

**ND State Electrical Board**  
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**Find us at**  
**www.ndseb.com**

## A Message From the Executive Director:



**Hello** everyone, and welcome to a new year!

Our NDSEB CEU classes received excellent reviews from the attendees last year.

We still continue to collect ideas for class subject matters. If there is any specific topic you would like covered, contact Scott Halle in our office with your thoughts.

Our 2015 CEU class schedule will once again have classes at 16 locations across the state, starting May and ending in December. This has been the schedule in 2013 & 2014 and we will continue it going forward. We get calls wondering when the January class will be - so please note that we won't have classes until May, at least for now, so watch our website and our upcoming Newsletters.

Remember the CEU credits are good for two renewal periods as they always have been. Attendance is usually poor in the first classes of every year and picks up as the year goes on, so sign up early and get some nearly "one-on-one" attention at class from our Instructor!

Due to questions being raised, the intent of ND Wiring Standards section 24-02-01-03, paragraph 6 referring to MC cable was discussed at the November, 2014 NDSEB meeting. The Board's intent/purpose for the wording of this rule is to allow MC cable and not the use of AC cable for installations in North Dakota. If you need further clarifications/information, give us a call and air your concerns.

At its September, 2014 meeting, the NDSEB approved a reciprocity agreement with the State of Wyoming for Journeyman electricians. This took effect September 17, 2014.

We take our mission of ensuring public safety seriously and appreciate all of the input we receive from electricians and the general public. We've been finding unsupervised or out-of-ratio individuals on jobs sites. We keep a list of the contracting Master/Class B electricians that have been getting this deficiency. They get a phone call from the Inspector and myself. Repeated violations of this nature will earn them a visit before the Board. Please supervise the people working under you!

As always, please keep us informed about your most current address as well as e-mail address. Communication with our office is important and if we get things returned as "undeliverable" it doesn't help us stay in contact with you!

Be safe out there,  
James Schmidt



Ensuring Public Safety Since 1917

# Connections

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January 2015

## License Renewal Change for Master & Class B

**License** renewal is coming up for all electricians. Important dates to remember are:

- **Apprentice Registration** renewals have already started and are due January 31, 2015.

If you do not continue to be registered, any electrical work that you do will not count towards experience credit when it comes time to apply for a Journeyman license.

- **Journeyman License** renewals will be starting shortly. Reminder postcards will be mailed in the early part of February. That renewal deadline is March 31, 2015.

- **Master & Class B License** renewal reminders will be mailed in the early part of March and are due April 30, 2015.

The NDSEB has implemented a few changes for those renewing as a Master or Class B electrician. When a

"contracting" Master or Class B renews, he/she will have to acknowledge statements that the individual(s)/employee(s) working under their supervision are current and have renewed for the next licensing period (registration/license expires in 2016). All of the following statements are required and must be acknowledged and accepted, whether or not you have employees:

1. "Under penalty of perjury, I have verified that any individual working under my supervision doing electrical work in North Dakota maintains a current registration or license and has renewed for the next renewal period. I also attest that any future individuals hired and working under my supervision will also maintain a current registration or license."
2. "I understand that under N.D. Laws, Rules & Wiring Standards 24-02-01-02(2): electrical contractors shall maintain records of all employees who are or will be performing electrical work for that electrical contractor and shall

permit the electrical board to examine and copy all such records as required by this section (example: payroll, Job Service, Workers Compensation, etc. records)."

3. "I understand that if I fail or refuse to comply or demonstrate compliance at the request of the Board or its representative shall subject my license to non-renewal, suspension, or revocation by the Board."

The NDSEB will be randomly auditing employer records to verify that all individuals are in fact currently registered or licensed. "NDSEB has experienced apprentices losing work experience for not maintaining an active registration, and we are finding licensees working without an active license, which is illegal," says Paula Glass, Office Manager. Before a contracting Master or Class B submits their renewal, please make sure and verify that all of your employees or individuals working under your supervision are "current" and have a 2016 expiration date. You can do this by having them show you their renewal ID card or through our website (Search "Lookup Licensed/Registered Electrician").

## Inside This Issue . . .

- License Renewal Change for Master & Class B / Website Improving
- Notes from the Director of Inspections
- Increased Activity Requires Two New Inspectors
- News & Notes from NDSEB
- Making a Connection: District 2 Inspector Richard Krause
- A Message from the Executive Director

## Website Improving

Our website ([www.ndseb.com](http://www.ndseb.com)) will also be undergoing a change shortly. It will involve a new "fresher" look as well as functionality. Please pay particular attention to the "Important Bulletin" on the home page as this will contain up-to-date notifications and answers to a lot of your questions.

## Notes from the Director of Inspections

### Storage Space Light Fixtures

At the last Inspectors' Meeting, finding broken bulbs in open light fixtures in under-stairway storage was discussed. Besides the issue of how the bare bulbs in keyless or pull chain fixtures got broken, discussion revolved around the potential fire issue with the lower ceilings and light bulbs seen in some under stairway storage areas. Some of these ceilings get as low as three feet and can be around a



corner and out of sight. With cardboard boxes still being a common storage container, closeness of a cardboard box to an unshielded or unprotected light bulb is a real issue. NEC Articles 420.11, 410.12

& 410.97 all address this problem. Inspectors are asking electricians to consider the type of light fixtures and the possible proximity of the light fixture to combustible materials when installing them in storage areas.

### Crow's Foot Receptacles

I'm sure many of you know by now, it was decided that the old 3 wire, 50 amp, 125/250 volt "crow's foot" receptacle is on its way out. Originally it was used for electric ranges before equipment grounding conductors were included in NM (Romex) cables.

At that time and even after equipment grounding conductors were included in NM, the frame of the range was bonded to grounded conductor (neutral) of the circuit inside the range. For some time now (twenty years?) it's been required by code to use a 4 wire, 50 amp, 125/250 volt grounding electric receptacle for ranges, eliminating the bonding of the frame to the equipment grounding conductor.

The manufacturer's literature for the old 3 wire, 50 amp, 125/250 volt receptacles and cord ends describe them as non-grounding receptacles and cord ends. So when you need to install a new receptacle for a welder or a grain bin motor take a 3 wire, 250 volt grounding receptacle and 3 wire, 250 volt grounding cord end along. If the customer has an existing 3 wire non-grounding end on his cord, you'll be helping the situation by having the cord end along.



Lyle Wergeland, Director of Inspectors at the NDSEB

Our inspectors are not expecting to see the old 3 wire, 125/250 volt, non-grounding receptacles installed after this Newsletter. ☺

## News & Notes from NDSEB

- September 1st was the date of implementation for the **2014 NEC and the 2014 ND Wiring Standards**. We still have code books for sale until they run out - contact the NDSEB at 701-328-9522.

If you are looking for a copy of the 2014 Analysis of Changes to the NEC, contact Lyle Wergeland at 701-328-9522. This is a great resource for deciphering the additions and deletions to the Code. And, of course, if you don't have the 2014 ND Wiring Standards, it is available on our website at [www.ndseb.com](http://www.ndseb.com) under the "Laws & Rules" tab.

- The software developers are making good progress on the **replacement Report System**,

which is NDSEB's main database of tracking wiring certificates and licensee information. This system will also tie into the e-Cert system and other online functions. It is currently in a programming/testing stage with implementation estimated for May/June of 2015.

The updated version will make the system more user friendly and give you access to more information. The system will require contractors to use the e-Cert system only so we will be eliminating paper wiring certificates in the near future. If you are using paper wiring certificates, you may want to get signed up for the e-Cert system sooner rather than later. It is a great tool to manage your wiring certificates electronically without the hassle of misplacing a paper copy. In the

past two editions of Connections we talked about the advantages to using the e-Cert system or if you have more questions, give us a call.

- Please remember, when **replacing receptacles in an existing installation**, that you must follow the requirements of NEC 406.4(D) (1) through (D)(6) as applicable, and that AFCI and GFCI type receptacles must be installed in a readily accessible location.

As of January 1, 2014 any receptacle replaced in a location that requires AFCI protection shall be one of the following per NEC 406.4(D)(4).

1. A listed outlet branch-circuit type AFCI receptacle.
2. A receptacle protected by an outlet branch-circuit type AFCI receptacle.
3. A receptacle protected by a listed combination type AFCI circuit breaker.

Please keep this requirement and all the other requirements of 406.4 (D) in mind when doing service calls or remodels at existing locations. ☺

## Making A Connection:

### District 2 Inspector Richard Krause



#### Originally

from Southeastern North Dakota, Rich Krause graduated from Verona High School and has

been an inspector with the NDSEB for seven years. He currently serves as the District 2 inspector, which covers the counties of McLean, Sheridan, Burleigh, Kidder, Emmons, Logan, and McIntosh.

Rich has been married to his wife Brandi for 13 years. They have two children - Hanna (12) and Grayson (7).

**What is your favorite part of your job?** *Being out and about working in my district and not stuck in an office all day.*

**Did you or do you have a mentor or a person that inspired you?** *I took 2 years of Electronics at a Vocational center in Oakes, ND, during high*

*school and my instructor Norman Stahlaker is the one who really got me interested in electricity and how it worked.*

**What are your hobbies?** *I like to fish with my kids, go deer hunting with my brother, and golfing.*

**If you could meet anyone in the world, who would it be and why?** *Louie Zamperini.*

**If you couldn't do your current job, what would you want to do instead?** *Philanthropist.*

**What would be your dream vacation?** *Anyplace warm in the winter.*

**The best thing about North Dakota is . . . ?** *Summer.*

**What's your favorite TV show?** *Bison Football*

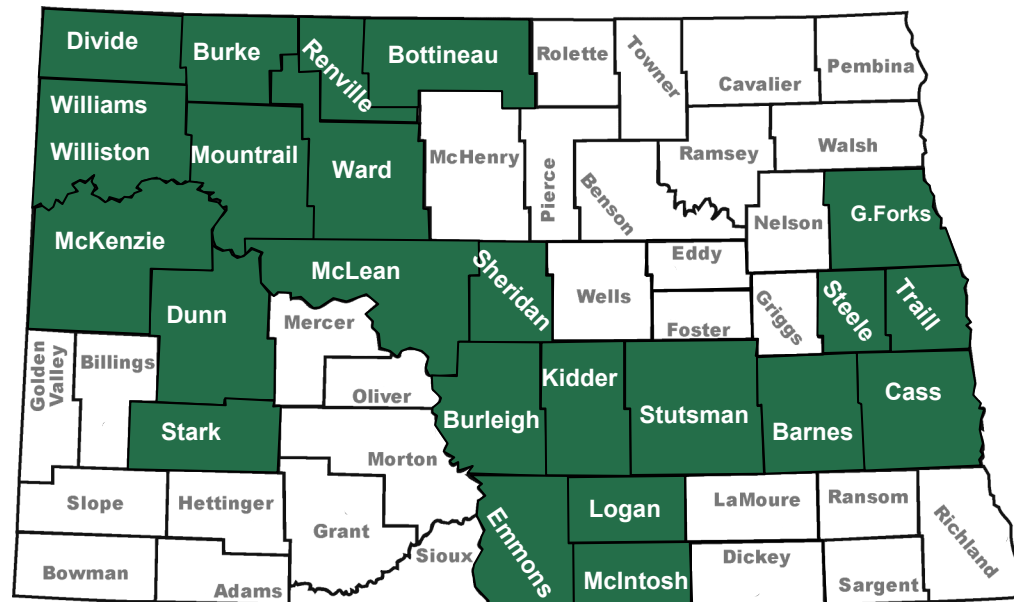


## Increased Activity Requires Two New Inspectors

**The** North Dakota State Electrical Board has hired two more inspectors to help handle the increased activity in the state. This brings the total number of state inspectors to 16, the highest number of inspectors in NDSEB history.

Tom Crawford and Mark Moderow, both of Fargo, ND, started in January of 2015 and are considered "roaming" inspectors. The other 14 state inspectors are assigned to particular districts.

"An ideal inspection district has between 750 - 1,000 active wiring certificates at any given time," explained NDSEB Executive Director James Schmidt. "But there are a few districts that have between 1,500 and 2,000 active wiring certificates. Tom and Mark will be assisting the inspectors in those districts."



The districts with the higher number of active wiring certificates are shown in green on the map above. The City of Williston is considered a district itself (District 12), as is Williams County.

## Who was

### Louie Zamperini?



Louie Zamperini was an Olympic athlete, participating in the Berlin Olympics in 1936, and a WWII bombardier. He survived 47 days

on a life raft at sea when his aircraft crashed into the Pacific Ocean. He was rescued by the Japanese, but endured two years of brutal torture at their hands as a POW. After the war, he became a Christian evangelist, forgave his captors, and went back to meet many of them.

His life story was the focus of Laura Hillenbrand's book "Unbroken" and a new film of the same name, directed by Angelina Jolie.