

The Final Major Difference



Shown here on the left, is a picture of something everyone takes foregranted. Going to the bathroom. You just can't stumble into the "john" in the middle of the night in a fog of tiredness. You must be aware. As bad things can happen. (Which I never personally experienced).

First the "controls" are totally different from the ones that you are used to, which allow for a totally mindless visit.

There is not just a single (green arrow) control to allow you to flush away your deposit. Sure, there is a bowl filled with water, equipped with a seat upon which you can sit. The same relaxed "sitting" for a proper bowel movement. AND, just like at home there are multiple "bathrooms" all with designated user groups. But that is where the similarity ends.



The first thing, upon entering the commode user space, is checking to ensure that the person who used it before you finished the job. It is common courtesy on board the boats, that when you do use the commode, that you complete the task. That task is filling the bowl with clean water after flushing away their deposit be it liquid, solid, or a combination thereof. Shown here in the picture on the right with the green circle is the approximate water level that a courteous person will leave upon the completion of their mission. The water level shown covers the valve at the bottom of the bowl, and it is part way up the side of the bowl. But not too far. Having water above this level does not allow for the "angles and dangles" of submarine operation. If the boat is put into a condition where extreme angles to the force of gravity are going to be present, a bowl that is "too full" might end up splashing its contents out of the bowl and onto the surrounding deck. Now true enough the deck is slightly slanted and there is a nearby drain, but the deck would still be wet for a while and that would not be pleasant for the next user.



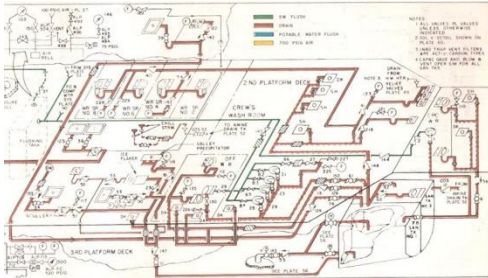
With the static status of a submarine commode now explained; there are two levels of complexity offered here in this SeeStory. The first level is the level of the visitor, up to and including the dedicated dink non-quals.



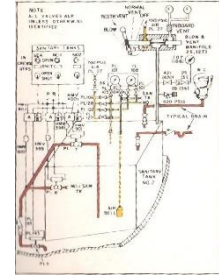
Flushing the commode is a two handed operation. On the left is a green colored valve control. That valve controls the flow of the flushing water. You start that first. Then very quickly the large black lever shown on the right is pulled forward towards the standing operator. At least you should be standing – doing it seated is not good, you can't see what is going on. That moves the Ball Valve at the bottom of the bowl and the contents of the bowl empties. At this point the green input water valve is opened such that a good flushing action takes place. When the bowl is completely cleaned of its contents, the lever ball valve is closed and the green inlet valve is closed allowing for some water left in the bowl – TASK COMPLETE!



As stated before the explanation of the controls for a visitor is satisfied by what you just read. As you move up in the amount of time that you are on board, the level of understanding has to increase. It is highly unlikely that a “visitor” is going to actually go to sea, so again the above was sufficient. The next step up the required complexity is that of a person going to sea on the boat. From that point you move up to the full extent of the “dedicated dink non-qual”. That is the level that I achieved. I became fully aware of the level of complexity, and I fully understood the rationale behind that complexity. But I never achieved the level required to be fully “Qualified in Submarines”.



Shown here on the left and the right are miniaturized portions of the submarines “piping tab”. The one on the left shows the supply lines supplying the water to various systems including the commodes flushing water supply routes. On the right the drain system is shown, all the way from the commode to the “Sanitary Tanks”.



Even in the miniaturized versions you can plainly see that there are a huge number of pipes and valves controlling both sides of the system. It is important to understand that just like any household the supply water to the sinks, showers and commodes are under pressure. That pressure is a very well regulated amount and the valves are required to localize any down stream leaks or valve failures. Controlling that pressure and being able to shut off sections for particular issues is very important, but only really needed by those fully qualified in submarines. For the rest of the newbies – you just have to be aware, of the one valve. That large green one behind the commode that controls the flow of the pressurized water into the bowl to clean away your waste. You have to know how to control that particular valve to achieve that goal – and that’s it on the supply side.

Now then that large handled valve that controls the ball valve at the bottom of the bowl. THAT’S THE BIGGY. IF you don’t understand the system behind that one valve – you could end up in a very Shitty situation. Let me describe such a set of circumstances that might put you in that position.

It’s the middle of the night, you are not “on-station” as yet, and it is well after the movie of the evening in the crews mess. Most of the crew are in their racks asleep, when you wake up from a sound sleep with the feelings of having to go to the bathroom for an urgent #2 visit. So you get up and make your way to the closest commode that you by rank and position within the crew are allowed to use.

Now then a little more submarine operation detail. Again, you are not “on-station” but you are just six hours away from being there. The Sanitary tanks are somewhat full. But you are going to be “on-station” for a couple of weeks, so it would be best that you have empty Sanitary tanks. So the most junior person on watch in the control room is told to go hang the “Blowing Sanitary” tank signs on all the commode room doors. Which he does – but remember he is a junior guy on his first boat ride and he is no where near fully familiar with the task at hand. Let’s just say that he is a little lack-a-dasical in hanging said signs.

The chief of the watch, seeing the junior sailor return to the control room, making his report goes through the notification process of informing everyone in control that they are about to “blow Sanitaries”. With that said remember the submarine is submerged, it remains “at depth” with a certain mixture of water ballast and air pressure. And the boat remains at the specified depth by that combination. Which means that it is holding off the external water pressure of the surrounding sea. Knowing that sufficient pressure has to be provided to the sanitary tanks such that the outside sea pressure is overcome and the water and waste located inside the sanitary tanks will overcome that outside pressure such that the contents of the sanitary tanks will actually be blown out because of that stronger pressure.

Now then let's come back to you. You made your way to the commode, and in the dim light of night cruising with a vast majority of the boat "rigged for red" so that periscope vision is maintained, and you being in the the fog of mid-sleep, you blew right by the poorly hung "Blowing Sanitary" sign. You sat down on the commode and did your business. Now you are ready to depart. But you don't want to stand up, as usual for the whole flushing process, you decide to just reach for the long handled valve control and turn the ball valve so that your deposit will go away without observational awareness. So you move the valve totally missing the tiny stream of bubbles that start coming up from the bottom of the bowl as the valve approaches "being open". Oh Hell you might have missed that in your partial sleep state even if you were standing as you should because the bubbles would be coming from from below your deposit.

Now then let's switch the perspective of what is about to happen from your vantage point to that of an air molecule that has just been put into the sanitary tank following the huge amount of compression needed for you to overcome the outside sea pressure with vigor. The wide open valve to the passing sea is no longer the lower surrounding pressure. That surrounding sea pressure plus that required to "blow sanitariums" combine and focus on that opening ball valve up that pipe in the crews restroom that was just opened. That new opening is now significantly easier to get to. So you the water molecule and the gazillion number of your partners along with a couple of weeks of waste that have been hanging around and decomposing in the sanitary tank decide to take the path of least resistance. Up the pipe you go, through all the twists and turns along the way all the way to that ball valve at the bottom of that one commode that is starting to open.

As a pressurized air molecule that is pushing weeks of decomposing waste from the tank, you have no hard feelings for that poor sleepy guy who made the mistake of remaining on the commode during the flushing process. His buttocks are just in the way of the freedom of a location at ambient room pressure – an absolute paradise from where you were. You and all your partner molecules reach that room of ambient room pressure and you just want to get as far away as possible from the pressurized location you just departed. You have made your escape and are so delighted in doing so you give every possible surface area around your new location a big hug. Be it sleepy sailor, his scrunched up clothing, the walls, ceiling, or floor around him everthing gets covered with a layer of the delightful escaped.

As to you as the young sailor, you now have a life long story to tell, and a nick-name that will be harder to shed than the coating you received that one sleepy night on board a submarine. One thing sticks in your memory of that event – you wish you had known more and remembered it even in a deep sleepy state.