



The Spectrum
Newsletter of the Rocky Mountain Chapter
<http://chapters.scte.org/rockymtn>
June 2009

Symposium Announcement for June 16th and 17th
Technical Articles
Scholarships
Board Members

Letter from the Vice President
Nick Segura

Get ready for another sold out SCTE Rocky Mountain Chapter Vendor Symposium!

This is our fourteenth annual Cable-Tec Symposium and Golf Outing and we're expecting the conference center at Inverness to be full again. During the opening reception on Tuesday we'll have more than 60 contestants again to compete in CableGames. What a blast – don't miss it! Please see the flyer below for more details.

Even more reason to attend our show - SCTE's 40th anniversary celebration!

With the SCTE's official formation date of June 22, 1969, we'll have special guests Mark Dzuban, Pam Nobles and Susan Parno attending our Rocky Mountain Chapter show to participate and share the 'History and heritage' of the Society. In fact, your Rocky Mountain Chapter is approaching 25 years as a chapter and has profiled our founding members in a full article below. Be sure not to miss special 40th Anniversary salutes throughout the year in *SCTE Interval* and at the Cable-Tec Expo® 2009 in Denver. <http://www.scte.org/content/index.cfm?pID=1669>

Analog Video Broadcast is now closer to being history as of June 12th

Fire up your spectrum analyzer with an off-air antenna and see the analog video carriers die as broadcaster's transition from amplitude and frequency (video/audio) carriers to 8VSB digitally modulated carriers. You've probably already experienced a change in troubleshooting behavior as the nature of Direct Pickup (DPU) interference changes all together. See our September 2008 Newsletter for more details and spectrum shots.

Seminar event offerings 2009

Here is a quick recap of past and present seminar events:

- March 19th – Return Path optimization & DOCSIS 3.0 at Comcast with speakers Ron Hranac and Frank Eichenlaub both from Cisco systems. **More than 100 attendees!**
- Mary 20th – In the home Technology Networking, HDMI wireless, Tru2Way at Comcast with speakers from CableLabs (Mark Woodworth and Clark S Stevens), and Jones/NCTI (Darrell Severns). **More than 40 attendees!**

Many thanks to our great speakers, and to all of you for your participation. Please feel free to reach out to any of Board members with feedback on any of the seminars, and to make suggestions for 2009. It is our goal to have topics that you all want to learn about and participate in.

Our next seminar is back by popular demand:

- Digital Test and Measurements- speaker Al Silva JDSU. (July 14th and July 16th)

This is such a popular event that we are branching out to Grand Junction to cover Colorado's west slope and also in Denver/Littleton. Please keep an eye out for the flyer, bring your meter and be ready to learn as this seminar promotes hands-on measurements as well.

It's Your Rocky Mountain Chapter

Rocky Mountain was awarded with a Chapter Achievement Award during this year's Chapter Leadership Conference in Utah. Our objective: "To encourage the free exchange of ideas, information, and innovations among members of the cable television industry and the communications industry at large." We help create an avenue/environment from which local industry professionals can communicate.

Just like most everything in life, "you get out of it what you put into it", so come to an event and share your knowledge and or experience. Believe me - the benefits you'll gain will come back to you many times over.

I hope to see you at the Cable Tech Games and Vendor Symposium!

Warmest regards

Nick Segura

14th ANNUAL CABLE-TEC SYMPOSIUM and GOLF OUTING 14th ANNUAL CABLE-TEC SYMPOSIUM June 16th-17th, 2009

Agenda

Tuesday, June 16th

7:30 am Golf Tournament

12:30 pm Lunch for Golfers

2:00 pm – 5:00 pm Vendor Set up

6:00 pm – 10:00 pm Cable Tec Games

Wednesday, June 17th

7:30 am – Continental Breakfast

11:30 am – Technical Lunch

8:00 am – 4:00 pm Exhibit Floor Open

Floor Closes from 11:30 – 2:00 for Lunch

DONATIONS for give-a-ways

We need donations for drawings during the Symposium. Drawings will take place during the exhibit hall time on Tuesday am/pm. Will you be donating for drawings?

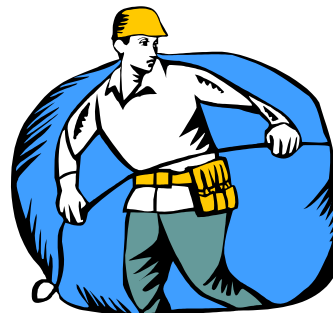
Yes _____

No _____

Contact: steve_murphy@cable.comcast.com Steve Murphy (720) 267-3038 or Dave Krook – Cable Tec Games (303) 408-4116

Contributions or gifts to the Society of Cable Telecommunications Engineers, Inc. are not deductible as charitable Contributions for federal income tax purposes. Hotel reservations must be made directly with the Inverness Hotel and Golf Club at (800) 346-4891 or other hotels in the vicinity. No block of rooms have been reserved for this event. For more information, contact:

Steve Murphy (720) 267-3038 or Dave Krook (303) 408-4116



The SCTE Rocky Mountain Chapter Scholarship Opportunity

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

Technical Forum

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 last several editions of “The Tech’s Forum” we have explored the differences between the digital signal of the CATV Industry (QAM) and the digital signal broadcasters are transitioning to (8VSB). In this edition we will wrap up our comparison of the two digital signals.

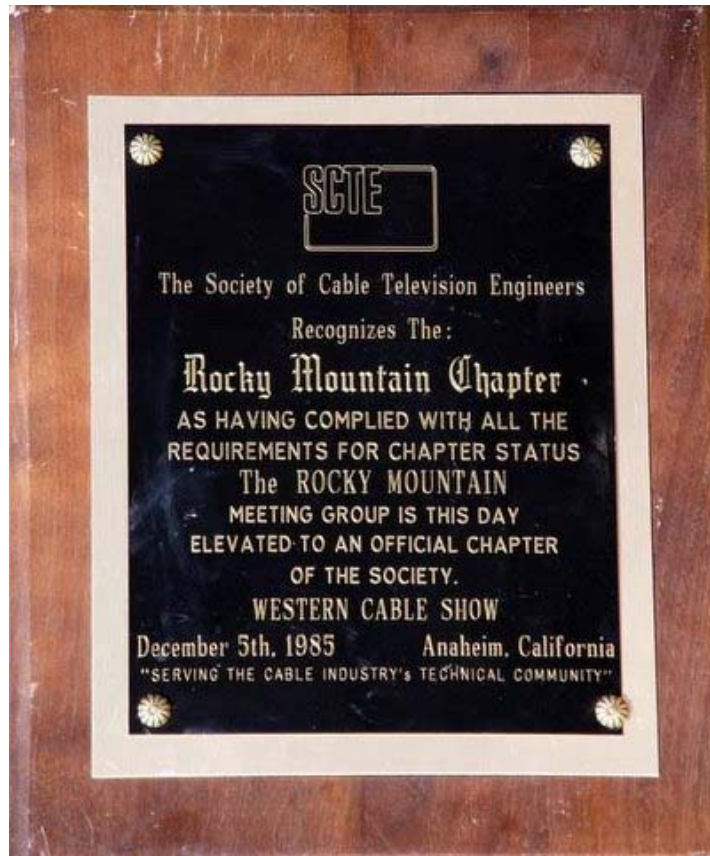
For years, the CATV Industry has utilized MPEG-2, QAM and the ability to multiplex signals to squeeze several channels into the space of one analog channel. Broadcasters now have a similar but somewhat limited capability with the advent of 8VSB.

As mentioned in previous editions, each broadcaster transmits a 19.39 Mbps digital stream leaving the broadcaster with much more options than with analog signal. A broadcaster can divide the channel into several different streams called sub-channels. For example, if the digital TV channel is channel 12, then 12.1, 12.2 and 12.3 could be three sub-channels each with the capability of carrying different programs.

8VSB supports Standard Definition and High Definition TV formats in addition to Dolby Digital. Even though many options and variables are available now for Broadcast TV, each broadcaster is limited to 19.39 Mbps of throughput for each 6 MHz channel. The typical data rate for one HD program is 10-15 Mbps while 2-4 Mbps is needed for typical SD programming.

That concludes this edition of “The Tech’s Forum” and our series of articles on the DTV Transition.

1985 - The Rocky Mountain Meeting Group is awarded Chapter status



Discussions with Rocky Mountain Chapter Founders

Dave Robinson

This year is the 40th anniversary of SCTE. We recently contacted some of the Rocky Mountain Founders of our chapter to see what their thoughts and memories were at that time and the changes that have occurred since our chapter was formed in December of 1985. More complete memories from the rest of our founders will be able to be read on our website. A copy of the plaque is above. Here are some selected memories.

Ron Hranac:

I don't have specific numbers from the early 1980s on the size of the Society, but can share some of what SCTE was up to as an organization. In 1983, Rocky Mountain Chapter co-founder Sally Kinsman was the first female elected to the national Board of Directors, and the first Cable-Tec Expo was held in Dallas that same year. 1984 saw the hiring of Bill Riker as Executive VP, the launch of the Satellite Teleseminar program, and *Communications Technology* becoming SCTE's official trade journal. The Broadband Communications

Technician/Engineer certification program was introduced at Cable-Tec Expo '85, and the first BCT/E exam was Category IV "Distribution Systems."

Data communications basics hit the top of the list quickly. If I recall correctly, this topic was covered in our first technical seminar, held in a lecture hall on the University of Denver campus. That seminar covered a lot of the basics of data—bits, bytes, baud, and so on—and while the subject was certainly of interest, it took quite a few years before data became a daily part of our jobs. Sometime in the '80s the Chapter tried to put together a regional seminar on HDTV, and ended up canceling it—there simply wasn't much interest in high-def at the time.

ATC, Jones InterCable, TCI, Mile Hi, Daniels, United, and a handful of others were among the major players based in Denver around the time the Rocky Mountain Chapter was founded. All of those companies have come and gone, or merged with or been acquired by other operators. ATC, of course, became Time Warner Cable.

Richard Covell:

Most (of us) were just then trying to figure out XMOD, C/N, and other distortions. Simultaneous Sweep was another hot topic and the gear available swept at a 3 seconds per trace rate.

They put on a seminar in Colorado Springs and had Sydney Fluct (who lived on Tulip Lane in Bucks County) provided training on sweep for Jerrold GI gear back then.

When RMC started in the Denver area, Pressure Taps were mostly out of the picture. Return loss was a big topic at that time. Also, wiring standards were handled mostly at a national level with local contribution. Signal Leakage was emphasized as well.

Steve Johnson:

I remember Sally Kinsman, Ron Hranac, Bruce Catter, Joe Thomas, Todd Acker, Tom Elliot, Richard Covell, Bob Luff and Pete Smith as some of the original members and/or founders.

The franchising battles were in full swing. While franchising departments were very competitive between MSOs, the technical departments were still mostly cooperative. Jones InterCable was overbuilding in underground areas of Denver and then selling back to United Cable, Daniels, or ATC, whoever the overbuilt operator was.

Pete Smith:

Signal Leakage was just starting. We held a national single topic seminar on signal leakage which was very successful due to the threat of losing channels. It was at the hotel just north of I-70/I-25 interchange which is now a Metro State Dorm. It has a round building – Regency? This seminar made the chapter some good profits and the feedback was incredible. Ted Hartson, aka Dr. Strangeleak, was the hit of the conference.

I was responsible for building some of the larger urban and mid-sized towns in the late 70's through 1984 when I left Time, Inc (before Time merged with Warner). The consumers chased our crews down the street wanting to know when they could get cable. It was not the operator they wanted, it was MTV, HBO, ESPN etc. We got 25% + with no sales or marketing and then more once we sold the product. The challenge was getting higher and higher bandwidths to larger urban areas.

Please contact any one of us with questions

2009 Board of Directors				
Name	Email	Company	SCTE Board	Phone #
Rex Kohart	rex_kohart@cable.comcast.com	Comcast	President	303-603-5639
Nick Segura	nick.segura@chartercom.com	Charter	Vice President	303-669-3705
Steve Brown	steve80134@comcast.net	Operations	Secretary	303-898-1027
Steve Murphy	steve_murphy@cable.comcast.com	Comcast	Treasurer	720-267-3038
Lane Johnson	l.johnson@cablelabs.com	CableLabs	Board	303-717-5123
Dave Krook	david.krook@technetix.com	Technetix	Board	303-408-4116
Jim Stewart	jim_stewart2@cable.comcast.com	Comcast	Board	970-692-9699
Joe Thomas	joe.thomas@ccur.com	Concurrent	Board	303-953-1386
Pat Wike	pat.wike@technetix.com	Technetix	Board	303-883-8978
Frank Eichenlaub	eichenf@cisco.com	Cisco Systems	Board, Web Mstr Region II Dir	303-790-6659

2009 Friends of the Board				
Definition: Somebody who supports the functions of the local chapter by participating in meetings; provides input that helps drive board decisions, volunteers as a speaker, possibly financially supportive, and generally those who make and impact through their involvement.				
Name	Email	Company	Position	Phone Number
Tom Gorman	tom.gorman@chartercom.com	Charter	SCTE Chairman	303-323-1482
Dave Robinson	drobinson@evisearch.com	EquiVision	Newsletter editor	303-722-8920
Alan Babcock	albab930@comcast.net	L&D and IT Services	Friend	720-470-3434
Jim Garcia	edwin_garcia@cable.comcast.com	Comcast	Friend	719-457-4517
Robert Kostelny	rob.kostelny@comcast.net	TSS, Inc	Friend	303-995-6689
Richard Covell	rgcovell@msn.com	TTSI	Friend & Speaker	303-646-5050
Hugh Long	hlong222@comcast.net	Educ Services	Friend & Speaker	303-601-5930
Mark Thompson	thompson@commscope.com	Commscope	Friend	303-773-3003
Steve Snider	stephen_snider@cable.comcast.com	Comcast	Friend & Speaker	303-603-2167
Joe O'Fallon	joe.ofallon@adc.com	ADC	Friend	303-520-8043
Rex Gerhardt	Rex_Gerhardt@comcast.net	Comcast	Friend & Speaker	720-490-5141
Frank Wimler	frank.wimler@chartercom.com	Charter	Friend	720-250-7917
Mike Guise	mguise4@aol.com	Radiant	Friend	720-470-7147
Wes Schick	wes.schick@arrisi.com	Arris	Friend	303-618-8012