From the Publisher … If this issue looks squashed inside – it is. You’re holding 14 pages of information compressed into 12!

We regret to announce the passing of two long-time NRC members. Relfe Luton, of North Carolina, passed away at his home on October 9, just seven days short of his 94th birthday, according to information received from his son. Also, according to information provided by Perry Crabill and via the Internet, Joe Kureth, Westminster, MD died February 4 at the age of 62. Our sincerest condolences to their family and friends.

Somewhere-in-New-York, 2010 … We’ve received confirmation from the World TV DX Association that they will be joining us again in 2010 at the joint convention to be hosted by Scott Fybush, who calls Rochester home but who hasn’t announced the exact location yet.

Unfilled positions … We’re in need of volunteers for the following positions: an Internet web guru, to manage and update www.nrcdxas.org; a DXN publisher, and one or more persons to edit future NRC publications developed by contributors or the club.

The NRC AM Radio Log is unbound and three-hole punched for standard binders. Media rate: $19.95 to U. S. NRC members; $25.95 to U. S. non-members; to Canadian members, $24.00 ($28.95 to non-members); add $3.50 for Priority Mail. Airmail to all outside of USA/Canada: $33.00. Canadian orders: PayPal or postal M. O. only. Order from: NRC Publications - P. O. Box 473251, Aurora CO - 80047-3251, or via www.nrcdxas.org. (CO residents, please add 3.5% sales tax.)
Switch

Bill Hale  w_r_hale@sbcglobal.net
6124 Roaring Springs Drive
North Richland Hills, TX 76180-5552

Status changes in AM stations, supplied by the FCC, CRTC, and listeners

CALL LETTER CHANGES

<table>
<thead>
<tr>
<th>Old Call</th>
<th>New Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>1060</td>
<td>NEW CA</td>
</tr>
<tr>
<td>1110</td>
<td>KJSA TX</td>
</tr>
<tr>
<td>1160</td>
<td>WDJO KY</td>
</tr>
<tr>
<td>1220</td>
<td>KJML CA</td>
</tr>
<tr>
<td>1410</td>
<td>WLVV AL</td>
</tr>
<tr>
<td>1480</td>
<td>WCIN OH</td>
</tr>
<tr>
<td>1600</td>
<td>WHJB PA</td>
</tr>
</tbody>
</table>

1060 NEW CA Arroyo Grande KRGA
1110 KJSA TX Mineral Wells KVTT
1160 WDJO KY Florence WQRT
1220 KJML CA Desert Hot Springs KPSF
1410 WLVV AL Mobile WNGL
1480 WCIN OH Cincinnati WDJO
1600 WHJB PA Bedford WAYC

CPs ON THE AIR

1410 CFUN BC Vancouver - Is now on the air from its new transmitter site in Delta. The old site will be kept operational until December to allow the station to remain on the air while engineers tune co-located CKST-1040, which is currently operating at half power from the new site. The old CKST towers, immediately to the north of the new ones, were cut down on 19 October. CHUM Radio engineers expect to have CKST fully operational at its new location by the end of October. Both stations will be U4 50000/50000 from seven new state-of-the-art tower site at 49-05-33 122-55-57.

GRANTS FOR NEW STATIONS

600 NEW CA Redding - CP granted for U4 620/1000 from four towers at 40-30-16/122-07-18. The day pattern is a circular plot to the north-east while the night pattern throws a large lobe to the northwest with smaller lobes to the southeast and south.

ACTIONS

730 WOHS SC Cramerton - CP granted for U1 10000/19 with a change in their City-of-License (CoL) from Shelby, transmitting from a new tower at 35-15-04/81-03-25.
980 KRTX TX Rosenburg/Richmond - CP granted U4 5000/4000.
1060 WILB OH Canton - CP granted for D3 15000/0. The pattern, besides being larger, is rotated clockwise slightly from the former direction of southwest to westerly.
1460 WQXM FL Bartow - CP granted for U5 10000/155, adding a new tower. The new day pattern throws a big circular pattern to the east-northeast.
1580 WSRF FL Fort Lauderdale - CP granted for U4 1000/1500.

AMENDMENTS TO APPLICATIONS

940 KTON TX Belton - Licensed for U4 1000/5, KTON applied for D4 3500/0 CH 3500. This amendment requests U5 600/100 moving to Kaufmann, Texas on 950 kHz.
1250 NEW NV Mesquite - Initial application was for U2 2500/75, then amended to U4 5000/500. Now they’ve requested U4 5000/480.
1460 KBRZ TX Missouri City - Licensed for U1 5000/125, KBRZ applied for 10 kW days, but omitted any mention of nighttime operation in the application. So the FCC took that as D3 10000/0. But, after realizing their mistake, KBRZ has refiled as U5 10000/112.
1560 NEW TX Wolfforth - Initial application was for U4 500/250. This amendment requests U4 235/250.

DISMISSALS

830 KMUL TX Farwell - Application for U7 50000/10 CH 16000.
1090 KNUZ TX Belleville - Application for D1 200. KNUZ remains D1 250/0.

HEAR AND THAR

◆ NEWS ITEM: Fifty state broadcast associations have signed onto a letter of protest to the Federal Communications Commission about a proposed $5,000 fine against KWVE(FM), San Clemente,
California, for an EAS mistake by a station staffer. The concern among the associations is that such a high fine against a volunteer “Local Primary One” (LP-1) station, which begins the daisy chain, will deter others from serving in that role. The associations represent radio and television stations in all 50 states as well as stations in the District of Columbia and Puerto Rico. In the letter, they ask that the agency either set aside the fine or simply admonish the station. The case goes back about a year. Calvary Chapel station KWVE transmitted an unauthorized Required Monthly Test of the Emergency Alert System. The FCC received a complaint in October 2008 that the station transmitted commercial programming and an ad as part of the test message, which were then re-transmitted by other stations and cable systems in the daisy chain. The station told the commission one of its employees had intended to run a scheduled weekly EAS test, but ran the unscheduled RMT instead; the employee also failed to transmit the End of Message code. The station says its beefed up its EAS training and the error has not been repeated. In its decision last month, the FCC said KWVE’s actions affected other stations and that “the transmission of EAS tones that are followed by a broadcast that is not part of an EAS test or actual emergency information, whether intentional or accidental, compromises the integrity of the EAS system.” It said the action was willful, which KWVE disputes, and that’s why it proposed a $5,000 fine. In their letter this week, the associations reminded the commission that KWVE is a volunteer LP-1. They are concerned, they wrote, that if the commission imposes a substantial fine against an LP-1 for a mistake, it would deter current LP-1s as well as current Primary Entry Point stations from continuing to participate voluntarily in EAS. The broadcast associations fear the fine would also have a chilling effect preventing new stations from serving as LP-1s or PEP stations. “The loss of a single LP1 station can cause a state’s EAS plan to be in non-compliance. If multiple LP-1 stations give up their ‘volunteer’ role in an operational area … the daisy chain would be broken, and there would be a disconnect between presidential and gubernatorial EAS alerts for that area,” the broadcast associations argued. Noting the commission’s efforts in trying to modernize EAS and upgrade the technology of alerting, the associations urged the agency to refrain from taking action that might have unintended consequences, that could, in turn, work against the steps being taken to improve EAS. (660 KWVE CA Oildale - Change: From: Contemporary Christian To: Religious Teaching // KWVE-107.9 Eff Date: 10/13/2009

**Returning to the airwaves:** none this week

**Reported as Silent:** WVMC-1360 Mount Carmel, Illinois; WCOX-1450 Camden, Alabama (but their FM station remains on-the-air);

Thanks to Shawn Axelrod, Wayne Heinen, David Lewis, Deane McIntyre, and

### GRAVEYARD DX UPDATE

+ record held by a DXer in USA/Canada where a Canadian/USA record exceeds that mileage

<table>
<thead>
<tr>
<th>1230 kHz:</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>WQUA IL Moline</td>
<td>Carl Dabelstein Minneapolis, MN +278</td>
</tr>
<tr>
<td>WBOW IN Terre Haute</td>
<td>Carl Dabelstein Omaha, NE +497</td>
</tr>
<tr>
<td>WHOP KY Hopkinsville</td>
<td>Carl Dabelstein Omaha, NE +543</td>
</tr>
<tr>
<td>WCUZ MI Grand Rapids</td>
<td>Carl Dabelstein Minneapolis, MN +402</td>
</tr>
<tr>
<td>KWNO MN Winona</td>
<td>Carl Dabelstein Lincoln, NE 341</td>
</tr>
<tr>
<td>WCOL OH Columbus</td>
<td>Carl Dabelstein Lincoln, NE +720</td>
</tr>
<tr>
<td>KERV TX Kerrville</td>
<td>Carl Dabelstein Omaha, NE 797</td>
</tr>
</tbody>
</table>

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**Domestic DX Digest**

West: Jim Tedford Radio_Enthusiast@hotmail.com 20310 Bothell-Everett Highway B4 - Bothell, WA 98012-8133

East: Mike Brooker aum108@idirect.com 99 Wychecrest Ave - Toronto, Ontario M6G 3X8 CANADA

**DX Catches in the U. S. and Canada, with 24-hr. ELT**

**DDXD-West**

Salutations from the very rainy Pacific Northwest. Heavy rains the past 24 hours took down my longwire SW/MW antennas, broke the lead-in on the TV antenna, and even knocked over the rain gauge on the home weather station. Fall has fell. Or is it fallen?

Reporters

**DP-HI** Dale Park, Honolulu, HI

**DP-HI** Dale Park, Honolulu, HI DXing while walking around the neighborhood with Sony
Walkman SRF-59 barefoot

FO-OK  Forest Osborn, Hooker, OK Icom IC-R70, Hammarlund HQ-150, 4' loop and 200' LW.

JDT-WA  Jim Tedford Bothell, WA Grundig Sat-800, Eton E-1, Kaito KA-2100, RCA Superadio, 150 foot longwire, Degen loop

JW-CO  John Wilkins, Wheat Ridge, CO Drake R-8, 4-foot box loop

PLS-KS  Paul Swearingen Topeka, KS Kenwood R-1000, amplified Sanserino loop.

SA-MB  Shawn M. Axelrod VEDX1SMA, Winnipeg, MB Icom ICT-70; Drake R-8; 4 foot unamplified box loop; Quantum loop; 155 foot outdoor wire; 100 foot indoor wire; MFJ 1026 phasing unit.

Station News

800  CKOR  BC  Penticton  Per Radio-Info.com website, stn adds John Tesh at 2000-0300, relayed over CJOR-1240. (DP-HI)

860  KKAT  UT  Salt Lake City  Per Deseret News, stn flipped from True Oldies Channel as “The Wolf” to conservative talk 10/05, featuring Don Imus, “America’s Morning News,” Joe Scarborough, Mark Levin and Curtis Sliwa. Slogan is “Utah’s Big Talker.” (DP-HI)

970  KNWZ  CA  Coachella  Per Palm Springs Desert Sun, stn added a relay over K232CX-FM 94.3 10/01 at 1806. Officially (i.e., the FCC) the translator simulcasts KNWQ-1140. KNWZ is also heard over KNWH-1250. (DP-HI)

1240  KFH  KS  Wichita  Per Radio-Info.com, stn adds Westwood One’s Kevin & Bean from KROQ-FM, airing 1500-1900. KFH’s website also says it will add ESPN Radio’s Mike & Mike 12/14 at 0600-1000. (DP-HI)

1370  KUPA  HI  Pearl City  10/12 0010 EDT Noted on the Walkman traditional jazz music below KKEA-1420’s channel, then ID “KUPA AM 13-70 Pearl City” followed by “smooth” and other contemporary jazz. Contemporary jazz continued until 0130 tune-out, interrupted every 15-20 minutes by the same pre-taped ID. However, stn has not been heard since. Obviously KUPA came on briefly in order to keep the license active. Only address for this stn is in Utah. KUPA was last heard with Fox Sports back in Oct. 2007. (DP-HI)

1400  CKGR  BC  Golden  Per Radio-Info.com, stn adds John Tesh via its relaying of CKXXR-FM 91.5 at 2000-0300. (DP-HI)

1630  KCJJ  IA  Iowa City  Per Radio-Info.com, stn adds Kevin & Bean, airing 1500-1900. (DP-HI)

1450  KLZS  OR  Eugene  Per Radio-Info.com, station will switch from SS ESPN Deportes to smooth jazz effective 11/16. Not known if callsign will change. (JDT-WA)

DX Logs (Times ELT)


650  KGAB  WY  Orchard Valley  10/11 0930. In the clear with Fox news. (FO-OK)

680  KNBR  CA  San Francisco  10/3 0858. On top of channel with “Beat of the Bay” program. (FO-OK)

790  KABC  CA  Los Angeles  10/11 0903. News about President and Pulitzer Peace Prize, in the null of semi-local KXXX. (FO-OK)

800  CKOR  BC  Penticton  10/10 1940 ID/promo as “E-Z Rock 800.” ZZ Top and Eagles songs, promo for that night’s Penticon Vees hockey vs. Merritt. Noisy, but readable. (JDT-WA)

870  KFJZ  TX  Fort Worth  10/2 0920. SS, Western Union ad @ 0921, Dallas traffic report @ 0931, Fort Worth wx, 55 degrees and sunny. First time ID; my SS is virtually non-existent. (FO-OK)

890  KTXV  TX  Mabank  10/2 0918. Vietnamese, with “Radio Saigon” ID. (FO-OK)

930  KRKY  CO  Granby  10/11 0843. C&W mx, mentioned 101.9 FM, call letter ID @ 0844, new here. (FO-OK)

1010  KSIR  CO  Brush  10/3 0936. Farm program call-in with items for sale and wanted, call letter ID @ 0949. (FO-OK)

1030  KVOI  AZ  Cortaro  10/15 0849. Heard man saying “1030 KVOI The Voice” but was quickly covered by a strong KTWO. A needed call letter change here. (JW-CO)

1100  KFAX  CA  San Francisco  10/02 0001, eHarmony ad, ID “This is KFAX San Francisco-Oakland-San Jose. KFAX, the Spirit Of the Bay,” MA ncr saying “Focus on The Family” was next. FAIR (DP-HI)
540 WETC NC Wendell-Zebulon – 10/6 0630 – good signal with man and woman giving news in SS from several Mexican states for North Carolina’s Mexican resi-

1670 WD2XXM MD Frederick - 10/9 1300 - mixing with Fairfax County, VA TIS, playing various types of music (rock, polka, etc). Man with long speech on benefits of IBOC HD radio. Gone by 1311. (KK-Va) Benefits of IBOC?? Geez, what the bleep are they smoking? Mike.

DDXD-East
REPORTERS

RB-NC Ron Bailey, Marion – Sony SRF-39FP
JC-DE John Cereghin, Smyrna - FRG-7, DX-150B, various ultralights
HF-MI Harold Frodge, Midland - Drake R8B, 125 ft. bow-tie; 85 ft. RW & 180 ft. center-fed RW
KK-VA Kraig Krist, Manassas - NRD-545, homemade 134 foot multiband antenna running NW to SE.
DP-HI Dale Park, Honolulu – station news
MKB-ON Mike Brooker, Toronto – Grundig G5, Grundig YB-400PE, Sony SRF-39FP, Panasonic RF-2200 (receiver emeritus)

STATION NEWS
660 WPYT PA Wilkinsburg - Per Pittsburgh Post-Gazette, station will switch from talk to African-American-oriented news-talk upon its sale. (DP-HI)
730 WVFN MI East Lansing - Per WILX-TV’s website, returned to the air 10/07 at 1655 after being off for six days to replace the transmitter, which failed after 35 years of service. (DP-HI)
890 WAMG MA Dedham - Per Boston Globe, station shut down 9/14 at 1700, pending the proposed shift of ESPN programming to WEEI-850. (DP-HI)
950 WPEN PA Philadelphia - Per FMQB newsletter, station started being relayed on WNUW-FM 97.5 New Jersey 9/09 at 1700. Carries ESPN Radio programming plus Content Factory’s “Into The Night With Tony Bruno.” New slogan is “The Fanatic, Home of The Philly Sports Fan,” in honor of the baseball mascot the Phillie Phanatic. (DP-HI)
1160 WSKW ME Skowhegan - Per Radio-Info.com, station flipped from ESPN Sports to oldies 9/21. (DP-HI)
1280 WHTK NY Rochester - Per Radio-Info.com, station added a relay over WROO-FM 107.3 on 9/7 and changed its callsign to WHTK-FM. (DP-HI)
1510 WWZN MA Boston - Per Boston Globe, station began simulcasting the 0600 and 1700 news from WCIV-TV 9/18. WCIV-TVs newscasts already air over WCAP-980 at 0500 and 1730. (DP-HI)

EXPERIMENTAL/TESTING
1670 WD2XXM MD Frederick - 10/9 1300 - mixing with Fairfax County, VA TIS, playing various types of music (rock, polka, etc). Man with long speech on benefits of IBOC HD radio. Gone by 1311. (KK-Va) Benefits of IBOC?? Geez, what the bleep are they smoking? Mike.

LOGGINGS
<table>
<thead>
<tr>
<th>Call</th>
<th>State</th>
<th>City</th>
<th>Frequency</th>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WICC</td>
<td>CT</td>
<td>Bridgeport</td>
<td>600</td>
<td>10/5</td>
<td>weak, “WICC Newsradio” and “Connecticut’s News and Information Station” liners.</td>
</tr>
<tr>
<td>WPMH</td>
<td>VA</td>
<td>Claremont</td>
<td>10/14</td>
<td>1730</td>
<td>very weak but did catch “talk radio for Hampton Roads” liner.</td>
</tr>
<tr>
<td>WEGG</td>
<td>NC</td>
<td>Rose Hill</td>
<td>710</td>
<td>10/7</td>
<td>gospel, mixing with WOR, “Gospel 710” and “Gospel 710 and 95.5” liners.</td>
</tr>
<tr>
<td>WLSV</td>
<td>NY</td>
<td>Wellsville</td>
<td>790</td>
<td>10/3</td>
<td>“790 WSLV” ID with classic country, poor against IBOC hash.</td>
</tr>
<tr>
<td>WCRN</td>
<td>MA</td>
<td>Worcester</td>
<td>830</td>
<td>10/10</td>
<td>#ID, New England college football scores.</td>
</tr>
<tr>
<td>WKAR</td>
<td>MI</td>
<td>East Lansing</td>
<td>870</td>
<td>10/7</td>
<td>gospel, mixing with WOR, “Gospel 710” and “Gospel 710 and 95.5” liners.</td>
</tr>
<tr>
<td>WOLM</td>
<td>NY</td>
<td>New York</td>
<td>910</td>
<td>10/11</td>
<td>“WOLM, Your Inspiration Leader”</td>
</tr>
<tr>
<td>WEPN</td>
<td>NY</td>
<td>New York</td>
<td>1050</td>
<td>10/13</td>
<td>mixing with station playing oldies from the 1970’s (can’t be CHUM any more!) with typical ESPN talk programming.</td>
</tr>
<tr>
<td>WFCN</td>
<td>IN</td>
<td>Indianapolis</td>
<td>1170</td>
<td>10/16</td>
<td>college football with announcer screaming “the University of Alabama-Birmingham Blazers have just beaten whoever it was, Southern MS I think) for the first time ever!!” “WACV” call ID, then sounds of the UAB marching band. Heard under tail end of West Virginia’s victory over Colorado on WWVA.</td>
</tr>
<tr>
<td>WCLN</td>
<td>NC</td>
<td>Clinton</td>
<td>1310</td>
<td>10/12</td>
<td>“WCLN, Your Inspiration Leader”</td>
</tr>
<tr>
<td>WISE</td>
<td>NC</td>
<td>Asheville</td>
<td>1460</td>
<td>10/2</td>
<td>college football game with announcer screaming “the University of Alabama-Birmingham Blazers have just beaten whoever it was, Southern MS I think) for the first time ever!!” “WACV” call ID, then sounds of the UAB marching band. Heard under tail end of West Virginia’s victory over Colorado on WWVA.</td>
</tr>
<tr>
<td>WJET</td>
<td>PA</td>
<td>Erie</td>
<td>1470</td>
<td>10/16</td>
<td>college football game with announcer screaming “the University of Alabama-Birmingham Blazers have just beaten whoever it was, Southern MS I think) for the first time ever!!” “WACV” call ID, then sounds of the UAB marching band. Heard under tail end of West Virginia’s victory over Colorado on WWVA.</td>
</tr>
<tr>
<td>WPCE</td>
<td>VA</td>
<td>Portsmouth</td>
<td>1580</td>
<td>10/9</td>
<td>college football game with announcer screaming “the University of Alabama-Birmingham Blazers have just beaten whoever it was, Southern MS I think) for the first time ever!!” “WACV” call ID, then sounds of the UAB marching band. Heard under tail end of West Virginia’s victory over Colorado on WWVA.</td>
</tr>
</tbody>
</table>

Foreign DX Catches. All times are UTC

Some heavy DX despite a light turnout: Japan heard in Illinois, new logs on Old Cape Cod, and more Prince Edward Island DXpedition goodies. My grandfather passed away earlier in the week, so I sent this out for publication early. If your logs are missing, then I’ll catch up with you next week.
(Bruce - our sincerest condolences to you -pls.)

Transatlantic DX

972 TAJIKISTAN R.Aap Ki Dunyaa, Orzu OCT 7 2300 - American Blues, then “It’s 2300 Universal Time and here is the news from the Voice of America,” fanfare, “From the VOA news center in Washington...” Recorded. Good. [Black-PE]

1026 IRAN IRIB Tabriz OCT 8 0120 - Good with prayers. [Barstow-MA]

1076.73 unID OCT 8 0116 - Unknown carrier; fair but no audio. [Barstow-MA]

1278 FRANCE France Bleu, Sélestat OCT 7 2320 - Man talking in French; weak. New log. [Barstow-MA]

1296 AFGHANISTAN VOA Pol-e-Charkhi (Kabul) OCT 7 2300 - Man with VOA news in English, the same announcer and script as the VOA news heard on 972 from Tajikistan. Recorded. Good. [Black-PE]

1305 SPAIN RNE5 synchros OCT 7 2317 - Good with news and musical interludes. Parallel a weaker 1314 kHz. [Barstow-MA]

1386 SPAIN Euskadi Irratia, Ganguren OCT 8 0054 - Good with music parallel 1476 kHz. [Barstow-MA]

1458 UNITED KINGDOM BBC Asian Network, Langley Mill OCT 7 2305 - BBC Asian Network ID at 2307 and before that some Arabian type music. In fair and shortly after mingled with the mix on the channel. New log. [Barstow-MA]

1512 SAUDI ARABIA BSKSA Jeddah (21°15’N 39°10’E) OCT 7 2354 - Weak with slop; talk, believe parallel 1521 kHz. [Barstow-MA]

Transpacific DX

693 JAPAN JOAB NHK2 Tokyo OCT 7 0910 - News in English with man and woman. Recorded. Very good. [Black-PE] OCT 8 1028 - Poor-fair peaks sometimes audible with a gal in Japanese parallel 747 kHz. In general 747 was a little better but not always. Several other TP carriers were in including 972 which seemed just a tad too weak to push audio past KQAQ and WDAY. New. [Kazaross-IL]

747 JAPAN JOIB Sapporo (43°05’N 141°37’E) OCT 8 1024 - Poor-fair peaks sometimes audible with a gal in Japanese parallel 693 kHz. Helped by phasing WSB. Stayed in ‘til about 1148 which was sunrise here. New and first Asian TP! [Kazaross-IL]

Contributors
Roy Barstow, Teaticket MA; RFSpace SDR IQ, 50 x 30-ft SuperLoop at 63°.
Chris Black, Priest Pond PE; Microtelecom Perseus, Porta-Flag antenna.
Neil Kazaross, Barrington IL; E-1 Phased BOG System at 320° 330-ft parallel 200-ft. 73 and Good DX!

College Sports Networks

Network listings for college sports stations

We continue this time with the schools that begin with E and F. I also threw in the station lists for Georgia and Georgia Tech, as I’m trying to squeeze in as many station lists as we can before we have to shift to basketball and hockey, starting in November. Flagships are in bold.

East Carolina Pirates, Greenville NC, Conference USA

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Call Letter</th>
<th>Power</th>
<th>Masts</th>
</tr>
</thead>
<tbody>
<tr>
<td>560</td>
<td>WGAJ-NC</td>
<td>1010</td>
<td>WRJR-VA</td>
</tr>
<tr>
<td>850</td>
<td>WRRZ-NC</td>
<td>1230</td>
<td>WFAY-NC</td>
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<tr>
<td>900</td>
<td>WIAM-NC</td>
<td>1250</td>
<td>WKDX-NC</td>
</tr>
<tr>
<td>950</td>
<td>WPET-NC</td>
<td>1450</td>
<td>WFBX-NC</td>
</tr>
</tbody>
</table>

92.3 WZPR-NC

90.5 WFJA-NC

107.9 WNCT-NC

88.9 WEIU-IL

Eastern Kentucky Colonels, Richmond KY, Ohio Valley Conference

100.7 WCYO-KY

Eastern Washington Eagles, Cheney WA, Big Sky Conference, Larry Weir

89.5 KEWU-WA

John Cereghin mwdx@pilgrimway.org

38 S. Carters Rd

Smyrna, DE 19977-1203

College Sports Networks

Network listings for college sports stations
Elon College, Elon, NC, Southern Conference
920 WPCM-AM

Fairmont State Falcons, Fairmont WV, West Virginia Intercollegiate Athletic Conference
102.7 WGYE-WV 103.7 W279AE-WV

Ferris State Bulldogs, Big Rapids MI, Great Lakes Intercollegiate Athletic Conference, Jason DaDay, Sandy Gholston
102.3 WYBR-MI

Findlay Oilers, Findlay OH, Great Lakes Intercollegiate Athletic Conference
1330 WFIN-OH

Florida State University, Tallahassee FL, Atlantic Coast Conference
790 WSFN-FL 1270 WNLS-FL 1400 WZHR-FL 94.9 WTNT-FL
820 WWBA-FL 1320 WBOB-FL 1430 WLFK-FL 96.3 WXOF-FL
850 WFTL-FL 1340 WTAN-FL 1450 WSTU-FL 96.5 WJTK-FL
1040 WHBO-FL 1350 WDCF-FL 1460 WNPL-FL 98.1 WTKE-FL
1060 WIXC-FL 1350 WFNS-FL 1460 WZEP-FL 100.3 WRKN-FL
1080 WHOO-FL 1360 WKAT-FL 1620 WNRP-FL 100.7 WFLA-FL
1200 WPTK-FL 1370 WOCA-FL 101.1 WYOO-FL
1240 WFOY-FL 1400 WPRY-FL 93.5 WBGF-FL
1260 WIYD-FL 1400 WTKE-FL

Fordham Rams, Bronx NY, Patriot League
90.7 WFUV-NY

Fort Hays State Tigers, Hays KS, Mid-American Intercollegiate Athletic Conference
103.3 KJLS-KS

Fort Lewis College Skyhawks, Durango CO, Rocky Mountain Athletic Conference
930 KIUP-CO

Fresno State Bulldogs, Fresno CA, Western Athletic Conference
580 KMJ-CA 1460 KION-CA 1560 KNZR-CA

Furman Paladins, Greenville SC, Southern Conference, Chuck Hussion, Gordon Higgins
96.3 WGOG-SC 103.3 WOLT-SC 105.9 (in-stadium transmitter)

Georgia Bulldogs, Athens GA, Southeast Conference, Scott Howard, Eric Zeier
580 WGAC-GA 1330 WMLT-GA 94.5 WBYZ-GA 103.5 WJAD-GA
610 WCEH-GA 1340 WTIF-GA 94.9 WHKN-GA 103.7 WXKT-GA
630 WBMQ-GA 1350 WRWH-GA 95.1 WACF-GA 103.9 WDDK-GA
750 WSB-GA 1380 WELE-GA 95.3 WSRM-GA 103.9 WQXZ-GA
860 WFKM-GA 1420 WPEH-GA 95.5 WIXV-GA 105.1 WKUB-GA
900 WJTH-GA 1440 WGG-IGA 97.7 WMGZ-GA 105.5 WIFN-GA
940 WMAC-GA 1450 WGPC-GA 97.7 WTCQ-GA 105.9 WVGA-GA
960 WRFGC-GA 1450 WRGA-GA 97.7 WUUF-GA 106.1 WNGC-GA
980 WLKY-GA 1470 WCLA-GA 98.1 WMGP-GA 106.3 WGMK-GA
1010 WJXL-FL 1490 WSYL-GA 99.9 WSNT-GA 107.5 WDBN-GA
1230 WBLJ-GA 1590 WTGA-GA 101.1 WGSY-GA 107.5 WITF-GA
1240 WWNS-GA 1600 WFIS-SC 101.1 WJLA-GA 107.7 WHFX-GA
1240 WPAX-GA 101.1 WTGA-GA 107.9 WOGT-TN
1300 WMTM-GA 92.1 WBTR-GA

Georgia Tech Yellow Jackets, Atlanta GA, Atlantic Coast Conference
620 WTRP-GA 1270 WJJC-GA 1450 WKEU-GA 96.7 WDXQ-GA
630 WNEG-GA 1300 WIMO-GA 1450 WMVG-GA 99.3 WCON-GA
730 WOHS-NC 1350 WFNS-NC 1460 WHAL-GA 100.1 WQMJ-GA
790 WQXI-GA 1370 WLOP-GA 1490 WCHM-GA 101.7 WYUM-GA
790 WSFEN-NC 1370 WFDR-GA 1590 WALG-GA 101.9 WJFL-GA
970 WVOP-GA 1410 WLAAQ-GA 1590 WTGA-GA 103.9 WDDK-GA
1030 WEBS-GA 1420 WPEH-GA 1630 WRDW-GA 106.7 WYAY-GA
1050 WLN-NC 1440 WLXN-NC 107.3 WMCD-GA
1240 WGG-CA 1450 WGN-NC 92.3 WSGA-GA

Findlay Falcons, Findlay OH, Great Lakes Intercollegiate Athletic Conference
1330 WFIN-OH
The Tecsun PL-310 AM-FM-SW-LW DSP Receiver
Four Band Performance Review
By Gary DeBock

Introduction
The Tecsun PL-310 is the latest DSP-enhanced pocket radio produced by China’s premier electronics manufacturer, and was designed to fully utilize all the innovative functions available from the American-designed Silicon Labs’ 4734 DSP chip. A product of the intense competition in the Chinese domestic market, the radio was designed to compete favorably with the Kchibo D96L model, which was introduced in August with very similar features. Because of the economics of the Chinese domestic market, the Tecsun and Kchibo companies have invested heavily in the practical application of the 4734 DSP chip in inexpensive consumer radios, producing models with astonishing capabilities—and very low prices.

The PL-310 was eagerly anticipated by hobbyists desiring a high quality pocket radio with the full range of DSP selectivity choices available from the 4734 DSP chip—1, 2, 3, 4 and 6 kHz filtering options. Such choices were initially offered in the Kchibo D96L model, but with various quirks that made some DXers less than satisfied. In this mini-review, the PL-310 will be extensively compared with the D96L, as well as with the Tecsun PL-300WT (a.k.a. G8), Tecsun’s initial DSP pocket radio model. Such a detailed comparison should enable prospective purchasers to make a decision whether the new PL-310 model will meet their needs.

The PL-310 Design Strategy
The PL-310 is essentially a refinement of Tecsun’s PL-300WT model, introduced in May as the first Chinese-market pocket radio featuring the Silicon Labs’ 4734 DSP chip. Although the PL-300WT (and its Grundig G8 clone) provided unprecedented AM selectivity and unmatched FM-DXing performance, there was no choice of DSP selectivity options on AM, and the single fixed option was not at the optimum 1 kHz setting. The radio also suffered from common inductance mismatches between the loopstick and the DSP chip, resulting in less-than-optimum AM and LW sensitivity.

China’s Kchibo company took advantage of these shortcomings by introducing their D92L and D96L pocket radio models in July and August respectively, both of which offered the full range of DSP selectivity options from the 4734 chip. Whereas the D92L model was hampered by severe design quirks, the D96L model has proven to be a very formidable AM-DXing receiver—with most of the D92L quirks corrected. Both of these models (as well as the PL-300WT) are fully covered in the 2009 Ultralight Radio AM-DX Shootout article, in which the Kchibo D96L was judged to be the winner in both AM sensitivity and selectivity. The new PL-310 represents the Tecsun company’s best efforts to produce a DSP pocket radio superior to the D96L, and to restore its premier position in this new Chinese domestic market radio category.

The PL-310 Basics
Physically, the PL-310 is very similar to the PL-300WT (G8) models, and may be pictured as a PL-300WT with a round tuning knob on the right side. At 5.5” x 3.3” x 1.1” (140 x 87 x 27 mm), the radio barely fits within the 20 cubic inch Ultralight definition limit when the volume of the protruding tuning knob is taken into account. As a 4734 DSP chip-based radio, the display features selectable options of signal strength /signal-to-noise ratio, temperature (selectable in Celsius or Fahrenheit), current time, and alarm time setting. As a major improvement over its PL-300WT predecessor, the PL-310 has selectable 1, 2, 3, 4 and 6 kHz DSP selectivity options available from a front panel control (in a carousel rotation scheme). Another major improvement over the PL-300WT is an excellent direct-entry keypad with generous-sized numeral controls (which operates without the typical need to push an “enter” button). There are 500 preset memories available, and an alarm function which can awaken the owner with either a buzzer, or a live radio signal.

Unlike the PL-300WT with its mismatched loopstick, the PL-310 has competitive LW coverage, which runs from 153-513 kHz. AM coverage is from 520-1710 kHz when 10 kHz steps are selected, and from 522-1620 kHz when 9 kHz steps are selected. The AM tuning rate is adjusted according to the user’s rotation of the tuning control, so that rapid rotation of the tuning control shifts the tuning rate from 1 kHz to either 9 or 10 kHz steps (whichever steps are selected by the user for his local area). When the tuning knob rotation is slowed down, the AM tuning rate shifts back to 1 kHz. Even if 10 kHz tuning steps are selected, a transoceanic DX-chaser can still manually tune in the 9 kHz-split frequencies with the tuning control.

Highly sensitive and selective FM coverage is from 64-108 MHz, and FM stereo audio is available from the headphone jack when such stations are received. The FM tuning rate also is adjusted according to the owner’s rotation of the tuning knob, with the slower 10 kHz steps changing to 100 kHz steps when the tuning knob rotation is faster.

SW coverage on the PL-310 is from 2.3 MHz to 21.95 MHz, selectable in 13 different band segments
from the front panel. In a major improvement over the PL-300WT’s reception of numerous AM spurs and mixing products throughout the SW spectrum, the PL-310 SW coverage is free of these problems.

Four different tuning methods are available: manual (tuning knob) rotation, direct frequency entry (using the keypad), “Auto Tuning Storage” (scanning of available stations into memory), and memory recall tuning.

The Tecsun PL-310 is powered by three 1.5v AA batteries (or a 4.5v adapter), and is available in black, silver or gray colors. It comes with three rechargeable AA batteries, a USB cable (to charge the batteries from your computer), stereo earphones, a vinyl carrying case, a wrist strap, and a Chinese owner’s manual (an English manual has been promised to current purchasers, to be provided “very shortly”). The PL-310 is currently available for $39.99 plus $24.00 shipping (by registered airmail to North America) from the top-rated eBay seller “Anon-co,” who will probably be joined by other Chinese eBay sellers once the PL-310 orders increase.

Competitive Performance

To fully investigate its DXing capabilities, the new PL-310 model was tested against competing top-rated Ultralight radio models on all four bands. For LW testing, it was matched against its PL-300WT predecessor (the only other Ultralight radio with LW coverage). For AM band testing, it was matched against the new Kchibo D96L model (the sensitivity and selectivity winner in the recent 2009 Ultralight Radio AM-DX Shootout, pictured at left), and the PL-300WT. On the FM band, the PL-310 was up against the top-rated PL-300WT, as well as the D96L. Finally, on the SW bands it was matched against the PL-300WT and the Eton E100 (a.k.a. Tecsun PL-200), which is generally considered the top-performing Ultralight radio in SW performance. All models were provided with new batteries (or recharged batteries) and operational checks prior to the live signal competition.

LW Testing

The PL-310 was tested against the PL-300WT in the reception of NDB beacons just past local midnight (0800 UTC) on October 10, 2009. The new PL-310 was able to receive the following four beacons, on the approximate frequencies listed:

- “NY” (351 kHz)…. Strong
- “ZP” (369 kHz)…. Moderate
- “QQ” (398 kHz)…. Moderate
- “MOG” (405 kHz)…. Weak

Of these four beacons, the PL-300WT model was able to receive only a trace of the “NY” beacon (at very weak strength). The PL-310’s LW performance was judged to be far superior to that of the PL-300WT, and as such is the Ultralight radio class performance leader in LW-DXing capability.

AM Testing

Both sensitivity and selectivity comparisons were made against the top-rated Kchibo D96L model, and the PL-300WT model. Tests were made at 1400 local time on October 10, 2009, in Puyallup, WA (35 miles south of Seattle). The PL-300WT model had been aligned on AM for best sensitivity, but the D96L and PL-310 models were tested as received from the Chinese eBay sellers. Selectivity was tested in the 1 kHz DSP option on both the D96L and PL-310 models.

<table>
<thead>
<tr>
<th>AM SENSITIVITY (best is 5; worst is 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>620-KPOJ 750-KXL 1130-CKWX 1280-KIT 1380-KRKO 1640-KDZR</td>
</tr>
<tr>
<td>PL-310 (A) 2.5 3 3.5 3.5 3</td>
</tr>
<tr>
<td>D96L (A) 3 3.5 3 3.5 3</td>
</tr>
<tr>
<td>PL-300WT (B) 1 2 3 2 2</td>
</tr>
</tbody>
</table>

**Sensitivity Summary:** The PL-310 has sensitivity roughly equivalent to that of the D96L, but the new PL-310 has an advantage over the middle frequencies, while the Kchibo D96L has a slight advantage on the extreme upper and lower band frequencies. The PL-300WT is outclassed by these two top models.

<table>
<thead>
<tr>
<th>AM SELECTIVITY (best is 5; worst is 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>560-KPO 1080-KFFX 1370-KAST 1460-KARR</td>
</tr>
<tr>
<td>PL-310 (A) no KVI slop (5) slight KPTK slop (4) moderate KKMO slop (3) no KSUH slop (5)</td>
</tr>
<tr>
<td>D96L (A) no KVI slop (5) slight KPTK slop (4) moderate KKMO slop (3) no KSUH slop (5)</td>
</tr>
<tr>
<td>PL-300WT slight KVI slop (4) heavy KPTK slop (2) almost all KKMO slop (1) heavy KSUH slop (2)</td>
</tr>
</tbody>
</table>

**Selectivity Summary:** The PL-310’s selectivity is exactly equal to that of the D96L, with both models showing impressive performance on all test signals. The PL-300WT was again outclassed, due to the lack of a 1 kHz DSP selectivity option.
AM QUIRKS: The PL-310 suffers from the same internally-generated AM heterodynes as the PL-300WT (G8) models, notably around 640, 980, 1400-1430 and 1600-1640 kHz. As with all the 4734 DSP chip radio models (PL-300WT, D92L and D96L), the “soft mute” function causes a serious drop-off in signal strength when tuning 1 kHz up or down from a DX station’s frequency, during attempts to escape local QRM. This function also causes “audio pumping” of the AGC action, making it less than effective in smoothing out variations in stations’ signal strength. Unlike the PL-300WT, there is apparently no way to disable the dual tuning rate controlled by the speed of tuning knob rotation. There is currently no English owner’s manual for the PL-310, although one has been promised by the eBay seller “Anon-co” for recent purchasers.

FM Testing The PL-310 was tested in the reception of various FM fringe stations against the top-rated PL-300WT, and also the D96L. Tests were made during average daytime conditions in Puyallup, WA (35 miles south of Seattle). The built-in whip antennas were used, with fully extended lengths. Since all these units use the same 4734 DSP chip on FM, FM selectivity was identical for all three models. However, the variations in FM sensitivity are detailed in the following information.

**FM SENSITIVITY: (best is 5; worst is 0)**

<table>
<thead>
<tr>
<th>Station</th>
<th>PL-310 (A)</th>
<th>D96L (B)</th>
<th>PL-300WT (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWV-15.000</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UnID Spanish</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>WYFR-15.440</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>World Harvest</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Harvest 15.665</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

FM Sensitivity Summary: The new PL-310 and its PL-300WT predecessor have identical FM sensitivity, which is superb in the reception of very distant fringe stations (most of the above stations are over 100 miles distant). The D96L apparently has a less effective whip antenna design, making its FM sensitivity a shade less impressive.

SW Testing The PL-310 was tested against the PL-300WT, and also the top-rated SW Ultralight radio, the Eton E100 (a.k.a. Tecsun PL-200), shown at left. Checks were made in the reception of several broadcast stations on the 19m (15 MHz) international band. Checks were also made on the lower SW bands for spurious AM-band signals, and mixing products (a serious problem in the PL-300WT).

**SW SENSITIVITY: (best is 5; worst is 0)**

<table>
<thead>
<tr>
<th>Station</th>
<th>PL-310 (A-)</th>
<th>E100 (A)</th>
<th>PL-300WT (A-)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWV-15.000</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>UnID Spanish</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>WYFR-15.440</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>World Harvest</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Harvest 15.665</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

* the PL-300WT has a severe problem, in which all these SW stations are mixing with the local KHHO-850 station, an IBOC pest 5 miles distant. Touching the whip antenna makes these nuisance signals disappear.

SW Sensitivity Summary: The new PL-310 has a shade less SW sensitivity than the Eton E100 (PL-200) model, and has equal SW sensitivity with the PL-300WT. The PL-300WT’s severe problem with AM spurs and mixing problems throughout the SW spectrum has been corrected in the PL-310, and the radio is an effective, stable SW receiver.

Tecsun PL-310 Verdict The latest DSP pocket radio from Tecsun is astonishing in its value and versatility, with unsurpassed sensitivity and selectivity on three different bands (AM, FM and LW). Tecsun has combined the outstanding FM performance of the PL-300WT with highly effective DSP filtering options on AM, and has improved the loopstick as well. With the LW design improvements added to the package, Tecsun has created what is very close to being a multiband dream radio—and an unbeatable bargain at $39.99 plus shipping.

In competition with the Kchibo D96L (the winner of the recent 2009 ULR AM-DX Shootout in both sensitivity and selectivity), the PL-310’s overall AM performance is roughly equivalent, and highly impressive. But these radios have different quirks, which may influence a purchaser’s decision. The PL-310 has a more serious issue with internally-generated heterodynes, which have disappointed various PL-300WT (G8) owners. But the D96L has its own problem with digital “chuffing noise” for 5 seconds whenever a control is changed, temporarily degrading AM sensitivity during DXing (and during MP3 recordings). The construction and style of the two competing radios is also quite different, with the PL-310 having a more traditional rectangular cabinet, and the D96L having a rounded-edge tapered style.

When the additional bands are considered, however, the PL-310 is the runaway winner in value over the D96L. It has superior FM and SW performance, and whereas the D96L has no LW coverage, the PL-310 has excellent LW capability. The superb multiband performance of the new Tecsun model certainly sets a high new standard for Ultralight radios, and is certain to attract many more hobbyists to the unique thrills and excitement of pocket radio DXing.

73 and Best Wishes, Gary DeBock
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