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Underwritten by: Bloomfield & Associates

Our purpose, mission statement, this current edition, archived editions and other relative information is posted on our website. As of this edition, we've had over 22,600 different visitors since we started the website on July 1st, 2000.

Thanks to our regulars and welcome to the new folks.
This is **YOUR** forum!

Editor's comments

Welcome to the NEW Tech-Notes. With this edition, you will have the option of receiving either this enhanced HTML version or a plain text version. Everyone will begin with the HTML – enhanced version, but if you wish to receive the text only, please advise us by sending an e-mail to: webmaster@tech-notes.TV and your name will be moved over to the text only list.



Also please note that the format has also changed. We've moved the news to the top of the list and put the Letters to the Editor and Feature articles just prior to Parting Shots. We are looking for other ways to improve your interaction with the Tech-Notes. Let us know what you think.

News

Subject: **DTV Tuners – a windfall or an albatross?**

By: Larry Bloomfield

We said that one of the impediments to the implementation to digital was the lack of a required DTV tuner in new television sets that roll off the assembly line. Someone must have heard us because last week the FCC has mandated the inclusion of DTV tuners in almost all new TV sets. You will see this additional tuner in some larger sets by July 1, 2004 and “all” new sets having a viewing area of 13 inches and larger by July 1, 2007.

Arguments for and against have been the order of the day ever since.

See the FCC press release at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-225221A1.doc



Subject: **Comments on the 8VSB DTV Tuner Mandate**
From: "Lee Wood" lwood@koin.com

The first 'mandated' UHF tuners didn't work too well. You still had to 'fine tune' each channel and they drifted all over the map, but if they had not been there the public expectation that 'this should work better' and the competition to make it better would never have prompted manufacturers to improve on the technology then available.

I view an ATSC tuner 'mandate' in much the same perspective. Where is the incentive to improve ATSC tuner technology if the tuner isn't there? Why is the 3-year old RCA DTC-100 still the most feature rich ATSC tuner on the market? Could it be that there is no 'incentive' (or mandate) to build anything better?

Multiple channels of Digital Television are out there for most viewers, but if the viewer can't receive it for lack of a tuner the transition will never be complete.

This is not an attempt to generate more anti-ATSC remarks. The failure of ITV Digital due to their business model and the documented reception problems in the UK forcing a modulation standards change there more than demonstrating that even COFDM does not solve everything.

Lee A. Wood, Director of Engineering
KOIN-TV / KOIN-DT, Portland, OR



Subject: **Putting Teeth in the DTV transition; Powell vows DTV action**
Excerpts from the Hollywood Reporter

FCC chairman Michael Powell plans to take quick action on outstanding issues delaying the transition to digital TV, including new regulations determining whether cable systems will have to carry multiplexed DTV signals. Just this past Friday (August 9th), in a letter to Rep. Ed Markey, D-MA, the chairman said that he expected to take up the so-called "plug and play" issue and cable's carriage of multiplexed digital TV programming. "In the near future, I intend to present a second report and order to the full commission to address outstanding issues concerning the carriage of digital television broadcast signals on cable and satellite systems," Powell wrote



Subject: **Say goodbye to analog cellular service**
By: Fred Lawrence

It was only a few years ago that the first wireline and non-wireline cellular systems went on the air—System A and system B. Control heads, cables and trunk mount units were the order of the day and the very first handhelds were the size of cinderblocks. I can

remember \$2000 being the list price of the very first one we sold in a two-way radio shop where I once worked; my how things do change.

This past week the FCC announced, as part of their streamlining the cellular telephone rules that they have introduced a five year transition period after which the analog (AMPS) telephone mode will no longer be required. We've mentioned this here as many television facilities rely on their cellular service and this could well impact them. There are still a lot of the legacy AMPS phones still in use in many parts of the country.

For more information, see the FCC public announcement at:

http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-225216A1.doc



Subject: **Digital Broadcast Copy Protection in the FCC sights.**

By: Larry Bloomfield

The big question is: Is this any of the FCC's business? It would appear that the FCC, for lack of anything better to do, after shoving a DTV system down our throats that is plagued with more problems than most care to consider, is now caving in to the greed and avarice of the Hollywood money people. With record profits in a declining economy, Hollywood money people are concerned with what amounts to what would be a fraction of their profits, being pirated away by thieves who will probably find the key to any copy protection system or mechanism they can dream up anyway.

So what is the FCC doing? They have initiated a rulemaking proceeding designed to explore whether the Commission can and should mandate the use of a copy protection mechanism for digital broadcast television, and what impact such regulations would have on consumers.

Right on the brink of the FCC announcing they'll be looking into Copy Protection and Congress getting all twitterpated over the same subject, Sony steps up to bat and nearly to the tune of "Here I am to save the day!" (You can finish the stanza)

Sony says that they have a new digital rights management (DRM) application that will work on a range of devices and will allow copyright owners to determine how intellectual property is used. OpenMG X includes an encoding module, which allows distributors to specify DRM details about how many times and for how long the content can be accessed. The server module distributes the content and the DRM information, while a third module allows development of applications that work with OpenMG X. Sony said the technology is likely to be added to a variety of mobile devices, including cell phones, portable audio players, and game consoles. OpenMG X has already been included in Sony's Magiqlip software, a PC-based music player.

ITWorld ran a story on this. You can see it at:

<http://www.itworld.com/Man/2683/020807sonycopyright/>

Now if everyone would just wait, and unless the FCC doesn't comes up with a fix for their failing DTV system, we may not have digital broadcast television to be concerned about and the need for such a mechanism would then be moot.

Check out the public record on this new wrinkle to occupy the once guiding force we could all look to for guidance (the FCC).



Subject: **About General Human Exposure to RF Issues on Mt. Wilson, or anywhere else, for that matter.**

By Fred Lawrence with input from the CGC Communicator

There isn't a broadcast service that doesn't have as part and parcel a common set of safety rules, especially when it comes to RF exposure. If you think this is a joke, just look at what happens in a microwave oven. Part of the local Ham Radio classes for the most uninformed of the would-be amateurs radio operators has a complete session on RF exposure. So why do professionals have such a difficult time protecting their own?



Based on some incidents that recently occurred on Mt. Wilson, Southern California's most densely populated transmitter site for everything from nearly all the commercial and non-commercial TV, FM and 2-way radios that serve that megalopolis, it seems that a few broadcasters are not very enthusiastic about human exposure to RF compliance issues. When asked to reduce power to facilitate tower work on Mt. Wilson, these excuses are sometimes heard: "I'm unavailable that day" - "I'll be on vacation then" - "How about if we reduce power from, say, 1 to 4 AM?" Ever try to do tower work between 1 to 4 AM?

Since multiple stations may be involved in power cut backs to permit tower work, sometimes it's a miracle any work gets done at all. One tower maintenance company complained that after a power reduction was finally accomplished on Mt. Wilson, a TV GM ordered his engineer to RESUME FULL POWER operation immediately. Full power operation was resumed, without warning, and with climbers on the tower structure! Instead of trying to find ways to protect the Hollywood money people's interest, the FCC should be out levying very heavy fines on these non-compliant stations and their GMs too

Obviously, too many people do not understand the absolute necessity of cooperating and complying when it comes to human exposure to RF signal issues. Compliance with the FCC's exposure rules is the law, and failure to comply could lead to serious liability consequences, to say nothing of rigorous FCC sanctions.

The consequences could be far worse than what the FCC will do if OSHA gets involved. OSHA does have jurisdiction in this, FCC fines and action are nothing compared to OSHA. OSHA might be using the FCC for technical assistance. OSHA likes to start their fines at \$10,000 per violation. Each day that a problem exists is a new violation. Hopefully not only should the irresponsible station be fined, but the GM, not the corporation, should be held personally accountable. If he or she thinks it's a joke, let them go up on the tower without the benefit of the power reductions.

Much more could and probably should be said on this topic. Tech-Notes hope you will send us your thoughts.



Subject: **SBCA Says No to Dual/Forced Carriage**

By: Larry Bloomfield (from a press release)

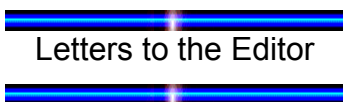
Should multi-channel video providers - including satellite TV companies - be forced to carry both analog and digital signals from broadcasters during the digital TV transition? The Satellite Broadcasting and Communications Association (SBCA) left little doubt as to how they felt in their comments filed recently at the Federal Communications Commission.

The SBCA told the FCC that it's firmly opposed to any forced-carriage regime requiring the delivery of both analog and digital signals of broadcast stations. The organization also said it supports the commission's conclusion that dual carriage is inappropriate, and added that it would reduce competition in the multi-channel marketplace.

SBCA President Andy Wright also used the association filing to point out that while cable claims competition is alive and well in the business, "no one should lose sight of the fact that the cable industry still controls over 75 percent of the multi-channel video marketplace."

Wright added, "That market power continues to give cable a powerful advantage against any potential competition, and dispels any suggestions that true competition exists, or will exist in the near future. Though the cable industry would like the commission and the general public to think that competition now exists, the facts prove that such assertions are recklessly premature."

As for general data on the satellite TV business, the SBCA said there are now more than 18.4 million households - equating to 48 million viewers - that receive multi-channel TV service via satellite, an increase of nine percent from March 31. The number includes C-Band customers. Satellite now serves nearly 18 percent of U.S. television households, the association said.



Subject: **Sacramento SBE**

From: Jack L. Davis, Chairman SBE Chapter 43 Jldavis@tribune.com

I am disappointed that you decided to trash me in a public forum about the turn out in Sacramento. I made several attempts to publicize your event and bent over backward to e-mail our membership, not once but on two separate occasions. I also mentioned it at the noon meeting and gave out the location.

There was no way to include the presentation in the meeting venue. We meet in a small meeting room at a local restaurant and they normally charge for the use of their rooms for presentations. They do not charge us because we are only there for a brief time and the food consumed offsets their costs.

I don't know what I could have done short of dragging some of the members over to VMI, I certainly made an honest attempt to give you some free publicity. The local SMPTE chapter was also invited, but I don't see you trying to blame them for no SMPTE members being there?

Jack Davis

(EdNote: We'd like to thank Davis and the other two other persons who did show up for our Road Show. If the SBE meeting place is too small to have technical presentations, then perhaps it's time to find a new meeting place. Technical presentations are one of the

key reasons members attend these meetings; fellowship is important, but in this day and age, not nearly as important as continuing education. SMPTE was not taken to task because they made no commitment whatsoever, which is probably even worse. It would have been better if the local SMPTE section had just said: "Get Lost" instead of ignoring the educational opportunity altogether.)



Subject: **Re: Tech-Notes #105**
From: Oddetta ODDETTA@aol.com

Hi, Reading about the digital article in Tec-Notes #105. I have a few questions. A person buys a digital TV and then subscribes to HDTV cable, then has to rent a box for each TV. Why? Then have to end up using two remote controls. Why? It seems to me with technology what it is, why the extra box and remote control. We have a side by side and the cable remote will not control that and the TV remote will not control the box. When will we be able to do away with the box for the Digital cable? Talking to the cable company does no good. They seem to know absolutely nothing. By the way we live in Fremont, Ca.

Anyway just wondering when some of this stuff can catch up with technology or technology will catch up with what is already on the market. Thanks,
Oddetta

(EdNote: First of all, HDTV is an enhancement of digital television (DTV). Not many cable companies offer the digital (DTV) signals of the local over the air stations. If they did, it would include that particular stations HDTV programs. This is despite the fact that many cable companies taut the fact that they are "digital." This simply means that they are distributing their signals digitally; it doesn't necessarily mean that they are carrying the DTV signals of the local broadcasters.

Since you live in Fremont, CA, you are most likely served by AT&T. Currently there are thirteen TV stations in the Bay Area that are transmitting over the air digital signals. The following is a list with their digital channels. Please note these are not the channels you are familiar with such as KGO-TV Channel 7. KGO's digital channel is 24.

KGO -TV 24
KTVU 56
KPIX 29
KTLN-TV 47
KTSF 27
KRON-TV 57
KSTS 49
KCNS-TV 39
KICU-TV 52
KNTV-TV 12
KQED 30
KBHK-TV 45
KBWB 19

Were the cable companies to offer you both the legacy analog signals, which they do, and the newer digital over the air channel as well, they'd have to give you two channels from the same program provider and that's not likely.

Over the air television extends from VHF channels 2-13 (roughly 52 MHz to 213 MHz) and on UHF channels 14-69 (roughly 470 MHz to 800 MHz). In the VHF band, these frequencies are not contiguous. (Note: All television stations, both analog and digital, transmitting anything above channel 52 will have to vacate those channels in the future in favor of a channel below channel 52. - The FCC is going to use those frequencies for something else.) Television tuners are designed to pick up the correct channel at its assigned frequency. Cable companies are not limited to these assigned frequencies. For example, there is a large gap in over the air television in frequencies used between channel 6 and channel 7 (88 MHz to 174 MHz) This space includes FM radio and a great deal of two way communications. Cable companies can use these frequencies to bring you more channels. There is a great deal of space between the top end of the VHF band and the beginning of the UHF frequencies. The cable companies also use this space as well to bring you additional channels. To do these kinds of things, it is necessary to have a different kind of tuner: therefore the need for the additional box.

Many TV sets are what they call "Cable Ready" and will have the ability to tune directly to these different cable frequencies. The booklet you got with your TV set should tell you about this. You would only be able to do this if the cable company was offering analog service. If they are, in fact, digital, you'll need the extra box to convert the signals from digital so you can use it with your TV set. If that is the case, I'd suggest you take the s-video or other video and audio outputs from the box and feed them into your TV set directly and by pass your TV set's tuner all together. You'll get a much better picture and sound. The cable company should be able to help you with this hook up.

As I said, the cable company should be able to help you with this. You should only have to have one remote control for each TV set that will control both the TV (on/off and volume) and the channel selector for the cable "box." You will need a cable "box" for each TV set, if you wish to use the cable service. Don't forget, over the air television is still alive and well. All you need is a good antenna pointing to the mountain top you want to receive from and it's free!

You need to talk to one of the cable company's technical types. The kids they hire at minimum wage to answer their phones aren't paid to know anything. If you keep that in mind, you'll not be quite as frustrated. Ask for a supervisor and tell them you want a technician to come out and assist you in the hook up of your TV set. They should offer that service at no cost. If they don't perhaps you could call one of the TV stations' technical people. In smaller markets, they usually will send some one out to help you, but that may not be the case in the Bay Area.)



Subject: **Some of My Observations #02**

By: Burt I. Weiner biwa@earthlink.net

Some years ago when I was working for KHJ-TV in Los Angeles I was talking to one of the senior engineers about camera setup and in particular the way that different people set up the cameras. He told me that he could almost tell who the video operator was for a show from home just by the way the cameras looked. To further expand on the point of that he told me the about a party where, present was someone from Technicolor and someone from one of the studios who did not use Technicolor. A comment was made to the Technicolor person that Technicolor's colorimetry was not correct. The Technicolor person replied, "We're not into correct colorimetry, we're into making pleasing pictures".

Some of this is art and some of it's science. I suppose you could say that it the science part that conveys the art. When I watch a program it's the art that hold me. The art of the story, the art of the visuals. I don't care how great or how poor it looks. If, to me it's a good story, I'll watch. If it's boring I don't really care how great it looks - I'm gone.

I suppose there are always exceptions to that. I remember when I first installed a dish at home. It was a 4.2 meter monster with a 120 degree LNA. I was glued to it one evening when my wife asked, "What program are you watching?" I replied, "I dunno." She asked, "What's it about?" Me: "I dunno." She: "Is it any good?" Me: "I dunno." She: Well, if you don't know what it's about or if it's any good, why are you watching it?" Me: "I'm watching a picture that's going about 50,000 miles round trip and it still looks great." (I still have the 4.2 meter dish but with a 25 degree LNA.)

We have "the dish" at home now. One of the 18 inch jobbies. Now the amazement comes in a different form. We get 150 gazillion channels and there's still nothing to watch. That's amazing!

Burt Weiner



Subject: The Sad State of DTV
From: Duane K. Dunn duane_k_dunn@mac.com

Just a note to co-workers in the industry: I worked with Larry at Harris.

KSBY has 80's technology mostly. I was working on a lot of the same stuff 16 years ago. Ever hear of U-matic? We edit on 950s and 800s along with Apple G4s. We do DV acquisition and do two machine cuts editing to U-matic. We have some Betacam in Odetics and elsewhere.

We just went union and were bought out by NewVision out of Atlanta. They take over in a month or so. We have DTV up and running at 100 watts, more than that ERP. We have a Samsung DTV tuner and Sony 4:3 set monitoring our up (or is it down) converted analog signal. 70%+ of viewers are on cable. Our old RCA analog transmitter has noticeable hum and needs some work. We have a Divicom MPEG encoder and Thales Amber and Turquoise – basically European DVB stuff converted.

I estimate we have fewer than 5 actual DTV viewers. For SD a 5mbit stream looks surprisingly good. The Divicom has 3 seconds of delay. It actually looks better than the analog in some ways, no hum bars.

NewVision's vision is to go Super local which I agree is the strength of legacy TV. They figure we will never have to worry about the 2006 DTV mandated cut-off due to lack of penetration, well maybe sometime in the year 3000. (I am quoting) We are the 1st crown jewel station in a planned 10-20 stations they will acquire in 6 months or so. So, no DTV, no multi-channel, just super local.

Duane



Subject: **The Road Show – A Taste of NAB Part II of VIII**

By Larry Bloomfield

From San Diego, it was a day long drive to Phoenix, AZ to finish off the second week. Our hosts, Audio Video Resources, AVR for short, provided an excellent display room for us to set up in and have the Phoenix SBE chapter meeting in. If you're ever near 4323 E. Cotton Center Blvd, in Phoenix, stop by and pay Ron Benson, one of their Senior Account Executives a visit. I'm sure he'd be glad to show you around, but, in all fairness, let him know you're coming. (rbenson@avrinc.com or 602+ 643-4216))

The folks at AVR were very gracious hosts to us and SBE Chapter 9. We even had members come all the way in from Tucson. There were over twenty people in attendance and nearly every attendee asked meaningful questions and expressed gratitude we came. It sure was nice to finally meet Ed Sutton, the Director of Engineer at KPHO-TV and several members of his staff. It was pointed out that the National SBE convention will be held here in Phoenix this October and Phoenix is ready. Those in attendance at this event this fall will have some nice hospitality awaiting them. Check out the pictures on the website at <http://www.tech-notes.tv/Trip/Venue%2005/Venue05.htm>

After traveling what seemed like half way around the world, we arrived in Dallas Sunday night and ready for our 6th show on Monday, May 6th. We set up in The Whitlock Group's offices in the Gateway Business Center in the Dallas suburb of Irving, TX. Except for giving us help in setting up and taking things down, the folks at Whitlock in Texas did little else to help make this event even remotely successful. The local partners were to have extended invitations to their clients, the engineering staffs at the local TV stations, but none of this was done. Our venue was, I believe, too far removed from where most of the TV stations were located and as such we spend the day looking at each other. We did get a few to show up as the result of calls I made early on in the day, but the turn out was pathetic. You can see pictures of our "Dallas" show at: <http://www.tech-notes.tv/Trip/Venue%2006/Venue06.htm>

I was beginning to wonder, where all that Texas hospitality I'd heard so much about was. Well we certainly found it in Houston on May 8th, when we were part of the SBE meeting at KUHT-TV. KUHT-TV is located in a very nicely laid out facility called the Broadcast Center on the campus of the University of Houston. Marty Kirkland, KUHT-TV's Chief Engineer and crew made George Schank's putting the program together for us and easy chore. The local SBE Chapter and SMPTE Section were well represented with a turnout of over twenty. It was finally hospitality that Texas could be proud of! The pictures are located at: <http://www.tech-notes.tv/Trip/Venue%2007/Venue07.htm>

Friday, May 10th was another great day for the Road Show. What else could you expect in New Orleans? Cliff Scott and the folks at Crescent Communications, Corp. helped us put the show together in the University Jefferson Campus Bldg. adjacent to WLAE-TV, a PBS member station.

When we were rapping things up, I felt that if all the rest of our venues go as well as this one, the Tech-Notes Taste of NAB road show will be a tremendous success! Cliff Scott and the folks at Crescent Communications did an out standing job of getting over thirty engineers to show up and check out what we brought with us. All seemed to enjoyed the presentations and the fine array of food Crescent provided. If you are ever in the New Orleans area, you must try a "Muffalotta." We had several trays of this really great local culinary delight. You just might seem some in one of the pictures at: <http://www.tech-notes.tv/Trip/Venue%2008/Venue08.htm>

I'd like to let you know a little about the folks who underwrote the Taste of NAB Road Show and ask that you give them consideration when you next have need for their products and/or services. We'll feature one or two as I chronicle our cross country venture.

Acrodyne Industries Inc. makes transmitters. I had occasion to see several in operation during the Road Show. I was impressed with the fact that their transmitter will accommodate any of the three better know IOTs (final amplifier and power output tube) with absolute ease and that their system used UNIX to control its functions. This latter feature permits a station monitor and make adjustments from nearly anywhere an engineer can access a computer. Not a bad feature when it is snowing and you don't want to go out in the weather. The installations I saw were nice, clean and seemed to be functioning quite well. The experienced engineers at the several stations had nothing but good things to say about the AI transmitter. <http://www.acrodyne.com>

AJA Video is company #10 who joined us after I embarked on the trip, April 22nd. There wasn't a venue where our information was presented that most of the digital plant folks knew about and used their products. AJA makes little boxes that convert from just about any kind of video to just about any other kind of video, and do it quite well. They also make the same products on cards that can be installed into a 2 rack unit high card case. One fellow told me that he had several dozen and used them to convert good, but expensive, analog video monitors into digital video monitor. <http://www.aja.com>

In our next edition of Tech-Notes, we'll talk about the trip down through Florida and Atlanta, GA, the next four venues. Stay tuned.



Subject: HDTV; Digital Cinema; Pro DVD; Streaming Media; Pro Audio
From: Des Chaskelson, Research Director, SCRI International (<http://www.SCRI.com>)

New reports just published from SCRI include: H/DTV Migration among US TV Stations; H/DTV Migration among Global Video and Film Production and Post Facilities. Other new reports published this year include: Broadcast / Pro Video Product Reports; Broadcast / Pro Video Trends Reports; Digital Media Trends Report; Broadcast / Pro Video Brand Awareness and Performance Report. To view table of contents go to: http://www.scri.com/sc_reprt.html

Upcoming surveys and reports from SCRI include: Pro DVD survey, conducted with DigitalMediaOnline, report to be published in September; Digital Cinema survey conducted with Digital Cinema Magazine -- to provide survey inputs and review the draft survey, email des_chas@scri.com; Streaming Media Survey now online (http://www.scri.com/sc_sur.html); Pro Audio survey to be conducted with DigitalProSound.com in September. For more information in any of the above reports, contact des_chas@scri.com.



Parting Short
By Larry Bloomfield



The comment in the last Tech-Note got the attention of both Leighton M. (Linc) Reed-Nickerson and his company, Rohde & Schwarz, Inc.

In an e-mail, Reed-Nickerson said: "I have been waiting for you to provide the name and address of the winner. When you do the gift certificate will be sent by FedEx to that person." The prize in question is a \$200 certificate for use at Ham Radio Outlet.



The winner is Norman S. Stein (nstein@sbgnet.com), Director of Operations, Sinclair Broadcast Group, 10706 Beaver Dam Road, Cockeysville, MD 21030. Please join us all in congratulating him. We here at Tech-Notes have been informed that the prize was sent FedEx to Stine this past week.

It is truly disappointing to all concerned that there was confusion about how this was to be handled. At no time did anyone at Tech-Notes wish to cast any aspersion on the fine quality products that Rohde & Schwartz, Inc. offer in their line of test equipment.

At the risk of spending more time on the transition to digital issue, now that someone woke up and saw the need for a tuner, (duh!) perhaps we shouldn't ignore some of the other lame arguments I've heard recently. The following are a variety of issues still hobbling this now infamous DTV transition. Although these dozen remarks are in the words of a colleague, you've seen the same sentiments here in the Tech-Notes.

- 1) Broadcaster transition costs ("We can't afford it")
- 2) Available tower space ("Sorry, we're out of space")
- 3) DTV to NTSC-NTSC to DTV transmission interference ("How come my picture looks weird?")
- 4) Copy protection (Hollywood, Networks, insert-name-of-entity-here, etc)
- 5) Receiver-to-display interconnection ("What about my Picture-In-Picture?")
- 6) Transmission system reception reliability ("I need to put up an antenna; On my roof?")
- 7) Cable carriage ("Where's my local news")
- 8) Viewer interest ("My picture looks fine")
- 9) Viewer needs ("I don't need a TV that big")
- 10) Receiver integration ("I still need something else to see HDTV on this display?")
- 11) Receiver-to-recorder interconnection ("OK, now how do I record this?")
- 12) Viewer system cost ("We can't afford that")

Feel free to add your own items to this list.

One of the things necessary in the transition to DTV, in the not too distant future, will be a converter box for the legacy analog TVs out there in TV land. They'll have to be easy to

operate, give all the features a DTV tuner in a DTV set would offer and at a cost the average household could afford to buy one or two.

Stepping up to this bat, as I've reported before, is the WOW box out of Salt Lake City. They tested it at the 2002 Winter Olympics. From what Craig James, one of Bonneville Broadcasting's top dog engineers, told me, it worked great. He did say that WOW wants to do a bit more refining on it before it is released for sale. Perhaps they are waiting for the CASPER chip from Linx. Not a bad move on their part. WOW is targeted to sell for just under \$200.

I couldn't help but wonder about the report out of Samsung who plans to offer a \$500 DTV set-top box that will do the same thing the WOW box will do. Samsung says that they are going after that market, which they believe is going to take off in the 4th quarter and springboard to 2003." Samsung's also announced a \$799 terrestrial model and \$699 combo for ATSC, NTSC and HD DirecTV reception. Guess it's better than nothing.

I recently received a press release from Marc Convents (Marc@outside-broadcast.be) who just wanted introduce his company. After reading it, whoever says that Europe isn't interested in HDTV had better think a gain.

Convents said that his company, Outside Broadcast, a Belgian TV facility company based near Brussels, specializes in international broadcast services, major sports events and cultural programs. They have a fleet of OB-units: 4 OB-vans and 3 fixed production rooms. The interesting part of his press release is Outside Broadcast's introduction of their new HIGH DEFINITION OB-van – Unit 8.

In the same document, Outside Broadcast's managing director, Ludo Kerkhofs, explains why the company decided to invest in high definition: "Getting started with High Definition has been a long story. We have been recording the Montreux Jazz Festival for 8 years. We are recording concerts in both the Stravinsky Auditorium and the Miles Davis Hall with 2 OB-Vans over a period of 15 days. Six years ago we had the opportunity to have a first experience with High Definition. In that year NHK delivered an HD OB-Van for which we provided a full technical crew.

"When the Montreux Jazz Festival asked for an HD recording of this year's festival, this seemed like the perfect opportunity to invest in High Definition equipment."

"The truck" will be able to handle any size and type of event in both SDI and High Definition norm. (1080i - 50hz/ 60hz)

Outside Broadcast is a major player in the European facilities market. A sampling of their projects speaks for itself: the Golden Leagues in Brussels, FIM Motocross World Championship Grand Prix's, Champions League games, several concerts and a few talk-shows.

Although it's still a very new HD market, Outside Broadcast believes that there will be an opportunity of growth in the future.

Check out Outside Broadcast's new high definition Unit 8 van at IBC Amsterdam, stand OEE105, Sportel Monaco, stand ESP05 or on their website at: <http://www.outside-broadcast.be>.

You know, as a satellite subscriber, I'm getting tired of seeing distant markets newscasts with their flashy pretty boys and girls telling me about local stuff that I could care less

about. I only live three hours from a market where I could get local-into-local, but because I'm in a different DMA, I am forced not to know about my state and the news in the general area of where I live. I know, I know, you've heard this all before, but I'm now at the point that I'd like whoever to do whatever it takes to get my DMA on the service I subscribe to so I can hear about the 100 plus temperatures we had here in our area recently, which are unheard of.

I think if we were to force, those who are fighting the merger of DirecTV and Dish, to watch the same kind of distant news and information, perhaps they'd let off. God, and a few knowledgeable engineers, only know that bandwidth is limited. You can get just so much through those birds up there and to get all 210 markets with most all channels, and that's 1695 as of the first of this year, not to mention the digital channels, they'll need not only their combined satellite capacities, but a few more monster bandwidth birds to boot. ---So get off their backs.

When EchoStar launches its newest satellite next week, the company could add as many as a half-dozen additional cities to the DISH Network local TV slate.

EchoStar confirmed that Las Vegas could be among the cities possibly added to the list of DMAs receiving local TV channels from the satellite TV service. The Las Vegas local TV package could become available from DISH by Thanksgiving. And Waco, Texas, is expected to be added to DISH Network's local TV slate, possibly by the end of August.

EchoStar VIII, set for liftoff next week, will allow DISH Network to add about a half dozen more local TV markets, thanks to spot-beam technology. Marc Lumpkin, Dish spokesperson said: "Without the company's pending merger with DirecTV, EchoStar will be limited by capacity restraints from offering local TV to about 50 markets. With the merger, the combined company promises it will reach all 210 TV markets.

I hope I live long enough to see my DMA on of the Satellites.

And finally, Jim Mendrala's computer is having some problems that he says are being resolved. Look for him to be back soon.



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