

www.broadcastermagazine.com

June / July 2010

Broadcaster

\$5.00

CANADA'S COMMUNICATIONS MAGAZINE

3D TRENDS

Knowledge Base Expanding
Glasses Disappearing

Also:

3D, Telepresence
Sweep NAB

Parsons Covers B.C.



Always Innovating. Always There.

At Harris, we're delivering the future today.

For nearly a century, Harris has pioneered the technologies that drive the world's leading television and radio broadcast operations.

Today, Harris is the industry's total communications leader — uniquely merging traditional broadcast and IT systems with powerful media software to streamline your current workflow and unlock all-new markets such as 3DTV, Mobile DTV, digital radio and out-of-home advertising.

Where are we headed tomorrow? Wherever you and your audience want to go.

To learn more, please visit us at www.broadcast.harris.com.

harris.com

HARRIS[®]
assuredcommunications[®]

Broadcast Communications • Government Communications Systems • RF Communications



Contents

Broadcaster® June / July 2010

Volume 69 Number 4

Feature Report

Cover Story:

10 Seeing 3D in a New Light
Not Your Daddy's Cardboard Cutouts

14 2010 Puts NAB In A
Whole New Dimension
New Products and Services
Introduced

NABSHOW™
Where Content Comes to Life™

22 Canadian Achievers
Tony Parsons...
A life in the news.



Departments

4, 20 Industry News

New Radio Association Needs Dual Mandate, Full Participation

Any new industry association or representative body for radio broadcasting in Canada must have one hundred percent participation from the country's radio broadcasters in order to succeed.

The announcement that the Radio Marketing Bureau will close this summer means the industry will be without a unified voice, and so its leadership is preparing for the launch of a new organization, one that could have an important and expanded "dual mandate" that combines the role of the RMB with that of the CAB, the Canadian Association of Broadcasters, which folded earlier this year.

Gary Belgrave, the current RMB President, told Broadcaster Magazine that any new association has to include full participation from the industry in order to succeed.

"All the broadcasters have to get together; it can't be a piecemeal process. If radio broadcast industry is going to have its own association, then the players - big and small - all have to agree to be part of it. That's the way it will be most effective, and will speak with a voice that is most authoritative," he said. "If half of them are playing, and half aren't, it isn't going to work."

RMB currently represents over 400 radio stations across the country, saying they generate over 80% of Canadian radio revenue.

Belgrave says that to do it right, it needs to be one hundred per cent. So, too, the focus of the industry must be one hundred per cent on radio matters.

Previous attempts to help the CAB find common ground between broadcasters and cable operators, for example, proved increasingly difficult as different views of the industry emerged over controversial issues such as fee for carriage and local content origination.

The CAB, for example, concluded that TV broadcasters such as CTV and Canwest would not find common ground with cable companies like Rogers Communications, which has broadcasting assets.

The RMB faces similar issues, and it became less able to find highly focussed radio broadcasters with that medium utmost in their mind.



Gary Belgrave,
Radio Marketing Board

"There are some, but they are not of the big ilk," Belgrave noted. "That's one of the benefits or drawbacks of consolidation; the bigger players have more on their mind beyond radio. That's why the CAB started to fail, as radio broadcasters found they were not even on the agenda anymore. Many felt they were not getting their due voice for the fees they were paying.

So we have to have focus in the new association and its membership. Even though some may be part of a bigger plan, members like a

Corus or a Rogers have to say, 'OK, that is our radio division and we are committed to it and we have this focus on it. I hope that's what the new association will enable them to do, to bring that focus and mandate.'

As announced by the RMB's Board of Directors, the current association will continue to operate as normal for its current members until August 31, 2010.

Until that time, discussion will continue to pave the way for the radio industry to re-establish its presence with one association dedicated to its particular legislative, regulatory, sales and marketing needs.

As Lesley Conway-Kelley, Chair of the RMB, stated, "Radio's future is bright and the best way to move forward and continue to be relevant in the current competitive environment is to focus our resources into one association with a broader yet focused mandate." Additionally she said, "The only way this action is possible is that we are able to build on the superior work of the RMB and its team under the leadership of its President, Gary Belgrave, to transition into a new association that will combine the strengths of both the CAB and the RMB."

Industry executives are currently working together to develop the framework for this new association, including representatives from both the RMB and the CAB. Golden West Broadcasting's Elmer Hildebrand, the former member of both the CAB and RMB is leading those discussions, Belgrave noted, and is acting as a catalyst for the new association.

"There's a lot of discussion going on at the moment," Belgrave explained, "and we're just waiting to see where that nets out. There's no way that we could hive on to our organization

Editor

Lee Rickwood
editor@broadcastermagazine.com

Contributing Editors

David Bray; Dick Drew; Derrick Scott;
Robert McKenzie

Senior Publisher Advertising Sales

James A. Cook (416) 510-6871
jcook@broadcastermagazine.com

Art Director

Anne Miron

Print Production Manager

Phyllis Wright (416) 510-5101

Production Manager

Gary White (416) 510-6760

Vice-President

Alex Papanou

President

Bruce Creighton

Circulation Manager

Cindi Holder (416) 442-5600 ext. 3544

Customer Service

Malkit Chana (416) 442-5600 ext. 3539

News Service

Broadcast News Limited

Editorial Deadline:

Five weeks before publication date.
Broadcaster is published 8 times yearly, by
BIG Magazines LP, a div. of
Glacier BIG Holdings Company Ltd.

Head office:

12 Concorde Place, Suite 800,
Toronto, ON M3C 4J2
Fax: (416) 510-5134

Indexed in Canada Business Index

Print edition: ISSN 0008-3038

Online edition: ISSN 1923-340X



Canada

Circulation audited by Audit Bureau of Circulations
Publications Mail Agreement 40069240. PAB
Registration No. 11003.

We acknowledge the financial support of the
Government of Canada through the Canada
Periodical Fund (CPF) for our publishing activities.
Return undeliverable Canadian addresses to
Circulation Dept. Broadcaster, 800-12 Concorde Place,
Toronto, ON M3C 4J2.

Subscriptions in Canada and U.S. \$45.95 for one year;
foreign \$59.95 (U.S. and foreign in U.S. funds).

Single copy, \$5.00; Directory, \$46.95 each. Canadian
subscribers must add GST and Provincial tax where
necessary. gst registration #R890939689.

For reprints call: 416-510-6871

USPS#016-247. US office of publication: 2424 Niagara
Falls Blvd. Niagara Falls, N.Y. 14304-0357. Periodical
Postage Paid at Niagara Falls, NY, USA. 14092.

Postmaster send address correction to Broadcaster, P.O.
Box 1118, Niagara Falls, N.Y. 14304.

From time to time we make our subscription list available to select companies and organizations whose product or service may interest you. If you do not wish your contact information to be made available, please contact us via one of the following methods: Phone: 1-800-668-2374; Fax: 416-442-2191; E-Mail: privacy.officer@businessinformationgroup.ca; Mail to: Privacy Officer-Business Information Group, Suite 800-12 Concorde Pl., Toronto, ON Canada M3C 4J2

Copyright © 2010 by Broadcaster® Magazine. All rights reserved. The contents of this magazine may not be reproduced in whole or in part without the permission of the Publisher.

SONY
make.believe



Unleash Your Potential
XDCAM EX



Three 1/2-inch-type "Exmor"
Full-HD CMOS Sensors

PMW-EX1R

Solid-State Memory Camcorder

Sony evolves its XDCAM EX line-up with the introduction of the new PMW-EX1R.

The direct successor of the PMW-EX1, it extends the capabilities of the XDCAM EX family with great new features such as DVCAM recording, Cache Recording, Picture Inversion and a host of additional refinements.

The PMW-EX1R camcorder supports not just SxS PRO memory cards but also the more affordable SxS-1™ media. There is also an innovative on-site backup solution with the PXU-MS240 mobile storage unit.

The EX1R is ideal for customers such as broadcasters, independent videographers and film makers who need exceptional HD picture quality and state-of-the-art workflow from a compact and affordable handheld camcorder.

Visit an authorized Sony dealer today and learn how you can unleash your potential with XDCAM EX.

www.sonybiz.ca

the lobbying, legislative and regulatory duties of the CAB - that's not our (RMB) mandate. Any more than you could live on to the CAB our mandate for marketing and advertising. It all has to be done differently in this day and age, in a unified and focussed way."

Belgrave noted that for some broadcasters, there would be a cost savings involved, as well.

"If they are only to pay to one organization, more focussed and more efficient, rather than two, that is a good thing from a financial point of view. But especially with an organization like ours, we need everyone to participate. If we are doing advocacy for the industry, and some are benefitting but not participating, that won't work. Some people have their own agenda, and they do not want to play in the sand box with those that are the competition, but that is not fair to the other players. We need a consistent voice, or our arguments fall flat. Speaking with one voice can give the whole organization much more clout in whatever venue they are talking."

Further announcements about the new radio broadcasting industry group are expected by if not before September 1, he added.

Rand Celebrates 25 Years

Montreal's 92.5 The Q celebrated Aaron Rand's

25 years with the radio station last month. The veteran broadcaster first took to the airwaves on May 19th, 1985.

It was then (known as CFQR — Corus Quebec) and is now a Corus radio station.

"This is the best job in the world — except for the getting up at four in the morning part," joked the legendary Montreal morning man, who's been at the same station since 1985.

"We congratulate Aaron for entertaining this city for 25 years," said Mario Cecchini, Vice-President of Corus Quebec. "He is a huge part of Montreal's radio history."

92.5 The Q is owned by Corus Entertainment Inc. and is home to Q Mornings with Aaron Rand, The Live Drive with Ken Connors & Donna Saker, as well as All-Access Weekends with Anne-Marie Withenshaw.

Part of the Corus Radio network, The Q is Montreal's only English-language Adult Contemporary station and has been a mainstay for decades with its core audience of women 35-54.



A colourful birthday bash for Aaron Rand

3-D Centre in BC Gets Federal Funding

The BC film industry sees itself in a leading position for 3-D media production following announcement of major government investment into research and training for new production and post-production technologies.

The Government of Canada is making an investment of \$530,000 in the Emily Carr University of Art and Design (ECU), to help purchase equipment and develop the first western Stereoscopic 3-D (S3D) Centre of Excellence in digital media and film technologies.

"British Columbia has a vibrant film making industry and today's investment will provide the necessary resources so this industry can remain competitive in the West," said the Honourable Lynne Yelich, Minister of State for Western Economic Diversification.

The S3D centre will be housed in Emily

Carr's Intersections Digital Studios, based in Vancouver. This new initiative will strengthen Emily Carr's applied research and collaboration with industry and will result in the only western Canadian S3D film-making technology research and training program.

Global News Names New Creative Director

Global News promoted Robyn Rudolph to the role of Creative Director, Global News.

With this newly created role, Rudolph will lead the creative development for all advertising, promotion and branding of the Global National and Global BC newscasts, as well as ensure the consistency of all Global News brands across the network. Rudolph's creative insight and extensive knowledge of the news industry has enabled Global BC and Global National to win several industry awards including multiple Pro-max international awards for their news marketing campaigns, the broadcaster noted.

Rudolph started her broadcast career with Global BC (BCTV) as a marketing producer and was later promoted to Manager, News Creative. Prior to this, Rudolph worked at an international creative agency.

Whittingham Joins Sensio BoD

Pat Whittingham has joined the Sensio Technologies Board of Directors, bringing his knowledge and experience accumulated over a 28-year career in the media industry.

The company develops and markets stereoscopic digital compression, decompression, and display-formatting technologies, used by content creators, video-game developers, broadcasters, specialty channels and digital cinemas.

Most recently, Whittingham was president of the Sony Broadcast and Production Systems Division at Sony Electronics (USA).

He currently serves as president of Toronto-area media technology consulting firm PGW & Associates and also sits on the boards of Miranda Technologies, Front Porch Digital and AZCAR Technologies Inc.

(Following the Sensio announcement, Azcar added to the news, when Stephen Pumple, Chairman and Chief Executive Officer of Azcar announced that Whittingham tendered his resignation from the Azcar Board so that he can free up some time to pursue his other business opportunities. "Over the past six years, Pat has provided solid advice and guidance and in his role as Chair of the Governance Committee Pat helped navigate the company through the maze

BCCS Inc.

BROADCAST CAPTIONING & CONSULTING SERVICES INC.

CLOSED CAPTIONING

- On-Line (Real Time) ● Off-Line (Post Edit / Pop-On)
- Live Display (Roll-Up)

BCCS provides our clients:

- Fast Turnaround
- Highest Quality in Captioning Accuracy
- Competitive Pricing
- Highly Trained Professional Captionists

LIVE, EPISODIC and COMMERCIAL PRODUCTION

For inquiries on your closed captioning requirements contact:

BCCS Inc.

- Telephone: (416) 696-1534
- Fax: (416) 421-7603

www.closedcaptioning.com



Pat Whittingham joins Sensio Board of Directors

of ever increasing regulations and governance matters, Pumble noted. “We want to thank him and wish him well in the new venture he is embarking on.”)

At Sony Electronics (US), Whittingham led the Sales and Marketing organization through a period of growth related to broadcast and production technology, systems integration, and digital cinema. During this time, he also served on the boards of Panavision, Concadia Solutions and Smart Signal.

In Canada, Whittingham was a founding Board member of CDTV Inc. (Canadian Digital Television Inc.), and served on the board of the Canadian Film Centre. As a consultant, his engagements include work for the Office of the Auditor General of Canada on a special audit of the Canadian Broadcast Corporation with a focus on strategic technology planning. In recent work for the Business Development Bank of Canada (BDC), Whittingham conducted an assessment of business plans for startups in the area of new media.

“Patrick’s extensive background in senior management, broadcast and professional sales and marketing, system integration, and engineering support of professional products in the high-technology sector makes him a remarkable addition to our board,” said Jacques Malo, Sensio board president. “We will miss the contributions and professionalism of his predecessor, Andre Lepage, to whom we owe our sincere thanks. As we build upon the work of Andre and others on the board, we are confident that Patrick’s experience and vision will fuel further innovation and success at Sensio.”

Much MTV Group Names Programming, Production Heads

Mark McInnis has been promoted to Vice-President, Production, Much MTV Group, CTV Inc., and that Brook Peters has been appointed Director of Programming, Much MTV Group, CTV Inc.

Brad Schwartz, Senior-Vice President and General Manager, Much MTV Group, CTV Inc. announced that McInnis’ role has been

expanded to oversee all production and development for the eight channels in the Much MTV Group.

McInnis has been associated with CTV for more than a decade, joining the company permanently in September, 2005. He was involved in some of CTV’s most memorable live specials and productions, including Live 8, Concert for Tsunami Relief, Canadian Idol, and, most recently, Olympic Morning and Canada for Haiti. McInnis is the creator of Entertainment Now (now ETalk) and was also Head of Documentaries for CTV in the late 1990s.

Peters is responsible for all aspects of the programming business for the eight channels in the Much MTV Group. Peters’ duties include scheduling, negotiation and execution of acquisitions, and lending support for overarching programming and brand goals.

Peters joins CTV with nearly a decade of broadcast experience.

Peters graduated from Ryerson’s Radio & Television Arts program, and since 2007 has served as the Manager of Programming for

English and French signals of both Teletoon and Teletoon Retro.

Prior to that, Peters worked for Corus where he started in on-air promotions and later became the Programming Manager at YTV (later to be named Corus Kids: YTV, Treehouse, Discovery Kids).

CBC Halifax Hears the Digital Future

CBC recently upgraded one of its music production remote trucks with a 128-channel, 32 fader Solid State Logic C200 HD Digital Production Console. It will be used for both live broadcast and recording of concerts and events for radio and television in Nova Scotia, New Brunswick and Prince Edward Island.

The first project for the newly installed C200 HD was with the Harvest Jazz and Blues Festival in Fredericton, New Brunswick capturing the performances of Grammy winner Terrance Simien & The Zydeco Experience and Grammy nominated Susan Tedeschi. Since then, the console has graced musical styles from orchestral, gospel and world to rock, blues and jazz.

“There are certain important advantages of



Avid Interplay will save you money

Explore These 10 Ways:

- Faster, smoother media access
- Greater output from journalists and producers
- Easier, more error-free content transfer
- Better asset re-use and re-purposing
- More open integration, longer gear life
- Simpler, less expensive support
- Increased resource consolidation
- Lower storage expenditure
- Reduced network costs
- Proven reliability, global installed base

These are just the beginning. To get an in-depth look at our Top 10 list and to learn more about how Avid can save you time and money, go to www.avid.com/interplayvalue



© 2010 Avid Technology, Inc. All rights reserved. Avid, the Avid logo, Deda, NEWS, and Interplay are trademarks or registered trademarks of Avid Technology, Inc. in the United States and/or other countries. All other trademarks are the property of their respective owners.

using a digital console when dealing with the live recording and broadcasting of an event, and those advantages are well expressed on the C200 HD," says Karl Falkenham, music producer and recording engineer for the CBC. "With a live performance situation, the C200's knob per function design approach is very powerful and immediate. We really like the Project Recall and Snapshot Reset abilities of the C200 HD, which make changeovers between bands a breeze," Falkenham described. "We can instantly call up the mix from the sound check for a particular act without any delay. This allows us to focus on fine tuning the sound, rather than scrambling for settings like we had to do with our previous analogue desk."



CBC's Karl Falkenham with the SSL C200

CTV Appoints New Vice President, Digital Media

Alon Marcovici has been appointed Vice President, Digital Media at CTV

Rick Brace, President, Revenue, Business Planning and Sports, CTV Inc., announced that, as Vice President, Digital Media, Marcovici is now responsible for CTV's overall digital media strategy, overseeing the company's Digital Media Group as it expands CTV's use of media platforms including portable devices and online delivery of news, sports and entertainment.

Marcovici will continue in his role as Vice President, Digital Media for Canada's Olympic Broadcast Media Consortium.

Marcovici's impressive and multifaceted career in marketing and communications spans the sports and entertainment, media and non-profit industries. Most recently, his responsibilities included the Olympic Consortium's development and distribution of digital programming, including online, mobile and other digital offerings, in addition to overseeing the research team.

Prior to joining the Consortium, Marcovici twice managed the on-site NBC Olympics Research

Room at the 2000 Summer Games in Sydney and the 2002 Winter Games in Salt Lake City. He has also served as Vice President and Chief Marketing Officer of the Toronto Board of Trade, Vice President of Marketing and Communications for the NHL's Florida Panthers and Office Depot Center, and Director of Marketing Media with Maple Leaf Sports & Entertainment Ltd.

Pharos Engine Drives Media Management at Corus New Headquarters

Corus Entertainment has selected new content management technology to help manage its media workflow across multiple platforms, including high definition, on-demand, mobile devices and online.

Pharos' Mediator program will integrate the company's multiple broadcast systems - including Open Text Digital Asset Management, Omni-Bus iTX and Pilat IBMS - into a seamless and unified operation of activities at every stage of Corus' ingest, archiving, transmission and content delivery process at its new headquarters, now under construction.

Corus Quay, the new base of operations for Corus, will house more than 1,100 Corus employees in a state-of-the-art broadcast and production facility located on Toronto's waterfront.

"We selected Pharos Mediator based on its proven track record for delivering highly integrated workflow programs with the flexibility to meet new and demanding broadcast environments," said Scott Dyer, Chief Technology Officer, Corus Entertainment. "We were also impressed with the depth of knowledge and experience shown by the Pharos team and we look forward to implementing Mediator in the coming months."

Corus, Pharos and Siemens IT are among the install partners at the new facility, expected to go live later this year.



Media Management at New Corus HQ

CTV Audio Supervisor Flying High with Digital Microphones

Not only has digital audio technology performed



Mike Nunan, CTV's post-production supervisor, successfully uses Neumann digital microphones to record a documentary on the "audio hostile" flight deck of the USS Nimitz.

for CTV's post production audio supervisor Mike Nunan in the relatively controlled environment of a concert hall, it's enabled him to come away with great audio in one of the most hostile environments he's ever faced.

One of CTV's marquee sound productions was the re-recording of 'The Hockey Theme' using some thirty Neumann digital microphones to capture a live orchestra in one of the largest such recordings ever (Nunan and his work on the Theme recording was featured in the March 2009 issue of Broadcaster Magazine, in 'State of the Art Treatment for New Version of Second National Anthem').

But when the opportunity came to spend time in a completely different environment - aboard the U.S. Navy's super-carrier, the USS Nimitz, while on a documentary production - the same mics were used.

As Nunan recalled it, "The powerful radar systems aboard Nimitz and her aircraft combined to create an enormous amount of electromagnetic 'pollution,' which induced all manner of annoying and awful noise on virtually every recording I made once I was on deck. It would have been a total loss if it weren't for the Solution-D microphones - they were completely impervious to the noise and degradation."

Director, Original Programming Named at Astral

Aubie Greenberg has been appointed as Director, Original Programming, Movie Services, Astral Television Networks.

Astral's Kevin Wright, Senior Vice President, Programming, announced that in the new position, Greenberg is responsible for developing the strategic direction and management of the original programming slate, including project selection, development and production for The Movie Network and HBO Canada. Current projects in development and production include the upcoming The Pillars of the Earth, Call Me Fitz, Good Dog and the third season of

Durham County.

“Through his extensive experience as a programmer, Aubie has come to know our brands inside and out and has a keen sense of what works for our networks and resonates with subscribers,” said Wright. “We are very excited to welcome Aubie to this new role, where his vision and multi-platform expertise will be fully leveraged.”

Greenberg has more than 20 years of experience working for Astral Television, most recently as Director of Programming, where he was responsible for programming uniquely branded multiplexes, HD channels and the recently launched HBO Canada.

Current Manager of Original Programming Kathleen Meek will take on an expanded role in the Movie Services department, where she will work on both original movies and series for the networks as well as Canadian theatrical films.

Bowing Out with a New Brand at Astral Media

Having just unveiled its new logo, look and brand, broadcaster and media company Astral is looking for a new corporate brand manager. Chief marketing officer and vice president of corporate communications Alain Bergeron says he will be winding down his duties this summer, with a final exit date at the end of August, following a nine year run with the Montreal-based cable, pay TV and digital signage company.

“The company has changed a lot, and grown tremendously. We have many more media properties than in 2000, having launched HBO [Canada in 2008], the Disney [Playhouse] service, Virgin Radio and Boom and our outdoor advertising network. It’s become a pan Canadian company. We’ve tripled our employees, and expect to hit a billion dollars in revenue next year.”

The growth of the company necessitated changes in its brand, Bergeron said of his last major project with Astral - redefining the company’s image, and better reflecting its current status and capability.

“We see our company as more accessible, more approachable, and we wanted the logo to reflect that,” he described. “We’ve outgrown the old logo, as a company, and we want to show the breadth of our assets and the creativity of our employees.”



So the new look seeks to encompass the company’s broad portfolio of media properties and to unite them under one consumer facing brand.

It’s the outcome of a 12-month brand assessment and redesign process, completed with the help of Toronto-based agency, Juniper Park.

“It was a hell of a job trying to capture and symbolize this,” he described of the rebranding task. “We looked at some 50 different creative tracks during the process, and narrowed them down top five that we developed into tangible deliverables. I presented four to Ian (Greenberg, CEO of the family controlled business).”

“He felt it right away, and he preferred the same one I did,” he said of the final lower case letter logo. “We both feel it better reflects who and what we have become, both as a group of individuals and as a company.”

The multi-coloured mosaic image symbolizes the company’s various business units, Bergeron described, coming together and forming one unit. The single white lines that threads through the mosaic, he said, represents forward movement and action, and helps unite the disparate shapes in one unified whole.

The logo’s design can be reproduced across multiple media platforms, Bergeron described, noting an animated version for TV or online use.

The vibrant colours and creative shapes in the new logo stand in contrast to the old logo, a single coloured letter A, representing its desire at the time to be seen as a strong, conservative company.

That logo helped establish what was a new company as a legitimate entity in the business, but the company needed to communicate something more than that now.

“I feel that I have achieved my mission here and want to take some time to reflect before embarking on the next stage of my career,” Bergeron said later.

Greenberg agreed that Bergeron has a huge role in developing and defining the company’s new identity. “During his time with us, the size of the company doubled,” Greenberg said. “He ensured that Astral’s image and corporate reputation evolved as we did. Alain advised me of his decision in March but insisted that it was important to him to see the launch of our new brand to completion. Mission accomplished! I know that he will be just as successful in the next stage of his career. I wish him much-merited success.”

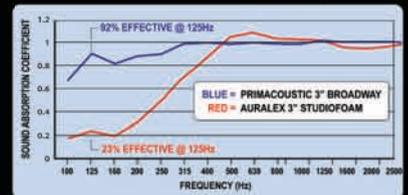
Astral will operate publicly under the Astral more *Industry News* on page 20

Great Sounding Rooms... Made Easy!

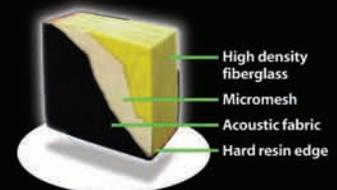


With Primacoustic, a great sounding room is no longer limited to big budgets. We offer a great selection of premium acoustic panels that outperform the competition and look great!

Check this out... this graph compares the performance of typical urethane foam to our premium Broadway panels.



Broadway panels are made from high density 6lb glass wool for amazing absorption right down to the bass region. Fully encapsulated with micromesh, resin hardened edges and fabric covered, Broadway panels won't leach and will look great for years.



Great performance, great looks, easy to install and affordable...

Primacoustic makes it easy!



PRIMACOUSTIC®
...take control of your room!

Primacoustic - 1588 Kebet Way, Port Coquitlam, BC V3C 5M5 tel: 604-942-1001 info@primacoustic.com

www.primacoustic.com



Seeing 3D in a New Light

It's not about your daddy's cardboard cutouts anymore.

By Lee Rickwood

The perfect storm of retail availability, industry standardization, content creation and new delivery opportunities is building buzz around 3D — and Canada is right in the middle of the picture.

Of all the comments and questions received about 3D, probably the most common one here is, 'Is it real now, or just another passing fad?'

That's quickly followed by, 'I hate the glasses; do I have to wear them?'

The quickest answers: 'Yes, it's real'. And 'Not for long'

3D TV is here to stay this time — but it's changing rapidly.

Across the media landscape, the proof of concept is clearly visible.

After all, it's just a few weeks since a major 3D movie became the top-grossing movie of all-time. And just a few months since just about every electronics manufacturer you can think of introduced their 3D TVs, Blu-ray players and gaming systems.

And TV programmers and broadcast distributors around the globe are still jumping on new

3D content opportunities, as seen in the recent rush to carry 3D sports events like the Masters and the World Cup.

Then, there's the mushrooming of industry events, hands-on production workshops, conference presentations, research initiatives and facilities launches dedicated to 3D.

No one at this stage — well, not many — are willing to say 3D will be hugely successful at every level. No one is saying there are not plenty of hurdles to overcome, from creation to delivery to financing.



But it is clear that 3D is a permanent fixture on the media horizon from this point on.

That's a key reason why, to kick off this year's Banff TV Festival, the keynote presentation is on "The Future of Television — 3D."

Producer/director James Stewart, founder of the Toronto-based production company Geneva Films, provides a rounded view of the 3D ecosystem and business models emerging for the industry in his talks.

Whether it's at the recent CPFTA Prime Time conference in Ottawa, or in an upcoming pre-

sentation at Cannes, Stewart shares his first-hand insights into the 3D process - from storytelling through production to delivery.

Producing in 3D

Stewart knows why 3D matters, how it is produced and what it cost, based on his own recent production experiences. He's one of a select group that can now deliver an in-depth keynote on 3D and its breakaway success as an entertainment and commercial medium, while showing his own digital 3D content for multiple platforms.

"3D's time has come. You see it in the blockbuster global box office success of *Avatar* and the 3D commercial success by major brands such as Sprint, Mazda and Vodafone. The advertising community is now ready and eager to capitalize on 3D's immersive effect," said Stewart. "But, across the creative community, we still have a lot to learn as we all tool up for 3D production."

That's the thinking, too, behind other Canadian 3D events, focussed on the how and why of production.

During the recent Worldwide Short Film Festival held in Toronto, industry sessions staged by the Canadian Film Centre looked at the business of content creation, production and distribution — including 3D.

Peter Fannon, Vice President of Corporate & Government Affairs, from Panasonic U.S. spoke during one such session, helping to 'Stretch the Imagination' of producers and directors in the audience with his presentation.

Outlining his view of the strong foundation and clear evolution of 3D, he said first off that he and his company are "very bullish" about 3D in the home, and that the company's 3D TVs are in a full production run, and not being held back in any way.

He went on to describe the converging storm of major studios (planning some 20 or 30 3D releases per year) with 3D content plans; the MSOs and cable operators (planning the launch of several dedicated 3D channels, not just specific 3D programs) with 3D delivery capabilities, as well as the availability of new 3D tools (Panasonic's own integrated 3D HD camcorder was shown in Toronto, and will be shipping soon, he said) for acquisition and post production.

In addition to the 3D camcorder, Fannon told the audience that Panasonic will offer a professional-quality 3D full HD LCD monitor for field use as well as a professional HD digital AV mixer for live event production in the near future.

But, understanding that the many human factors that can impact the viewer (like natural or stereo convergence, image alignment and perspective impacts like hyperstereo and orthostereo) — as well as the technical factors (like screen refresh rates and display scanning frequency that affect 3D viewing), he agreed that there's still a need for further industry research

BC Media Industry Sees Itself in 3D

The BC film industry sees itself in a leading position for 3D media production, and so news of major government investment into research and training for new production and post-production technologies is most welcome.

The Government of Canada is making an investment of \$530,000 in the Emily Carr University of Art and Design (ECU), to help purchase equipment and develop the first western Stereoscopic 3D (S3D) Centre of Excellence in digital media and film technologies.

The S3D centre will be housed in Emily Carr's Intersections Digital Studios, based in Vancouver. This new initiative will strengthen Emily Carr's applied research and collaboration with industry and will result in the only western Canadian S3D film-making technology research and training program.

The BC film industry hosted the shooting of more than 239 television and film projects in 2009 generating in excess of \$1.3 billion in production spending and employing approximately 30,000.

"We are grateful to the Government of Canada for recognizing the need for this type of investment," said Dr. Ron Burnett, Emily Carr President & Vice-Chancellor. "This funding will allow us to grow the capabilities of the Centre and lead the country in ground-breaking S3D technology research, education and training."



The Honourable Lynne Yelich, Minister of State for Western Economic Diversification, with new state-of-the-art 3D equipment.

and technical standardization.

Alberta: 3D Ready (also being staged at the Banff Centre, but not as a part of the Festival) is another day long event designed to provide information on 3D pre-production, producing & directing, stereoscopy & digital capture, post-production & distribution.

Put on by the Government of Alberta for its residents, sponsored by industry organizations like Digital Alberta, Telefilm and the NFB, the event features a hands-on workshop put on with the participation of equipment companies such as Panasonic and the 3D Camera Company (3DCC), based in Toronto.

Geneva Film and 3DCC have worked together on creating Live Action Digital 3D, such as a the-

atrical spot billed as the world's first 3D public service announcement. It dramatically portrayed the work realities and life aspirations of emergency services personnel (and it was featured in a Broadcaster Magazine report from March 2009, still available online at www.broadcaster-magazine.com).

Stewart's most recent 3D work was for the U.S. telecom company Sprint, which launched a 3D spot in conjunction with the debut of *Shrek Forever After* - now called the number one film at the North American Box Office.

The 3-D Sprint campaign, created by Goodby, Silverstein & Partners in San Francisco and placed through Mindshare in New York, screened in select theatres in the U.S., and was shown in the prime #1 spot, immediately before the film runs, Stewart noted. A 2-D version will also run in front of all other films to ensure that the PSA campaign reaches all NCM moviegoers.

Called 'Reversal', the spot shows a man chatting on his cell phone. He's soon surrounded by people, objects and actions in multiple dimensions that totally distract him from his call.

The voice-over reminds

viewers, "Movies don't interrupt you. Please, no talking or texting during the film," and ends with the Sprint tagline. The fact that the man and his cell phone are 'immersed' or 'surrounded' in the distracting 3D imagery adds credence and credibility to the message.

The 3-D elements of the PSA were produced by Geneva Film, but the production was a team effort. "NCM's innovative vision coupled with Goodby's stellar creative was a symbiotic fit for Sprint's launch into 3D. This spot lent itself naturally to the immersive experience of 3D," described Stewart.

Therein lies one of the keys to successful 3D production — a unified vision and an appropriate message for the medium, a coupling of strong technical execution with an engaging narrative arc or storyline.

Researchers Look at 3D

Not every story is better in 3D, agrees Richard Grunberg, Professor at Ryerson's School of Radio and Television Arts in Toronto, and a researcher working at the Digital Cinema and Advanced Visualization Laboratory.

"It's important to study viewers' responses given the rebirth of 3D technology and the growing availability of 4K digital cinema," Grunberg says. "We're trying to analyze how people perceive the difference in formats and then quantify it. Do they really have a greater response to 3D images and to what degree? It's all about making

Presenting at major industry events like CFPTA, Hot Docs and the Banff TV Fest, Toronto's James Stewart is off to the Cannes Lions International Advertising Festival to talk about 3D and its success as an entertainment and commercial medium.



A major milestone in the history of advertising – produced for one of the biggest brands, screening in the largest number of cinemas, this spot for Sprint created an immersive and engaging environment to put across its message. The 3-D elements were produced by Geneva Film Co. of Toronto.



sure the producers, and the audiences, get the most bang for their buck.”

As director of photography in the University’s (and Canada’s) first full 4K Digital Cinema Lab, he’s curious to know how viewers react to the technical aspects of images, including resolution, noise, compression, motion artifacts, colourimetry and dynamic range.

The \$2.9-million Digital Cinema and Advanced Visualization Laboratory, outfitted with an impressive array of technology, has received funding and support from the Canada Foundation for Innovation, the Ontario Ministry of Research and Innovation, DALSA Corporation, CANARIE (Canada’s National Research and Education network provider), and StarLight (a Global Open Light Exchange facility in Chicago).

Grunberg launched his research process by shooting a children’s television show in the digital cinema lab using different image formats.

A number of 3D experts, as well as directors and directors of photography from several Canadian kids’ TV programs were invited to participate in the shoot.

Viewers’ responses to four image formats: 4K, 4K 3-D, 4K 2-D and 2K 2-D will be assessed.

So Grunberg and his team have now recruited volunteers who will watch the program while their facial and eye movements are monitored by sophisticated tracking equipment and computer software programs. Where do they look during specific on-screen moments; which special effects garner the most favourable reactions; and how do different age groups respond to various image formats and screen sizes?

“We’re also trying to identify the parameters of 3D technology,” Grunberg explains. “For instance, if a 3D hand is shown on a 42-inch screen, at what point does it become disconcerting to the viewer?”

“There’s still room for improvement in 3-D technology,” he acknowledges. “We’re working to make it as much of an immersive experience

as possible. At the end of the day, the goal is to maximize the audience’s viewing experience.”

New Technology Passes on the Glasses

For some, that viewing experience seems to be akin to making a faux-pas fashion statement, because they just don’t want to wear any accessories to watch 3D content.

While, for the most part, those old red-and-green cardboard glasses are a thing of the past (although, in one instance, a company called Trioscopics, has updated the old anaglyph red-and-blue glasses with a green-and-magenta scheme), newer active shutter or passive polar-

ized eyewear is being used for now. Concern over the price, and the number, of glasses required to have some friends over for a 3D World Cup party, are causing some frowns.

But other companies are all smiles as they move to make 3D glasses a thing of the past.

In a prototype LCD displayed at the Society for Information Display, Toshiba demonstrated glasses-free 3D viewing in nine discrete positions using ‘GRIN’ (gradient index) lens technology.

The GRIN lens is made up of a second LCD panel over the main 1400 x 1050 2D panel that, when activated, changes the refraction index distribution and creates a 3D image.

cover story continues on Page 21

HD-SDI / HDMI conversion

The HD Spigot S/H for HD-SDI to HDMI or the HD Spigot H/S for HDMI to HD-SDI

- Supports S/PDIF audio
- Supports 1080i or 720p HD
- HD Input/Output compatible with SMPTE 292M
- Interfaces with inexpensive HD cameras via HDMI (Spigot H/S)
- Interfaces with inexpensive monitors (Spigot S/H)
- See us at NAB 2010, booth SU2709, April 12-15

visit us at www.linsys.ca
Linear Systems Canada Ltd.
 Unit 1, 1717 Dublin Ave., Winnipeg, MB, Canada R3H 0H2
 Tel: 204 - 632-4300 • Fax 204 - 697-2417





2010 Puts NAB In A Whole New Dimension

3D, Telepresence Among Advanced Visions for Broadcast Future

Total Registered Attendees:

88,044

International Attendees:

23,900

Countries Represented:

156

The 2009 NAB Show final attendance was 82,650.

It was a successful showcase for new digital TV technology of all shapes, sizes and dimensions, filling the session rooms and covering the exhibit floor at the National Association of Broadcasters (NAB) Show 2010. The showcase drew more people than the year before, as well.

The NAB has released its attendance figures for the event, showing an increase over the previous year's figures.

"Content professionals from across the globe turned out in force at the NAB Show, and we're delighted by the extraordinarily positive feedback from both attendees and exhibitors," reported NAB Executive Vice President of Media Relations Dennis Wharton. "The uptick in attendance and dazzling technology on display here in Las Vegas demonstrates again the NAB Show's enduring popularity and status as the premiere global event for the content marketplace."

International and news media attendance figures are included in the overall registration number. The figures are based on pre-show and onsite registration.

Among the new and returning features at NAB, this year marked the debut for a new exhibit area, the International Research Park, where advanced broadcast technologies not yet commercially available were featured.

Such as a new 3D production system (yes, 3D was everywhere this year) from the European 2020 3D Media Research Project. Member organizations JRS, Technicolor, University of Hasselt and Barcelona Media conducted the demo.

It's a three camera system -- one main and two 'feeders' that achieves 3D depth acquisition



WESTERN ASSOCIATION OF BROADCAST ENGINEERS

Please visit our new web site for details on our 2010 convention, WABE's Educational Initiatives and to download copies of our 2009 papers: www.wabe.ca

Mark your calendar for this year at the Sheraton Wall Centre in Vancouver, BC.

November 7th – 10th, 2010

For information please contact:

**Kathy Watson, WABE Office Manager,
info@wabe.ca. Or call 403-630-4907**

in a more sophisticated fashion than the two-image stereoscopic cameras widely used today. In fact, five cameras were mounted at the exhibit demo area, with some as backs-ups or alternative views.

The cameras' video streams — uncompressed HD — were captured using a new 10 GigE network infrastructure, and recorded on a FlashPak-based field recorder. All told, representatives said, the system provided a net data bandwidth of 9 Gbit/s.

That's too much for most mobile operators (the ATSC M/H spec uses just a portion of the 19.39 Mbit/s bandwidth for broadcasting video to mobile phones), so a separate showcase of mobile DTV receiver technology was attracting a lot of attention for other reasons,

The Mobile DTV Marketplace, sponsored by NAB, the ATSC, CEA and the Open Mobile Video Coalition (OMVC), was where companies like LG Electronics showed one of the first consumer products to carry the new ATSC Mobile DTV certification mark, the DP570MH mobile digital television with DVD playback. Also shown by LG was a prototype GSM mobile phone with a built-in mobile DTV receiver. Mobile DTV receivers will also be built-in to consumer USB devices that can be plugged into a notebook or other portable media devices to receive and display mobile DTV programs. USB Receivers from DTV Interactive, iMovee, and Hauppauge were shown.

Computer maker Dell skipped the USB stick approach, and showed one of its small portable PC 'netbooks' with embedded mobile DTV, WiFi

and broadband capabilities.

ATSC was also hosting an exhibit presented by Korean broadcasters and consumer product makers of a non real-time (NRT) service using the ATSC digital TV system. During the demo, viewer watched a live DTV transmission while other video files were simultaneously being downloaded for later viewing. Much of the content being downloaded was in 3D, so the demo opened the door for over-the-air DTV support for 3D video transmissions.

Announced after the event closed, but providing another way to look at the broadcast industry overall, came word that NAB will partner with the Telepresence Show next year.

Telepresence technologies allow organizations to conduct business globally, the organization described, providing an immersive environment and an interactive experience similar to being in the same room. It allows business and content professionals to interact via high quality video imaging and crystal clear audio from multiple locations. Specialized telepresence solutions for specific industries already exist, for settings as diverse as pharmaceutical research labs, movie and television studios, university-level distance learning, and neurological operating rooms.

TelepresenceWorld at NAB will feature an exhibit floor along with a dedicated conference education program. The new partnership also means telepresence technology will be integrated into the NAB Show, in both telepresence-enabled session rooms and through a virtual

live element, extending the reach of the event for sponsors and exhibitors to thousands of virtual attendees worldwide by re-broadcasting education sessions on a state-of-the-art virtual event platform.

Yet, with all these new dimensions to engage in, and even with 3D being the hot topic across the NAB show floor, in terms of distribution, production and acquisition, the fact that some manufacturers were promoting 2D cameras drew strong attention.

Designed to help indie filmmakers and others make the move from Super 16 to HD while still capturing a cine-style image, Panasonic's new AG-F100 camcorder with a 'micro 4/3-inch imager' was pitched to those wanting a top-of-the-line look, with a more economical price point.

The AF100 records to AVCHD at a maximum of 24 Mbps and supports the updated SDXC standard for memory cards, supporting capacities from 32 GB to (eventually) 2 TB.

Sony, by the way, said it also has a new product coming for the "entry-level" filmmaker — described as a "smaller, more-affordable camcorder" but one with a 35mm-sized sensor.

The camera was not on the show floor, but therein lies a good reason for attendees to return next year.

Among the other equipment releases that were shown at NAB (or at industry events following that show):

NEW PRODUCTS

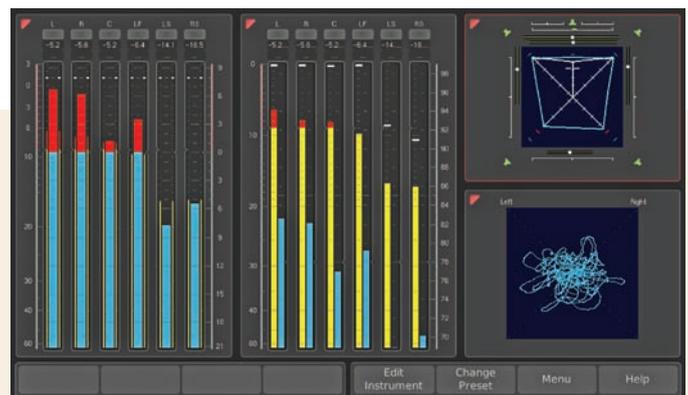
RTW Launches TouchMonitor Series

RTW has launched its new TouchMonitor series, with the TM7 and TM9 (7" and 9" respectively) making their debut at NAB 2010.

A highlight of this new audio metering series is the redesigned GUI (graphical user interface) that is equipped with a touch-sensitive 16:9 high-resolution screen with an optional digital 3G SDI interface.

Controlled simply using a finger or a mouse, this offers users a new dimension of freedom for positioning and scaling individual instruments, the manufacturer described. For example, when multiple instruments of the same type are assigned to different input channels, they are displayed simultaneously and configured separately.

In addition, new instruments and functions can be added as software modules to the device at any time. Many display functions known from existing RTW products are available to choose from: the unique Surround Sound Analyzer, the Real-Time Analyzer (RTA), an ITU/EBU-compliant loudness meter, and an intelligent ident analyzer. A true-peak meter is



RTW TouchMonitor and Peak Meter

available as a software option as well.

The TouchMonitor TM7 with 7" touch screen and the TouchMonitor TM9 with 9" touch screen handle input signals of various formats: analog, AES3 and AES3id (TouchMonitor TM9 also accepts 3G SDI signals as an option.) All versions feature a LAN port, a VGA output for connecting external screens, GPIO interfaces and two USB ports.

IDC Showcasing New Products at NAB

Ottawa's International Datacasting Corporation used NAB to debut the SFX ProIPTV, IDC's next generation blade receiver for IPTV distribution. The newest member of IDC's award winning SuperFlex line of products, the ProIPTV has room for up to 14 dual carrier, hot swappable receiver blades per chassis, making it ideal for Telco's and multi-dwelling units where space is at a premium.

Another feature of the IDC booth was the company's 3D live event demonstration, in conjunction with Sensio and The 3D Camera Company from Toronto.

IDC also released its SuperFlex SFX IP Streamer, an all IP solution for in-theatre distribution of live 2D and 3D alternative content in digital cinemas. Combining an IDC SFX professional satellite receiver and a Doremi Digital Cinema Server, the IP Streamer enables live event projection for up to four digital screens in a multiplex, simultaneously.

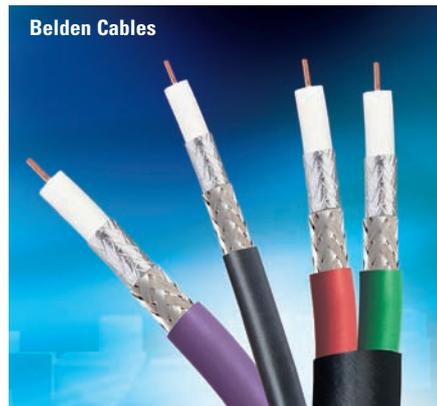
Belden Video Coax for SDI, HD-SDI, 1080P/50-60 and 3D-HD

Among the new digital video cables introduced by Belden at NAB 2010, its new Brilliance Video Coax Cable is being called the first designed specifically to meet the requirements of emerging 1080p/60 (in N.A.) and 1080p/50 (in EU) 3 Gigabit applications.

The Brilliance 1794A Precision Digital Video Cable features the same high-velocity core as 1694A and has a Duobond shield for the ultimate in shield effectiveness. The new, slightly larger (14 AWG) cable design improves on the distance performance of 1694A (at 16AWG), providing 1080p/50-60 distance of 314 feet (96 metres), calculated with the SMPTE distance formula.

The 1694WB Precision Digital Video Cable is a ruggedized version of 1694A, for use in outdoor and direct burial applications, the manufacturer described. The cables feature a gel-filled, water blocking layer and hard black polyethylene jacket for weather resistance and protection

against ingress of moisture, making the cables well-suited for use at golf tournaments, outdoor sports events, and underwater location shooting. The cables' electrical characteristics are identical to those of 1694A, including the same attenuation and low return loss.



TERMINATE

CROSS
BORDER
SHOPPING...

"Stop retail dollars from leaving your market"

69 Cent

Dollar[®]

"Still the best turn-key retail sales promotion for Radio, TV, Shopping Centres, Big Box Retailers"

Details and video
www.dickdrew.com

Drew Marketing & Productions Ltd.

Hitachi Celebrates 100 Years

Hitachi celebrated its 100-year anniversary at this year's NAB, showing both historic and advanced solutions for broadcast TV, including a sampling of its new HDTV product line.

Among the products shown: Hitachi's SK-HD1000 camera line, fresh from its extensive and rigorous use by Canada's broadcast Consortium partner CTV during the Vancouver Winter Games.

The SK-HD1000 camera system employed an advanced Internet control system provided significant savings in terms of operators needed to control the cameras. The SK-HD1000 and Z-HD5000 camera systems can be configured and controlled using off-the-shelf IT routing and switching equipment.

Two new point-of-view (P.O.V.) cameras were introduced, the DK-H100 and DK-Z50, They both have: 2/3-in IT CCDs; switchable 59.94/50Hz operation; simultaneous SMPTE-292M 1920x1080i; SMPTE-259M SD-SDI and analog (Y,Pb,Pr/ RGBS) HD outputs; TCP/IP network control; motorized five-position filter wheel; variable shutter to 1/10,000sec.; 14-bit ADC; 38-bit DSP; full integration/compatibility with existing SK-HD1000/ Z-HD5000 control panels and a newly developed "control teaming mode" that improves matched camera characteristics, performance and controls for 3D production rig applications.

The DK-H100 has 2.3 million pixel IT-CCDs employed in the top-of-the-line SK-HD1000. The DK-Z50 employs the same sensor as the existing Z-HD500 HDTV camera.

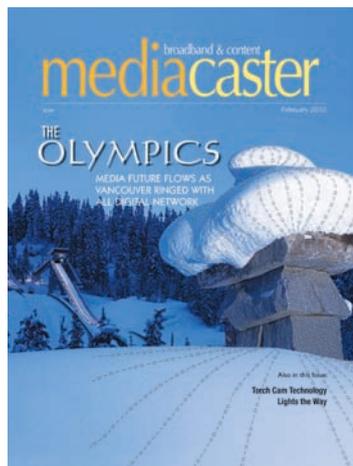
Dejero Broadcasts Live in Vegas

As part of its debut showing at NAB, Waterloo, ON-based Dejero used its new Dejero LIVE Platform to broadcast live from the Strip during NAB 2010.

Using patent pending technology, the Dejero LIVE Platform delivers broadcast quality SD or HD signals and improves live interview talkback - transmitting with only one second latency over wireless networks.

The Dejero LIVE Platform made its 'gold medal' debut during the 2010 Winter Games Torch Relay - providing live broadcast TV coverage across of the 27,000 mile journey.

Dejero's wireless ENG technology was first described in the February 2010 issue of Mediastar Magazine (please see the digital online version, at www.mediastarmagazine.com)



Sony Brings New Tools for 3D Disc Production and Video Editing

Sony has announced a Blu-ray disc authoring application and a new 3D subtitle offset editing application, allowing users to author 3D titles in accordance with the Blu-ray Disc Association (BDA) 3D Blu-ray disc specification to greatly enhance workflow capability for production facilities and professional video editors.

To assist editors creating 3D subtitles, the new Z Depth application generates the required offset metadata file needed in a 3D BD project allowing editors to more accurately and easily position subtitles when creating 3D Blu-ray Discs.

As one of the first professional-level 3D Blu-ray disc authoring software systems available, the new features of Blu-print 6 will allow studios to author 3D content for the new 3D Blu-ray format standard Profile 5, import new MVC encoded streams, and work with Z Depth for 3D subtitle authoring. Designed for high volume professional production, the updated Blu-print 6 software will also include support for offset metadata integration required for 3D Presentation Graphics and 3D Interactive Graphics. 3D BD-J integration and 3D Blu-ray Disc cutting master generation is also supported in order to provide maximum intuition and flexibility for complex authoring projects.

The all-new Z Depth subtitle offset editing application uses the video power of Vegas Pro 9 to provide a combination that will allow 3D authoring companies to easily create required disparity metadata files for positioning of subtitles and IG menus in a 3D Blu-ray Disc production. New to 3D BD production, the Z Depth application will allow 3D Blu-ray Disc authoring facilities and subtitle creation companies to produce accurate subtitling in the 3D space that will allow for the most comfortable viewing experience. The BD spec offset metadata files created by the application can be used in any 3D Blu-ray Disc authoring application that follows BDA specifications Profile 5. There are no special hardware requirements for Z Depth, though it is highly recommended that editors use the Presonus Fader Port for data input. Vegas Pro 9 is required for Z Depth integration.

Digital Rapids Transcode Manager at NAB

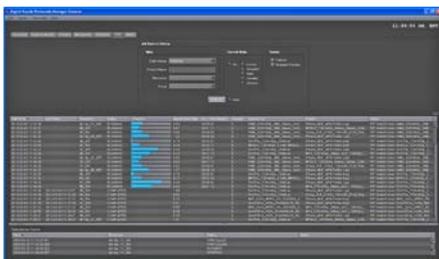
Not only was Digital Rapids showing its own new products and services at NAB, it was providing the crucial support to ensure that NAB's own video was available online at the official trade show site.

Digital Rapids' Transcode Manager – its automated, scalable transcoding system – was used to encode edited video segments into the formats required for Web distribution. The

resulting high-quality media files were then delivered to content distribution provider Highwinds for on-demand delivery to viewers through the NAB Show website.

Digital Rapids later announced significant new enhancements for its TouchStream portable live video encoding and streaming appliance, including live encoding for adaptive streaming to Apple iPhone mobile devices, and support for Microsoft Internet Information Services (IIS) Smooth Streaming.

TouchStream encodes to multiple outputs at varying bit rates and resolutions from a live input source, automatically dividing the outputs into discrete segments immediately ready for adaptive delivery by a server or Content Distribution Network (CDN). As content is delivered to each viewer, delivery is switched between these outputs to provide optimal quality based on available network bandwidth.



Digital Rapids

DVEO Launches New Software-Based SD/HD Transcoders

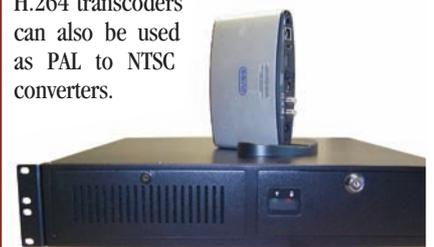
DVEO showed its new MPEG Gearbox product line at the NAB, featuring broadcast quality, Linux-based, MPEG-2 to H.264 transcoders or MPEG-2 to MPEG-2 scalars for the IPTV and cable industries. Three systems are available: ASI to IP, ASI to ASI, and IP to IP.

Each system transcodes one HD (720p) stream or two SD streams into H.264 and outputs the streams over ASI or IP. The MPEG Gearbox ASI/IP can also receive 1 to 4+ MPEG-2 channels and output them to a dedicated IP network as MPEG-2 streams. Audio support is MPEG and AAC (MPEG-4).

The H.264/MPEG-4 compression standard uses up to 60 percent less bandwidth and disk space than MPEG-2 video, with no change in picture quality.

The IP video streams generated by the MPEG Gearbox ASI/IP and MPEG Gearbox IP/IP can be viewed on television sets with standard IP capable set-top boxes, or on computers using streaming video software clients such as VLC or Mplayer. MPEG Gearbox ASI/IP and MPEG Gearbox IP/IP are typically deployed in "closed" systems such as hotels, universities, and corporations, where bandwidth is dedicated and is used for this purpose only.

MPEG Gearbox ASI/IP, MPEG Gearbox ASI/ASI, and MPEG Gearbox IP/IP provide PID filtering of all unwanted traffic, and include an easy-to-use GUI for operation. The H.264 transcoders can also be used as PAL to NTSC converters.



DVEO Transcoder

Feature Your Product Online

If you would like to have your products featured on the Online Products Showcase please contact:

James Cook at
jcook@broadcastermagazine.com
 or by telephone at: 416-510-6871

CDN TOLL FREE:
 800-268-7742, press 1, dial 6871#

USA TOLL FREE:
 800-387-0273, press 1, dial 6871#

Polecam Zooms in 3D

With many exhibitors looking at 3D through variable-magnification optics, Polecam used NAB to demonstrate its prime lens/camera movement strategy for shooting and acquisition.

Polecam showed a live 3D technique, using two Toshiba IK-HD1 ultra-compact HD cameras mounted side by side on a 3D Head, feeding two camera control units mounted at the base of the rig. Each CCU sent HD-SDI to an Inition StereoBrain creating an integrated 3D signal which was fed to a stereoscopic display.

The monitor employed at NAB was a 46 inch JVC GD-463D10 LCD screen using Xpol circular polarization for natural 3D reproduction.

For live shooting, the Polecam 3D rig allows adjustable convergence control between takes

by the operator. The standard lens aperture range is f2.2 to f16 and a single motor drives the iris on both lenses and the two cameras are genlocked to each other. Polecam's 3D-Narrow head attaches directly to all standard Polecam rigs. It is designed for normal studio shooting and close-ups where cameramen need to match normal human eye spacing. An optional variant, the 3D-Wide head allows the distance between cameras to be extended to 'hyperstereo' which increases the 3D effect for more distant subjects. Polecam's 3D-Narrow and 3D-Wide heads both retain the freedom to achieve sweeping 3D HD sequences that, for the viewer, almost amount to flying.



Polecam 3D Head

Panasonic Unveils Integrated HD 3D Camcorder

Announced prior to NAB, Panasonic is now taking orders for the fully integrated 3D HD camcorder it demonstrated at the show, called the AG-3DA1.

Panasonic's new Full HD 3D camcorder has dual lenses, a camera head, and a dual Memory Card recorder integrated into a single, lightweight body. The camcorder incorporates stereoscopic adjustment controls making it easier to use and operate. The twin-lens optical section allows the convergence point to be adjusted. Functions for automatically correcting horizontal and vertical displacement are also provided.

Right and left Full HD video streams from the twin-lens 3D camcorder are recorded as files on SDHC/SD Memory Cards, ensuring higher reliability than tape, optical disc, HDD or other mechanical-based recording systems.

The solid-state, no-moving-parts design helps reduce maintenance costs. The Panasonic 3D camcorder is able to perform in extreme environments and is resistant to temperature extremes, shock, and vibration. The file-based workflow provides instant, random access to recorded content; easy plug-in to Mac and PC-based platforms; and longer recording capacity.

In addition to the 3D camcorder, Panasonic says it will offer a professional-quality 3D full HD LCD monitor for field use as well as a professional HD digital AV mixer for live event production.



Panasonic 3D HD

JVC Adds 4K Projector to D-ILA Lineup

JVC Professional Products introduced a new, 10 MegaPixel 4K D-ILA projector, the DLA-SH7NLG, incorporating three 1.27-inch 4K2K D-ILA display devices for high-quality imaging and dual ultra-high-pressure mercury lamps for 5,000 ANSI lumens of brightness.

The new model joins the DLA-SH4K, which debuted two years ago, as a 4K D-ILA projector offering. Like its predecessor, the DLA-SH7NLG achieves ultra-high resolution of approximately 10 megapixels (4,096 x 2,400), five times the resolution of full HD, plus the projector has a 10,000:1 native contrast ratio.

The DLA-SH7NLG operates on normal AC 100-220V power and consumes less than 1.1 kW. Convergence can be adjusted to 1/10 pixel accuracy via GUI control, and three gamma tables are included. Six test patterns, including a crosshatch and color bars, enable image adjustment without external signal sources.



JVC DLA



The Association of Central Canada Broadcast Engineers, Technologists and Technicians Inc.

September 16 - 19, 2010

Horseshoe Resort

Book Now

FOR THE 2010 CONFERENCE ROOMS WILL BE GOING FAST.

CONTACT: JOANNE FIRMINER, 1-800-481-4649, information@ccbe.ca, www.ccbe.ca

FOR-A Wins at NAB

Two new products from FOR-A were introduced at NAB, bring the company award recognition for its LTR-100H storage device and CEQ-100HS 3D monitoring solution.

Designed to support LTO-5 technology, the latest standard in long-term, high-capacity tape storage, the LTR-100H can record approximately 50 hours of programming at 50 Mbps (stored as MXF files) to LTO-5 tape. The compact LTR-100HS includes an LTO-5 drive, 2 TB hard drive, LCD monitor, and front panel controls, plus connectivity for file-based I/O and external VTR control. Embedded IBM Long Term File System (LTFS) technology enables various systems to read and write a file on LTO-5 tape directly and improves the archive application workflow.

The CEQ-100HS provides a variety of monitoring options, as well as camera calibration functions, for the growing 3D production market. With its built-in frame synchronizers, it allows stereo 3D filming with cameras that have no external synchronous input. The compact unit also offers automatic colour calibration, helping correct colour between pictures from both cameras, and adjusts the horizontal parallax, which determines the depth of the 3D images.

Tapeless HD Camera, 3D Sports Lens from Canon

Canon showed a range of products, including HD broadcast lenses and robotic HD cameras, new tapeless HD camcorders, multimedia LCOS projectors among other imaging products.

The new Canon XF305 and XF300 professional tapeless HD camcorders use an MPEG-2 4:2:2 50Mbps codec for capturing and recording native 1920 x 1080 video onto affordable, universally available Compact Flash (CF) cards. Uniting video, audio and metadata into a single file, the Canon XF305 and XF300 use an MXF (Material eXchange Format) File Wrapper, a widely supported open-source format, to maximize compatibility with existing industry infrastructure and non-linear editing (NLE) systems.

The Canon XF305 and XF300 Professional Camcorders include a Genuine Canon 18x HD L-series lens providing documentary filmmakers and news camera operators with the focal-range versatility required in the field. Canon's XF305 model features industry-standard HD-SDI output, genlock, and SMPTE time code (in/out) terminals for multi-camera or 3D productions.

Canon also touted what may be the longest telephoto portable HD lens in the world that can be used in compact 3D camera rigs. With a 2X extender, its maximum focal length will be 1000 mm, offering extraordinary possibilities for 3D sports and events imaging. But, at 5.5 lbs., the 18x, 28mm-500 mm EFP-style lens is both lightweight and portable.

Designed to serve the critical color-matching needs of digital imaging professionals, the new Canon REALiS SX7 Mark II Multimedia LCOS Projector offers a remarkable 4000 lumens of brightness and advanced LCOS technology for highly detailed, film-like display of video and still images.

NewTek Adds to TriCaster Lineup

NewTek has launched TriCaster model TCXD850, the latest addition to the TriCaster line of high definition (HD) portable live production systems. This new TriCaster offers a 22-channel switcher, with eight HD or standard definition (SD) digital or analog inputs, two DDRs, titles, stills, two network inputs and eight virtual/mix channels.

TriCaster TCXD850 benefits and features include:

- 22-channel switcher with eight digital or analog inputs, two DDRs, two network inputs, titles, stills and eight virtual/mix channels
- Advanced overlay capabilities include rotation, positioning and scaling in 3D plus animated effects
- New live virtual sets in HD include double box effects with options for stand-up and one or two presenters
- Photorealistic LiveMatte virtual sets system with advanced matte generation and spill suppression for every switcher input
- Two network inputs deliver graphics from LiveText, presentations from a PC or Mac using iVGA or other computer sources to the switcher or overlay channels
- Simultaneous monitoring of all switcher inputs at full field-rate and signal integrity verification with colour Waveform/Vectorscopes
- Using any combination of either embedded digital, AES or the 16 balanced analog XLR audio inputs to bring in microphones, stereo or quad line level sources
- Audio mixing capabilities with audio follows video support and auxiliary routing to integrate into an external audio setup

- HDMI and VGA program outputs for projector (IMAG) or other monitoring applications
- 36 hours of 1080i recording capacity that can be extended by using the three removable drive bays
- Three video output rows provide flexible simultaneous HD and SD video output
- Durable rack mount 4U case with redundant power supply.



New Tek TriCaster

Jim Goessinger, National Sales Manager – Broadcast & Post, is pleased to announce the following appointment:



ERIC RIEHL to the position of **Technology Sales Representative Broadcast & Post Production Division**

With a Management Economics degree from the University of Guelph, Eric joins Applied Electronics with a solid operational and systems background in Post Audio, as well as strong customer support and sales experience with editing systems, storage solutions, and broadcast automation and archiving. Eric will be focusing on providing innovative products and solutions to our broadcast and post production clients while offering exceptional customer support.

Applied Electronics is Canada's leading Designer, Supplier & Integrator of Professional Broadcast, Post Production and Audio Visual Systems & Technology.

Applied Electronics Limited
Your Complete Technology Partner

TORONTO
905.625.4321

MONTRÉAL
514.333.3324

CALGARY
403.291.5143

EDMONTON
780.462.8275

VANCOUVER
604.439.7228

www.applielectronics.com

more Industry News from page 9

name, while retaining Astral Media for its legal corporate name.

Meanwhile, the national radio sales division has been renamed to coincide with the new Astral corporate profile that was revealed last week. Astral Media Radio Sales and Astral Media Broadcast Sales in Vancouver have evolved into what is now Astral RadioPlus.

Quebecor News Channel Coming?

A new, all-news network directed by Kory Teneycke, Prime Minister Stephen Harper's former Director of Communications, could soon be coming to Canadian living rooms.

Quebecor Media Inc., has filed an application for an English-language TV news network with the CRTC. The application coincides with Quebecor's appointment of Teneycke as Vice-President of Development at QML.

Teneycke, who left the Prime Minister's Office less than a year ago, has been working on contract with Quebecor for months amid persistent reports of the development of a new, right-wing news channel based on the successful U.S. Fox News.

Teneycke has also been given oversight of the QMI bureau in Ottawa, which covers parliamentary affairs for the Sun Media chain of newspapers.

Fanshawe College Celebrates Best in Broadcasting

At its annual Broadcast Awards ceremony held earlier this year, Fanshawe College recognized the outstanding achievements and pursuit of excellence of the top students in the Broadcast Radio and Broadcast Journalism programs. The event took place at the London Convention Centre.

Among the many awards presented was the first-ever Damien Evans Spirit Award, named in the memory of Fanshawe College graduate Damien Evens, who passed away from cardiac arrest on December 11, 2009. It is now presented annually to a graduating student from the Broadcast Journalism program who has made the most of his or her abilities during their course of study, demonstrated a commitment to the program and maintained a positive attitude toward their classmates and instructors.

This year, the Broadcast Awards Ceremony was co-hosted by The X Student Program Coordinator, Romane Cox of Broadcast Radio and The X Student News Directors, Stefanie Masotti and Sarah Ferguson of Broadcast Journalism.



Among the winners at the recent Fanshawe Broadcast Awards Ceremony are Broadcast Journalists of the Year Ashley Rowe and Stefanie Masotti, pictured with Devon Peacock (Corus Radio London).

Fanshawe College Awards for 'Best in Broadcasting'

- CKUE-FM** - Most Promising Reporter of the Year Award *Shannon Wise*
- The Greatest Hits 103.9 FM** - Creative Writer of the Year *Tom Fraser*
- AM 980** - Most Promising News Writer of the Year *Caroline Cameron*
- RAEDIO Inc. (Stratford)** - Promotions Award *Jonah Istifan*
- KLZ Innovations** - News Production Award *Emmett Murphy*
- The Barry P. Sarazin Memorial Award** *Ashley Holmes*
- 680 News** - Most Promising Current Affairs Producer of the Year *Jennifer Ferguson*
- CJCS Radio (Stratford)** - Special Recognition Award *Bryan Wood*
- AM 980** - Most Promising Newscaster of the Year *Jennifer Ferguson*
- 103.1 Fresh FM** - Most Promising On-Air Personality of the Year *Mark Lebel*
- CKSY-FM** - Best Current Affairs Producer of the Year *Stefanie Masotti*
- CKLW Radio (Windsor)** - Producer of the Year *Tom Fraser*
- London Consumers Association of Canada/Rogers TV Cable**
- Sports Broadcasting Award *Emmett Murphy*
- CKOT RADIO/TILLSONBURG COMMUNITY Robert (Bob) Humenick Memorial Award**
- Most Promising Talk Show Host *Elizabeth Gogol*
- London Consumers Association of Canada/Rogers TV Cable**
- Audio Imaging Award (two winners) *Ryan Valdron, Riley Jabour*
- Bayshore Broadcasting Corporation** - Best Newscaster of the Year *Ashley Rowe*
- FM 96** - Salesperson of the Year *Christopher West*
- CTV Southwestern Ontario** - Best News Writer of the Year *Kaila Dundas*
- CHUM Group Radio** - Most Promising Radio Broadcaster of the Year *James Dobos*
- London City Press Club** - Best Reporter of the Year *Tricia Flatley*
- Fresh FM** - On-Air Personality of the Year (Female) *Ashley Carter*
- Damien Evans Spirit Award** *Katie Roberts*
- FM 96** - On-Air Personality of the Year (Male) *Ryan Valdron*
- CFCO-AM Radio**
- Most Promising Broadcast Journalist of the Year *Jennifer Ferguson*
- Martha Blackburn Scholarship** *Katelyn MacIntyre*
- Dana Lewis Frontline Award** *Stefanie Masotti*
- Corus Radio London** - Radio Broadcaster of the Year Award *Jonah Istifan*
- AM980**
- Broadcast Journalists of the Year (two winners) *Ashley Rowe, Stefanie Masotti*

cover story continued from Page 13

When the GRIN lens is turned off, the refraction index is unaltered and a 2D image is displayed. 2D images retain full resolution, while 3D image resolution is cut back to 466 x 350.

They even showed how, by turning the GRIN lens partially on, the display could simultaneously show 3D and 2D imagery. The current screen is only 12", but it is a huge opportunity that could see glasses-free 3D LCD TVs on global markets by 2015.

But the wait is not really necessary, according to Toronto-based developer SpatialView.

The company is a pioneer in stereo 3D content delivery and auto-stereoscopic technologies, and it's already involved in some of the world's first glasses-free 3D content creation.

Using its proprietary tools and technologies, Spatial View has 'dimensionalized' a traditional 2D movie trailer into stereoscopic 3D, for screening during the recent Brussels International Fantastic Film Festival (BIFFF).

Closer to home, the company was involved in the creation of a glass free 3D video game, viewed and played on a BlackBerry smartphone — but viewed on one of *Spatial Views 46" auto-stereoscopic displays*.

The game, called IC3D, was a showpiece at the Ontario House Pavilion at the 2010 Vancouver Olympic Games; it was created at Sheridan College and developed in collaboration with Spatial View.

Spatial View has the software conversion and 3D programming tools, as well as the hardware overlay screens or shells that can turn 2D displays into 3D screens.

For laptops and PCs, for TV sets, and for mobile devices like the BlackBerry or iPhone, these plastic bevelled see through covers slide over the core display, enabling 3D viewing wherever and whenever such a screen is available.

It's possible that not only will 3D glasses be a thing of the past, but so too, the screen itself!

Holo-TVs will resemble a large book laid out on the floor, according to Sony engineers.

As with a hologram, lasers can then project images that appear to float in the middle of the room, and can be enjoyed from every angle without 3D glasses.

NHK, the Japanese public broadcaster, has committed to selling the first holo-TV by 2020, and it has earmarked billions of dollars for the project. The broadcaster, and the Sony engineers working with it, is so confident it is offering international holographic broadcasts as part of

its 2022 World Cup bid.

The images would be captured from 360 degrees by 200 high-definition cameras during each match and then transmitted as three-dimensional images, projected by a large table size device.

Future Looks Bright....

No matter what kind of display, the future of TV is appearing now. Meanwhile, developments will continue, issues will be addressed, research will be conducted.

At an upcoming scientific conference, scheduled for mid-July in New York City, the next steps in this three-dimensional future will be revealed.

The Society of Motion Picture and Television Engineers (SMPTE) will bring together leading 3D scientists, engineers, and researchers who are laying the foundation for the next generation of 3D standards and technologies.

The SMPTE International Conference on Stereoscopic 3D for Media and Entertainment will offer new scientific perspectives about the next generation of 3D acquisition, conversion, transmission and display technologies.

Experts will address issues ranging from how to acquire 3D images without expensive mirror rigs, why some 2D-to-3D conversions look great and others do not, and when consumers can get rid of those old 3D glasses. **B**

Ontario Researchers Take Long Look at 3D

Filmmakers, vision scientists and psychologists at York University are working with a \$1.4 million fund for the 3D Film Innovation Consortium (3D FLIC), a two-year academic-industry partnership designed to boost 3D film production in the Greater Toronto Area (GTA) and Ontario.

Teams of filmmakers at York, led by Professor Ali Kazimi in the Department of Film, Faculty of Fine Arts, will work with an array of film industry partners and the Canadian Film Centre to develop 3D scenes and films. Vision researchers and psychologists in York's internationally-recognized Centre for Vision Research, led by Professors Rob Allison in the Faculty of Science and Engineering's Department of Computer Science and Laurie Wilcox in the Faculty of Health's Department of Psychology, will then use this material to conduct tests exploring how humans perceive and process the images, which the filmmaking teams will use to refine their films.

Researchers plan to address the question of how best to control viewers' attention when viewing 3D imagery and the role this technique could play in the 3D film narrative.

"Ontario has film crews, technicians, and camera operators with decades of experience, and we need to support and hasten their transition to 3D film to remain competitive," described Jim Mirkopoulos, vice-president of operations at Cinespace Studios. Cinespace is a longstanding supporter of the Faculty of Fine Arts and one of 3D FLIC's partner organizations; their standing White House sets in Kleinburg, Ont., will be used as a 3D research studio.

The 3D FLIC team includes:

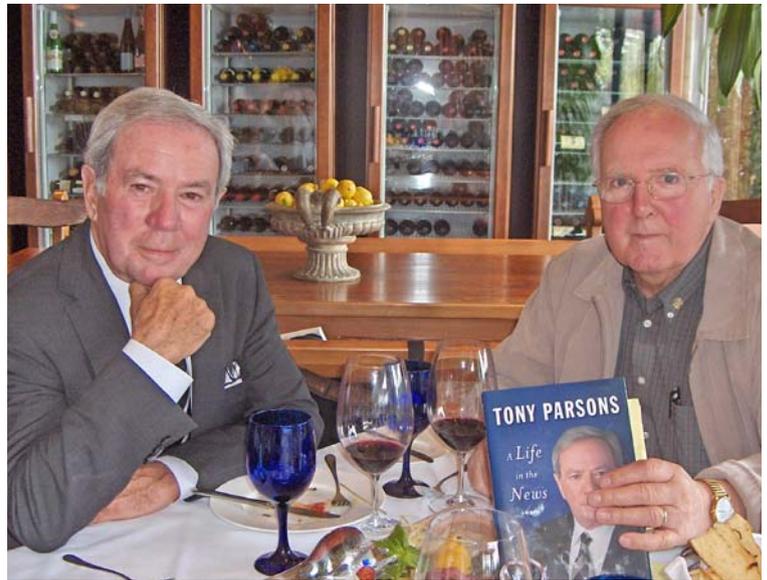
- The Canadian Film Centre (CFC)
- Ontario Centres of Excellence (OCE)
- Computer Animation Studios of Ontario (CASO)
- Cinespace Film Studios
- 3D Camera Company (3DCC)
- Creative Post Inc.
- Starz Animation Toronto
- PS Production Services
- Side Effects Software
- Saw VII Production Canada, Inc.

3D FLIC has a unique funding arrangement with Ontario Media Development Corporation (OMDC) and Ontario Centres of Excellence. OMDC has contributed over \$436,000 to help recognize 3D film as a new production paradigm through the project's innovative partnerships; OCE has allocated over \$287,000 to support the project's scientific and technology development aspects of stereoscopy research. Seven industry partners will provide over \$450,000 through in-kind support, with additional institutional support from York University.

Tony Parsons... A life in the news.

For over 50 years Tony Parsons has been a newsman and news anchor. Never a news maker.

by Dick Drew



Tony Parsons and Dick Drew Together Again

photo credit Mitch Drew

That all changed last December, when he retired from his enviable thirty year career anchoring the major newscast on BCTV/Global, Vancouver.

He was its franchise.

One of the most highly respected and recognized persons in B.C., he'd built it up to where it had a larger share than any newscast in any major market in North America.

But the station was looking for a newer, younger anchor, and near the end of his contract he was only working two days per week as the station geared up to replace him with Chris Gailus.

Then, just short weeks after his so-called retirement, viewers across the province were excited to see him anchoring the 10 o'clock news on employee owned CHEK-TV Victoria — where he plans to become an investor — thanks to its excellent cable coverage throughout B.C.

Then, another few short weeks later, Tony was back in the news when he showed as an anchor on CBC-TV Vancouver, as well as CHEK!

Now Tony was really in the news, going head to head against Gailus on BCTV/Global.

Viewers who had gone south for the winter came back wondering if they were dreaming. When they left, Tony was on BCTV/Global, when they returned, he's on CHEK and CBC.

Over at BCTV/Global, some may have felt it was more like a nightmare.

CHEK's News Director Rob Germain feels this way about it: "Dick, when it comes to news anchors, Tony is tops, and he's still passionate about broadcasting. His choosing to come to

CHEK was amazing; it's a great endorsement of what we are doing at our newly independent employees' owned station."

Now add to the mix the bright and creative Johnny Michel, Managing Director for CBC/BC.

If this were an old black & white TV melodrama, you'd see Johnny wearing a black cape and stove pipe hat, twisting a black handle bar moustache over the sounds of thunderously dramatic music.

Johnny had worked with Tony at BCTV/Global for seven years, and he wanted more.

Come to CBC-TV, Michel said, anchor the 5:00-6:30 pm news with seasoned co-anchor Gloria Macarento, going head to head against Chris Gailus.

In return Johnny would give Tony a sum of money, a two year contract with options, and a talent share deal with CHEK.

Now Tony's commute is by helicopter.

From home, he heads to Vancouver to anchor CBC News at noon week-days (thirty minutes is simulcast on CHEK). Then, he rushes to the airport and flies to Victoria to prep for the CHEK 10 o'clock news.

Now, it's rumoured his two deals earn him some \$400,000 per year plus a Global pension. Tony would not confirm nor deny this figure, nor would he say what his plans are for all the air miles he's piling up...

If you don't love in BC, you may not fully appreciate the respect and credibility Tony has. To my knowledge there has never been a disparaging word said or written about him.

I've known him since the early 60's when we

worked together at CHML Hamilton. Someone who has known him even longer is Warren Beck, now at CKPC Brantford having, like Tony, been coaxed out of retirement.

"Three of us — Tony, Bryon Cox and I — shared an apartment in the late 50's, when we all worked in news at CHML, Beck recalls.

"Tony always dressed to the nines, and, well, the superintendent's wife had the 'hots' for him. His charm and extreme good looks always got us what we wanted, so if we needed anything for our apartment, we would send Tony to negotiate — home cooking, apartment cleaning, you name it."

Then Warren told me the real story — "If one of us were 'entertaining', we had a rule that you left the balcony light on, and that meant 'Stay Away!'" Hey, what can you expect, these guys were in their early 20's!

Four years later Tony moved on to CHUM, Toronto, then CTV, then BCTV, building his 'Life in the News.'

Having known this Canadian Achiever for 50 years, having read his recently released memoirs with that title, I think an alternate would be: "Teflon Tony, nothing sticks except success." **B**

Now semi-retired, Dick Drew and his wife Aline live in Maple Ridge BC, near their five grandchildren. After 50 years, Dick is still involved in the industry he loves, writing this regular column for Broadcaster Magazine and operating Drew Marketing Ltd.



Get more of the story on your smartphone with Canada's trusted news leader. **THE CANADIAN PRESS** 

Craving 24/7 multimedia news on your smartphone from Canada's leading news providers? Satisfy the news addict in you by going to thecanadianpress.com/mobile on your smartphone to download The Canadian Press Mobile app today! Enjoy a slick, intuitive interface personalized to your choice of topics and postal codes, featuring an unrivalled network of local, national and world news and photos from many trusted sources all in one place:



Route it. Convert it. Connect with AJA.



3G SDI Routing, set-up in seconds...

KUMO 1604 - 16 SDI inputs - 4 outputs
KUMO 1616 - 16 SDI inputs - 16 outputs
KUMO CP - 1RU Control Panel

KUMO

Compact and cost-effective, KUMO SDI routers are ready for any broadcast, production or post-production environment. Easy to install, KUMO runs Embedded Linux for fast configuration and operation via any standard web browser or the optional KUMO CP 1RU control panel. KUMO routers and the KUMO CP panel also support Bonjour - enabling zero-configuration networking with Mac's and Bonjour-enabled PC's.

SDI - at the speed of light...

FiDO

The latest addition to our class-leading range of Mini Converters, FiDO is a family of SDI/Optical Fiber converters that allow the transport of SDI, HD-SDI and 3G SDI over distances of up to 10km. There are 5 models, including dual channel transmitters and receivers, offering the highest density and lowest cost available. FiDO brings AJA's renowned quality and reliability to Optical Fiber conversion.



Find out about our latest broadcast and conversion solutions
by visiting us at www.aja.com