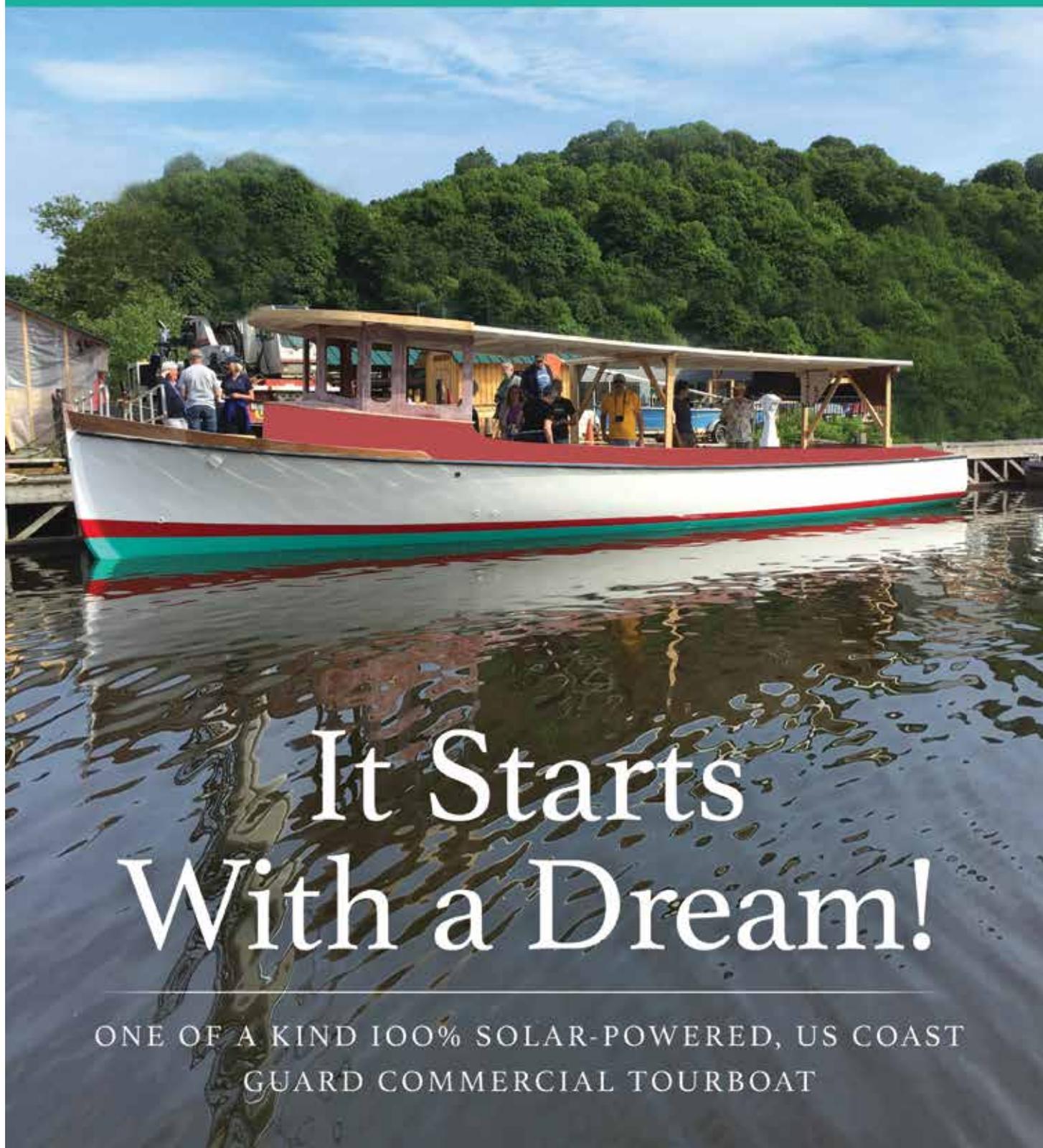


# BOATING

*On The  
Hudson  
& Beyond*

JULY/AUG 2018



It Starts  
With a Dream!

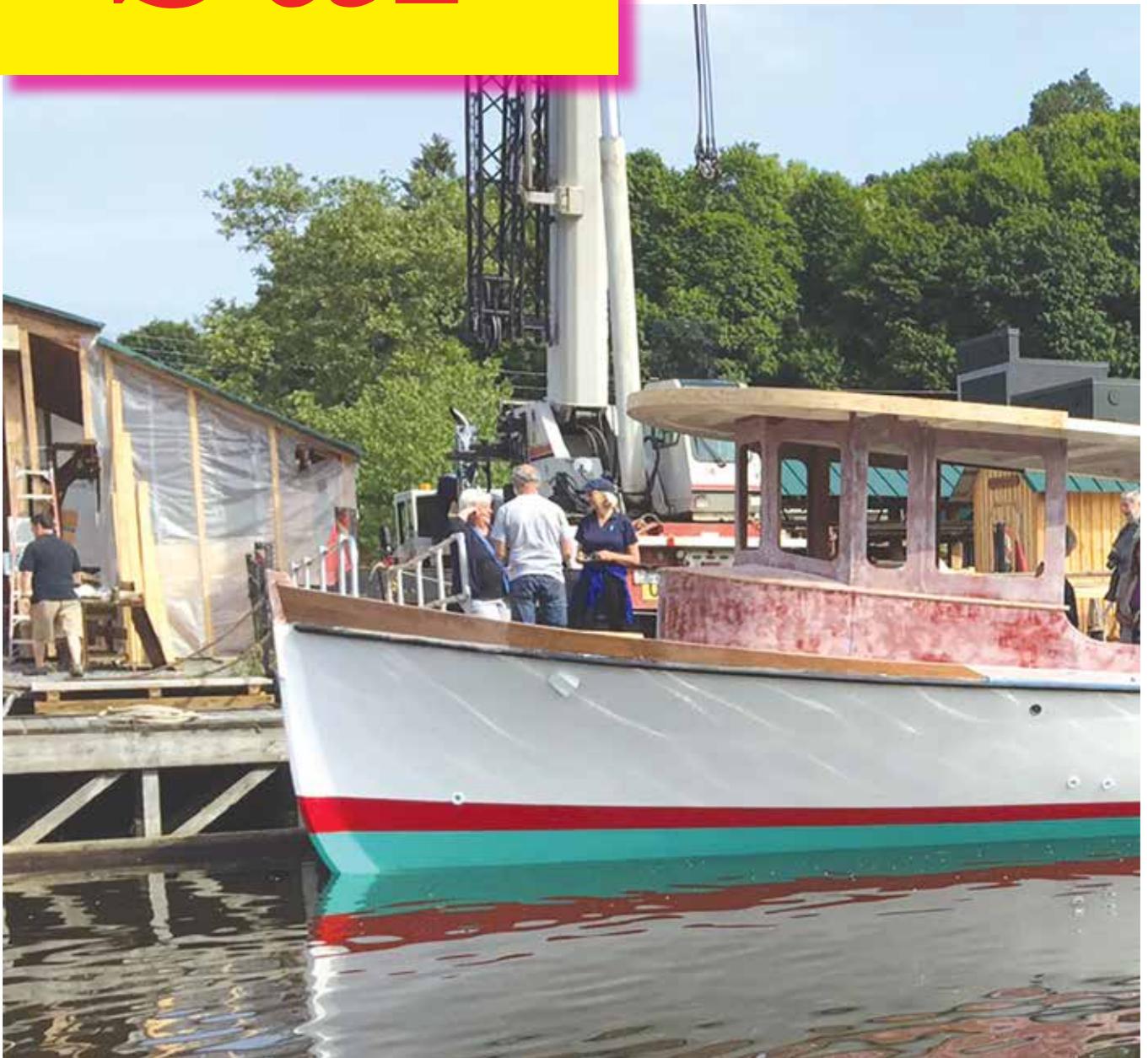
ONE OF A KIND 100% SOLAR-POWERED, US COAST  
GUARD COMMERCIAL TOURBOAT

# “Solar Sal”

On June 8th **Solar Sal 44** was launched into the Roundout Creek in Kingston. She is in the process of becoming the first ever 100% solar powered, US Coast Guard Inspected, commercial tourboat. (The boat is in the water for final Coast Guard inspection)

Only three lifetimes ago all transportation was solar powered, powered by people, animals and wind. Rowing craft of many sorts were the pick-up trucks of the day. Over 1000 sloops plied the Hudson River, they were the 18 wheelers of the day. The international jet plane travel of today was provided then by clipper ships those 3 short lifetimes ago.

Some wooden ships have been replicated and/or restored. The most famous is the Clearwater. Her cargo now is people and her value is not goods but education. The fresh water she sails in is only a drop in the bucket of the water that sustains



this planets biosphere. All fresh rainwater is distilled by solar power.

Wood in a wet environment is not particularly durable. The myriad of wooden parts, shaped, fitted and assembled into boats start with astounding strength that fights the forces of wind and wave that impede marine transportation. Still today 90% of all cargo is transported by boat.

The same fossil fuels, that have almost entirely replaced the solar powered transportation of some 200 years ago, travel up and down the Hudson River in boats and by railroads. However, an historic transition is beginning to replace those fossil fuels. Seen occasionally in electric cars and busses, electricity is also moving into marine transportation. Besides being clean, quiet and less maintenance, electricity is usually less expensive than fossil fuels because it is so much more efficient.

Internal combustion engines are unable to produce power at the low range of RPM of those engines. Additionally, it is difficult to measure the power of these engines at any speed. Electricity in contrast produces full torque at all speeds, is easily shifted in direction and the power is easily measured and displayed at any time.

I have an electric car and there are experimental solar cars, but there are not practical solar cars. The reason is that the area of the roof does not provide sufficient solar energy to power the car. Likewise there are experimental solar airplanes, but not practical ones for the same reason, the area on the wing not enough to power the plane.

Boats can be designed by a patent pending technology, so the power on the roof matches the power required for propulsion.

Clean, quiet, reliable, practical and proven solar powered marine propulsion.

