

WORK-ENERGY

Unit 11 Dr. John P. Cise, Professor of Physics, Austin Com. College,

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Question: This is a 4.09 oz arrow which is shot with a 40 pound bow as mentioned below. She pulled the arrow back 2 feet.(a)Find the mass of arrow in slugs? Ans. 0.0078 slugs(b) Find the spring constant of the bow? Ans. 20lb/ft (c)Find the energy stored in bow(elastic potential energy) when the arrow is pulled back 2 feet? Ans. 40 ft. lb. (d) When the arrow is released, find the speed of arrow ?Ans. ~ 100 ft/sec.

Retired Principal Rekindles Competitive Fire for Archery



Cory Lum

Phyllis Shipman in Honolulu. She was an all-American archer in the 1960s, and is now trying to qualify for the Beijing Games.

Phyllis Shipman did not look like the other athletes attending the United States Olympic Assembly last month in Houston. Neither buff nor sinewy and, at 64, several decades older, Shipman represented the sport of archery at the annual gathering of Olympic stakeholders. “This is so much fun,” she said, not only about the meeting but about her new life as an elite competitor. Shipman is ranked among the top female archers in the United States and is vying for one of three spots on the 2008 Olympic team. Shipman, a left-hander, went on to become an all-American in the sport in 1964 and ’65. Yet she said she did not think it was “that big a deal” and “left the bow behind when I left college.” She moved to Hawaii for [Peace Corps](#) training but dropped out to pursue a career in education on the islands. She bought some used equipment and started shooting on weekends at an Oahu archery range. The other recreational archers there, mostly men, helped her with her form. “I don’t know if it was self-defense or what,” she said. Within months, she was shooting better than they were and subscribing to archery magazines. One had an ad for a five-day training course at the Olympic Training Center in Chula Vista, Calif. She talked her husband into going with her. “I hadn’t left the island in 30 years,” she said. After winning several tournaments and achieving a top-10 national ranking, Shipman became a resident athlete at the Olympic Training Center in 2003 but failed to qualify for the Athens Games in 2004, finishing seventh in the elimination rounds. She now has her sights on China in 2008. “I know the amount of work that’s required this time,” said Shipman, whose training regimen includes daily four-hour shooting sessions with a **bow that has a draw weight of 40 pounds.**