





### THE SPOKES SPEAK - GEARED TO SERVICE

# **Rotary Club of the North Fork Valley**

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WEB SITES: <u>www.rotary.org</u> <u>www.rotary5470.org</u> <u>www.paoniarotary.org</u>

Meeting Thursdays at Noon in the Paonia Town Hall

District 5470 Club 1180 - Chartered 12/20/22

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LAST MEETING: September 5, 2019

The September 5<sup>th</sup> meeting was a field trip to Lands End Sculpture Center. The usual Noon meeting at Paonia Town Hall did not take place.

#### **ANNOUNCEMENTS:**

• None today

### **Program: Lands End Sculpture Center**

Betsy Marston arranged a tour of the Sculpture Center for the Club members. A dozen or so members participated. Co-Owner Nancy Zimmerman led the tour, and showed the Club members the step-by-step process to transform an artist's clay sculpture into a bronze final product.

They use the lost wax process, and work only in bronze. First a mold is made of the artist's work. If the piece is large, it is segmented into as many parts as necessary. A full-size whale was cast several years ago, and required 500 individual pieces.



Nancy Zimmerman Showing Rotary Members a Wax Replica

These molds are then used to create a replica of each piece in wax. Channels, called spruels, and other elements are then added to the wax replica to allow the bronze to flow properly into the piece and the air to escape. The wax replica is then dipped into a 55-gallon drum full of a special kind of plaster, and then coated with fine sand. This is allowed to harden.

Next, the plaster cast is heated to high temperature to cure the plaster, allowing it to hold the hot bronze without cracking. This also allows the wax to melt and escape, leaving a mold for the bronze. The wax is captured and re-used. When time for the pour, several molds are arranged in an old bathtub on a bed of pea gravel, ready to accept the molten metal.



Molten Metal Being Poured into Molds

Meanwhile, bronze and other trace metals are heated to a couple thousand degrees in a propane-fired crucible. Bronze is mostly copper and is sourced from ReclaMetals in Montrose. Two men in protective clothing then execute a finely choreographed procedure of pouring the glowing metal precisely into each mold.

When cool enough to handle, the molds are taken outside, and the plaster is broken off the solidified bronze with a hammer. Additional clean-up is accomplished with a sand blaster. The spent molds are recycled into road base.

The individual pieces are then welded together to form the completed sculpture. The seams are

finessed in such a way that the piece looks as if it was molded as a single piece. The sculpture may then be put through some additional processes to modify the surface texture and/or form the patina on the metal that the sculptor desires.

The original mold can be re-used to create additional wax replicas and the process repeated to create multiple copies of the original piece.

Nancy explained that their company is a "Job Shop", in that they work for sculptors. They do not produce any original work of their own. She said it is a cyclical business, and fairly competitive as there are numerous companies that do what they do,



Newly Bronze-filled Plaster Molds Being Cooled

primarily in Loveland, CO. However, West Elk is fairly unique in being a one-stop shop that can take a piece from initial mold to final product completely in-house. The shops in Loveland tend to each do only part of the process (and point fingers at one another if something goes wrong). West Elk is also unique in being located on the Western Slope. Artists moving over from the Front Range are often surprised and delighted to find a full-service foundry located in Paonia.

Numerous beautiful pieces in various stages of completion were on display around the facility, many by local artists. One, of a bicycle race (see below), had even been sent to Apple CEO Tim Cook.



Native American Sculpture Molded from WWII Ammunition Casings





Rotary Members Examine some Finished Pieces







Sculpture Waiting for Patina

## **UPCOMING MEETINGS:**

Date	Speaker	Program	Member
9/12/2019	Don Grant	Blue Sage Building Grant	Marsha Grant
9/19/2019	Amina Ubén	2020 Census	Randy Campbell
9/26/2019			John Coombe
10/3/2019		Business meeting	
10/10/2019			Felix Belmont
10/17/2019			Pam Bliss
10/24/2019			Barb Heck
10/31/2019			Fifth Thursday
11/7/2019			Mike Heck
11/14/2019			Ulli Lange
11/21/2019			Bob Lario
11/28/2019		no meeting	
12/5/2019			Betsy Marston
12/12/2019			Jackie Parks
12/19/2019			Kevin Parks
1/2/2019			Karri Polson





