

# Zero Beat



Hampden County Radio Association

April 2013

## April meeting features Doug Grant, K1DG Learn about the World Radio Team Championships

A big event is coming to New England in 2014. World Radiosport Team Championship (WRTC) will feature international competition between the best amateur operators in the world. For once living in NE brings us something other than snowy winters, potholes, and high taxes—we will have a front row seat for the best amateur radio event in the world!

Doug is president of WRTC 2014, a non-profit formed to organize, promote and run WRTC2014. Here's a little background on our April speaker:

Doug is an accomplished station builder and operator, and competed in the first five WRTC events where he won one gold and two bronze medals. He has also served as president of a large regional radio club, and is



Dave, AA1YW and Jim, KK1W set up Medfield WRTC test station in 2012

a member of several contest committees. Professionally, Doug is a consultant in the semiconductor and wireless industries.

Besides introducing us to the competition of WRTC, K1DG will enlighten us to the 'behind the scenes'



Tower being raised at Medfield 2012 WRTC test station. 40' Rohn 25 tower supported beam and inverted vees/dipoles

effort it takes to pull off a competition featuring over 60 stations stretched across 100 miles of beautiful New England landscape. Think of it like setting up sixty Field Day stations in six hours and you'll get an idea of the enormity of the task!

You're probably aware that HCRA was involved with a WRTC test station last year. We will be back again this year but with two stations. How would you like to join Matt/W1MSW, Dave/AA1YW, Steve/W3SM, Bruce/KB1TLX, Steve/N1SR, Juergen/AB1SO and others? Think of it as a weekend of 'fun in the sun' and a chance to return in 2014 and rub elbows with the best operators in the world. This is truly an opportunity of a lifetime; if it appeals to you, then climb on board.

Mark your calendars now so you don't miss our April 5th meeting.

'73...

Jim/KK1W

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Dan Vierno/KB1VWQ will be taking orders for HCRA name badges at the next HCRA meeting. Orders must be prepaid: \$13 for pickup at next meeting, \$15 for delivery by mail.

# FROM THE SHACK

## Next Meeting: World Radiosport Team Championships presentation

The “Olympics of Amateur Radio” is coming to New England. Doug/K1DG will be our special guest speaker this Friday. Learn about WRTC2014 (World Radio Team Championship 2014), what it is all about and how YOU can become part of the operation—even if you aren’t a competitor! More info about our meeting is elsewhere in this issue of *Zero Beat*. Don’t miss this interesting meeting, it will be many years before WRTC returns to New England again!

## HCRA Field Day 2013

We’re on the move—literally! Field Day is on the move for 2013. For various reasons we have decided to relocate from our usual QTH at Dufresne Park in Granby. Our new location is School Street Park in Agawam, Mass. We believe this new location offers a welcome change from the ‘same old, same old’ of our former site, some new challenges to overcome and a genuine saving to the HCRA treasury. All in all it appears to be a good move.

We will go into more detail about this and other Field Day plans next month. For now here’s a brief rundown of the logic behind our decision:

1. The Town of Granby changed their policies regarding park usage and required the person (not the group) renting the park to take ‘personal responsibility’ for the group’s conduct. None of our board members felt comfortable signing such a document.
2. We have been looking at alternative locations over the years. Although the Granby Park has many good features the \$750 rental fee is pretty steep.
3. Many members have expressed an opinion that it is ‘time for a change’. They may be right; change is good. There’s nothing like learning to deal with a new set of challenges to get the creative juices flowing.
4. We considered the School Street location five years ago and again in 2012. The biggest obstacle is a lack of tall trees. Using a formula similar to the WRTC station setup we can overcome the lack of trees and at the same time reduce setup labor up to 50%.
5. School Street Park is centrally located, is a new, modern facility and the Town of Agawam has been extremely willing to work with us. Agawam understands the value of amateur radio to the public and welcomes an opportunity to work with HCRA to produce a Field Day that can showcase our value to public safety.

All in all we feel this is a good move for HCRA and Field Day. Hopefully you feel the same and will become re-energized to get out and provide assistance to make this year’s HCRA FD one to remember for years to come!



## Spots from the cluster:

**Foxhunting** – Rich/N1KXR volunteered to be organizing foxhunting this year. Many of you signed up at the last two meetings and have received at least one group email so far. Rich will be in touch soon with the goal to get all of us up and running by the time the weather gets better (it WILL get better, right?). Please see Rich after the April meeting and let him know what you would like to do to help out.

## May meeting to feature Bill/W1GTT

Bill will be demonstrating his Emergency Communications trailer. Stay tuned for more info next month.

## New England QSO Party May 4th and 5th

Will you win the beautiful HCRA Plaque given to the highest Single Op score in Hampden County? You won’t if you don’t get on the air. See an in-depth article by W1MSW elsewhere in this issue and read all about NEQP by clicking the link.

**Meeting Refreshments:** We’re still looking for volunteers! It is apparent our members enjoy having coffee and sweets at the meetings. The rub is nobody seems to feel it should be ‘their job’ to procure them! What’s up with that? Counting family members our club membership is over one hundred people! As I’ve mentioned in the past do you really think all club duties should fall on the nine board members? I don’t believe it should, that’s why I’m tossing out this request once again.

We are looking for one or two folks to pick up coffee & donuts for the meeting. Do you feel you, maybe with a friend, could spend fifteen to thirty minutes of your time that will benefit all the folks attending the meeting? If so please see me at the end of the meeting. I’ll fill you in on how easy it is to put smiles on the faces of forty or so people.

‘73 and see you at the meeting,

Jim/KK1W

## What? Are we crazy?

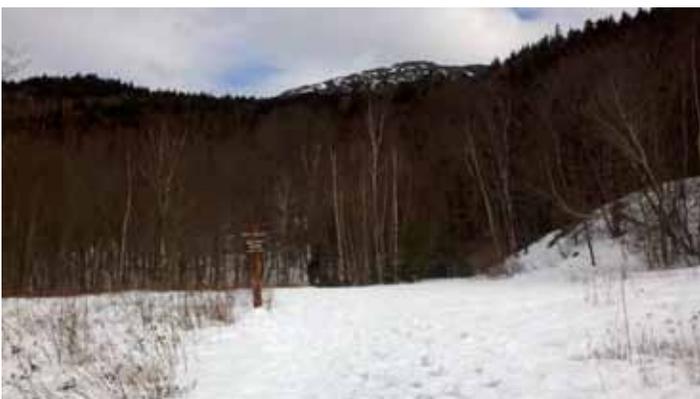
Winter has not stopped out several intrepid local ham portable operators from braving the outdoors and fresh air. Whether it is 19 degrees on the top of Mt. Monadnock, or several inches of snow, or trails covered with ice, it has not stopped Doug/W1DMH, Jeff/NT1K, Frandy/N1FJ, Ed/KB1NWH, Nick/K1MAZ, Chris/KB1RMA, and even Jim/KK1W from venturing out (sorry if I missed anyone crazy enough to hike out in the winter.)



Bare Mountain at night. Yikes! (NT1K)



View from part way up Mt. Monadnock March 14th (N1FJ)



A rare level place on the trail up Mt. Monadnock (N1FJ)

## A CW Man's Argument for Dropping the Code Requirement

Al Woodhull, N1AW



[Note: this is modified from a piece I wrote for Slashdot back in 2005, when the question of whether to drop the Morse code requirement for all license classes was still being debated.]

I agree the time has come to remove Morse code as a barrier to becoming a ham. But I hope some portion of the frequency bands will still be reserved for CW and other modes that use low bandwidth and are effective with low power. Note I am not even saying reserve the frequencies for Morse code alone. Computer assisted digital modes rival or exceed the ability of the human ear and brain to decode narrow-bandwidth signals at low signal-to-noise ratios.

But these are compatible with Morse code. One thing that I haven't seen mentioned in the comments on this question is that it is possible for a beginner with limited funds to build transmitters and receivers from scratch that are useful for CW operation. This is not the case with equipment for FM or single sideband voice operation. Thus, although learning Morse code is a hurdle that is formidable to some, once mastered it opens up many possibilities for technical experimentation.

I've now been a ham for over fifty years. In my youth ham radio was for young geeks what computers have become now. My friends and I built our transmitters from parts scavenged from old radios and televisions, and in the process learned skills that later helped us when we built our own computers.

Some say learning Morse code is easy. For them that may have been true, but not all people learn things in the same way. As a teen-ager it took me two years from the time I decided I wanted to be a ham to the time I could pass a 5 word-per-minute Novice code test. It took me a full year to pass the next hurdle, the 13 word per minute test for a General license. It was almost 15 years more before I could pass the Extra Class 20 word per minute test.

So I am completely sympathetic with those who say learning Morse code is a barrier. For some that is certainly true. I say let them into ham radio, let them see how hard it can be to make yourself heard with a 100 watt transmitter competing on crowded voice bands, and then let them meet some of the operators who regularly succeed with 5 or 10 watt homebuilt rigs using Morse. Some may then decide it's worth the effort.

# Local happenings

(All times are local time)

**Sundays:** 0845: Western Mass Emergency Net 146.94, PL 127.3 - W1TOM/R

**First Monday:** Southwick Regional RACES Drill, 1845, 146.49 Simplex

**Mondays:** 1930: HCRA 10m Net 28.375

**Tuesdays:** 1930-2000: 146.94, PL 127.3 - W1TOM/R - Hampshire County Emergency Net

**Wednesdays:** 1930: MTARA Info net 146.94, PL 127.3 - W1TOM/R - includes NTS Net

2000: MTARA Swap net: 146.94, PL 127.3 - W1TOM/R

2000: MTARA Simplex Net - starts on 146.94 - PL 127.3, then goes to 146.42 direct (simplex) Usually starts immediately following the swap net.

**Thursdays:** 2100: Weather Net (Roger, K1PAI Net Control), 1st Thursday of every month: 147.090 MHz, All other Thursdays: 147.000, PL 127.3 - W1TOM/R

**Fridays:** 1200: BB's (Brown Baggers Luncheon)

Munich House

13 Center Street

Chicopee, MA 01013

Expect between 6 and 12 attendees every Friday. Good food, great company!

## Club meetings & VE sessions

**1st Friday of the month** 7:30 PM, HCRA Club Meeting, Holyoke Hospital Auxiliary Conference Center, 575 Beech St. Holyoke MA 01040 (no meetings held in July or August) <http://www.hcra.org/meeting-location/>

**3rd Friday of the month** 7:30 PM, MTARA Club meeting, Red Cross building 506 Cottage St, Springfield, Mass. (no meetings held in July or August)

**4th Friday of the month** 6:00 PM, Technician, General, and Extra Class License Exams, Holyoke Hospital Auxiliary Conference Center, 575 Beech Street, Holyoke, Mass. Hosted by the Western Mass VE Team (WMVET). Contact: David Cote, w1fab@arrl.net

**Third Monday of the month** 7:00 PM, Franklin County Amateur Radio Club meeting, Greenfield High School (no meetings held in July or August) <http://www.fcarc.org/>

**4th Monday of February, May, August, November** 7:00 PM, FCARC VE Exams, Unitarian Church, Main Street, Northfield <http://www.fcarc.org/>

**Next YCCC Meeting** is Saturday, April 6th, 1:00 pm - 4:30 pm, Sturbridge Host Hotel, Sturbridge, Mass. <http://www.yccc.org/>

## Flea markets coming up

7 April Southington CT SARA @HS \$5@8 \$20/T@6:15 Norm W3IZ 860 584 1403

7 April Framingham MA FARA@KeefeTech \$5@9\$25/T@7:30 SteveKB1NIV 508 872 9336

20 April Portland ME PAWA @AmLegion \$5@8 \$10/T@6:30 John W1JLB 207 776 2288 W

20 April Brookline NH NEARC Antique \$10@7:30 \$4@8:30 Bruce 603 772 7516 F

21 April Cambridge MA FLEA at MIT Nick 617 253 3776 F (Third Sunday April thru October)

28 Ap Manchester CT NEWS V/UHFConf @ Baymount@8 184x63 MarkK1MAP 413 566 8118

3,4 May Deerfield NH NEARFest XIII @FG Mike K1TWF 978 250 1235 T

Visit our website at

<http://www.hcra.org> .

Facebook Groups:

*Hampden County Radio Association and SOTAJerks.*

## HCRA contact list

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Skywarn Liaison, Eric Tuller N1QKO (413) 967-3869  
et-n1qko@juno.com

VE Session Liaison, Dave Cote W1FAB (413) 575-2950  
w1fab@arrl.net

# CONTEST CORNER

Matt Wilhelm, W1MSW

## CQ World-Wide WPX - CW

Dates: May 25-26, 2013

Although not one of the “Big Four”, this contest is a close cousin and a great opportunity to work the world as well as domestic contacts. However, the scoring is a bit more complex in this contest. If you’re using contest logging software, there’s no need to worry as it will handle calculating everything. Multipliers are based on callsign prefixes, so there are lots of multipliers out there! The exchange for this contest is RST plus a progressive contact serial number starting at 001. Although the contest lasts for 48 hours, single operator stations can only operate for a total of 36 hours with off times being a minimum of 60 minutes. Take some time out those weekends to work some new entities and hand out some points or if you have the time, maybe try to earn some wallpaper. For more information on CQWW WPX – CW please go to [www.cqwpw.com](http://www.cqwpw.com).

## New England QSO Party (CW & SSB)

Dates: First weekend in May (May 4-5, 2013)

A club favorite, in this contest New England stations ARE the DX. Most years both HCRA club calls are activated and in recent years, several of us operating a Multi/Single under the WB1Z have made an annual pilgrimage up to one of the more “rare” counties of Vermont. W1NY stays home in Hampden County and is usually run out of Ed-KB1NWH’s shack as a Multi-Single, which he has graciously opened up to other club members to come operate. The object of this contest is to contact as many New England stations (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) in as many New England counties as possible on 80-40-20-15-10m. (New England stations work anyone). The great thing about this contest is that you actually can work the entire contest AND sleep. It starts at 4pm Saturday EDT and pauses at 1am Sunday morning and resumes Sunday morning at 9am and ends at 8pm Sunday evening. The main reason for this is so that participants in the mobile category can operate safely while participating in the entire contest. Certificates are awarded to the top scorers (25 QSO minimum) in each New England county and there are a number of plaques that are awarded to top scorers. Every year HCRA sponsors the plaque for the highest score for single operator in Hampden County and many times it ends up going to a club member. This is a very casual contest and QSO parties tend to be extra friendly. So, take some time the first full weekend in May to score some points and make sure

to call CQ because stations all over the country are going to be looking to work you. Why? Because the top prize for highest single operator score outside of New England is a lobster dinner for two! For more information about NEQP please see <http://www.neqp.org/>

## Trump buys ARRL

Newington, April 1, 2013

In a surprise announcement, the American Radio Relay League (or Ma ARL, as she is sometimes called) said today that it has been purchased by Trump Intentional and will be reopened as a casino this fall. “We regret that [expletive deleted] hams will no longer be able to spend time operating W1AW, but the facility will be much upgraded and will be a LOT more comfortable, with complimentary beverages available. We will also be open 24/7,” said a Trump spokesman.

“Frankly, we are sick and tired of being a non-profit,” says David Wintner, K1ZZZ. “There’s simply no money in it.”



## From Steve, WA1HFF:

Anyone interested in trying digital voice (April *QST*, page 59), let me know via my email on [qrz.com](http://qrz.com) -- the software is free, from [freedv.org](http://freedv.org). You do need 2 sound cards. If you are set up on digital modes now, its pretty easy to get up and running.

# New England SOTA Day a great success

On March 9, the SOTA Jerks sponsored a Summits on the Air day with an emphasis on summit-to-summit (S2S) contacts. The following hams climbed nearby summits:

- **Doug/W1DMH** on Peaked Mtn in Monson, MA (W1/CR-006)
- **Jeff/NT1K** on Quabbin Hill in Ware, MA (W1/CR-013)
- **Frandy/N1FJ** as NE1SJ on Mt. Tom in Holyoke, MA (W1/MB-006)
- **Ed/KB1NWH** on Peaked Mtn. in E. Granby, CT (W1/MR-003)
- **Nick/K1MAZ** on Talcott Mtn in Avon, CT (W1/MR-001)
- **Chris/KB1RMA** on Mount Pawtuckaway North (W1/NL-019)
- **Jim/KK1W** on Bare Mountain, South Hadley, MA (W1/CR-014)

Many QSOs were made on 2 meter FM, but I could not hear anyone on 146.52 (intermod? front end overload? operator error?) but managed to make over 30 contacts on 20 and 40 meter cw and ssb. -N1FJ, Frandy



*Happy New England SOTA Day crew enjoying a few 807s at McLaddens in Hampden after their activations. Shown: KK1W, N1FJ, W1DMH, K1MAZ, KB1NWH. Not shown (and not enjoying any 807s at McLaddens) KB1RMA, NT1K.*



*View of Mt. Tom towers on New England SOTA Day*

# Nominations now being accepted for June elections

The 2014 Election will be held at our June 7th meeting. As in years past many board members have once again raised their hands to help guide HCRA through another year of fun and excitement. For many of them this will be another year of many serving HCRA. Wouldn't it be great if YOU stepped forward and offered a little bit of time every month to ensure our club is the best it can be? Not only would it provide some 'down time' for a present board member – more importantly it is an opportunity to bring new views, different ideas and more exciting activities to our club. Are you ready to give it a try?

Listed below is the slate as it stands right now. There's only one position shown open but we are VERY open to nominations for all positions. As a team we are flexible, supportive and willing to move our present positions around to accommodate a new member. If it turns out we have more than one candidate for a position even better. We can hold a run off election in June, how cool is that?

It says a lot about our present board and their effectiveness that there aren't a lot of 'willing volunteers' for nominations. Unfortunately that's a double edged sword. Although things are going well, if we don't encourage new board members we'll eventually stagnate and then comes the 'upheaval'. HCRA has been through these in the past and we should attempt to avoid it in the future. Enough rambling on, here's the slate as it stands on March 16th.

## HCRA Proposed Slate of Officers/Directors for 2014

Directors:

At large: John/Kx1x

Membership: Rich/N1KXR

Technical: OPEN

Program: Matt/W1MSW

Zero Beat Editor: Frandy/N1FJ

Officers:

Secretary: Dave/N1MFL

Treasurer: Dave/AA1YW

Vice President: Ed/KB1NWH

President: Jim/KK1W

Trust me, if you're interested in making HCRA a better, stronger organization there is a place for you on the board. Contact Jim/KK1W and let's talk.

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***Note: HCRA Board meeting minutes will no longer be published in Zero Beat. They are posted to our website, <http://www.hcra.org/>***

# Show and Tell

## meeting a success

Our meeting on March 1st was the annual HCRA Show & Tell. In the spirit of Show & Tell and trying to build new things, Jeff – NT1K started what we hope will be regular live broadcasts of our meetings for those who cannot attend. Turnout at the meeting was good and there were 9 presentations. Prizes, which included a Raspberry



Pi, Arduino Uno and two raffle tickets were offered for the audience's top three favorites. Juergen – AB1SU (DK1TM) scored the most points with his presentation on his Arduino based software controlled antenna rotator and chose the Raspberry Pi. Jeff – NT1K presented his attenuator for Foxhunting and tied with Dan –KB1VWQ for his



presentation on his tower project. We let Jeff and Dan battle it out for remaining two prizes and once the dust settled, Dan was holding onto the Arduino Uno and Jeff was holding two raffle tickets. Here is a list of the other presenters and projects:



KD1UU - Hendricks QRP Radio Kit

N1AW – Ardukeyer



KK1W – Quadcopter with GPS and remote telemetry

W1MSW – YCCC SO2R interface

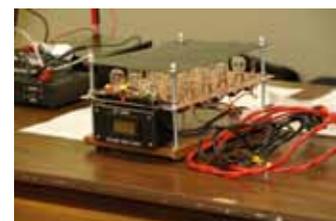


AA1LY – Dummy load for 12v power supply testing and repair



N1EOE – Portable station and antenna

Everyone did a wonderful job presenting their projects and we thank them for taking the time to show their fellow club members what they've been working on. Thank you to everyone who was able to make the meeting, including those who were able to tune



in via the live stream on the HCRA USTREAM channel. Also, a special thank you to Jeff – NT1K for setting up the live stream and manning the camera throughout the

evening. The meeting did run a little late and for those who suggested putting a time limit on presentations, we have heard your requests and you can expect to see that next year. And please don't forget, it's never too early to start working on your project for next year!



If you were unable to attend the meeting, you can always see what you missed here: <http://www.ustream.tv/recorded/29659726>

- **New Field Day location! See page 2, From the Shack**
- **ISS app review. See page 8**
- **Local Happenings & Flea Markets, page 4**
- **Are we crazy? See page 3**
- **Meetings are much more than the program.**
- **Dayton Hamvention is May 17-19 this year**

# Review of Android app "ISS Detector"

-Bob Lafleur NQ1C nq1c@arrl.net



ISS Detector is an app for Android phones and tablets which allows you to track the ISS, other satellites, and other objects in space. I have used ISS Detector on my phone running Android 2.3.6 and also on my Nexus 7 and Nexus 10 both running Android 4.2.2. The

application performs well on all devices. The developer is actively enhancing the app and there are frequent updates, often with new features. ISS Detector is free, however there are extension or add-ins that are sold for a small charge. ISS Detector is only available for Android, there is no version for Apple products.

The general of ISS Detector is to be able to locate the ISS



(International Space Station) for sightings with the naked eye. The application will give you a list of sighting times based on your location when the ISS would be visible, along with information on where to look such as azimuth, elevation, and time. ISS Detector also assigns a color (yellow or green) based on factors such as brightness and whether to give an idea of how likely the sighting would be.

The compass display and bubble guide on the right will aid you in finding the ISS if you don't know what direction to look or need help to figure out the exact elevation. The start and end times are accurate and I have used them multiple times to successfully view the ISS. Friends have been amazed at how easy it is to see the ISS when you know when and where to look.

The real beauty in this application for hams is the extensions available, and in particular the extension to show amateur radio satellites. The amateur radio satellites extension will add pass information for the ISS for any time of the day or night, not just when it is visible. You can also add tracking for many other satellites that you could either possibly hear or work. The list of satellites available for tracking is not necessarily ones that are operational at the time of the tracking, but ones that could possibly be operational. You would need to use other sources to find out what mode a satellite is in, and if it is in operational status.

ISS Detector has a plethora of settings which you can use to control what the application will detect, and how to handle the detections. You can receive a notification before a detection, and even set a silent period so that you are not disturbed, say during the night, or during work hours.

I think one of the things that makes ISS Detector is great is the amount of customization you can use to make the app do exactly what you want.

There is even a section of experimental settings that allow you to further filter the alerts that you will get. For example, if you only wanted to be alerted when a satellite will be above a certain elevation, you can select that. Since this section is titled "experimental settings", you might find that they don't function always as expected. I have not experienced any problems, but you never know.

By tapping on one of the ham satellites which you have selected to track from the amateur satellites extension, you also get some frequency information. Once again, this frequency information is minimal and may not tell the whole story. For example, for ISS, it says 145.80 FM, even though that operational mode seems to be currently turned off most of the time (I have heard one ISS to ground QSO on this frequency). 145.825 FM packet is probably a more accurate frequency to listen to at this time, however the app does not reflect that information.

The app works equally well in landscape view on my

Nexus 10. Different device screen sizes may give different results but so far on the 3 devices I have it works great. Speaking of multiple devices, even though I have the app installed on 3 devices, I only had to purchase the extensions one time. As long as all devices use the same google login, the extensions will be active for any device on your account.

If you click on the symbol to in the lower right, you will get a map that initially shows the coverage area for the sighting you are viewing, and then it will transition to a tracking coverage of that satellite's current position. The map will update as the satellite's location change and you will be able to see the coverage that the satellite has. I am not sure, but I believe this is the area that this satellite would be visible, and not necessarily the radio coverage area.

All in all, I think ISS Detector is a pretty nice app. For free you get some functionality that you can use to impress your friends by showing them the ISS. For a few bucks, you get a nice ham satellite tracking app. Give it a try and maybe it will earn a place on your home screen like it has on mine.



## Meeting Location

*Our meetings are being held at the Auxiliary Conference Center at the Holyoke Medical Center. Many of you have been here before, it's where the Western Mass VE Team has given examinations for close to a decade. We have all the details of the hall and how to get there on our website. <http://www.hcra.org/meeting-location/>*

*Our new location is newly renovated with state of the art heating and cooling, comfortable chairs, a complete A/V setup including screen, projector, sound system and wi-fi. Handicap access, convenient rest room, vending machines and 24/7 security round out the list. Join us!*

