LA SPEZIA ITALY 3 luglio 2010
VEDI DISEGNI PAGINE SEGUENTI see drawings on the following pages

I understand that similar ideas may have already been considered but also think that sometimes certain little details can make the difference as to wether an idea is possible to realize or not.
I am a professional geologist and have been working for over 25 years on underwater works and have expert knowledge as to the drilling problems below the sea.
I believe that you all are orientated toward a containment and recuperation solution due to the contrasting pressure of the well even with set valves on the BOP. You all are probably not sure of the lateral hold between liner and caser and the well walls.

Based on what is stated above, I asked myself if it would be possible to reduce the loss of the LMRP without interuppting the flow and how the oil could be temporarily stored without the constant presence of a ship to elimate problems under bad weather conditions (hurricanes).

Based on the decsriptions which BP has given I have thought of the following:

Intervention goal: Eliminate oil loss at the LMRP base trying to diminish the influence of bad weather conditions.

1) Construct a united connection at the head of the BOP.

Construct a quick coupling (similar to those used for high pressure hydraulic systems) with valves at the base to allow the passage of the oil flow during the operations of fixing and blocking(see designs)to connect with flanges to the freed flages on the head of the BOP.
With open valves insert the male of the quick coupling and block it (to be projected in details)
Begin the pumping and close the lateral vent valves.

For the fixing of the quick coupling there are 2 hypothetical solutions:

1a):Hypothesis 1: Cut or unscrew the bolts that hold the upper flange and remove the flange.

1b)Hypothesis 2: Replace the flange located at the base of the new bypass positioning a tube slighltly larger than the flange at the head of the BOP in order to position the lower portion of the bypass with a coupling around and under the flange at the head of the BOP. Form a block of resin to jet in two sacks under the flange of the BOP head to unite the bypass with the quick coupling and the head of the BOP.

To be independent of bad weather (an idea certainly to be studied in detail)
Place a container(old oil tanker?) that functions as a lung 40-60 meters below sea level and anchored with ropes and cement blocks to the sea bed. From the tank which is normally full of water,oil is pumped in from above allowing water to flow out below through valves.
The presence of a lung tank in marine quoted where there are no hydrate formation problems,

allows to recuperate oil even in bad weather conditions.

Is it possible to have more information on the real problems that you all are unable to resolve?

Best regards,
Franco Ferrari

For any clarifications or doubts you may contact us at 011 393384244466.
I would also greatly appreciate just an acknowledgement if any of my technical information has been any kind of help.

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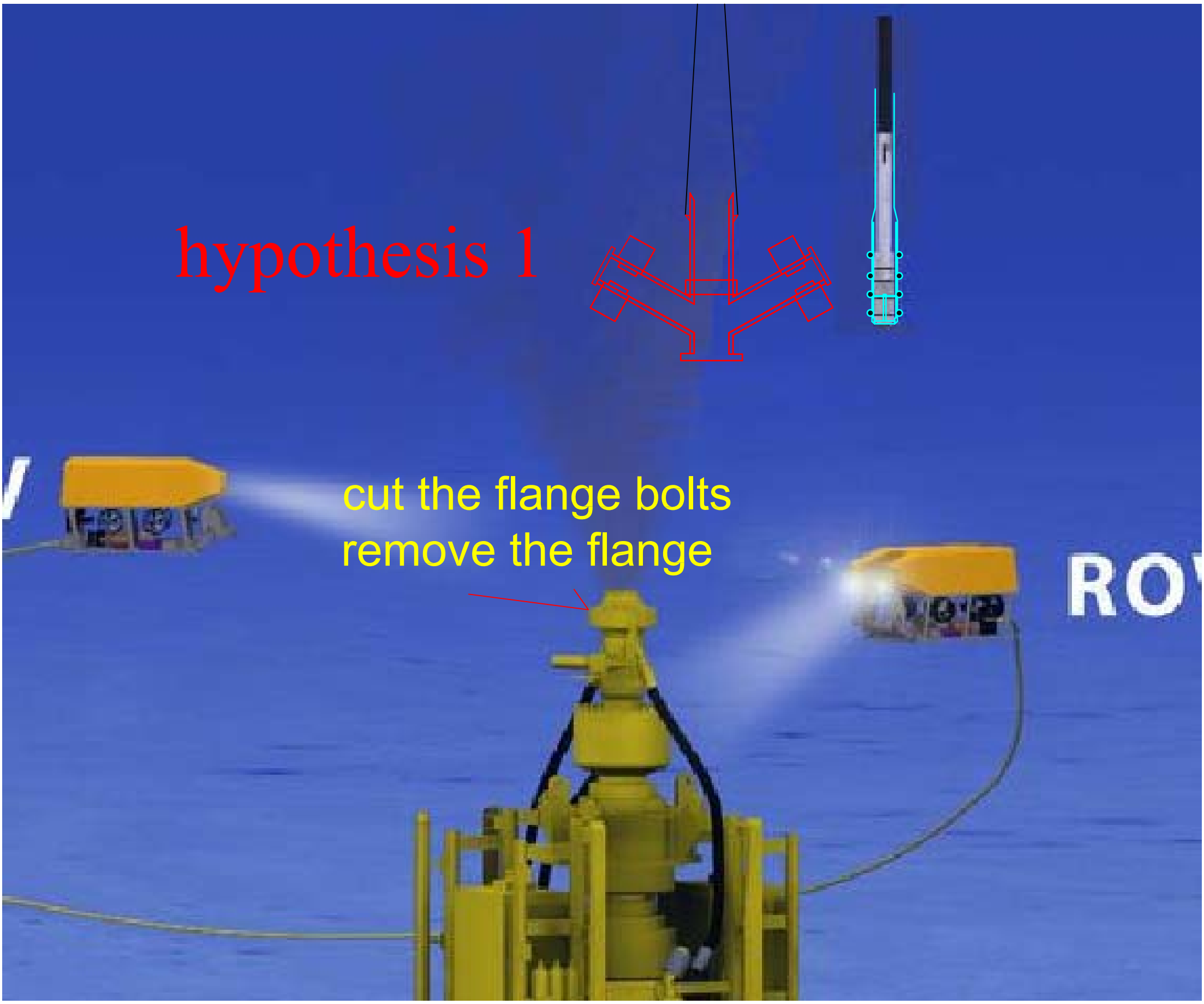
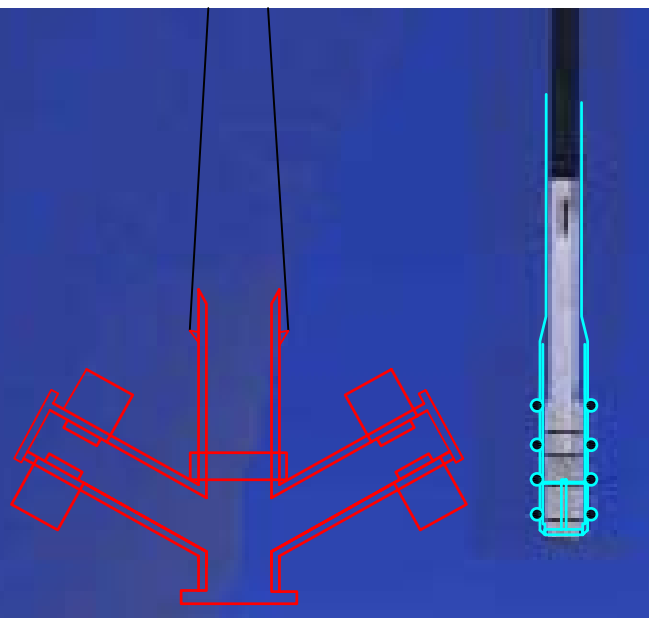

hypothesis 1
cut the flange bolts
remove the flange

hypothesis 1

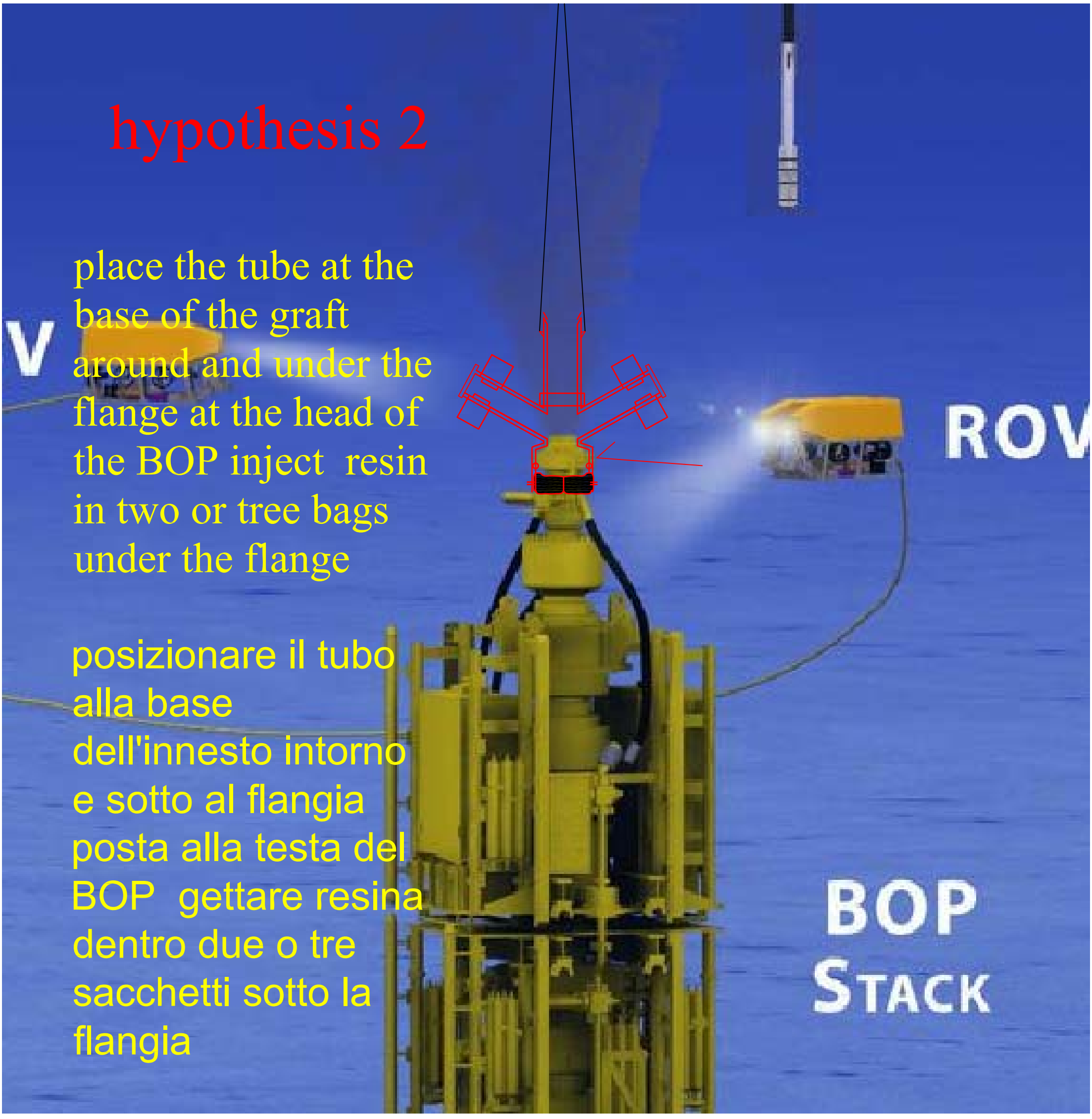


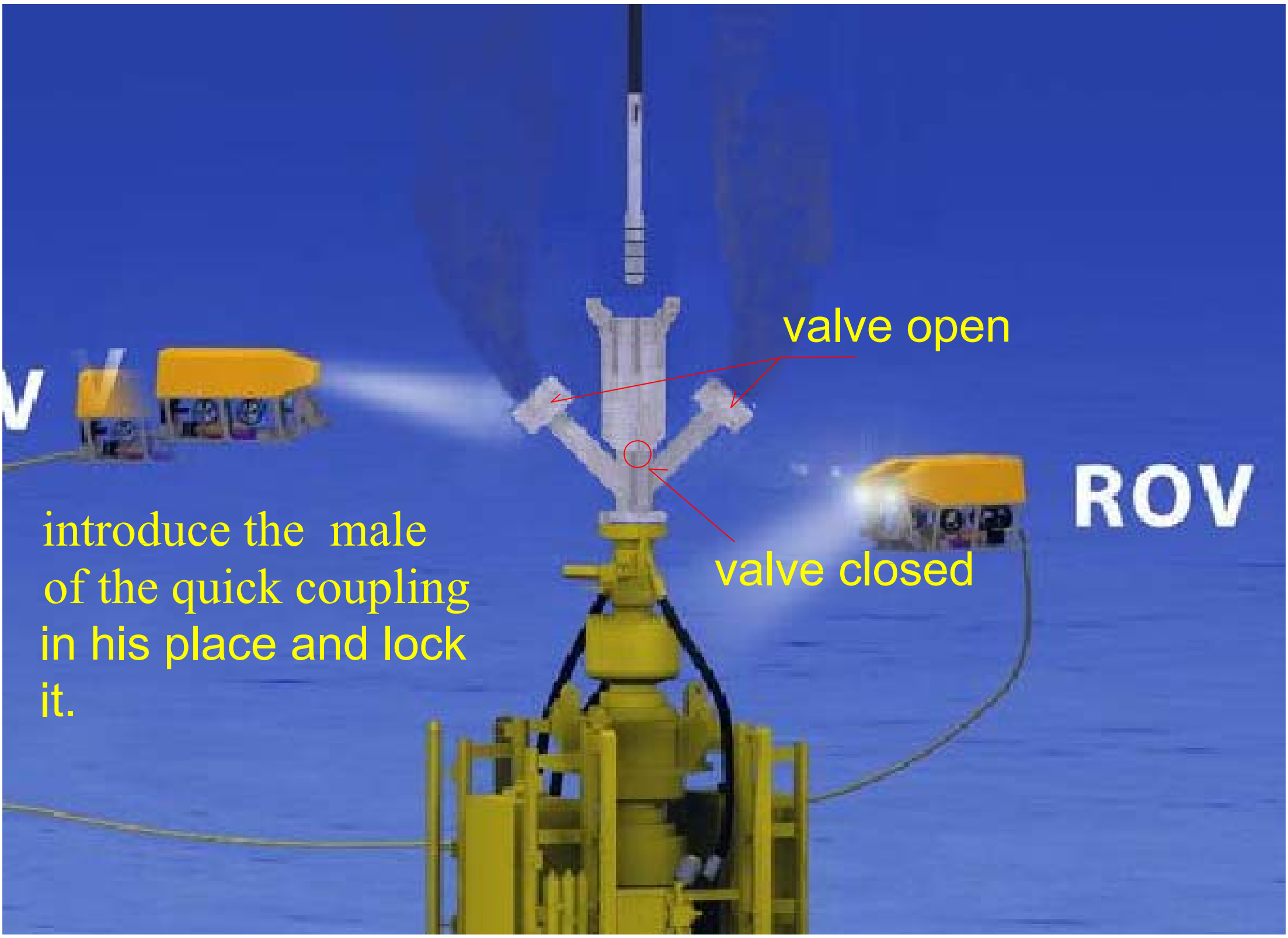
cut the flange bolts
remove the flange

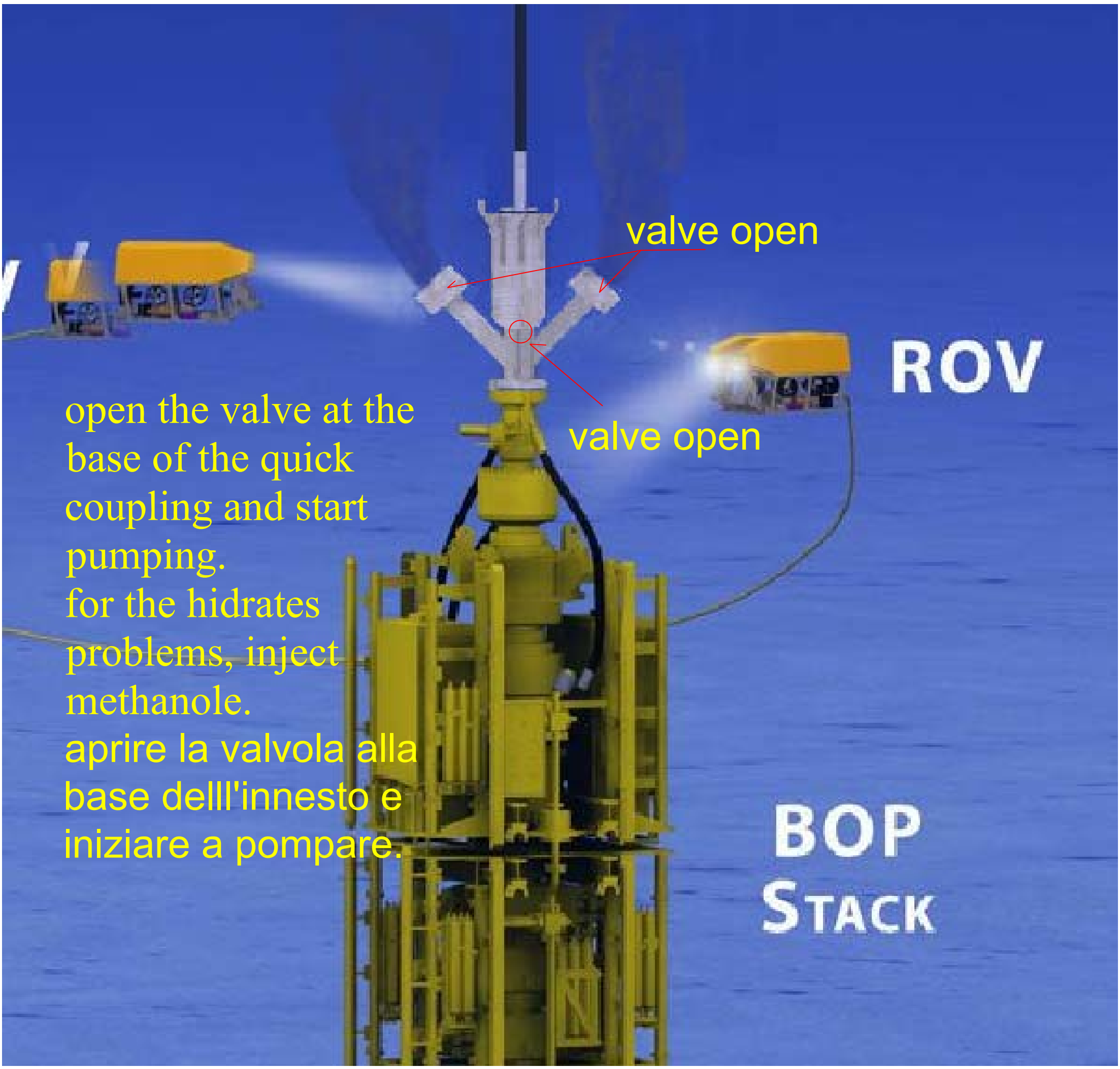
hypothesis 2

place the tube at the base of the graft around and under the flange at the head of the BOP inject resin in two or tree bags under the flange

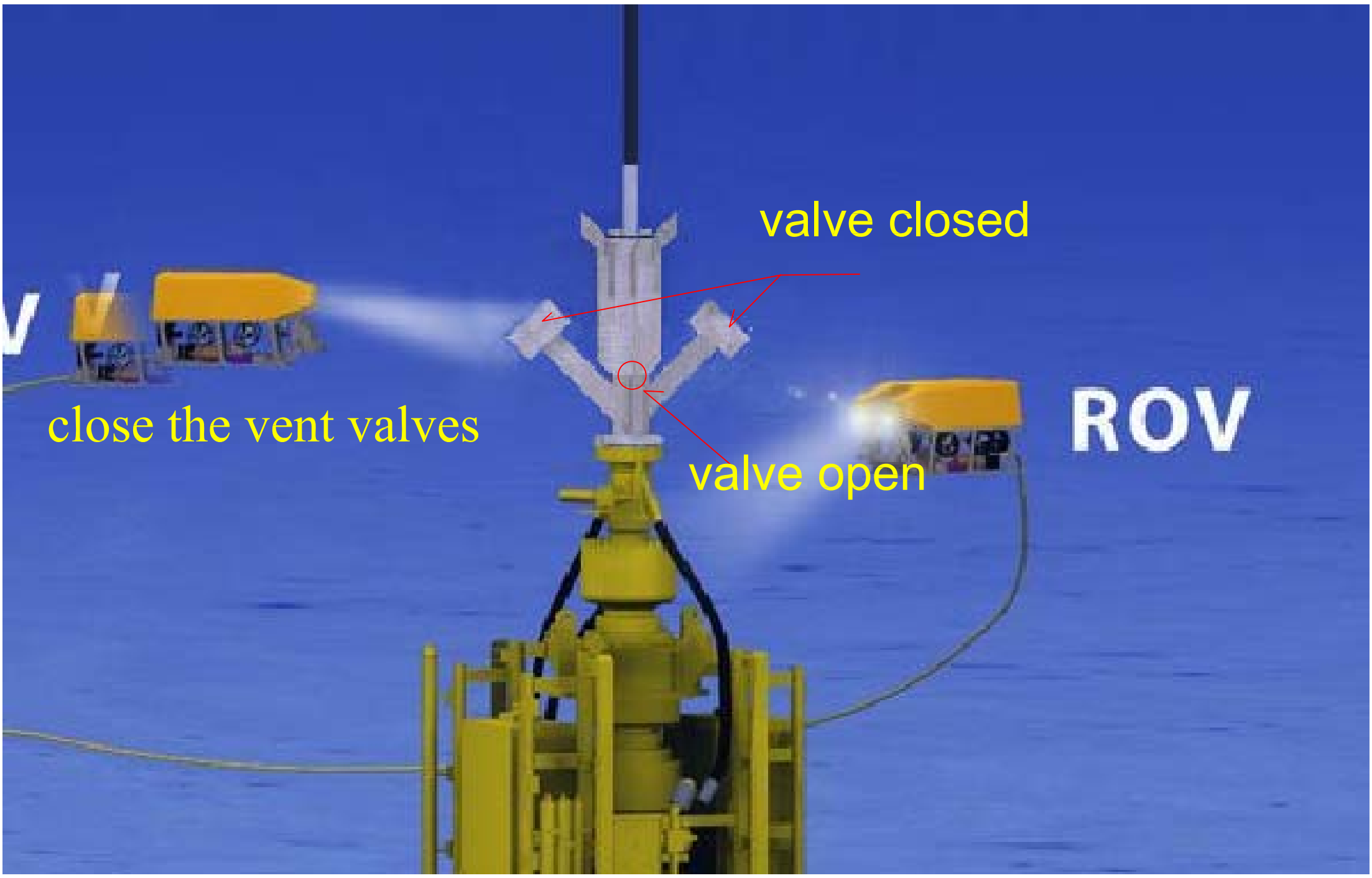
posizionare il tubo alla base dell'innesto intorno e sotto al flangia posta alla testa del BOP gettare resina dentro due o tre sacchetti sotto la flangia

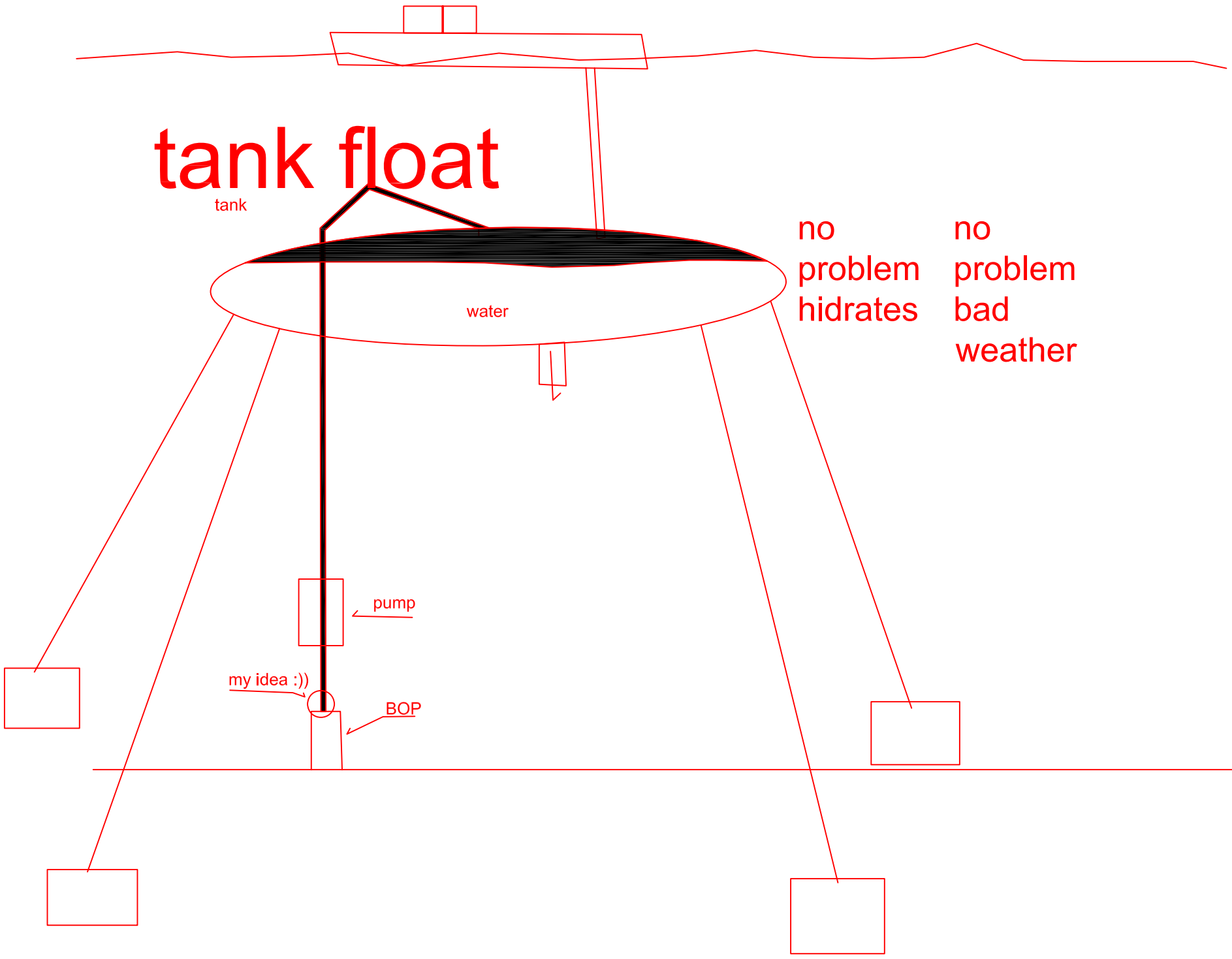



valve open
valve closed
ROV
introduce the male
of the quick coupling
in his place and lock
it.



open the valve at the base of the quick coupling and start pumping.
for the hidrates problems, inject methanole.
aprire la valvola alla base delll'innesto e iniziare a pompare.


valve closed
close the vent valves
valve open
ROV


tank float
tank
water
no problem hidrates
no problem bad weather
pump
my idea :))
BOP