

New grad gives research project a cross-country tryout

6/09/08

"We have been cycling for 14 days and are currently in Berea, KY, a small college town much like Alfred. Daniel Ohart is accompanying me. He is also an 2008 graduate in mechanical engineering from Alfred University."Our stops are not planned. We decide were to stay on a day by day basis, usually at campgrounds, churches, hostels, and the occasional motel. We are traveling on a well established bicycle route called the TransAmerican bicycle trail that runs from Yorktown, VA to Astoria, OR. So far we have been traveling through very small rural towns that have nothing more than a post office and gas station. "We are averaging 56 miles a day and have traveled about 790 miles to date. It has been very, very hot with a few rain days as well. We are just about through the Appalachian Mountains."Planned itinerary: Yorktown, VA, to Astoria, OR? (4,247.5 mi.)1. Yorktown, VA, to Christiansburg, VA? (369.5 mi.)2. Christiansburg, VA, to Berea, KY? (381 mi.)3. Berea, KY, to Murphysboro, IL? (416 mi.)4. Murphysboro, IL, to Girard, KS ? (407.5 mi.)5. Girard, KS, to Alexander, KS ? (331.5 mi.)6. Alexander, KS, to Pueblo, CO ? (292 mi.)7. Pueblo, CO, to Rawlins, WY? (393 mi.)8. Rawlins, WY, to West Yellowstone, MT ? (351 mi.)9. West Yellowstone, MT, to Missoula, MT ? (332 mi.)10. Missoula, MT, to Baker City, OR? (413.5 mi.)11. Baker City, OR, to Eugene, OR? (340 mi.)12. Eugene, OR, to Astoria, OR? (235 mi.)The BRAT Country Cargo Trailer was devised by Johnson as a solution to the problem of limited cargo space when cycling long distances. Finite Element Analysis software was used to conduct stress and deflection analysis of trailer design under the required loading.