



# Short CIRCUITS

November  
2019

SERVING CENTRAL ILLINOIS AMATEUR RADIO SINCE 1921

IN THIS ISSUE

## From The President

by Rick Suhadolc NgCKL

I would like to thank all the members that helped Ed Deutsch KC9GF safely reinstall his tower November 4th at his QTH near Lakeside Country Club. Ed now has a 7 element tri-bander back installed on a Rohn 45 Tower.

Dennis Mills KE9UA has posted on the CIRC Wire email a Fatal Tower climb in South America where two climbers (one died) while attempting to remove two sections of tower with a Gin Pole. The Workers had the two sections of radio tower supported on the Gin Pole when the Gin Pole failed. I could go into the many mistakes that caused this event, but instead need to remind everyone that Amateur Radio can be a Dangerous Hobby.

When we set up our equipment at Home or on others property the local Building Codes require us to obey the codes from the authorities having jurisdiction. The entire State of Illinois (including unincorporated areas) has adopted the NFPA NEC 70 and 70E codes. Under this NFPA Code System NFPA 70E Is the Standard for Electrical Safety in the Workplace. The Committee that formed the NFPA 70E Electrical Safety Code was started on January 7, 1976 and was formed to

assist OSHA in preparing an Electrical Safety Standard that would serve OSHA's needs.

Under NFPA 70 E Informative Index J, A Job Briefing and Planning Checklist to be completed before starting any work:

- 1) "Identify" all Hazards. Including Hazards by others equipment.
- 2) "Ask" Equipment to be shutoff, and made safe.
- 3) "Check" all Safety Procedures
- 4) "Know" Who is in charge.
- 5) "Think" What can go wrong.
- 6) "Prepare"

For the worst case. CPR/AED trained? Who is in charge of dialing 911?

Where is the Fire Extinguisher? Are radio communications available? Plan "B" what to do if Plan "A" cannot be accomplished?

Please remember that the owners of towers and tanks that we ask permission to climb and install equipment expect us to be aware of all the hazards and act professionally when on their property. We should have a Safety Plan before starting any work.

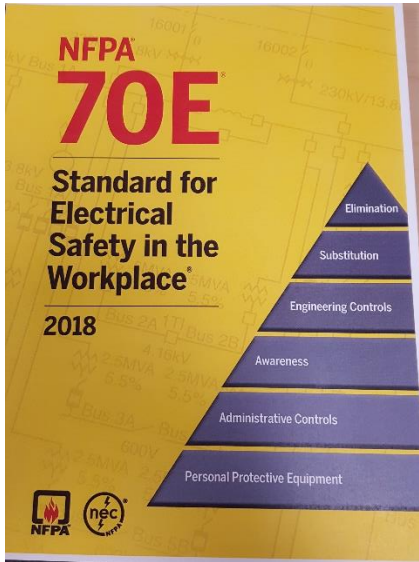
Rick  
NgCKL

### Electrical Safety

Article by Rick Suhadolc NgCKL

# Electrical Safety

Article by Rick Suhadolc N9CKL



**Informative Annex J Energized Electrical Work Permit**

*This informative annex is not a part of the requirements of this NFPA document but is included for informational purposes only.*

**J.1 Energized Electrical Work Permit Sample.** Figure J.1 illustrates considerations for an energized electrical work permit.

**J.2 Energized Electrical Work Permit.** Figure J.2 illustrates considerations when determining the need for an energized electrical work permit.

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**ENERGIZED ELECTRICAL WORK PERMIT**

**PART I: TO BE COMPLETED BY THE REQUESTER:**

(1) Description of circuit/equipment/job location: \_\_\_\_\_ Job/Work Order Number \_\_\_\_\_

(2) Description of work to be done: \_\_\_\_\_

(3) Justification of why the circuit/equipment cannot be de-energized or the work deferred until the next scheduled outage: \_\_\_\_\_

Requester Title \_\_\_\_\_ Date \_\_\_\_\_

**PART II: TO BE COMPLETED BY THE ELECTRICALLY QUALIFIED PERSONS DOING THE WORK:**

(1) Detailed description of the job procedures to be used in performing the above detailed work: \_\_\_\_\_ Check when complete

(2) Description of the safe work practices to be employed: \_\_\_\_\_

(3) Results of the shock risk assessment: \_\_\_\_\_

(a) Voltage to which personnel will be exposed

(b) Limited approach boundary

(c) Restricted approach boundary

(d) Necessary shock, personal, and other protective equipment to safely perform assigned task

(4) Results of the arc flash risk assessment: \_\_\_\_\_

(a) Available incident energy at the working distance or arc flash PPE category

(b) Necessary arc flash personal and other protective equipment to safely perform the assigned task

(c) Arc flash boundary

(5) Means employed to restrict the access of unqualified persons from the work area: \_\_\_\_\_

(6) Evidence of completion of a job briefing, including discussion of any job-related hazards: \_\_\_\_\_

(7) Do you agree the above-described work can be done safely?  Yes  No (If no, return to requester.)

Electrically Qualified Person(s) \_\_\_\_\_ Date \_\_\_\_\_

Electrically Qualified Person(s) \_\_\_\_\_ Date \_\_\_\_\_

**PART III: APPROVAL(S) TO PERFORM THE WORK WHILE ELECTRICALLY ENERGIZED:**

Manufacturing Manager \_\_\_\_\_ Maintenance/Engineering Manager \_\_\_\_\_

Safety Manager \_\_\_\_\_ Electrically Knowledgeable Person \_\_\_\_\_

General Manager \_\_\_\_\_ Date \_\_\_\_\_

*Note: Once the work is complete, forward this form to the site Safety Department for review and retention.*

2017 National Fire Protection Association NFPA 70E

**INFORMATIVE ANNEX I**

**Informative Annex I Job Briefing and Planning Checklist**

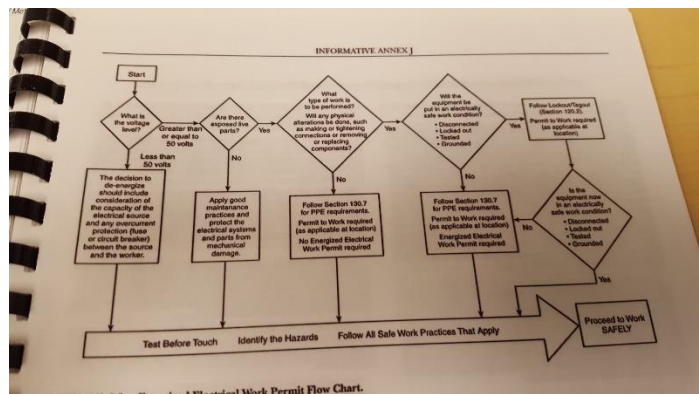
*This informative annex is not a part of the requirements of this NFPA document but is included for informational purposes only.*

**I.1 Job Briefing and Planning Checklist.** Figure I.1 illustrates considerations for a job briefing and planning.

<p><b>Identify</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hazards</li> <li><input type="checkbox"/> Voltage levels involved</li> <li><input type="checkbox"/> Skills required</li> <li><input type="checkbox"/> Any "foreign" (secondary source) voltage source</li> <li><input type="checkbox"/> Any unusual work conditions</li> <li><input type="checkbox"/> Number of people needed to do the job</li> </ul> <p><b>Ask</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Can the equipment be de-energized?</li> <li><input type="checkbox"/> Are backfeeds of the circuits to be worked on possible?</li> <li><input type="checkbox"/> Is an energized electrical work permit required?</li> </ul> <p><b>Check</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Job plans</li> <li><input type="checkbox"/> Single-line diagrams and vendor prints</li> <li><input type="checkbox"/> Status board</li> <li><input type="checkbox"/> Information on plant and vendor resources is up to date</li> </ul> <p><b>Know</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> What the job is</li> <li><input type="checkbox"/> Who else needs to know — Communicate!</li> </ul> <p><b>Think</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> About the unexpected event... What if?</li> <li><input type="checkbox"/> Lock — Tag — Test — Try</li> <li><input type="checkbox"/> Test for voltage — FIRST</li> <li><input type="checkbox"/> Use the right tools and equipment, including PPE</li> </ul> <p><b>Prepare for an emergency</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Is the standby person CPR/AED trained?</li> <li><input type="checkbox"/> Is the required emergency equipment available? Where is it?</li> <li><input type="checkbox"/> Where is the nearest telephone?</li> <li><input type="checkbox"/> Where is the fire alarm?</li> <li><input type="checkbox"/> Is confined space rescue available?</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Shock protection boundaries</li> <li><input type="checkbox"/> Available incident energy</li> <li><input type="checkbox"/> Potential for arc flash (Conduct an arc flash risk assessment.)</li> <li><input type="checkbox"/> Arc flash boundary</li> <li><input type="checkbox"/> Any evidence of impending failure?</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> Is a standby person required?</li> <li><input type="checkbox"/> Is the equipment properly installed and maintained?</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> Safety procedures</li> <li><input type="checkbox"/> Vendor information</li> <li><input type="checkbox"/> Individuals are familiar with the facility</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> Who is in charge</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> Install and remove temporary protective grounding equipment</li> <li><input type="checkbox"/> Install barriers and barricades</li> <li><input type="checkbox"/> What else...?</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> What is the exact work location?</li> <li><input type="checkbox"/> How is the equipment shut off in an emergency?</li> <li><input type="checkbox"/> Are the emergency telephone numbers known?</li> <li><input type="checkbox"/> Where is the fire extinguisher?</li> <li><input type="checkbox"/> Are radio communications available?</li> <li><input type="checkbox"/> Is an AED available?</li> </ul>
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**FIGURE I.1 Sample Job Briefing and Planning Checklist.**

Shaded text = Revisions. Δ = Text deletions and figure/table revisions. \* = Section deletions. N = New material



# Swapmeet

Newsletter and Web Manager

1. Items submitted to me need to have a title, description, cost and how they can contact the seller. While I can put it out there, I cannot be the broker.
2. I will try and keep the web site and newsletter in sync but since the newsletter only comes out once a month it might have items in it that are sold. If you sell something let me know and I will remove it.
3. I do not want to say what can and cannot be listed but please make it worth the while, meaning some substantial items, not a box of coax for \$1.
4. Items will stay listed for 3 month and then be removed regardless if I get a notice or not. If you want to list it again, send me a new email.

So with that said and I certainly open to items and other things I have not thought up I will put the first item up for sale.

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1961 Hammarlund HQ-145X - \$150 O.B.O. This is a broadcast to 30mhz receiver with a bandspread dial just for the ham bands. All bands work from my testing and it is cosmetically in pretty good shape. Bought it at Dayton this year and realized I just don't have room for it. Call or email Jeff at 309-310-1702 or [kc9qqm@gmail.com](mailto:kc9qqm@gmail.com)

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## AREA NETS

Tuesday 8:30 P.M. 28.450  
CIRC Open 10 meter Net

Tuesday 9:00 P.M. 146.940 (103.5PL)  
CIRC Open Net

Thursday 8:00 P.M. 28.450  
Vertical polarization is encouraged but not required

Sunday 08:15 A.M. 1.915  
Open 160 meter AM net

.....  
If you are wondering where all the nets are, it was brought to my attention that many of these are no longer in operation. I have left the ones the CIRC handles directly.

If you want another net listed, please send me an email directly and please verify it is a current net and I will add it to the list.

Jeff KC9QQM

[Kc9qqm@gmail.com](mailto:Kc9qqm@gmail.com)

## AREA EXAM DATES

Following is the schedule for W5YI-VEC Amateur Radio exams for the year 2018. At the Community Room of the Bloomington Public Library located at the intersection of E. Olive St. and S. East ST. Entrance off of S. East St.

Please bring two forms of identification. You must have an FCC issued FCC Registration Number (FRN) or Social Security Number. We cannot administer a test without your FRN or SSN. You will need a copy of your Current license plus any CSCE you want to apply.

2020 dates;

TBD

Exams' in Morton are held at the Morton Public Library, 315 West Pershing at 12:00 Noon the third Saturday of even numbered months and. Sep 21 (Superfest),

CIRC Meeting  
Fourth Wednesdays of the month at 7:00 p.m. at the  
American Red Cross  
1 Westport Dr.  
Bloomington, IL 61704

## Regular Calendar of Events

Daily Coffee Klatch Monday thru Friday  
9:00 a.m. at Dairy Queen Veterans at Cub's  
XYL's Join the OM's Monday and Friday

Weekly 10 Meter Net  
Every Tuesday evening at 28.450 MHz- at 8:30 p.m.

Weekly 2 Meter Net  
Every Tuesday evening on the 146.940-repeater at 9:00 p.m.

Weekly 6 Meter Net  
Every Thursday evening at 50.135 MHz at 7:00 P.M.

Weekly 160 Meter AM Net  
Every Sunday morning at 1.915 MHz at 8:15 A.M.

CENTRAL ILLINOIS RADIO CLUB  
P.O. BOX 993 BLOOMINGTON, IL 61702-0993

WEB PAGE

[HTTP://WWW.QSL.NET/W9AML/](http://WWW.QSL.NET/W9AML/)

*President: Rick Suhadolc  
(N9CKL)*

*Vice-President: John Payne (AC9TN)  
Secretary: Keith Hanson  
(AC9S)*

*Treasurer: Greg Kellermen  
(KC9WVR)*

*Member at large: Grant Zehr  
(AA9LC)*

*Newsletter Editor: Jeff Lovell (KC9QQM)*

*The CIRC is a not-for-profit ARRL special service club whose purpose is to advance the service of Amateur Radio. Located in Central Illinois, the CIRC and its members welcome all to use the 146.94 repeater and to attend club meetings.*

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# Short CIRCuits

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