNet components are all connected over a 10Gbps optical fiber network to form a decentralized routing matrix.

One MediorNet Compact Pro provides signals for a large, high-brightness, mobile touch-screen system that facilitates interactive player interviews and analysis from locations around the course. Other MediorNet nodes handle signal transport

to an on-site studio and the host OB truck. WDM multiplexers within the system cut the number of fiber connections required for the Compact Pro from six single-mode cores down to just two, and MediorNet's automatic signal rerouting capabilities deliver full optical redundancy over just four cores.

This is also the first North American deployment of RIEDEL's new MediorNet MultiViewer software app. Running on two of the MicroNs, the app provides robust multiviewing capabilities for up to 18 video signals that can be viewed locally or redistributed out to any of the MediorNet nodes. The integrated solution also includes RIEDEL's RockNet 300 real-time audio distribution network that rides atop the MediorNet backbone.

RIEDEL's virtual keypanels give the Telegenic crew unprecedented flexibility, and the MediorNet all-in-one approach drastically simplifies setup – relieving the crew from having to route signals in and out of various bits of equipment. Plus, RIEDEL's network-based design makes connecting the trucks and sharing resources much easier and more straightforward.



START ME UP!

"The list of mentors and partners is constantly growing and it gives me a great amount of satisfaction to be a part of this. We are empowering the next generation of entrepreneurs and there's really no better way to give back."

Thomas Riedel

Encouraging and supporting new business creation has never been more important. In today's globalized world, and even close to home, start-ups can help drive economies and accelerate innovation. Thomas, a life-long entrepreneur who began his journey in broadcasting and sports in a garage 30 years ago, is testament to the entrepreneurial spirit. Today, creating environments where imagination, enthusiasm, and entrepreneurship all come together is key to fostering new businesses.

So, it is not surprising that Thomas has found a way to give back and support future entrepreneurs and innovators by supporting and embracing the ideals of the leAD Sports accelerator in Berlin. leAD seeks to unite entrepreneurs, experts, athletes, mentors, and international investors with start-up companies and is closely linked to the philosophy of Adidas founder Adi Dassler – creating the best to help athletes perform at their best.

But what defines the entrepreneurial spirit that leAD is looking for? They want people with real perspective, strong ideals, courage, and vision. leAD uses several strategies throughout the year to nurture sports start-ups, highlighted by their accelerator program. In this case, a 3-month process begins with an application phase that results in 40 companies being selected to continue. From there, 16 high-potential start-ups are selected to enter the "accelerator" phase of the program. Here, their business plan is stress-tested, they get intensive training, advice from industry leaders, direct feedback on their product offerings, and meetings with VCs for access to capital. Staying true to the sports topic, 4 weeks into the program the Semi-Finals are happening. Of the initial 16 startups only the best get to remain in the accelerator to work with dedicated coaches, mentors and potential investors towards Demo Day. Finally, at the end of an investment pitch, one company is selected the winner.

It's obvious there's passion on both sides with leAD's passion for sports and Thomas' for communications and entertainment. RIEDEL is closely linked to the world of entertainment, and maybe that's to be expected from a magician-turned-DJ-turned-entrepreneur. That's probably why many people consider him an entertainer at heart.

For Thomas, it is clear that sports will continue to move and motivate the masses and he is counting on these new innovators to find and develop the technologies that will draw viewers more deeply into the events. Immersive experiences are here now and it's anyone's guess how they will be adapted to enrich events from eSports to F1 and everything in between.



leAD

SPORTS ACCELERATOR





ANDY'S GALLERY OF VISION

When did you meet Thomas for the first time?

It seems like we've known each other since high school but, in reality, it was sometime in the 90s. The first time we worked together intensively was during our time together at ORF with myself as the Technical Director of Ö3 and Thomas as the innovative technologist who wanted to change the world.

There's no second chance for first impressions. How was yours of Thomas?

He was a man who wanted to change the world and wanted it done immediately. He did everything he could to make his visions come true and was very confident of what he could offer.

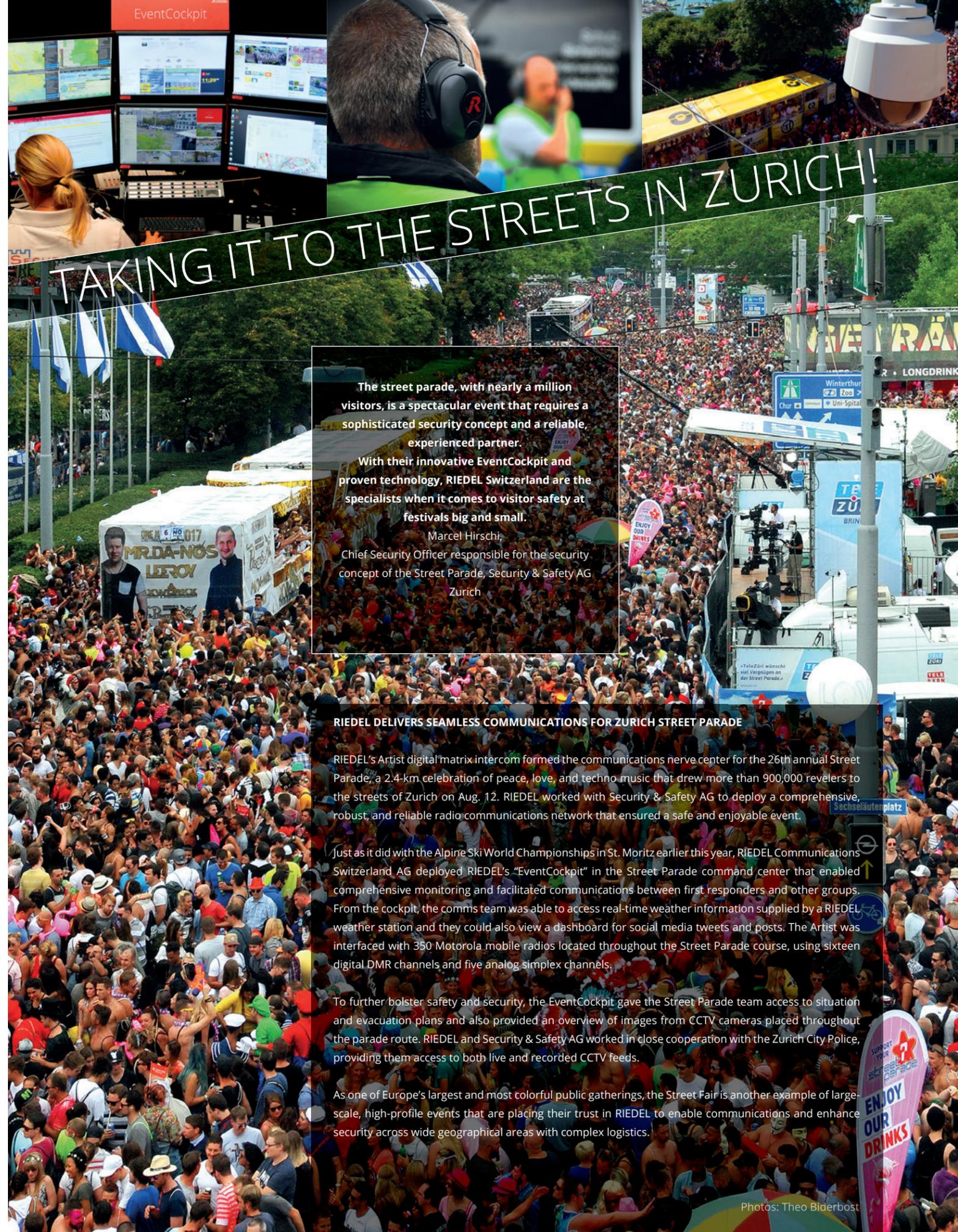
Were there parallels in your careers?

Yes, of course! We were always solution-focused, always in a good mood, and always looking ahead towards the future. But we were always mindful of the past because we learned a lot from it.

You have witnessed the broadcast business from the very beginnings. Where do you see the biggest differences between the past and present?

The biggest difference is that nothing is as it used to be. The nice thing about it is that Thomas and I have always loved the disruptive nature of our business and the constant change and the renewal.

Andreas Gall | Chief Innovation Officer at Red Bull Media House



TAKING IT TO THE STREETS IN ZURICH!

The street parade, with nearly a million visitors, is a spectacular event that requires a sophisticated security concept and a reliable, experienced partner.

With their innovative EventCockpit and proven technology, RIEDEL Switzerland are the specialists when it comes to visitor safety at festivals big and small.

Marcel Hirschi,
Chief Security Officer responsible for the security concept of the Street Parade, Security & Safety AG
Zurich

RIEDEL DELIVERS SEAMLESS COMMUNICATIONS FOR ZURICH STREET PARADE

RIEDEL's Artist digital matrix intercom formed the communications nerve center for the 26th annual Street Parade, a 2.4-km celebration of peace, love, and techno music that drew more than 900,000 revelers to the streets of Zurich on Aug. 12. RIEDEL worked with Security & Safety AG to deploy a comprehensive, robust, and reliable radio communications network that ensured a safe and enjoyable event.

Just as it did with the Alpine Ski World Championships in St. Moritz earlier this year, RIEDEL Communications Switzerland AG deployed RIEDEL's "EventCockpit" in the Street Parade command center that enabled comprehensive monitoring and facilitated communications between first responders and other groups. From the cockpit, the comms team was able to access real-time weather information supplied by a RIEDEL weather station and they could also view a dashboard for social media tweets and posts. The Artist was interfaced with 350 Motorola mobile radios located throughout the Street Parade course, using sixteen digital DMR channels and five analog simplex channels.

To further bolster safety and security, the EventCockpit gave the Street Parade team access to situation and evacuation plans and also provided an overview of images from CCTV cameras placed throughout the parade route. RIEDEL and Security & Safety AG worked in close cooperation with the Zurich City Police, providing them access to both live and recorded CCTV feeds.

As one of Europe's largest and most colorful public gatherings, the Street Fair is another example of large-scale, high-profile events that are placing their trust in RIEDEL to enable communications and enhance security across wide geographical areas with complex logistics.

Photos: Theo Biderbost

Recent Installations (selected)

PERFORMER **PF** SKYPE TX **STX**
 ARTIST **AR** TANGO TNG **TNG**
 MEDIORNET **MN** MICRON **MCN**
 SMARTPANEL **SP** BOLERO **BO**
 ROCKNET **RN**

