I have just read a great research article\(^1\) on the [Answers In Genesis](http://www.answersincreation.org) site. In the article, several young earth creation science advocates examined the seaworthiness of Noah’s Ark. Even though this is a great study and credit should be given to the researchers, it contains one fatal flaw. This flaw invalidates the study’s support of a young earth, and at the same time lends support to an old earth.

**Discussion**

First, let’s look at the key points in question, which are the motions taken into account to calculate the seaworthiness of the ark. The researchers used 8 factors:

1. Heave (to raise or lift; overall vertical motion)
2. Pitch (To dip bow and stern alternately. The angle of such a dip)
3. Roll (To move or rock from side to side; i.e. The ship pitched and rolled in heavy seas)
4. Vertical acceleration at FP (Forward Perpendicular, defined as the foremost location of the loading waterline near the bow - their definition)
5. Deckwetting frequency at FP (Frequency at which waves crash onto deck...closely related to number 6 below...not all waves that slam the boat wet the deck)
6. Slamming frequency at ST 3/20 (Station number, defined as the normalized distance FP by ship length; here the location is 3/20 of the ship length away from FP.
7. Vertical Acceleration at the bridge (up and down motion of the bridge)
8. Lateral Acceleration at the bridge (side-to-side motion of the bridge)

To test their theories, they used 12 variations of the shape of the ark, and calculated the seaworthiness based on these 12 variants. In addition, they created three 1/50th scale models for testing in a water tank with simulated ocean conditions.

This is all fine and dandy, and I applaud their efforts. The reason the study is flawed, however, is because they should have had a ninth motion factor, forward velocity, the speed at which the Ark is traveling.

I have found this problem over and over in young earth creation science research...they don’t consider the impact of other young earth studies (perhaps because it would invalidate them). One article in particular I have used on several occasions, and here I’ll use it again. The article is “Patterns of Ocean Circulation Over the Continents During Noah’s Flood,” by John Baumgardner and Daniel Barnette. This wonderful...
study has invalidated many young earth claims, even though young earth theorists wrote the article to support rapid erosion rates and the Flood.

According to this article, ocean currents reach a peak of 87 meters per second on day 50 of the flood. This is the water velocity over the continental land masses, as the water currents form cyclonic patterns, with lesser currents over the ocean basins (we are not told the ocean basin currents). Since the waters prevailed on the earth 150 days, and did not start to recede until day 190, the waters maintained this cyclonic current velocity for 140 days.

Nowhere in the Ark study did the researchers take into account the forward motion of the ark caused by this current. Since the current varied by the location of the land masses, the average speed of the ark probably varied. However, we can be certain that the ark would have been affected by it. The ark was obviously built over a land mass...in other words, it was built over the location of these higher currents. The ark would have been carried away from the start point by these currents.

They state that the currents produce strong equatorward currents parallel to the western coastlines (the cyclones are compressed against the western continental margins). If there were competing cyclonic patterns, the ark would eventually end up in the place of least current, which is the middle of the ocean.

There is no doubt that the ark would have been carried away from the start point, thus the ark must have circled the globe, thus, the contention that the ark was a floating barge would not work, as it navigated the open seas. The Ark would probably sail around the globe several times, although we can make no firm conclusions. The ark would occasionally be caught in the strong equatorward currents, and it would probably be a rough ride.

What would happen if this forward motion were accounted for? Since this study is complete, we won’t know until another one is accomplished. So why did they not take this into account? There are two possibilities. First, they simply forgot about the other study, and were merely intent on evaluating the ark’s survivability on a relatively flat surface of water. This mistaken thinking is an outgrowth of their conception of the ark as a barge, which merely had to float, and not be seaworthy. The thinking of the ark as a barge is correct, but this barge theory can only work if the ark was floating in a regional, localized flood event, such as proposed by old earth creationists.

The second reason they did not account for forward velocity is because had they done so, they would have invalidated the argument for a young earth and global flood. If you assume a global flood with a barge-like ark, it may have sunk.

**Conclusion**

Could the ark have survived when you account for the forward velocity? We will have to wait for another more comprehensive study to answer this question. However, it’s clear that this study supports the fact that the Ark would have no problems surviving a local (universal) flood event as proposed by old-earth creationists. Once again, thanks go to the young-earth theorists, who have once again given us excellent evidence for a localized flood, and an old earth.

---------------
1 Technical Journal, Volume 8, Issue 1. Published on the web at answersingenesis.org/tj/v8/i1/noah.asp

2 Circumference of earth = 40,076 km at equator. Current of 87m/sec equals 313.2 Km per hour, or 194.6 miles per hour. 140 days = 3,360 hours, therefore speed x hours = 653,8560 miles (or 1,052,281 Km). Divided by circumference = 26.25

Other Relevant Answers In Creation Articles

Noah’s Flood – Is the Young Earth Creation Science Model for Noah’s Flood right?
A Bridge Over Troubled Waters - A Scientific Look Into the Genesis Flood Account