

About the Artist:

David C. Roy

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started "Wood That Works" and I became a full time sculptor. Since then I have designed and handcrafted over 130 different limited edition and one-of-a-kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural northeastern Connecticut.

Wood 
that Works

Cumulus • Directions



To the Owner...

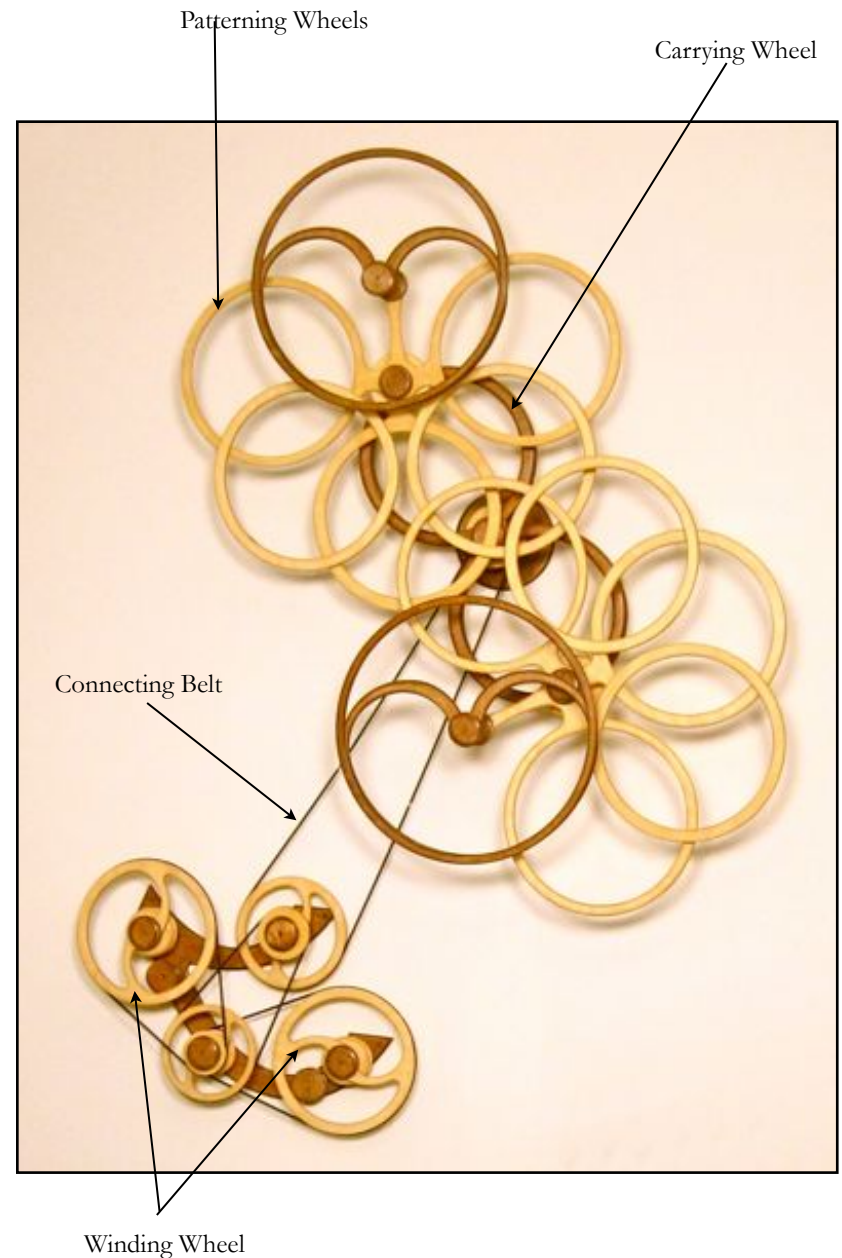
Hello,

Welcome to the world of Wood That Works. This Cumulus is a one-of-a-kind. It was completed in 2010. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Cumulus has been my full time occupation for more than 30 years. I hope Cumulus brings you and other viewers as much enjoyment as I've found in making it.

Cumulus has been mounted on a wall in my shop and running for at least 2 complete windings (several hours) before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem free for years to come. I use only the finest materials. Of course, problems can still occur no matter how hard I try to prevent them. My answer to this is a warranty to the original owner against defects in materials and workmanship for five years. See the guarantee section of this booklet for details.

It leaves me happy and satisfied to find that my work has made it's way into new lives. I hope it brings you years of enjoyment.

David C. Roy



Directions:

To Wind

- Turn the winding wheels in a counter-clockwise direction 23 turns.
- Pay close attention to the top of the light colored wood spool directly behind the winding wheel. Stop winding as soon as you see the red tape appear on the metal band. This is placed about 1 turn from the end.

Winding beyond this point may damage the sculpture.

To Start

- If the sculpture does not start immediately after winding push the dark colored back carrying wheel one rotation clockwise to start the sculpture

Guarantee:

- My kinetic sculptures are guaranteed to the original owner for a period of five years. All warranties expire with transfer of ownership from the original owner. Damage of the sculpture from exposure to extremes of high or low humidity, or to adverse hot or cold temperatures, or damage caused by normal wear and tear, accidents, misuse, or modification will not be covered by the warranty. Shipping and insurance to and from Wood That Works is the responsibility of the purchaser.
- I will charge a reasonable repair fee if the sculpture was damaged by misuse or needs refurbishment from normal wear and tear.

About Cumulus:

This sculpture is called Cumulus because the final form reminds me of the large puffy clouds we see often in the summer.

I didn't start out with the idea of creating a cloud form sculpture. I wanted to create a sculpture with two independent but connected floating forms that would interact visually. I started working with the "bird" shapes I've used in previous floating motion pieces like [Journey](#) and [Falcon](#) but found I wanted more overlap events to happen so the simple horizontal bird curve evolved into a horizontal curve inside a large circle. This heavier "bird" form required a shape with considerably more mass to balance it. I played with lots of shapes before settling on the arc of rings. I liked what I was seeing in the interaction between the ring forms and how it complimented the more unpredictable motion of the circular birds. It wasn't until I had actually built the sculpture that I saw the cloud connection.

The lower left hand part of the sculpture is where the power is stored in a pair of constant force springs. All of the lower assembly wheels only move when the main motion part of the sculpture needs a push. The actual moment of the push comes when the entire motion assembly stops moving in a clockwise direction and starts to reverse. This triggers the mechanism to give it a push to restart the sequence.

Specifications:

One-of-a-kind

Size: 61"h x 53"w x 8"d

Power Source: negator spring

Approximate Run Time: 10 hours

Materials: hardwood plywood, bearings, string

Cumulus ©2010

Directions:

To Mount on Wall:

- DO NOT remove the tape holding the belts in place
- Hold the lower backboard in the desired location against the wall. Level the bottom edge. For best results use a level. The mounting angle is critical for proper operation.
- Temporarily screw the lower template in place.
- Place the upper template in place over the lower one respecting the alignment marks. Mark the hole locations from this template using a sharp instrument. Remove both templates. Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
- The top base must be installed in the correct orientation. There is an arrow on the back of the disk showing the UP side. When viewed from the front the single short brass pin mounted directly in the dark circular base should be at between 11 and 12 o'clock.
- The lower winding mechanism can be mounted at any position or angle relative to the upper base as long as sufficient tension is maintained in the connecting spring. I set it at a right hand mount to show one position.
- Screw upper and lower bases into position.
- Install the connecting belt by looping it over the small pulley next to the base on the upper mechanism and the center pulley on the lower mechanism. Hook the ends of the belt together.
- Remove the knob from the upper base. Slide the carrying mechanism onto the shaft being careful to line up the 2 bearings in the mechanism. Screw the knob back in place, until it is finger tight. DO NOT over tighten. There needs to be between 1/16th and 1/8th inch of front to back play in the mounting to allow for changes in humidity.
- Slide patterning mechanisms "A" and "B" onto the shafts labeled "A" and "B" following the same cautions regarding bearings and over tightening the knob.
- Remove the tape holding the drive belts in place.

Before Moving Sculpture:

- Always tape the spring-belts in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again.

