Line Replacement
Team Event

Mean Time = 20 minutes ~ Dead Time = 25 minutes

Event Description:
This event is designed to demonstrate the skill of replacing a line with limited personnel.

The poles will be 40-foot, single phase poles. There will be two dead end poles, set 100' apart, and a straight-line pole(A-1) in the middle. The objective is to completely change out the #2 ACSR phase wire without the use of sleeves within the spans. The phase must be in proper sag at the end of the event. The new wire will be lying on the ground along the span to be replaced. The deadend shoes will be the Hubbell GDW 2010A as shown on page 3. The A-1 insulator will be the Hendrix HPI 25J02 as shown on page 4. The tie used on the A-1 will be the Hubbell STT40, Super Top Tie as shown on page 4.

The event will have limited equipment (2 hand lines; 1 grip; 1 strap hoist). **This equipment must be supplied by the competitors.**

Basic Rules:

1. The team will have a maximum 5-minute set-up time and questions.
2. The wire cannot be touched during the set-up time.
3. Poles must be sounded with a hammer prior to climbing- this can be done during set up time.
4. Time starts upon judge's signal.
5. The event is simulated de-energized so the use of leather gloves will be allowed.
6. The climbers may put on climbing tools during the set-up time, but gaff guards must be used outside of the pole circles.
7. A lineman may not be on another pole when tension is released on phase wire being removed.
8. All wire must be sent up and down on a hand-line – cannot be carried up or dropped.
9. A maximum of 3 inches of wire can be left out of the back of the dead-end shoe from where the solid aluminum stops in the bottom of the yoke.

10. **The tail must be fed through the yoke of the deadend shoe and out the back side, opposite the side that the wedge is on.**
11. **The proper final sag will be a judgment call.**
12. **The old wire must be rolled up and taped into a good roll and laying at one of the dead-end poles.**
13. **A hoist must be used to sag in the new wire.**
14. **The old wire cannot be cut down under strain.**

Possible Deductions (2 pts. unless otherwise noted):

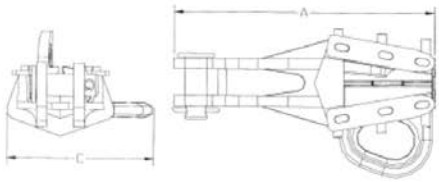
1. **Infractions of any rules listed in the General Rules.**
2. **Failure to sound pole before climbing.**
3. **Climbing with the wire.**
4. **Lineman on another pole when tension released on phase wire (as specified by #13 above).**
5. **Improperly installed tie on A-1.**
6. **Sloppy construction (sag, too much wire sticking out of the dead –end shoe, etc. – judgment call)**
7. **Failure to follow basic rules listed above.**
8. **Cutting down wire under strain. (10pts)**

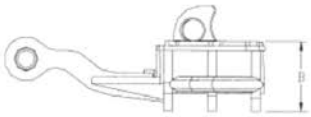
Event related questions should be directed to cgreene@kaec.org

DA 6

ALUMINUM
GDW2000

DEADENDS
AUTOMATIC OVERHEAD
SIDE-OPENING WEDGE
ALUMINUM GDW2000 SERIES





- Redesigned GDW2000 Series
- Fastest method of deadending ACSR, AAAC and AAC conductor
- Accepts wide range of conductor sizes. High Strength Aluminum alloy body and jaws
- Requires no wrenches or special tools
- Can be repositioned on conductor during installation
- Plated jaws available to accommodate copper conductors

Note: For plated jaws remove "A" suffix.
Example GDW556
All bolted deadends are rated 40% of RBS - Partial tension per ANSI C119.4"
For conductor sizes not shown in catalog, consult factory

Material: **Body and Jaws** – High Strength Aluminum Alloy
Clevis Pin – Galvanized Steel
Cotter Pin – Stainless Steel

Product Data & Conductor Size

CATALOG NUMBER	CONDUCTOR RANGE		DECIMAL RANGE INCHES (MM)		ULTIMATE STRENGTH LBS. (kN)		DIMENSIONS INCHES (MM)			APPROX. WEIGHT EA. LBS (KG)
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	BODY	SAG EYE	A	B	C	
GDW2010A** *GDW2010**	#4 str AAC #4 AAAC #4 ACSR #4 str CU	2/0 str AAC 2/0 AAAC 2/0 ACSR 2/0 str CU	.23 (5.8)	.45 (11.4)	6,000 (26.69)	4,000 (17.79)	7.5 (190.5)	2.0 (50.8)	4.5 (114.3)	1.5 (.07)
GDW2040A** *GDW2040**	#4 str AAC #4 AAAC #4 ACSR #4 str CU	4/0 str AAC 4/0 AAAC 4/0 ACSR 3/0 str CU	.23 (5.8)	.57 (14.5)	8,000 (35.59)	6,000 (26.69)	8.0 (203.2)	2.0 (50.8)	4.9 (124.5)	2.0 (0.9)

* *Plated aluminum jaws provided to accommodate copper conductors.*
** *RUS Listed*

Hendrix HPI 25J02

STT40