

BERRY AVIATION, INC

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For the past 12 months, we have been working with the FAA to develop an airdrop program that will be used to deliver cargo to people on the ground, most likely in either a military or humanitarian aid setting. The concept is that cargo bundles, equipped with parachutes, will be dropped from the aircraft at an altitude of 500 ft. above the ground. The airspeed of the aircraft at the time of the drop will be around 120 knots, with the bundles hitting the ground at a rate of about 19.2 ft/sec.

We selected to use the WaterBrick as part of our program field-testing. Our testing required nine bricks per bundle, stacked in a 3 x 3 configuration, filled with water for a total bundle drop weight of 250 lbs each. Each WaterBrick bundle was rigged with the C9 Military Surplus chute.

Each 250 lb. WaterBrick bundle was dropped 3 times, sustaining only minor damage, all bricks were in condition to be dropped more than once. Out of all 6 drops, only 1 drop resulted in two lids being popped off. Out of the 18 bricks used to configure the two bundles, only 3 bricks sustained small pinhole size punctures. None of the bricks burst upon hitting the ground.

Upon completing our program testing, we were very satisfied with the results and the WaterBricks more than performed up to our expectations. By utilizing the Water Bricks, we were able to configure the bundles to the dimensions and weight required with ease.

Having used the WaterBricks in our initial testing and seeing how well they performed in terms of durability and easy configuration, in the future WaterBricks would be a perfect candidate for additional testing or humanitarian and troop resupply missions.

