

Plug-In F

ltimatte

FUTURE OF BROADCAST

Micros

152503

licrosoft

arass valley

grass valley

The Premier Video Technology Solutions Company

ALSO IN THIS ISSUE

New Products, Services and Company Brands P. 14

Three Books Sound Out Latest Audio Techniques **P. 18**

Top Awards for Leading Canadian Journalists, Broadcasters **P. 21**

Publication Mail Agreement No. PM40069240





7 new models Introduced at NAB 2012

7" Production Viewfinder



47" Quad LCD



LQM-471W

24" Mide-Gamut



LVM-247W

32" Color Critical



XVM-325W

2 New Rack Mounts



LVM-174W/LVM-212W 17" Color Critical



Premium Monitoring Solutions for the Most Demanding Applications

TVLogic offres the most complete line of professional viodeo monitors in the industry with over 30 broadcast, production and rack mount models from quad 3.4" to 56" 4K resolutions monitors and every size in between.

With an unbeatable combination of precision engineered image processing and preferred features like built-in Waveform/vector Scope, Auto Color Calibration, Closed Captioning (CE 608/708), 3D LUT Import/Export, HDMI to SDI Converted Output, 3G & Dual-Link Support and more, TVLogic has the right solution for all your monitoring needs.





www.bsesystems.com / Toll Free: 800-268-4081 / Tel: +1-416-438-6230 sales@tvlogic.ca www.tvlogic.ca Editor Lee Rickwood editor@broadcastermagazine.com

Contributing Editors Dick Drew, Alan Hardiman, Robert McKenzie, David Gibson, and Rob Finlayson.

Senior Publisher Advertising Sales James A. Cook (416) 510-6871 jcook@broadcastermagazine.com

Print Production Manager Phyllis Wright (416) 510-5101

Production Manager Gary White (416) 510-6760

> Vice-President Alex Papanou

President Bruce Creighton

Circulation Manager Anita Madden (416) 442-5600 ext. 3596

Customer Service Malkit Chana (416) 442-5600 ext. 3539

> News Service Broadcast News Limited

Editorial Deadline Five weeks before publication date.

Broadcaster[®] is published 9 times yearly, by BIG Magazines LP, a div. of Glacier BIG Holdings Company Ltd.

> Head Office 80 Valleybrook Drive, Toronto, Ontario M3B 2S9 Fax: (416) 510-5134

Indexed in Canada Business Index Print edition: ISSN 0008-3038 Online edition: ISSN 1923-340X



Canadä

Circulation audited by Audit Bureau of Circulations Publications Mail Agreement 40069240.

We acknowledge the financial support of the Government of Canada through the Canada Periodical Fund (CPF) for our publishing activities.

Subscriptions in Canada \$50.95 for one year; \$78.95 for two years; USA \$63.95 for one year; Foreign \$63.95 for one year (US and Foreign in US Funds). Single copy Canada \$8.00; Single copy US \$10.00; Single copy Foreign \$10.00; Directory Canada \$51.95; Directory US \$51.95; Directory Foreign \$51.95; Directory Canada Shipping & Handling \$8.00; Directory US Shipping & Handling \$10.00; Directory Foreign Shipping & Handling \$10.00 (US and Foreign in US funds). Canadian subscribers must add HST, HST registration #R890939689.

For reprints call: 416-510-6871

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, 80 Valleybrook Drive, Toronto, Ontario M3B 2S9

Copyright © 2012 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.



FEATURES

4 Future of Broadcast Television Initiative Officially Formed During NAB Show







DEPARTMENTS

- 7 Industry News
- **14** New Products



21 Canadian Achievers Another Award is Needed for Top Radio Reps By Dick Drew





Adaptive, not disruptive, technologies were on display at NAB 2012, and digital bridges were being built among different standards, competing formats and creative concepts.

Photo by David Gibson

Future of Broadcast Television Initiative Officially Formed During NAB Show

Next Generation Equipment, New Broadcast Directions, Digital TV Developments Won't Stay in Vegas

here's broadcasting renaissance underway, and it's all digitization's fault.

Digital innovation is able to bridge many of the longstanding gaps between the different television signal formats and transmission systems used around the world, and the barriers to their common usage.

Perhaps more importantly, it can be used to fend off challenges to broadcasting from competing sectors or delivery platforms, and find ways to make more technical and economic sense of defined spectrum resources.

At the very least, digitization is enabling a real uptick in non-traditional broadcasting, with private corporations and public institutions alike using new digital tools and techniques in a burst of digital media-casting of all sorts, to all platforms.

As such, digital developments can be seen

as adaptive now, not necessarily disruptive. Just as digital data streams can adapt to changing conditions and capabilities, so too the broadcast industry must adapt to a changing technical, business and strategic environment.

That's the word from the NABShow 2012, the National Association of Broadcasters annual convention and trade show. As big and wide and deep as the event is these days, NAB seemed nothing but all-digital, all the time. There's new digital acquisition equipment (cameras with dual codecs for simultaneous HD and Web format recording, and cameras built-in Wi-Fi and ftp capabilities; recording devices with digital audio/video capabilities beyond slo-mo, high speed, 1080p or 4K).

grass vallev

There's new post-production gear (more creative power in ever smaller digital boxes, it seems, with multi-layer switchers offering both HD and Facebook outputs; but a box isn't even necessary with expanding cloud based post production services being offered).

> And new delivery solutions (so many platforms to reach, so little time, so many new systems for content delivery to second, third and even fourth screens) that share the digital denominator (and the broadcasters' desire for improved bottom line through with expanded digital multicasting services).

Broadcasters, programmers and studios are seeing cloud-based solutions as key to their post-production, transcoding, storage and delivery requirements — as well as performance analytics. The industry's business strategy, too, is digital.

As demonstrated during a well-attended general session on FOBTV at NAB, nothing less than the future is as stake.

In fact, executives representing television broadcast organizations from around the world signed a landmark memorandum



4 Broadcaster June 2012

egrated playout



FUTURE OF BROADCAST AT NAB

Digital developments can be seen as adaptive now, not necessarily disruptive. Just as digital data streams can adapt to changing conditions and capabilities, so too the broadcast industry must adapt to a changing technical, business and strategic environment.

of understanding (MOU) to officially form the global Future of Broadcast Television (FOBTV) Initiative.

Among many key international leaders, Canadian members of the initiative include the Canadian Broadcast Corporation (CBC) and the Communications Research Centre Canada (CRC); both are signatories of the memorandum.

(Make no mistake – it is a 'royal' proclamation, what with Her Majesty Queen Elizabeth II represented on the document: Anthony Caruso, Director, of the CBC's New Broadcast Technology Department, inked the document, as did CRC Vice-President Bernard



NAB President and CEO Gordon Smith; Bounce TV co-founder and former U.N. Ambassador Andrew Young; Vme Founding President & CEO Carmen DiRienzo; Gannett Broadcasting President Dave Lougee; and President of Antennas Direct Richard Schneider at Future of TV Coalition 2011 Press Conference.

Caron, on behalf of her Majesty the Queen, in right of Canada as represented by the Minister of Industry through CRC Canada).

The MOU builds on the Future of Broadcast TV Summit held in China late last year, where world broadcasting leaders established a framework for cooperation in a simple endeavour -- to chart the future course of television broadcasting.

They know that television and media consumption has changed drastically with the desire for time-shifting and placeshifting capabilities, and always-connected, multi-screen services.

There's more to come for sure, and it's all digitization's fault. As a result, broadcasters around the world face numerous challenges on technical, business and regulatory fronts.

Yet there's a sense of expectation that the next generation of broadcast television technology – digital technology - has the potential to revolutionize the industry.

As just one example, note that the revolution will not just be digitized, but metadata-ized.

Broadcasters have long tended to just see dry core technical information meeting the need for program processing and scheduling.

Yet digital data is the key to a boxful of new ways to describe, discover, repurpose and reuse content, new ways in which viewers can find and interact with broadcast content and digital media of all kinds, therefore also opening up new business models and revenue opportunities.

Metadata is also being used to supplement programming and power TV search by content owners and **CONTINUED ON PAGE 6**



The Future of Broadcast TV session drew hundreds at the 2012 NAB Show; ASTC's Mark Richer was elected FoBTV chairman during NAB meetings.

FUTURE OF BROADCAST AT NAB

alternate platform operators, so broadcasters can see it as a marketing opportunity, not just an engineering requirement.

When content is available on different platforms, from smart TVs to smartphones and more, describing that content well and to make it attractive to watch or purchase is crucial to both.

So the more metadata that's created in acquisition, production, post and delivery the better, and the equipment and ideas to do so were at NAB 2012.

And there was a confidence that international, national and local broadcasters have the expertise to deploy the ideas and technology that will deliver more high quality entertainment and news content to viewers, at home and on-the-go.

The importance of mobility echoes throughout the FoBTV initiative, as does the concept of 'cooperative content' – TV and Internet, broadcast and digital, marketing and engineering.

As upbeat as it sounds, however, there is concern over 'unnecessary spectrum consumption', and the threat from 'competing sectors or delivery platforms' now and I the future, The FoBTV sees clearly that spectrum is being sought after for broadband by global technology providers, and that puts pressure on the broadcast industry to improve spectral efficiency.

It's all part of the renaissance.

It includes the development of major technologies, in newly established digital TV development laboratories, as the basis for new standards in next generation broadcast systems.

As mentioned, a simple endeavour.

So it's good that the Future of Broadcast Television (FoBTV) Initiative also named an accomplished and experienced leadership team at NAB, as announced by its Management Committee (*see sidebar page 11*).

Mark Richer is FoBTV Chairman; he's President of the Advanced Television Systems Committee, one of the 13 global technology and standards organizations that founded the FoBTV Initiative. Phil Laven, Chairman of another founding member, the Digital Video Broadcasting Project, is FoBTV Vice Chairman.

The first Chairman of the newly formed FoBTV Technical Committee is Dr. Wenjun Zhang, Chief Scientist, NERC-DTV.

Three Vice Chairs were named: Dr. Yiyan Wu, CRC's Principal Research Scientist, Dr. Toru Kuroda, Director of NHK's Planning and Coordination Division and Dr. Namho Hur, General Director, Department of Broadcasting System Research at ETRI.

The signatories of the FOBTV MOU believe that terrestrial broadcasting is uniquely important because it is wireless (supports receivers that can move), infinitely scalable (point-tomultipoint and one-to-many architecture), local (capable of delivering geographically local content), timely (provides real time and non-real time delivery of content) and flexible (supports free-to-air and subscription services).

The attribute of wireless delivery of media content to a potentially unlimited number of receivers makes terrestrial broadcasting a vital technology all over the world. Broadcasting is, in fact, the most spectrum-efficient wireless delivery means for popular real-time and file-based media content, according to the MOU.

The complete MOU – signed by technical executives of the Advanced Television Systems Committee (ATSC), Canadian Broadcast Corporation (CBC), Communications Research Centre Canada (CRC), Digital Video Broadcasting Project (DVB), European Broadcast Union (EBU), Electronics and Telecommunications Research Institute (ETRI), Globo TV-Brazil, IEEE Broadcast Technology Society (IEEE-BTS), **CONTINUED ON PAGE 11**

FOBTV Memorandum of Understanding

The MOU underscores the stated goals of the FOBTV Initiative:

- > Developing future ecosystem models for terrestrial broadcasting taking into account business, regulatory and technical environments,
- Developing requirements for next generation terrestrial broadcast systems,
- Fostering collaboration of Digital TV development laboratories,
- Recommending major technologies to be used as the basis for new standards, and
- > Requesting standardization of selected technologies (layers) by appropriate standards development organizations



New acquisition concepts that couple capable cameras with digital distribution devices were on display at NAB 2012, highlighting new production partnerships and creative opportunities for news, sports and more. The GoPro HERO2 and the Livestream Broadcaster can combine ive 1080p HD video with Wi-Fi and cellular delivery options. Photo by David Gibson





The International Space Station will act as a music recording facility for collaborators Canadian astronaut Chris Hadfield and Ed Robertson of Barenaked Ladies fame.

A new song will be written, recorded and premiered in Space and on Earth simultaneously, as part of a partnership between CBC Music, the Coalition for Music Education and the Canadian Space Agency (CSA).

Canadian astronaut Chris Hadfield and multiple Juno Award winner Ed Robertson of Barenaked Ladies fame will co-write the new tune, set for release during Music Monday 2013, the annual celebration of music.

The date comes during Hadfield six-month mission aboard the International Space Station (ISS), during which he will be commanding the spacecraft.

It's the first such assignment for any Canadian; Hadfield is a veteran of two space shuttle missions. He's also an accomplished musician and songwriter.

He's scheduled to blast off this December launch aboard a

RTDNA President's Award Goes to...

The RTDNA President's Award will be presented to Terry Scott at the President's Awards Gala, during the association's special 50th Anniversary National Conference in Toronto, June 21 to 23, 2012.

RTDNA Canada - The Association of Electronic Journalists - announced last month that Scott, Director of Broadcasting at The Canadian Press, would be this year's recipient of the RTDNA President's Award.

RTDNA's highest honour is presented annually to individuals or groups that have brought distinction to, or made major contributions to, broadcast journalism.

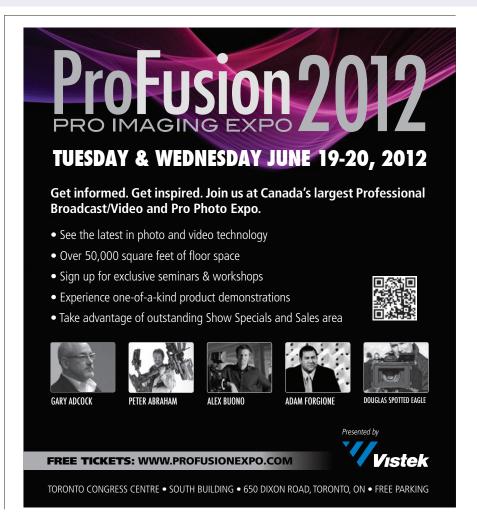
"Terry Scott's impact on the Canadian broadcasting scene over the past thirtyseven years has been significant," said RTDNA Canada President Andy LeBlanc. "I've only known Terry for a few of those years and I've witnessed his continuous and passionate contribution to the industry and our Association."

Scott started his noteworthy career working at his school newspaper in Saskatchewan, taking journalism classes during high school. He worked as a weekend news anchor before graduating, then immediately landed a full time job and has stayed the course ever since, working at top radio and TV stations in Regina, Montreal, Toronto, the Windsor-Detroit and London, ON regions, before joining Russian Soyuz spacecraft to reach the ISS, where he'll live and work for six months – and compose, collaborate and "record as much as I can on orbit," Hadfield told Robertson, when they met for the first time at the CBC studios and hatched the plan.

Over the coming months, as Hadfield and Robertson craft music and lyrics, CBC will produce a series of videos documenting the collaboration progress.

The finished song will be premiered during programming on various CBC media platforms next year, and will be performed by students across Canada, May 6, 2013.

Every year, Music Monday is coordinated by the Coalition, and celebrated on the first Monday of May, when music students and teachers leave the classroom, head outdoors and into their communities, and perform the same song at the exact same time as part of the festivities.





Broadcast News as Supervising Editor in 1990. He helped in the shift to combine the BN and CP newsrooms.

More than two decades later, he now oversees broadcast-related business for CP as Director of Broadcasting.

His active participation in RTDNA Canada includes numerous official roles; Awards Chair, President, Past President. He currently serves on the boards of both RTDNA Canada and RTDNA International. His dedication also extends to keeping members informed as volunteer editor at the weekly newsletter, the Update.

RTDNA Canada is the voice of electronic journalists and news managers in Canada. The members of RTDNA Canada recognize the responsibility of electronic journalists to promote and to protect the freedom to report independently about matters of public interest and to present a wide range of expressions, opinions and ideas. The RTDNA Canada Code of Ethics, adopted by the Canadian Broadcast Standards Council, is used to measure fairness and accuracy in the profession.

CRTC Loudness Regs Ring in September

The Canadian Radio-television and Telecommunications Commission (CRTC) published the final regulations requiring Canadian broadcasters and broadcasting distributors to control the loudness of TV commercials by September 1, 2012.

"The rules we published bring us a step closer to our goal of eliminating loud TV ads," said Leonard Katz, Acting Chairman of the CRTC. "We have every expectation that the industry will take the necessary steps to meet our deadline and provide relief to viewers."

The regulations require Canadian broadcasters to adhere to the Advanced Television Systems Committee's (ATSC) standard for measuring and controlling television signals. Adherence to this standard will minimize fluctuations in loudness between programming and commercials. The ATSC is an internationally recognized body that sets technical standards for digital television.

In December 2011, the CRTC published draft regulations for comment after responding to Canadians' concern that commercial advertisements were too loud.

Broadcasters are also responsible for maintaining the volume of programs.

They must follow these rules and ensure that both programs and ads are transmitted at the same volume by no later than September 1, 2012.

CBC Licence Renewal Hearings Re-scheduled for November

Twice-delayed, now rescheduled for the fall, the Canadian Broadcasting Corporation will have licence renewal hearings in the midst of major budget restrictions.

The Canadian Radio-television and Telecommunications Commission first postponed the hearings last September, the first such occurrence in more than ten years, and then it again delayed the renewal hearings in February 2012 to next month.

The hearings had been set for June, but the CBC made a request for postponement to allow it to establish a future operating budget once details of the federal budget, tabled in March, were known.

The CRTC was to consider applications by the CBC to amend the licences of Radio 2, Espace musique, and their affiliated stations to permit national advertising.

However, the CRTC now plans to "thoroughly explore the performance and plans of CBC radio in relation to its mandate" and review applications by the CBC to renew broadcasting licences for radio, television, and specialty television.

The budget contained significant budget cuts to the CBC's operation, said to affect staffing, production, regional services and international operations.

The hearing will commence on November 19, 2012.

Sim's Latest Acquisitions Trigger New Name, Logo

Toronto-based broadcast equipment and production service provider Sim Video is now SIM Digital.

The company has seen significant mergers, geographic expansions, executive team hires and a widening portfolio of services in this, its 30th year of operation.

Current growth and entry into new markets are both cited as key reasons for its name change.

In the past month, SIM acquired the post division of Master Key, a Los Angeles-based post-production house known for delivering high-end finishing services including conform, color correction, titling and mastering services for feature and television productions.

"SIM is a company that has worked hard to be at the forefront of our industry, and that means we are always evolving," explained founder and CEO Rob Sim.

"While our name has served us well over years, the word 'video' seemed a little out of place with cameras like the Arri Alexa, Sony CineAlta and RED cameras winning over the industry," he noted. "We

Nelvana Pitches Berenstain Bear 50th Celebrations

It's the 50th anniversary of the highly popular Berenstain Bears franchise, seen as one of the biggest book selling series in history, counting over 250 million copies sold.

There have been 40 episodes of an animated TV series, produced by Nelvana Enterprises, featuring the Bear family -Mama, Papa, Brother and Sister Bear. Now, Nelvana says it is in discussions with potential licensing and retail partners on opportunities to celebrate the historic milestone.

Since the publication of The Big Honey Hunt in 1962 by creators Jan and Stan Berenstain, under the editorship of the legendary Dr. Seuss, the Bears have touched millions of lives worldwide.

"Families have turned to the Berenstain Bears for over a half a century now to learn about and reinforce important life lessons and values, all conveyed in a comforting, fun and engaging way," said Andrew Kerr, Head of Consumer Products for The Americas and Australasia, Nelvana Enterprises. "There is no family quite like the Bears, who have become a true American 'institution', and we are excited at all of the possibilities that this milestone anniversary presents."

Along with the TV series, the Bears have been featured in a children's musical, amusement park rides, toys, ebooks, apps and even a video game. There is also a feature film in development, and new titles are anticipated this year from

both Random House Children's Books and HarperCollins Children's Books.

Jan Berenstain sadly passed away in February, 2012, following Stan Berenstain's death in 2005. She is survived by her sons, Mike and Leo Berenstain, who continue to build upon the world created by their parents in all-new Berenstain Bears books.





Founder and CEO Rob Sim stands out as new company signage is installed, conveying his company's new name, digital brand and expanded service offerings.

have one of the most impressive inventories of digital cinema tools and cutting-edge services available, and yet our name didn't imply it. After exploring some options, we ultimately focused on choosing a name that simply reflected how the industry and our clients refer to our services today – and SIM Digital was born."

Another key reason: the former Sim Video's merger with Bling Digital, creating a company that could provide comprehensive equipment and file-based workflow solutions.

So SIM has experienced significant growth in the past few years and is looking to expand its service offerings in the L.A. market in 2012, building on this workflow solutions expertise that includes on-set data management, video assist, digital dailies, LTO tape archiving as well as the newest acquisition in post-production service provision.

"Productions see no boundaries on where or how they shoot today. Our clients need to have access to our equipment and services in any city or country they decide to shoot in, so we've made it a priority to be more accessible," added Jim Martin, CSO, SIM Digital. "Change is always around us, and that's what makes this an exciting time for our company. We're eager to introduce our services to these markets under our new design, and we believe that our revamped identity will serve us well in this digital age."

SIM has offices across Canada, in the U.S. and China.

Citytv Greenlights Two New Comedy Series with Vancouver Companies

Citytv's original content team has greenlit two new original comedy series – Package Deal and Seed and will work with Thunderbird Films and Force Four Entertainment, respectively, on the productions.

The two series are slated to launch exclusively on Citytv in mid-season; additional production and broadcast details were not available at press time.

"Citytv has long been the home to some of the most successful and critically-acclaimed comedies from the U.S. – and now we're throwing our hat into the ring!" said Claire Freeland, Director of Original Programming, Rogers Media. "We're excited to be working with the seasoned teams at both Thunderbird Films and Force Four Entertainment, where together, we will create two comedies that are edgy and hip – and most importantly, funny. Andrew Orenstein and Joseph Raso have created fresh and hilarious characters in worlds our viewers will love. Our audiences love comedies, and Citytv's strength in this genre is undeniable."

Created by Andrew Orenstein (Malcolm in the Middle, 3rd Rock from the Sun) and produced by Thunderbird Films, Package Deal is a 13-episode, half-hour, multi-camera original comedy about three overly close brothers and the woman who comes between them.

From Force Four Entertainment, the producers of the upcoming Citytv original reality series The Bachelor Canada, and creator Joseph Raso, Seed is a 13-episode, half-hour series that offers a fresh take on the family comedy.

Thunderbird is a Vancouver-based entertainment company that finances, produces and distributes programming maximizing the financial and creative benefits of Canadian co-production.

Vancouver-based Force Four Entertainment is one of Canada's most successful and respected television production companies; it's owned by President Rob Bromley, Executive Producer John Ritchie, and Director of Business Affairs Gillian Lowrey.

IAB President Stepping Down

IAB Canada's long-time President, Paula Gignac will step down from her current position, effective September 1, 2012.

Gignac will actually continue to consult for the organization on a variety of projects beyond that date, including continuing in her role as lead representative for IAB





Canada in its involvement in the Digital Advertising Alliance Of Canada (DAAC) and with respect to IAB Canada's administration of the DAAC's Canadian Self-Regulatory Program For Online Behavioural Advertising, slated to go live this year.

Gignac, who has led IAB Canada since September 2004, is moving out of the Greater Toronto Area for the next two years (where IAB Canada's main office is located), in support of her partner who will pursue a Masters Degree elsewhere in Ontario.

Gignac leaves her role as President of IAB Canada having directed virtually all of the organization's major initiatives and growth to date, and having seen the industry grow from just \$170 million in annual online ad revenues in 2004; to \$1.2 billion in 2007, \$2.2 billion in 2010 — and, if ZenithOptimedia's predictions for Canada are correct — past the \$3 billion mark, which will likely occur on her watch.

"IAB Canada and indeed the entire Canadian Marketing community have been incredibly fortunate to have benefited in so many ways from Paula's dedication, commitment and extreme passion for all things digital," said Carolyn Cramer, General Manager, Canada for Tribal Fusion and Vice Chair of IAB Canada's Board of Directors.

Rogue Gathers Canadian Partners

Astral and Corus are participating in the 10-part suspense-drama series Rogue.

The series is scheduled to begin production in Vancouver in August, 2012 and air in 2013.

Starring award-winning actress Thandie Newton (Crash, Mission: Impossible II), the series is an international co-production between Astral's The Movie Network and Corus' Movie Central, Entertainment One in Canada, Greenroom Entertainment in the UK and DIRECTV in the U.S.

"High-concept, made-in-Canada original programming is what sets The Movie Network apart as a premium network," said Aubie Greenberg, Director, Original Programming, Movie Services, Astral Television. "Our partnership with Entertainment One on Call Me Fitz has been a boon for audiences and we look forward to furthering this relationship on a global scale."

"We are very pleased to bring this high-quality and exciting production to Vancouver and then to Canadian audiences," said Jocelyn Hamilton, Vice

McEwen in New Role at NABA

Michael McEwen is the new Director General of the North American Broadcasters Association.

McEwen's broadcast experience is well known in Canada; it includes a distinguished career with CBC/Radio-Canada both in production and in the executive offices, and as an innovator in implementing new technologies such as the introduction of Digital HD Television in Canada.

He's also had a long association with NABA as a past Director, President and Secretary General. Over the past six years, McEwen has been a Director and since 2010 the Chairman of the UK based Media Asset Capital, a consultancy for the industry.

Having resigned that role and taken up his new duties with NABA, McEwen is welcoming "the opportunity and privilege to



Well-known in Canada, Michael McEwen is the new Director General of the North American Broadcasters Association.

again work with NABA members in developing broadcast leadership on the major industry questions which members are dealing with both in North America and around the world."

NABA is a non-profit association of broadcasting organizations throughout North America committed to advancing the interests of broadcasters at home and internationally.

"Michael brings to NABA a depth of broadcast experience and understanding of the industry at a time our members are challenged by change in our markets, services, technologies and regulations," said NABA President, Robert Briskman, when announcing the appointment, on behalf of the NABA Board of Directors. "We look to him to use that experience and consensus making skills to help our members come to unified positions on the issues of the day and to take actions beneficial to our industry."

As a member of the World Broadcasting Unions (WBU), NABA creates the opportunity for North American broadcasters to share information, identify common interests and reach consensus on issues of an international nature. NABA provides representation for North American broadcasters in global forums on topics including journalism issues, protection of content, spectrum related concerns, the territorial integrity of broadcasters' signals, and digital transmission issues.

President, Original Programming, Kids, Comedy, Drama, Corus Entertainment.

The series will be executive produced by Nick Hamm, John Morayniss, Michael Rosenberg and Steven Marrs. Series creator Matthew Parkhill (The Caller) will also serve as writer and supervising producer.

White Pine Cracks Again

White Pine Pictures will be teaming up once again with the CBC on their newest TV drama, Cracked (13 x 60'). The series order comes on the heels of a successful pilot that was shot last fall.

Starring David Sutcliffe (Gilmore Girls, Private Practice) as Detective Aidan Black and Stefanie von Pfetten (NCIS, Battlestar Galactica) as psychiatrist Dr. Daniella Ridley, the hour-long drama series follows unique partnerships of police detectives and mental health professionals of the Psych Crimes Unit as they investigate psychologically complex crimes.

"We're delighted to be collaborating

with the CBC on this original, intelligent, and innovative Canadian drama series featuring a dynamic cast and fast-paced scripts", says executive producer Peter Raymont, president of White Pine Pictures.

Cracked is created by writer Tracey Forbes (Flashpoint, Buffy the Vampire Slayer) and Toronto Emergency Task Force officer Calum de Hartog. The Cracked pilot was executive produced by Raymont, Janice Dawe and Tracey Forbes; creative producer is Susan Morgan; and the director is Tim Southam (Bones, House).

The series will be distributed internationally by White Pine and Munichbased Betafilm and is represented in the USA by Carrie Stein of 3Arts Entertainment.

Cracked is White Pine's second drama series for CBC. Their first, The Border, ran for three successful seasons and was sold internationally to 21 broadcasters and versioned into 11 languages. **B**

FUTURE OF BROADCAST AT NAB





NewTek's TriCaster presentation, and particularly its green screen chromakey demo, was a lights-out (the shadows and poor lighting were on purpose) example of new digital production styles, and how they can be extended to meet creative, technical and market requirements. Photo by David Gibson National Association of Broadcasters (NAB), National Engineering Research Center of Digital TV of China (NERC-DTV), NHK Science and Technology Research Laboratories (NHK), Public Broadcasting Service (PBS) and the Brazilian Society of Television Engineers (SET) – is available online, in a digital format of course, at www.fobtv.org.

FoBTV is a voluntary, non-profit association that is open to any organization that signs the MOU. ${\bm B}$

FOBTV Management Committee

The founding FOBTV members comprise the Management Committee:

- > Advanced Television Systems Committee (ATSC)
- > Canadian Broadcast Corporation (CBC)
- > Communications Research Centre Canada (CRC)
- > Digital Video Broadcasting Project (DVB)
- > European Broadcasting Union (EBU)
- > Electronics and Telecommunications Research Institute (ETRI)
- > Globo TV-Brazil
- > IEEE Broadcast Technology Society (IEEE-BTS)
- National Association of Broadcasters (NAB)
 National Engineering Research Center
- of Digital TV of China (NERC-DTV)
- NHK Science and Technology Research Laboratories (NHK)
- > Public Broadcasting Service (PBS)
- > Brazilian Society of Television Engineers (SET)

NAB COMMENTARY BY LEE RICKWOOD, WITH CONTRIBUTIONS FROM CONFERENCE CORRESPONDENTS ROBERT MCKENZIE, DAVID GIBSON, AND ROB FINLAYSON.



	3		PANK 2	Contraction of the local division of the loc	Mail & Sound T. Statute 3 and	Danie 10.09.09.08	\square	
					10			NewTek TriCetter's
	101000000 SS 200	000012.00	00.00 19.00	REA DEVELOPMENT				
		6 ToCenter;				TriCaster		
			- 61 cz - 62 cz e z e		The second se			
NevTek > Nighty Show 8 + Center								
Animale Zoom		B B	· 🚹				-CONT.	
								00003.21
								The second
	ar 36 37 18 2				00:00:15:00 🖂 🛄 🔹 🕫		712.	

Learn more about TriCaster at: WWW.Newtek.com



TAKE CONTROL



NewTek TriCaster[™] 850 EXTREME is like having an HD live truck that fits in your rack or on your desk. In live production, there's no time to second guess. We get it, that's why we build TriCaster.

· Affordable 24-channel, native HD system (up to 1080p) that broadcasts, streams, projects and records

- · Record up to eight channels of video, simultaneously, with NewTek IsoCorder™ technology
- · Go wireless with Apple® AirPlay® to deliver video and audio from iPad®, iPod®, or iPhone®
- · Eight external sources with the ability to mix and match formats
- · Eight virtual/mix channels for layered switcher effects
- · 18 HD, live virtual sets provide a network-style setting in a small space

Add the TriCaster 850 CS hardware control surface and have illuminated buttons, a premium T-bar and three-axis joystick mapped directly to the TriCaster 850 EXTREME workspace. Now, you can make split-second decisions with your eyes on the show and your hands at the controls.

It's time. Take control.



TCXD8

TriCaster



A new line of TriCaster live production systems introduced by NewTek at NAB brings all new capabilities for live event producers and digital media publishing professionals.

The new TriCaster 8000, TriCaster 855 and TriCaster 455 can be used to create and deliver content for live TV, online video streaming, social media sites and display via digital screens or projectors, or any combination thereof.

The top of the line TriCaster 8000 starts with a 24-channel switcher with eight fully re-entrant M/E rows, and adds support for large-scale, multi-camera production in native full-resolution HD, 8 channels of ISO recording in up to 1080p, and live output to up to 14 different display destinations.

New social media production tools have been introduced, which allow for video clips, individual stills, or batches of ISOgrabbed frames from a live show to be uploaded to multiple social media platforms, including Facebook, YouTube, Twitter, and Flickr—or FTP-transferred to a directory—in a single pass.

With its redesigned hardware control features, the system introduces extensive integration and customization options that include virtually limitless scalability with third-party router support, recordable macros that can be triggered simultan-

Ki Pro Rack Brings Ready-to-Edit Recording to 1RU Form Factor



AJA Video Systems introduced the Ki Pro Rack, a new 1RU rack mount form factor with Ki Pro functionality, enabling recording of high-quality, edit-ready files for the fastest path from camera to edit in.

Ki Pro Rack uses the same SSD or spinning disk storage modules as the Ki Pro with recording capacities scaling up to 500GB. Ki Pro Rack simplifies the acquisition-to-edit workflow by creating high-quality Apple ProRes 422 or Avid DNxHD files which can be used directly in most standard professional editing systems without the need to import or transcode files.

With its stand-alone operation and configuration, there's no need for an external computer, and its familiar buttons and operational controls help minimize the learning curve.

Connections include HD/SD SDI, HDMI, and HD/SD analog video I/O; multi-channel AES, analog balanced XLR, and embedded audio I/O, along with RS-422 machine control, genlock, and LTC connections.

NewTek Unveils Next-Generation TriCaster Family For Live Production and Media Publishing

New TriCaster live production systems from NewTek feature redesigned hardware controls, and extensive integration and customization options.

eously, along with extensive effects and graphics capabilities.

In addition to Apple AirPlay support, NewTek's IsoCorder technology has been updated to add system support for virtually every nonlinear editing application for both the Mac and PC, without the need for transcoding.

It also has enhanced support for recording of multiple input sources and output options with embedded timecode and four audio tracks. Audio mixing is more flexible with the ability to delegate the process to a separate iPad control app, or one of the Avid Artist series control surfaces.

The TriCaster 855 is a facilities-class system, equipped with 24-channel switching, and inputs for up to eight cameras; five digital media players for video clips, graphics and titles, and two network channels for sharing computer screens and displays from wireless iOS devices. It has eight M/E-style virtual inputs and three outputs.

The TriCaster 455 is scaled for virtually any restricted space, including small studios, production vans, control rooms, backstage, a blogger's office, and more. It features a 14-channel switcher with four camera inputs along with other production and graphics functions.

Rogers Media Buys Two Calrec Audio Consoles for BC Stations

Rogers Media has purchased a set of Calrec Artemis audio consoles for its Vancouver facility, home to the Citytv Vancouver, OMNI BC, and SportsNet Pacific channels.

The purchase includes a 40-fader Artemis Beam console for the larger of the facility's two control rooms and a 16-fader Artemis Light for the smaller room.

It's all part of the Vancouver plant's upgrade to HD; the new Artemis consoles ability to will enable the three stations to produce local shows in 5.1 audio to match its new HD video setup.

The two Artemis consoles will be linked via Calrec's Hydra2 audio routing system, giving the stations the ability to share any resource across their networks. Artemis' I/O functions use high-capacity 8192² crosspoint routers and a variety of I/O units.

"Because the desks are networked together, we can share microphones, IFBs, remote feeds — everything — via the MADI interface," said Myles Morse, engineering coordinator for Rogers Media Vancouver. "With a networked audio system, it takes a lot less effort to get a piece of content from one place to another, which will make our daily local productions easier. We'll be much more flexible and able to handle larger, more complex productions, which could translate to more revenue."

Bluefin2 HDSP technology affords 340-channel processing paths on an Artemis Beam and 240 paths on an Artemis Light, with up to 128 program busses, 64 IFB/Track outputs and 32 auxiliaries.

The Rogers Media purchase represents Calrec's first sale of its Apollo technology platform in the Canadian market.

The long arm dual ear wireless headset from DPA.

DPA Features Headset Mic Series

DPA Microphones featured its d:fine series of headset microphones, noting their consistent audio performance at all sound pressure levels. The mics have a frequency range of 20 Hz to 20 kHz \pm 2 dB and a maximum peak handling capacity of 144 dB before clipping. The d:fine series is available as omni-directional and directional and includes a long and a short mic boom mounted on either a single-ear mount or a dual-ear mount.

The single-ear d:fine is good for more stationary productions, while the dual-ear d:fine is designed to remain firmly in place during more active productions.

The adjustable, single-ear headset features a removable ear hook assembly. All mics feature a connector wire with multiple connector options to fit any professional wireless system.

Université du Québec Moves Media with EditShare

The Université du Québec à Montréal (UQAM) is replacing its existing video and cinema production and post-production facilities with two professional HD television studios and master control room powered by EditShare tapeless workflow solutions; Geevs for ingest and distribution, Flow for asset management, XStream for collaborative storage and Ark for backup and archiving.

The new installation provides an integrated workflow, connecting production and post-production systems including the university's 75 Avids, 50 Final Cut Pros and 30 Adobe Premiere editing workstations.

"We have been looking at different video servers - recording, post and archiving - for the last two years and have done our share of testing and visits to local broadcasters like Radio-Canada/CBC and TVA, Télé-Québec. After taking the EditShare solution through its paces, we found that it best suited our needs with regards to teaching, production and research," said Gilles Boulet, Director of Audiovisual Services, UQAM.

EditShare's Montreal-based business partner INSO was integrator on the project. In addition to customizing the Edit-Share installation to support the UQAM workflow, INSO is integrating the university's new media network infrastructure with the existing one to support the new media workflow.

TSL Leans Back to Listen

TSL Professional introduced its new Touchmix Pilot Desktop Remote system, for one-touch access to any analog or digital audio source material in mono, stereo or surround.

The rack mount unit and touch screen control panel system allows for the individual adjustment of levels and balance and can be used to mix together multiple incoming sources.

Configuration snapshots can be loaded or saved using on-board memory locations or via the on-board USB port.

It's been developed for operation with TSL's AVM-T-MIX (Touchmix), as



well as other I/O devices.

The Touchmix, a system design inspired by input from the BBC, is comprised of a pair of 20-channel audio mixers with exclusive signal selection via the on-board router and a 'solo' monitoring buss function similar to that of a large-format digital audio mixing console. Up to 64 audio inputs can be chosen simultaneously from SDI, AES and analog sources.



PRODUCTS

Sound Devices Go with Portable Audio/Video Recorders

Sound Devices has new PIX 260 and PIX 240 Version 2 portable production audio/video recorders available.

The PIX 260 file-based video/audio recorder/player comes in a 1/2-rack, 2-U chassis for fixed production and post-production environments. Using the Apple ProRes or Avid DNxHD codecs, the PIX 260 records and plays files at up to 220 Mbps in 10-bit 4:2:2 video, along with up to 32 tracks of 24-bit, 48 kHz audio. Files from the PIX 260 are ready for direct import into Avid and Final Cut editing environments without transcoding. Files can also play out of the PIX 260 for real-time applications.

In addition to 16 channels of embedded SDI audio and eight channels of HDMI audio, the PIX 260 also accepts eight channels of line-level analog I/O and eight channels of AES digital audio. Using Dante, the PIX 260 can accept and transmit up to 32 channels of audio over Ethernet.

The PIX 260 has a built-in five-inch 800- x 480-pixel video display that allows users to view video and setup-



Sounds Devices PIX 240 and 260 recorders have built-in video scalers and frame rate converters.

menu selections. The PIX 260 can be controlled by both external RS-422 and through its embedded Web server over Ethernet.

Up to four SATA drives can be connected to the PIX 260 simultaneously. All four drives can be recorded to simultaneously for RAID-1 type redundancy and to eliminate the need for postrecord copying when multiple copies are required.

Sound Devices' PIX 240 Version 2 connects to cameras with HDMI or SDI, like the ARRI and RED as well as smallformat HD cameras from Sony and Canon. It records directly to QuickTime



using Apple's ProRes or Avid's DNxHD codec, so files recorded in the field can be used directly in post production.

Both the PIX 260 and PIX 240 include a scaler and frame-rate converter that allows the incoming signal to be recorded after up, down or cross-conversion at the same or a different rate. Hardware-based 3:2 pull-down removal is included as well.

Singular Software Takes Media Collaboration to the Cloud

Singular Software's new CloudEyes cloud-based media synchronization service lets producers and contributors remotely share and mine footage for video collaborations.

CloudEyes technology is based on the company's Plura-IEyes and DualEyes products that can automatically sync audio and video clips for multi-camera and dual-system audio applications.

The automatic synchronization technology of CloudEyes removes the need for timecode and clappers, and automates the most time-consuming of workflow tasks and moves its capabilities from the desktop to the cloud.

"In the past few years, the tools and devices we use to record and edit video have surged ahead in incredible ways," said Bruce Sharpe, CEO at he Vancouver-based company. "We can merge video from multiple sources, sync them automatically and create sophisticated multicamera productions on the desktop. But until now, developers creating online applications haven't been able to combine expertise, footage or other media elements easily. CloudEyes is one part hunting and gathering platform and one part community mash-up engine—through which everything from planned shoots to spontaneous, crowd-sourced recordings can come together and be turned from raw footage into compelling stories."

Content Repurposing, Enterprise-Wide IPTV Distribution with Digital Nirvana



Digital Nirvana introduced MediaPro IQ, a content repurposing system for multi-platform distribution, and ManyView IQ, an enterprise-wide IP video distribution system, at NAB. MediaPro IQ offers a way to repurpose HD clips from cable as

well as broadcast by using cable card technology to record encrypted cable feeds in full HD. Users can edit, clip and publish live or recorded content in real-time. Search is based on text, logs and metadata. Video can be exported to Flash, MPEG-2, MPEG-4, H.264, and XDCAM and other formats for content repurposing.

It's compatible with various Web browsers, and iPad, iPhone, and Android interfaces are also available.

ManyView IQ can store, distribute and publish offline video assets on a private, enterprise-wide IPTV system, for any device on the network, including desktops, mobile devices and smartphones, set-top boxes, connected TVs, Web browsers and media players.

Both new solutions are based on open API's for integration into other systems, and both record from IP, ASI, ASI/IP, SD/ HD-SDI, ATSC, QAM, NTSC, PAL or DVB-T/C/S2 protocols.



JVC Shows Dual Codec Mobile Camera

Mobile HD newsgathering and web video acquisition are a powerful combination in one camera package, such as the new JVC Professional GY-HM650 ProHD handheld mobile news camera, equipped with dual codecs.

Not due out until the end of the year, it was shown at NAB recording full HD files on one memory card while simultaneously creating

smaller, Web-friendly files (1/4 HD) on a second card.

With built-in FTP and Wi-Fi connectivity, the GY-HM650 can be used to deliver the video files back to a station without a microwave or satellite connection.

Equipped with three, 1/3-inch 1920x1080 12-bit CMOS sensors, the lightweight GY-HM650 records HD or SD footage in multiple file formats, including native XDCAM EX (.MP4), Final Cut Pro (.MOV), and AVCHD, to non-proprietary SDHC or SDXC media cards. It also records .MXF files with rich descriptive metadata that is optimized for asset management. The camera also includes HD-SDI and HDMI outputs for easy monitoring of HD footage.

With a built-in Fujinon wide angle 23x zoom lens, good low light sensitivity (F11 at 2000 lux), the GY-HM650 has the optics for challenging shooting environments. The HD lens has a focal range of 29mm-667mm (35mm equivalent) and includes manual focus, servo zoom, and iris rings, along with three ND filters and a removable hood. Other features include JVC's auto-focus with face detection and an optical image stabilizer.

In addition, the GY-HM650 provides a number of essential audio features. Its built-in stereo microphone is ideal for capturing natural sound on location, but the camera also includes two XLR inputs with phantom power and a shotgun mic holder, as well as a headphone jack and separate input for a wireless mic receiver.



Matthews Intro "Tinker Tools" for iProduction

Matthews Studio Equipment introduced their new line of "Tinker Tools" designed for production crew members who see iPads, iPhones and other digital devices as a vital part of their production package.

"Tinker Tools" keep the gadgets close, but the hands free.

There's the MicroClamp that is the base of the whole system. It can grip to round of flat surfaces, as well as many other objects or any shapes found on set. It has dual 3/8" and 1/4" mounting holes for flexibility, high performance stick pads and an aluminum locking kip handle.

There's also a Smart Phone Adapter that uses the MicroGrip technology

and two brackets for secure mounting almost anywhere - on set, on location or even in a moving vehicle. Then there is the "MUT", which helps mount any kind of tablet or iPad, with or without a protective case. It adjusts from 10" to 13" long and 1/" to 34" thick. It works with standard mounting devices and comes with a 1/4-20" female thread hole on the back of the bracket.

Matthews also has a new line of wireless camera focus controls, pan/tilt heads that can store and recall settings and position points and a lightweight jib.

The SENNA pan/tilt head is aimed at smaller HD/DSLR rigs; the XL Minute Jib extends to over 13' (4.2M) and weighs less than 28 pounds (13Kg).

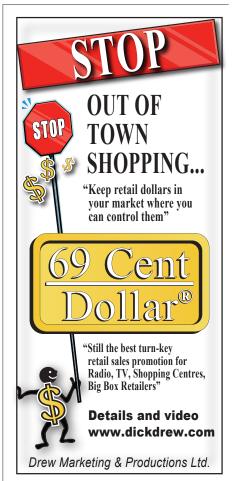


PS-Viewfinder Extension for Alexa Studio

The PS-Viewfinder Extension from P+S TECHNIK is a new accessory for the ALEXA Studio, whether working in the studio or even in the field.

The 29 cm extension attaches directly to the ALEXA Studio Viewfinder using a PL-mount.

It features a fully variable zoom function with an approximate 2X magnification. A pivoting filter holder is incorporated in the PS-Viewfinder Extension, which is prepared for the ALEXA viewfinder leveling rod.



BOOK REVIEWS

Sound Tips and Techniques in Print, Online

Three Audio Books Reviewed

BY ALAN HARDIMAN

hen it comes to books about audio, I've always preferred the prescriptive type that attempt to tell you how to do something, as opposed to the descriptive variety that talk about products or people and how successful they have become. That's why I got pretty excited when Focal Press sent me three volumes for review. From the titles alone, I could tell I was in for a "how-to" feast.

Recording Tips for Engineers

First up is Tim Crich's Recording Tips for Engineers, Third Edition. The subtitle says it all: "Over 1,000 easy-to-use tips, hints, tricks, how-to's, set-ups and explanations for today's recording engineer, musician and home studio user." And Crich should know—his book is based on 20 years in the studio working on records by the likes of The Rolling Stones, John Lennon, Kiss, U2, Billy Joel, and Bryan Adams.

His tips are all in easy-to-digest bullet form—perfect for the attention deficit types among us, and for picking up now and again in the "throne room" as an alternative to Readers Digest. Much of the book concerns microphone techniques, and for that reason alone, it's worth the cover price of \$34.95 (slightly higher in Canada).

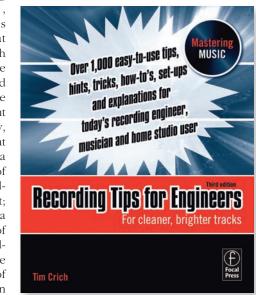
For example, one nifty little tip is to duck the reverb return on a vocal, using the vocal itself as the key input. "The vocal is usually the most important thing in the mix, so clarity is paramount. Try running the main reverb through a noise gate on the 'duck' mode. The singer sings and the reverb ducks to give the vocal some room. When he stops, the gate opens and all the reverb returns. This tricks the listener into thinking the reverb is on throughout the passage."

Arguably, the most pragmatic tip in the book is his Rule of

Thumb: "Make the guy who signs your check sound best."

My quibbles with the book are few, and concern mostly his forays into theory. A chart showing the ranges of various instruments within the audio spectrum places some instruments an octave too high, an error reinforced in the text when he writes that "the A string on an acoustic guitar vibrates at 220 Hz" when, in fact, the fundamental frequency is 110 Hz. Later in the book, he notes correctly that the low E string vibrates at about 81 Hz, so one can't help but wonder whether poor editing is at the root of the misinformation.

Discussing wavelength, Crich notes correctly that "wavelength is equal to the speed of sound divided by the frequency," but goes on to say, erroneously, that "220 Hz has a wavelength of about one-anda-quarter feet; 440 Hz has a wavelength of about two-anda-half feet." The wavelength of 220 Hz is, in



BOOK REVIEWS

fact, double-not half-that of 440 Hz, being closer to five feet.

Did anyone with a technical background ever proofread this volume, now in its third incarnation? These sorts of errors give rise to a lack of confidence in the author's grounding in his subject, and the book may have been better had the theory been omitted—or at least proofread by knowledgeable eyes.

My advice is to skip the theory chapters at the beginning and buy the book for the tips and practical advice. Even old dogs with decades of experience will learn a few new tricks. Recording Tips for Engineers, Third Edition is a "must have" handbook.

Modern Recording Techniques

The second book at hand is Modern Recording Techniques, 7th Edition, by David Miles Huber and Robert E. Runstein. This book has secured a place as the audio reference textbook in dozens, if not hundreds, of college courses. Coming in at over 650 pages, it covers the ground from audio theory to studio practice and everything in between, including contemporary production techniques such as grooving, looping, warping and beat slicing.

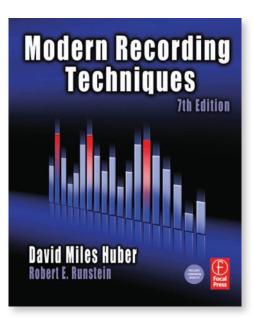
A companion web site, www.modrec.com, contains useful audio tutorials that are referred to in blue type throughout the book under the heading 'DIY Do It Yourself,' as well as an audio glossary, video tutorials, and audio web links. Most of the tutorials offer downloadable audio files that readers can play in order to learn more about such topics as masking, compression, proximity effect and phase, among many other things.

Watching a video of the author walking around a Telefunken M216 microphone and hearing him speak while different directional characteristics are switched in can only increase one's understanding of polar patterns and microphone selection. An

audio tutorial on analog tape modulation noise featuring audio samples from a Studer A80 once owned by Bruce Swedien, and for comparison, an Otari 5050, is also highly instructive.

This book is rightly centred on the use of the digital audio workstation in audio production today. I doubt that there are very many studios of any size that do not use a DAW for at least some production tasks.

I still have a well worn copy of Runstein's original 1974 edition, in which digital PCM recording is mentioned only in the chapter on tape noise reduction techniques, along-side Dolby, dbx, and Burwen products! While much of that first edition was, naturally, given over to analog tape recording, and included highly detailed instructions for the



daily task of tape recorder alignment, the current edition witnesses the passing of tape technology by omitting any practical guidelines for analog recorder cleaning, demagnetizing, and alignment.

Given that analog recorders are still favoured by some prominent mastering engineers, however, it may be a simple matter to incorporate Runstein's chapter on magnetic tape recording, EQ, and alignment in a future edition, if only as an appendix.

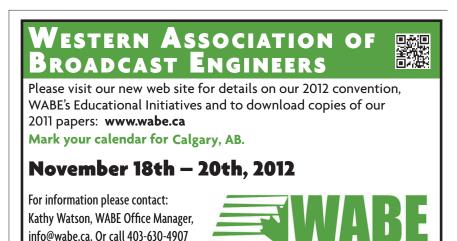
This is but a small quibble, considering the monumental achievement of the authors in presenting a vast amount of material to beginning and intermediate students of audio through the media of print, audio and video. Modern Recording Techniques, 7th Edition is not

so much a book as it is a multimedia excursion into the subject. Even at \$49.95 (slightly more in Canada), it's a steal—very highly recommended.

Small Signal Audio Design

I've saved perhaps my favourite book for last, Douglas Self's Small Signal Audio Design. This 550-page book—its technical heaviness balanced by the author's light hearted and good humoured approach—will take up residency on my shelf alongside Walter Jung's Audio IC Op-Amp Applications and IC Op-Amp Cookbook, and Don Lancaster's Active Filter Cookbook, two staples underpinning my modest design and repair activities.

Focusing almost exclusively on audio at the electronic component level, Self introduces the reader to the properties of integrated circuits, resistors, capacitors, inductors, and transistors as they apply to useful audio devices such as filters, equalizers, preamplifiers, volume and balance controls, inputs and outputs, signal switching circuits, mixers, metering, power supplies, and



www.broadcastermagazine.com

BOOK REVIEWS

analog interfaces with the digital domain.

A generous assortment of sample circuits accompany the discussion of each type of device, and the author weighs their comparative advantages and shortcomings, usually concluding with his own well considered recommendation.

Along the way, he surveys a number of op-amps, concluding that the venerable 5534/5532 (single/dual) is pre-eminent in audio work and "a powerful reason is required to pick any other device." Last notes that the 5532 has been "criticized by subjectivists who have contrived to convince themselves that they can tell op-amps apart by listening to music played through them. This always makes me laugh, because there is probably no music on the planet that has not passed through a hundred or more 5532s on its way to the consumer."

He also advocates the use of ± 17 V power supplies in audio circuits versus the more common ± 15 V supplies because they increase headroom and dynamic range by 1.1 dB with no sacrifice in cost or reliability. Moreover, he warns that moving from ± 17 V rails to ± 18 V rails yields only 0.5 dB more headroom and is "going

Book Reviews in a Minute!

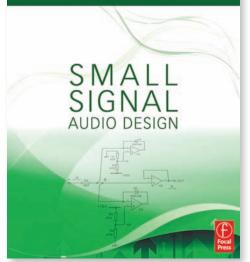
A quick summary of Alan Hardiman's reviews:

> Recording Tips for Engineers, 3rd edition, by Tim Crich. Written in bullet form, this is a handy practical guide of useful information. Lots on mic positioning for various situations, as well as humorous but common sense things (e.g., "always make the guy who pays your check sound best.")

> Modern Recording Techniques, 7th edition, by Robert Runstein and David Myles Huber. A complete, comprehensive approach to the studio, covering all the bases. Currently the standard, it has replaced John Woram's Recording Studio Handbook, now long out of print. Completely revised and updated.

Small Signal Audio Design, by Douglas Self. A great desk and workbench reference coming in at 550 pages, covering components, transistors, op amps, and applications in building and modifying filters, mic preamps, mixers, line inputs, balanced I/O devices, metering and so much more. Most helpfully, circuit boards and component layouts for many of the circuits examined here are available online. to cause difficulties if you want to run op-amps with maximum supply ratings of ±18 V from the same power supply."

He then provides a straightforward design for a ± 17 V power supply that can built using 15 V IC regulators, the ubiquitous 7815/7915 pair, and modified to provide the extra ± 2 V.



I found the chapters on volume and balance controls and signal switching particularly illuminating if only because these are parts of audio equipment that we most often take for granted, rarely giving them a second thought unless they fail. It is reassuring to read that that while a mechanical switch is as 'on' as the resistance of its contacts and connections allows, it is in general terms a good deal less 'off—typically "the offness is only -66 dB, and grounding the unused side of the switch only improves offness by about 2 dB," Self writes.

(So that's why at high levels you can still hear muted channels on a Mackie mixer if you leave the channel faders up!)

The author then examines a number of alternatives to mechanical switches in a most instructive discussion, with a view to increasing signal attenuation in the 'off' position and eliminating the annoying click when the switch is actuated. Like Huber and Runstein, Self maintains a website to which he adds new material on an ongoing basis, and where he can be contacted by readers wishing to discuss matters in detail.

The website also contains a list of printing errors that should be consulted prior to constructing any of the circuits in the book, since some component values are wrong as they appear in the book (http://www.douglas-self.com/ampins/books/errata.htm).

Finally, PCBs, kits, and built circuit boards of some of the designs in the book can be obtained online at a companion website, www.signaltransfer.freeuk.com.

At \$73.95 (slightly higher in Canada) Small Signal Audio Design isn't cheap, but it may just motivate you to dig out the old solder-



ing iron, roll up your sleeves, and sit down at the bench for a satisfying afternoon that will no doubt drag on into the evening. It might even make you feel like a kid again. **B**

ALAN HARDIMAN, B.SC. M.A. IS PRODUCER & CREATIVE DIRECTOR AT ABC, ASSOCIATED BUZZ CREATIVE A MEDIA AGENCY BASED IN TORONTO. HE'S ALSO A MUSIC PRODUCER, SOUND ENGINEER, RELIC HUNTER AND INDUSTRY CORRESPONDENT.

DOUGLAS SELF





Dick Sienko, recipient of the BCAB Friend of the Industry award with Dan McAllister; BCAB 62nd Annual Conference, Delta Sun Peaks Resort, May, 2009

Another Award is Needed for Top Radio Reps

BY DICK DREW

e got the Award, but.... When the Ontario Association of Broadcasters announced its 2011 Lifetime Achievement Award was being presented to Richard 'Dick' Sienko, I said `'Halleluiah'.

If ever there was a person deserving of this award it was certainly Dick Sienko. His achievements within the industry and for his client stations are monumental. His list of previous awards is impressive including 'Friend of the Industry' presented in 2009 by the British Columbia Association of Broadcasters.

I first met this dedicated sales rep in 1977. I worked at CHML/CKDS-FM, Hamilton. Dick was a newly self-employed owner of his brand new radio rep shop, Target Broadcast Sales [TBS].

Little did anyone realize the huge footprint that was being formed, and the effect it would have in the broadcast sales rep business.

Sienko was born in Toronto in 1935; in

1955 he started in the rep business with Radio & Television Representatives, and worked in radio stations in the prairies and Ontario. He had a sterling career, including 15 years with Hardy-Tele Capital, a Quebec based rep shop that decided in 1976 to make changes that did not include Dick Sienko.

And that, ladies and gentlemen, is where the story really begins.

Without a job. Married. Four kids. A mortgage and car payments.

So Dick and his wife Donna decided to do what so many achievers do under





CANADIAN ACHIEVERS



Dick Sienko in the spotlight at the 2011 OAB Conference

similar conditions. They cleared off their kitchen table, transformed it into their boardroom table and dove headlong into the wonderful world of entrepreneurship.

With the encouragement of eight B.C. stations which he had rep'ped at Tele Capital, Dick and Donna built TBS into a major radio rep shop, targeting small/ medium markets. At the time, there were already 15 other shops rep'ping radio, they made it an even 16.

Now there are less than six.

Right from the get-go they picked off small and medium market stations which had heard of his reputation as a non-major market specialist. He was becoming known for fighting like a person possessed for every cent he could get for small market stations—stations which seldom received a nickel of national business.

Wind back the clock to September 1979. I purchased CKAY Duncan, joined Dick's rep shop and remained there until I sold 27 years later. As owner of a medium market station, I could sleep comfortably knowing that Dick Sienko was out there beating the bushes fighting for my best interests.

When I asked him his secret to his success he told me, "Dick, I was lucky, I had a wife and partner [Donna] who understood me and the business we were in. She kept me focused. When you own a rep shop, you work 24/7/365. There was hard work. I found the harder I worked for my stations, the luckier I got. The rep business is not brain surgery. It's dedication to the principles of doing an honest job for your stations."

Dick is among the first to tell you that Donna is equally responsible for any success he has had. Although the award was presented to Dick, his wonderful life partner belongs up there receiving accolades and recognition as well.

Extra accolades for Dick and Donna came in a special video produced for the awards, featuring tributes from leading broadcasters coast to coast: **Ron East**, of Prince George, whose stations were among the eight that launched Dick's rep shop. **Bill Evanov**, **Michael Caine**, **Steve Rae**, **Ross Kentner** and **Bob MacEachern** all gave radio greetings. While **Dick Berndt** represented the advertiser's side, his son **Stephen**, who now owns the company, told how he and his siblings grew up listening to his par-



Dick Sienko and his wife Donna

ents live and breathe small and medium market radio.

A touch of class was added to the video tribute when **Rick Arnish** of Pattison Broadcasting hoisted a glass of wine [from B.C, I suspect]. It was a wonderful tribute as they told of his "giving a voice to independents".

Over the years, TBS has introduced much to be proud of, including **Irene Guiliano** Canada's first national female sales rep. TBS now represent stations in every province and territory in English and French, and it remains the only privately-owned representative shop.

Richard 'Dick' Sienko and Donna Sienko. The award went to him. Much of the credit goes to her. They are both 'Canadian Achievers'. **B**



Richard Sienko is presented with the OAB Lifetime Achievement Award.

Deliver more of the story with Canada's trusted online news and video leader.







Rely on breaking news stories, photos and video from The Canadian Press to increase your online and mobile traffic and keep audiences coming back for more.

Contact us today for a complimentary demo and special pricing tailored to your site! info@thecanadianpress.com | 416 507 2084 | www.thecanadianpress.com/video

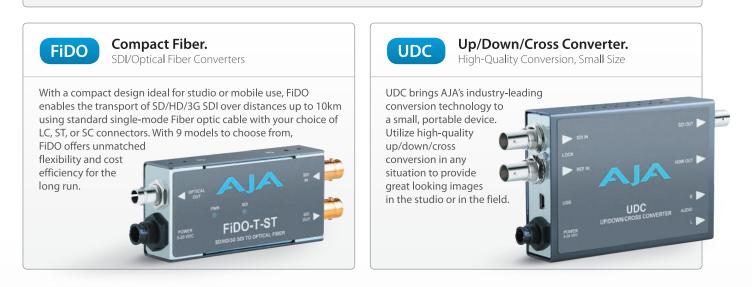
Convert with AJA.

Mini-Converter and Rackmount products that make professional workflows work.



FS2 features comprehensive analog and digital I/O to integrate into any workflow and allow multiple output types of any signal.

- Dolby E decoding option
- Direct Fiber I/O connection options
- · Built-in video processing amplifiers for signal adjustments and color correction



Find out about our latest Convert products at www.aja.com



