



The Spectrum
Newsletter of the Rocky Mountain Chapter
<http://chapters.scte.org/rockymtn>
June 2010

**Letter from the President:
Nick Segura**

Dear Rocky Mountain Chapter colleagues,

It is hard to believe that we are half way through the year already. Because of you we've had such great participation at every seminar to date and fully expect this now at future venues because of the plethora of talent who continue to commit to serve, and because you are finding value with each.

- January 21st Cable 101 at Comcast in Englewood >50
- March 16th Drop Hardening, Albuquerque NM- 86 attendees
- March 18th Drop Hardening, Englewood CO - 51 attendees
- May 20th - Cable and the Digital World at CableLabs in Louisville CO - 63 attendees

SCTE Headquarters already pulled off another fantastic leadership calibration and training meeting called the **Chapter Leadership Conference (CLC)**. It is my pleasure to inform you that the Rocky Mountain Chapter received several certificates of recognition covering four award categories including *Professional Development, Recruitment, Compliance and Striving for Excellence*.

Vendor Cable-Tech Symposium

As a reminder, our Rocky Mountain show will be held June 15th and 16th at the Inverness Hotel. We would like to see all MSOs and Contractor company partners in Colorado represented at the Cable Tech Games, please let me know if you have questions on what's involved.

This site continues to be first class and each year we adjust slightly to meet the needs of our membership. Our symposium is rated highly in the vendor community and sells out each year now; the show floor is full of the newest products and truest equipment on display. Please come and put your hands on it and learn the most firsthand!

We will have the ever-popular **opening reception and Cable games** on Tuesday beginning at 6pm and Sponsored by Ubee Interactive, then Wednesday we will have another great **lunchtime technical session** sponsored by Motorola and of course a great show floor product showcase all day.

Cable Games

Competition has grown across techs from all areas of Comcast, Bresnan, US Cable, Mountain Cable, Baja Broadband and many others. You'll have to come down to try your hand at competing or simply have fun watching the others. We'll be sending our Cable Games overall winner to the SCTE Cable-Tech EXPO in New Orleans October 22nd to compete internationally.

For the Cable-Tec games, please contact Dave Krook (303) 408-4116 or david.krook@technetix.com to register your technicians in this years' games. In addition, this year we will be offering a technical session provided by CommScope called "Drop Installation Fundamentals – The Core Network Reliability" to be held in the Evergreen Room of the Inverness Hotel and Conference Center, 200 Inverness Drive, Englewood, CO 80112 on Wednesday, June 15th from 12 noon – 4 pm. For more information, please contact Nick Segura (303) 669-3705 nick.segura@chartercopm.com.

Show agenda

Tuesday, June 15

7:00 AM - 7:15 AM	Golf Tournament Check In	Golf Club Staging Area
7:30 AM - 12:30 PM	Shot Gun Scramble Golf Tournament	Inverness Golf Club
12:30 pm - 2:00 pm	Golf Lunch	Upper Mountain View
2:00 PM - 5:00 PM	Vendor Exhibit Set up	Summit Ballroom
12:00 PM - 4:00 PM	Tech Session – Drop Installation Fundamentals - The Core to Network Reliability - Training sponsored by CommScope. Preregistration required – Nick Segura nick.segura@chartercom.com 303.323.1425	Evergreen Room
6:00 PM - 10:00 PM	Cable Tec Games and Reception – Sponsored by Ubee Interactive	Colorado Lounge/Upper Mountain View/Evergreen Room

Wednesday, June 16

7:30 AM - 9:00 AM	Continental Breakfast - Sponsored by Harmonic	Colorado Lounge
8:00 AM - 11:30 PM	Exhibit Hall Open	Summit Ballroom
11:30 AM - 2:00 PM	Technical Lunch – 3D TV - Sponsored by Motorola	Upper Mountain View
2:00 PM - 4:00 PM	Exhibit Hall Open	Summit Ballroom

Our next seminar coming up is the ever popular **Digital Test and Measurements** with speaker Al Silva from JDSU. This is such a popular event that we are again branching out to Albuquerque, NM (August and then to Littleton CO. This will happen August 10th and August 12th. You'll see an email flyer with the specific and locations. Bring your meter and be ready to learn as this has hands-on opportunities as well.

As always, please visit our website for details: <http://chapters.scte.org/rockymtn/>



The RMC Board, its friends and I hope to see you at upcoming events.

Thanks again for all your support,

Nick Segura

2010 Chapter Events

Telecom Industry Current Events	Professional Development, Benefits of Certification	Take-a-ways “Getting that one thing out of this seminar”
Membership benefits	Safety message	Scholarship opportunities

Date	Location	Subject	Speaker
June 15 -16	Inverness Hotel & Golf Club Englewood, CO	Lunchtime technology presentation plus Noon Technical session: Future Tech & Home Technology	Mark Francisco , Comcast Fellow, Office of the CTO Ajay Luthra , Senior Director Adv Technology Grp, Motorola
Aug. 10 Aug. 12	Albuquerque, NM ----- Comcast Mineral Littleton, CO	Digital Testing & Meas. MER/BER	Al Silva , JDSU Al Silva , JDSU
Oct. 20-22	<i>New Orleans, LA</i>	<i>Cable-Tec EXPO-The industry's engineering show of the year. Expo provides the opportunity to discover and learn first-hand about the latest in cable technology, products and services</i>	
Nov. 11	Charter Comm.Greenwood Village, CO	Intermediate IP (Routing, Switching, and Protocols)	
Jan 13, 2011	Comcast Iliff, Englewood, CO	Commercial Installations & Applications	
3 rd Wednesday	On Line	A series of live, interactive, Web-based seminars offered the third Wednesday of every month. <u>Free</u> <u>for SCTE members</u> ; \$29 for nonmembers. The next event is IPv6 in the Data Center Wednesday, March 17 http://www.scte.org/content/index.cfm?pID=940	SCTE Live LEARNING 

You can find past presentations at the bottom of this seminar events notice page:

<http://chapters.scte.org/rockymtn/page15.html>

Also, “Save the date” for these next board meetings (please come share your thoughts):

Date	Location	Agenda highlights
7/16	Champps Americana	
9/17	Champps Americana	
11/11	Charter Communications	Election Preparation
1/7/11	Champps Americana	2011 Planning Session

Technical Corner

SCTE Tech Tips can help to enhance your technical proficiency. This is an excellent member benefit; get yours at: <http://www.scte.org/content/index.cfm?pID=1718>



Whether you are looking to find out more about a specific technical issue or you just need a refresher on a basic engineering principle, SCTE Tech Tips can help to enhance your technical proficiency. SCTE Tech Tips are quick-hitting and focused resources designed to provide all cable telecommunications engineering professionals with an overview of relevant technical subjects or concepts.

Each SCTE Tech Tip will provide a brief overview of a topic that is part of the foundation of our industry. Additionally, Tech Tips will include links to industry resources, charts and tools, technical conversion tables, and interactive practice assessments.

SCTE Tech Tips are a valuable members-only resource for all levels of our engineering profession.

SCTE Implication Papers (Great value to Members)

SCTE Implication Papers focus on new technologies and solutions being deployed within the telecommunication industry. Derived from the papers will be the implications of this technology to various segments of operators' organizations, clearly defining how these new technologies will impact their organization and their specific responsibilities. Topics include:

- Deployment Outlook
- Budgeting needs
- Network Upgrades
- Workforce Training

The implication papers, which can be downloaded as a PDF, will be made available on the SCTE website. If you would like to submit a proposal for an Implication Paper, please see the [Call for Implication Papers](#) document. If you have questions, please email ImplicationPapers@scte.org.

If you wish to be included in the Call for Papers database for consideration for future opportunities, please email your request and contact information (name, company, address, phone/fax numbers, and your email) to gcalcaterra@scte.org.

Frank Eichenlaub Jr.
SCTE Region 2 Director
Systems Engineer
Cisco

Scholarship Opportunity

By Joe Thomas

In these hard times job loss is collateral damage to the effects of the credit, housing, and energy issues affecting our country. The Rocky Mountain Chapter is proud to be in the position to offer its members a way of providing some security or opportunity in these times. We believe that through a scholarship program we can assist members wanting to differentiate themselves from their peers through education and certification.

Why does the RMC support a Scholarship Program for its Members?

We make it easy on our members to enroll, test, and certify for SCTE certifications covering a wide range of job classifications and skills. Certificates range from residential installation practices to digital video engineering and all points in-between. Visit the <http://chapters.scte.org/rockymtn> web site for certification offerings. Our scholarship application should take you less than 15 minutes to complete and you'll just need to add two letters of recommendation before sending to us.

Why should I certify with the SCTE?

The SCTE is the leading source of certification specific to our industry. There are over 15,000 worldwide members and more than 3,000 members enrolled in SCTE certification programs. It is the most comprehensive and widely recognized program in the industry.

In this competitive job market any edge you can give yourself will help you rise above the masses when being considered for a promotion or a new job. Believe me when I say, that experience and "time in the trenches" is invaluable to our employers and it has let many of us earn a great living in a great industry.

However, there are large numbers of people out there looking for job that have time and work experience on their side. Unemployment is expected to move into the double digits in 2009 and competition is only going to become fiercer. How will you secure your current position or prepare yourself for the next promotion opportunity? Today you need something else to demonstrate your commitment to expanding your work knowledge and skills. Otherwise your resume looks just like the two dozen other ones sitting on a hiring manager's desk.

College classes are another avenue for motivated individuals. A college degree is a fantastic goal and the SCTE Foundation has funds available for grant to help you here as well. Consult the www.SCTE.org web site for more details. But College is not for everyone and the time, family responsibilities, and other constraints are endless. SCTE certification allows you to simply test at a local seminar after home studying for as long as you wish. There is no set class schedule or deadlines. The RMC offers testing at about every seminar. Certification is a viable route for many whom have full time jobs but yet want to advance and demonstrate their knowledge. The Rocky Mountain Scholarship program covers membership cost, testing fees, and peer recognition. The details of how to apply for a scholarship from the RMC is available on our web site: www.scte.org

"Certification demonstrates to a candidate's peers and company management that they have the initiative to acquire knowledge and improve their skills and abilities".

Please contact us with any questions:

Rex Kohart (303) 603-2916 Rex_Kohart@cable.comcast.com

Steve Murphy (720)267-3038 Steve_Murphy@cable.comcast.com

Tech's Forum

By Jim Stewart

Welcome back to "The Tech's Forum". This section of the SCTE newsletter features articles and tips for technical personnel of the CATV Industry. Ideas and articles for "The Tech's Forum" are always welcome. If you would like to contribute please contact me at jim_stewart2@cable.comcast.com.

In the next several editions of the "The Tech's Forum" new technologies will be discussed. Recently there has been a lot made of a new technology called 3D TV which will be the topic of this edition of the Tech's Forum. 3D TV technology is used to add the optical effect of depth perception onto a 3D capable Television display.

Let's begin our discussion on 3D from the customer perspective. There are two types of 3D TV displays, auto-stereoscopic and stereoscopic. Auto-stereoscopic does not require the use of glasses by using a lenticular or parallax barrier in front of a specialized display so that a different image is presented to each eye. Stereoscopic displays require the use of glasses. Anaglyph, Passive polarized or active glasses are required. Anaglyph glasses use separate red and blue lenses. Passive polarized glasses present alternately polarized lines. Active glasses use electronic shutters in each lens that open and shut.

Now let's take a look at the delivery side of 3D. We need to consider three options for delivery, the 3D format, the compression standard and the resolution. Checkerboard, panels and full resolution are choices available for the 3D format. Compression standards available include MPEG-2, MPEG-4 AVC, MPEG-4 MVC, Simulcast and 2D+Depth. Resolution choices are 720p60, 1080i30, 1080p24/30 or 1080p60.

Depending upon which delivery options are chosen, bandwidth requirements can be anywhere from the same as those of current 2D HDTV to as much as twice that amount. Obviously, the more bandwidth use, the higher the quality of the picture will be.

Recently, Comcast hosted a 3D viewing event featuring the 2010 Masters Golf Tournament using the panel 3D format, MPEG-2 compression standard and 1080i30 resolution. The resulting bandwidth was 18.75 Mbps, similar to a standard 2D HDTV channel. The next big step for 3D, ESPN plans to carry up to 25 games of the FIFA World Cup in 3D this June.

For more information on 3D, plan to attend the Rocky Mountain Chapter Symposium which be held June 15-16 at the Inverness Hotel. The topic of this year's luncheon on the 16th will be 3D TV.

Crystal-Clear, Maybe Mesmerizing

By [BRIAN STELTER](#)

HOUSTON — Fully half of the United States is now watching television in high definition, the fastest adoption of TV technology since the VCR hit store shelves in the 1980s.

With the adoption comes good news for networks and Hollywood studios: HD lures viewers to TV for longer periods of time. According to The Nielsen Company, high-definition households watch about 3 percent more prime-time programming than their standard-definition counterparts.

The sudden growth in high-definition, or HD, viewing has happened with little fuss for consumers, who simply swapped out their TV sets and set-top-boxes. But behind the scenes, HD is nothing short of a

revolutionary upgrade for the television business, involving hundreds of millions of dollars of investment in new cameras, studios and control rooms. It has even changed the way local anchors apply their makeup here in Houston, a particularly popular market for HD.

“High-def is like being under a magnifying glass lit up by a flashlight,” Sherry Williams, an anchor at KHOU-TV, the [CBS](#) affiliate in Houston, exclaimed on a recent morning.

But as HD adoption grows, it is apparent that there are still two kinds of TV production: one that enables viewers to see individual blades of grass on a baseball field, and one that is little changed since the 1960s when color television took off.

Studio executives privately complain about local stations that cannot yet afford to receive high-definition broadcasts of shows. And producers say they cannot yet take full advantage of the wider, crystal-clear medium because so many viewers still have outdated TV sets.

High-definition TV is produced in the widescreen 16:9 aspect ratio, allowing a more cinematic look. But television news graphics, for instance, still have to be squeezed into the 4:3 ratio of standard definition.

In Houston, which counts a higher proportion of HD viewers than any other market in the country, except for Washington, D.C., viewers rarely comment on the quality of KHOU’s signal, unless some sports event is not being carried in HD, that is.

“For the consumer, it was very easy,” Susan McEldoon, the station president, said of the transition.

KHOU was the first Houston station to upgrade to HD three years ago. “It’s such an expensive endeavor,” she said, with a multimillion-dollar investment in new cameras, computer servers and other equipment.

New sets for the newscasts were also built, and new graphics packages were created. Since then, KHOU’s competitors have all converted to HD, with the final station completing its transition this month.

In some cases, the networks have had to play catch-up with the local stations: just last month CBS started broadcasting its national morning show in HD. This month the longest-running television show in the United States, “Meet the Press,” introduced a fully HD set.

Ms. McEldoon said she did not know whether HD had specifically helped her station’s ratings; the conversion was simply a matter of keeping up with changing industry standards.

HDTV standards were adopted in the late 1990s, but it was not until late 2008 — as the price of the TV sets steadily dropped — that a quarter of Americans were seeing the results at home. Now Nielsen says that 51.7 percent are watching in high-definition. Those households have higher income levels and are more likely to own DVRs and video game consoles.

Some networks — especially ones catering to sports and film fans — benefit more than others. [ESPN](#), [HBO](#), Nickelodeon, the NFL Network and Showtime are all among the biggest gainers of audience share in HD, according to a Nielsen analysis of ratings data for The New York Times.

Fox even promoted the impact of HD at an upfront presentation to advertisers in New York last week.

“While wonderful new gadgets are introduced all the time, research shows that the consumer’s first purchasing choice is a big, beautiful flat-screen HD television,” said Peter Rice, the chairman of Fox Broadcasting. “And they’re not buying them as furniture. These sets bring the audience closer to the action, and closer to the emotion.”

In an odd way, HD may limit the number of channels that viewers turn to, because once they can watch programs in HD, they have little desire to watch anything of a lower quality. “HD is the new basic cable,” said David M. Zaslav, the chief executive of [Discovery Communications](#), which owns Animal Planet and TLC, among other channels.

The result has been a rush to upgrade by channels big and small, all crowding onto the HD spectrum allotted by cable and satellite companies. “It helps to be in the neighborhood” with other HD channels, said Philippe Dauman, the chief executive of [Viacom](#), which owns [MTV](#) and Comedy Central. “It certainly enhances viewership.”

Patricia McDonough, the senior vice president for planning, policy and analysis at Nielsen, said the swift adoption of high definition confirmed that “people are constantly looking for the best picture they can get.”

As families bought their first HD set, Nielsen data showed a migration out of the bedrooms and kitchens, where Americans traditionally watch TV by themselves, and back into the living room, where the biggest and best set traditionally sits.

Now, as families buy additional HD sets, “I expect we’ll see people go back the other way,” she said.

2010 Elected Board of Directors

Name	email	Company	Position	Phone Number
Nick Segura	Nick.Segura@chartercom.com	Charter	President	303-669-3705
Joe Thomas	Joseph.Thomas@us.fujitsu.com	Fujitsu	Vice President	303-953-1386
Steve Murphy	Steve_Murphy@cable.comcast.com	Comcast	Treasurer	720-267-3038
Hugh Long	hlong222@comcast.net	Charter	Secretary	303-601-5930
Rex Kohart	Rex_Kohart@cable.comcast.com	Comcast		303-603-5639
Frank Eichenlaub	eichenf@cisco.com	Cisco Systems	Board, Web Master Region II Director	303-790-6659
Lane Johnson	l.johnson@cablelabs.com	CableLabs		303-717-5123
Dave Krook	David.Krook@technetix.com	Technetix		303-408-4116
Steve Brown	Steve80134@comcast.net	InterMtn. Consult.		303-898-1027
Jim Stewart	jim_stewart2@cable.comcast.com	Comcast		303-603-5687

Supporting Friends of the Board 2010

Definition: Somebody who supports the functions of the local chapter by participating in meetings provides input that helps drive board decisions, volunteers, speaks supportive, and generally those who make an impact through their involvement.

Name	email	Company	Position	Phone #
Alan Babcock	ababcock@cmitsolutions.com	CMIT Solutions	Friend	303-478-1660
Kevin Bland	Kevin.Bland@chartercom.com	Charter	Friend	(303) 588-0529
Joe Coffey	Joe.Coffey@ecitele.com	ECI Telecom	Friend	513-332-8051
Donavan Conway	dconway@timesfiber.com	Times Fiber	Friend	805-377-3023
Richard Covell	rgcovell@msn.com	TTSI	Friend & Speaker.	303-646-5050
Judy Donovan	jdon589029@aol.com	Donavan Consulting	Friend	720-870-2821
Paul Eisbrener	peisbrener@jonesncti.com	Jones/NCTI	Friend	303-209-1365
Rex Gerhardt	rex_Gerhardt@comcast.net	Sr L & D Professional	Friend	720-490-5141
Tom Gorman	Tom.Gorman@chartercom.com	Charter	Friend and SCTE Chairman	303-323-1482
Mike Guise	mguise4@aol.com	Radiant	Friend	720-470-7147
Sherisse Hawkins	sherisse.hawkins@twcable.com	Time Warner	Friend	720-279-2810
Ron Hranac	rhranac@cisco.com	Cisco	Friend & Speaker.	720-875-1338
Robert Kostelny	rob.kostelny@comcast.net		Friend	303-995-6689
Debbie McManis	debbie_mcmanis@cable.comcast.com	Comcast	Friend	720-267-3604
James Neil	jim.neil@cablem.com	Cable Mgmt	Friend	303-632-0506
Joe O'Fallon	Joe.OFallon@lineagepower.com	Lineage Power	Friend	303-670-7450
Dave Robinson	drobinson@evisearch.com	EquiVision	Friend and Newsletter editor	303-722-8920
Neil Serafin	neil@cabtel.com	CabTel	Friend & Speaker	(720) 352-3319
Steve Snider	stephen_snider@cable.comcast.com	Comcast	Friend & Speaker.	303-603-2167
Mark Thompson	thompson@commscope.com	Commscope	Friend	303-773-3003
Roger Wade	Rwade@bresnan.com	Bresnan	Friend	307-637-0172
Frank Wimler	Frank.Wimler@Chartercom.com	Charter	Friend	720-250-7917

Please contact any one of us with your questions and feedback.