

# Over-the-Horizon Engines

by Capt Thomas B. Savage

*We have a problem in our boat companies. Instead of living with it, let's acknowledge it, correct it, and move on.*

As a rifle platoon commander in a boat company my first experience with outboard engines of any kind was with the 55-horsepower engines that we strapped on the back of our combat rubber raiding craft (CRRC). The Johnson 55 was something I didn't give much thought to. They were old and beat up, but they ran fairly well, and since I didn't have anything to compare them to I just took them for granted, and went about the business of being a platoon commander.

Upon our return from the Western Pacific I was given the job of company executive officer and boat officer. I heard we were getting the new "over-the-horizon" package for our zodiacs, and must admit that I was pretty excited. I was told that we would now have twin

IMARS 35-horsepower pump jets on our boats. This sounded "high speed," and I was all set to test out something new. Alas, the over-the-horizon package left much to be desired.

To begin with, the "over-the-horizon" name given to the package is nothing more than that—a name. The two engines, although individually a bit smaller than a single 55, use up a huge amount of fuel. With an 18-gallon bladder filled to capacity, we are just barely able to complete an over-the-horizon insert in moderate seas before running out of fuel. The range of the twin 35s on one bladder is 25-30 miles. With the single Johnson 55 we could get 40 miles or more out of one bladder. Therefore, we

are required to bring two bladders. Not only does this add extra weight, but range still is a concern when we run into heavy seas, mechanical problems, or a medium length extract (10 to 15 miles).

Another problem with this system is the extra weight. In the past a boat team of six men could move a boat without much of a problem. Now, with two engines, a transom stiffening kit, and a reinforced deck plate the CRRC is 148 pounds heavier than it was with the Johnson 55. Add the extra fuel required and a six or seven-man boat team simply cannot lift its boat. This

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means extra time in the beach landing site, the most vulnerable spot for the company during a raid. It also makes it impossible for a small reconnaissance team to cache its boats, and that team must now be dropped off and picked up instead of operating independently.

Although there are many problems, the most frustrating of all are the mechanical problem associated with this new system. Synchronizing the engines to run together and linking the steering mechanism has been a constant problem since we began using these engines. We also have twice as many engines to maintain. Despite frequent operational testing, extensive preoperational checks, and a rigorous maintenance program, we have yet to

complete a transit without having multiple boats go down. We are spending twice as much time and effort to remain operational, and we are having about half as much success.

Add to all of this the extra noise created by the engines, the fact that a very small amount of debris (especially kelp) will clog the engines and bring the raid force to a halt, and the slow response time of the engines in the surf zone and you are left with a very bleak picture.

As I understand it the pumpjet was incorporated into the system after a number of accidents occurred with the propeller driven Johnson 55s. I am in complete agreement with anyone who suggests that training should be conducted safely, but not at the expense of mission ac-

complishment. The twin 35 over-the-horizon package degrades our mission capability. It seems to me this was a "good" idea that was not properly tested before it was fielded. Instead of taking the attitude of, "well, this is what we've got, we're going to have to live with it," let's bring back the 55s, learn from our mistakes, and move on.

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