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## Project Portable Oxygen Bottle "POB" Ejection Seat

The station was asked to establish a methodology of testing and cleaning "POB's" for a Pilot's Ejection Seat out of a Jet Aircraft.

The project was broken-down and comprising 8 steps of methodology.

1. Was to view the cylinder design specification and to work out the specific test pressures to apply to that cylinder without over pressurizing overstretching the cylinder.
2. The client's requests were to strip the cylinder back to clean skinned, without damaging the cylinder at all.  
We decided the best methodology was to chemically dip and strip the paint work off the cylinder. This left the cylinder cleaned skinned without any residual marks or metal loss.



- The next step was to undergo the Hydrostatic Pressure test with volumetric expansion test and Data Logging the test.



- Drying the tested POB's with a 3 stage clean filtered air source suitable for "O2" Oxygen Gas Traffic.



5. Repaint the cylinder POB's back to the client's specifications.



6. Clean & Dry the cylinder POB's for Oxygen usage for the cylinder to enter back into service.





7. Finale Inspection, Inspect the cylinder for any contamination, using a specific UV light source with the appropriate wave length suitable for oxygen usage. This was a challenge as the neck opening was under 1cm.

We embarked to find a manufacture to create a new light source with the appropriate UV spectrum and wavelength required.

The light guide required would need to fit through the neck opening which was 1cm in diameter.

After much R&D, we entered into a contract with an Israeli company to manufacture and deliver the light source.



8. Deliver the POB's back to the client bagged suited for oxygen usage.

