CLAIMS

~~1. A floatation device comprising:~~

~~a buoyancy chamber;~~
~~a cryogen reservoir;~~
~~a heating pipe providing switchable fluid communication between the cryogen reservoir and the buoyancy chamber; and~~
~~a microprocessor and a plurality of sensors;~~
~~wherein the microprocessor contains a unique identifier for the device.~~

~~2. The device according to claim 1, wherein the buoyancy chamber, cryogen reservoir and heating pipe are at least partly contained within a housing.~~

~~3. The device according to claim 2, wherein the housing is provided with a reinforced portion adjacent the cryogen reservoir.~~

~~4. The device according to any one of the preceding claims, wherein the buoyancy chamber is subdivided into a plurality of compartments.~~

~~5. The device according to any one of the preceding claims, wherein the buoyancy chamber, or each compartment of the buoyancy chamber is provided with at least one orifice to allow sea water to move into and out of the buoyancy chamber.~~

~~6. The device according to any one of the preceding claim, wherein the buoyancy chamber, or each compartment of the buoyancy chamber is provided with at least one one-way valve to allow supercritical cryogenic fluid or gas to exit the device.~~

~~7. The device according to any one of claims 2 to 6, wherein the heating pipe is routed through the housing so that at least a portion of the heating pipe is adjacent to an outer surface of the housing.~~

~~8. The device according to any one of the preceding claims, wherein the heating pipe is switchable using a valve.~~

~~9. The device according to any one of the preceding claims, further comprising a plurality of heat conductors configured to introduce heat into the cryogen reservoir.~~

1~~0~~. A method of raising an item from the seabed, the method comprising the steps of:

lowering a floatation device to the seabed, wherein the floatation device comprises ~~according to any of the preceding claims to the seabed~~ a buoyancy chamber; a cryogen reservoir; a heating pipe providing switchable fluid communication between the cryogen reservoir and the buoyancy chamber; and a microprocessor and a plurality of sensors;

wherein the microprocessor contains a unique identifier for the device;

attaching the floatation device to the item to be raised;

creating a supercritical fluid within a portion of the floatation device:

allowing the floatation device and the item to rise to the surface using the buoyancy of the supercritical fluid to raise the item to the surface.

2~~11~~. The method according to claim 1~~0~~, wherein the supercritical fluid is supercritical nitrogen.