

## *Heaviest Building Moved on Rubber Tires:*

*OPEN CATEGORY*

### **FDSM, Inc.**

**Ft. Myers, Florida, USA**

### **Malt Project**

**T**he project began at the end of 2006 but was not completed until January 2007. It is the second of three four-plex structures relocated. This structure is the heaviest of the three weighing 750 tons. To accommodate a new development the three structures were relocated across the street from the existing site.

The building had a footprint of 4800 square feet. It was very heavy for its overall size. The first floor was a monolithic slab. The second floor and ceiling consisted of eight-inch prefab slabs. Shoring the structure was a challenge due to the concentrated weight in such a small area

Cost for relocating the three structures was \$500,000



#### AWARDS COMMITTEE

**James Herman, Chairman, South Dakota**

**John Matyiko, Jr., Virginia • Keith Settle, Oregon**

**Don Toothman, Tennessee • David Vant Hul, Iowa**

## *Heaviest Building Moved NOT on Rubber Tires:*

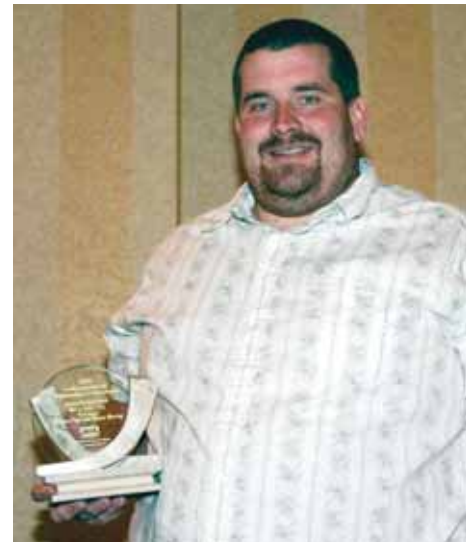
*OPEN CATEGORY*

# Jeremy Patterson House Moving

Washington, Iowa, USA

## Historic Clark House, Iowa City, Iowa

The project took place over 10 days in the winter of 2007.



Jeremy Patterson

This structure is an Iowa landmark. It had one-inch air gaps between the second and third layer of bricks. First, due to the conditions of a failing foundation, all 23 cribs were hand dug to the desired depth. Ring holes were sawed in the limestone portion of the foundation. A diamond tooth chainsaw was used to plunge cut through the remaining 17-inches.

Four 211 lb/ft main beams and 12 x 12 and 14 x 14 lb/ft cross beams were used. 64 JSJS 15-ton crib jacks and a 24-jack unified system were used to lift the structure. After lifting the structure crews dug out the old foundation and carefully separated the limestone in order to use it for a veneer facing to preserve the structure's historical value. The structure was 72 feet long, 42 feet wide and weighed 585 tons.



## Heaviest Structure Moved on Rubber Tires:

OPEN CATEGORY

### Scrib's Moving & Heavy Hauling

David City, Nebraska, USA



David Scribner

### Omaha Public Power District Transformer

This project consisted of moving the transformer, over a 10-day period in May, 2007, from a rail siding in Bellevue, NE 17 miles to West Omaha.

Population and industry growth in western Omaha required a need for more electricity. A route was located with no bridges that required a permitted route of 17 miles to move the 300-ton transformer. The project cost was \$65,000.



## Heaviest Structure Moved NOT on Rubber Tires:

OPEN CATEGORY

### Minty's Moving, Ltd

Onanole, AB, Canada

### Henday Transformer, Manitoba Hydro Generating Station, Gillam, MB, Canada

The project took three days in May 2007, requiring the move out of a failed transformer and moving in a new one.

Two transformers were moved simultaneously starting with the removal of a 14 month old failed transformer worth \$8 million and weighing 326 tons fully assembled with oil and replacing it with a spare transformer weighing 452 tons with all equipment, including oil. Both transformers are among the largest in the world. Fully assembled both are 36 feet wide, 44 feet long and 38 feet tall to the top of the bushings. Gillam Manitoba is 750 miles of Onanole, MB, home of Minty's Moving, Ltd. This far north the ground is still frozen in May, except for close to the in-use transformers where a lot of heat is given off.

The failed transformer was jacked and set on slide beams (double 8 x 8 welded H beam at 80 lbs per foot) and then placed on slide shoes with Teflon on the underside. After placement of all support timber and additional slide beams it was winched sideways out of the way of the new spare transformer coming in. The process was accomplished within a half day with a six-man crew. Two S300 Bobcats were used to handling timber mats and slide beams.

As the failed transformer was being re-jacked to place the slide beams for the endways north

move, the second set of jacks were being set on the spare transformer. The spare was loaded on to the hydraulic slide system. The spare was moved about 500 feet with three directional pushes. By the end of the third day the failed transformer was moved out and the spare transformer was put in place and set down. This was completed two days ahead of schedule and Manitoba Hydro was very pleased. This was a very critical transformer within their electrical grid. The loss of revenue was just under \$1 million per day for



Harold Minty

this particular transformer. We have since been in discussion about moving the failed transformer at Gillam on a dolly transporter to their Limestone Dam site to be rebuilt.



## *Longest Distance Moved on Land:*

*OPEN CATEGORY*

### **Warkentin Building Movers, Inc.**

Virden, MB, Canada

### **From Elfrase, Saskatchewan to Bluffton, Alberta, Canada**

This move of a 1,000 square foot bungalow for 688 miles occurred from March to May in 2007.

The move originated at Elfrase, Saskatchewan. The bungalow was one of several houses Warkentin purchased. First it was moved to Yorkton, SK. Due to road restrictions and a winter thaw Warkentin was under pressure to move several structures to the Alberta border. So the bungalow sat at Macklin, SK. In May the house was delivered to Bluffton, AB where a basement was being prepared.



**Wayne Warkentin**



## Most Square Footage on One Level:

OPEN CATEGORY

# Patterson Structural Movers

Washington, Iowa, USA

Louisiana Mall, Lafayette, LA



Jake Patterson

The project occurred 12 days over the summer of 2007. A concrete floor was lowered to add height to the second floor so the building could be subdivided into condos.

The concrete and steel structure was lowered with 6,000 blocks, 142 crib jacks zoned out on two 12-jack JSJS machines. The 30,000 square foot building was lowered simultaneously. The building was 175 feet x 204 feet. Total square foot was 36,000. The building was estimated to weigh 900 tons.



## Longest Structure Moved:

OPEN CATEGORY

### MCF Movers, LLC

Newburgh, Indiana, USA

### Jackson Covered Bridge

In Park County, five miles north of Rockville, IN, the historical Jackson covered bridge was located on Sugar Creek, an unpredictable creek, in order for the structure to be restored over the summer months. The move of 400 feet occurred on February 21, 2007. Prior to that, in January, a temporary bridge was constructed. The restored bridge was returned to its original location in August-September, 2007.

The all-wood arch bridge, the longest single span covered bridge still in use for vehicle traffic in the United States. It spans 227 feet. Prior to restoration the weight limit capacity was three tons. Following restoration the load capacity is now 13 feet. The cost of the project was \$170,000.



## Most Innovative Move:

### OPEN CATEGORY

# Northwest Structural Moving

Scappose, Oregon, USA

## Corbett Street Development

The project occurred over the 30 days in March 2007 in Portland, Oregon. The building was moved in order to make way for future development of Condominiums with river views.

This 40-foot x 45-foot x 36-foot tall building, weighing 120 tons, was moved 80 feet horizontally and lowered 37 feet vertically onto a new basement. What made the project more challenging was the severe slopes and unstable soil. The hillside was excavated in a stair-step manner creating two piers. The first tier had an eight-foot vertical drop and a 30-foot horizontal run. The second tier had a 29-foot vertical drop and a 50-foot horizontal run. One of the most challenging and time consuming parts of the project was that every one of the 32 crib towers had to be laid out and built within ¼ inch of tolerance to keep the skate beams parallel before the building could be skated over the hillside. To safely skate the building over the unstable hillside and to keep the weight of the building on the basement floor, 37 feet below, 1500 crib blocks and 18 steel beams were used to tie together an elaborate cribbing layout that would precisely support the skate beams and allow us to lower the building once it had cleared the hillside.



Keith Settle

