CLAIMS

What is claimed is:

1. A method of using a subsea vessel for buoyancy, comprising:

floating the vessel in water coupled by releasable engagement with a platform having equipment for delivery subsea, wherein the vessel includes a shell arranged around at least one inner enclosure containing gas with concrete material poured to fill between the shell and the enclosure;

submerging the vessel until supported by a seabed; and

releasing the engagement of the platform from the vessel thereby leaving the equipment subsea and causing ascent of the vessel from the seabed for recovery of the vessel.

2. The method according to claim 1, wherein the gas in the enclosure is pressurized to at least 6500 kilopascals.

3. The method according to claim 1, wherein the submerging includes increasing the weight of the vessel by introducing the water into the inner enclosure through a valve.

4. The method according to claim 1, wherein steel forms the shell and the inner enclosure.

5. The method according to claim 1, wherein the shell and the inner enclosure are concentric cylinders.

6. The method according to claim 1, wherein the inner enclosure has a domed top with a conduit at an apex of the top providing fluid communication

through a check valve to an exterior of the vessel for venting the gas as the enclosure is flooded for the submerging.

7. The method according to claim 1, wherein the at least one inner enclosure includes a plurality of enclosures arranged in the shell.

8. The method according to claim 1, wherein the vessel further includes thermoplastic pellets contributing to the buoyancy.

9. The method according to claim 1, wherein the concrete material has a density less than the water.

10. The method according to claim 1, wherein density of the vessel increases toward a bottom of the vessel.

11. The method according to claim 1, wherein the concrete material has a density profile that increases toward a bottom of the vessel.

12. The method according to claim 1, wherein the concrete material includes glass bubbles.

13. The method according to claim 1, wherein the concrete material includes glass bubbles with a higher concentration of the bubbles toward a top of the vessel than a bottom of the vessel to create a density profile increasing toward the bottom of the vessel.