

Navy S1000D History

- Pre-2004, Multiple small projects by various Commands
- In 2004, Littoral Combat Systems was selected as Test Case for S1000D enterprise implementation.
- Database Selection
 - Multiple Databases were reviewed
 - OPNAV 04 Down selection
 - Contenta was currently in use for HM&E
 - Contenta was selected to reduce implementation costs and software footprint in the Navy
- Test Server activated in 2005

Results – Best Practices

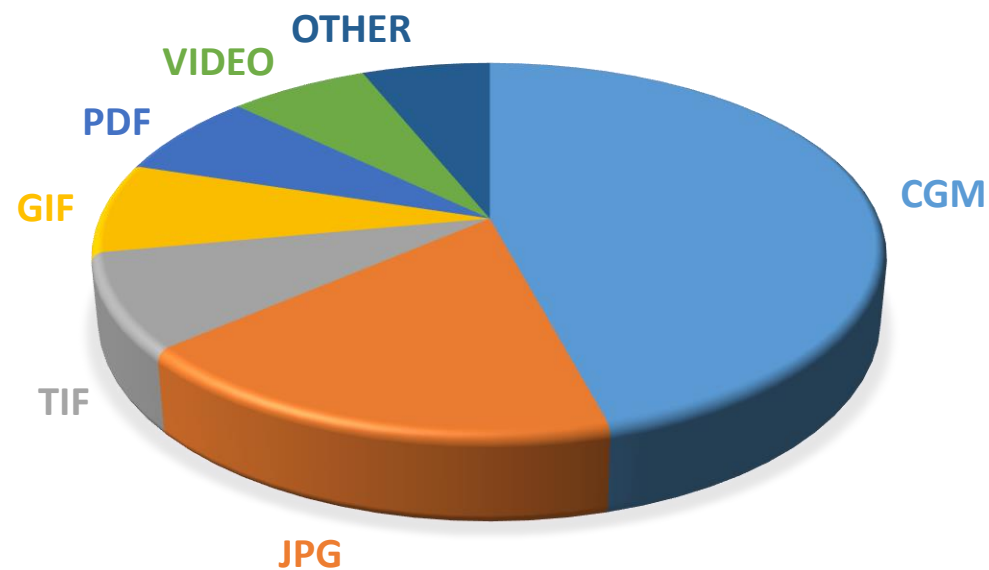
- Computer Hardware Infrastructure
- Conform to S1000D data constructs without deviation
- Determine Style and Baseline
- Standardize Data Module Incremental Size
- Standardize Editor Tools
- Provide Training

Enterprise-wide Implementation

- FY09 NSWCPCD designated as the NAVSEA's Center of Excellence for S1000D Implementation.
 - Mentoring Navy Activities in Acquisition and Sustainment of S1000D data
 - Developing of Navy Training (Classroom/NKO)
- Implementing Standard NAVSEA Integrated Publishing Process (SNIPP)
 - Integration of Contenta database into Distribution Process to the fleet
 - Integration of LiveContent into the TDMIS (Technical Data Management Information System)
 - Integration of LiveContent into Ship Board Servers
- S1000D CSDB Configuration Control Board (Aug 09)
 - Implemented to Control Output Styles across platforms

NAVSEA S1000D

- DI-TMSS-81805 (24 Mar 2010)
- NAVSEA CSDB Contents (2 May 2018)
 - Publication Modules: 11,208 (~1868 TMs)
 - Data Modules: 458,558 (~1,375,674 pages of data)
 - Illustrations: 72,623

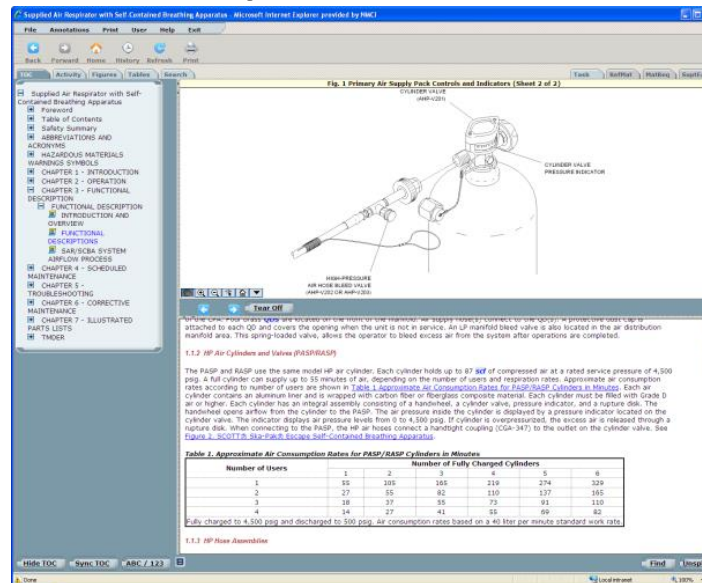


NAVSEA Output Standards

- Electronic Technical Manuals (ETMs)
- Interactive Electronic Technical Manuals (IETMs)
- PDF Publisher (MIL-STD 24784D)
 - Descriptive
 - Procedural
 - Troubleshooting
 - IPD

The Road Ahead

- ETMs – pdf format will make up the majority of TMs
- IETMs will be used only 15% or less of all TMs



TMIN

3-3.1.1 PASP Control Panel Assembly (CPA)

The PASP CPA houses controls and indicators that activate and monitor airflow. By turning the 3-way valve, the operator selects the cylinder to be on-line. A PASP or RASP cylinder is selected by turning the handle in the appropriate direction. The outlet for the 3-way valve is connected to an in-line air filter that traps small particles. The filter is located behind the CPA and cannot be seen on the panel. A regulator is located on the center of the panel and reduces the HP air to 100-115 psig Pounds per square inch gauge for the SCOTT® Escape SCBA or 60-80 psig for the MSA Mine Safety Appliances® Escape SCBA for delivery to the air distribution manifold. During operation, the CPA operator adjusts the regulator to maintain set pressure. An LPLow Pressure gauge monitors the pressure as air travels through the system. The face of the LP gauge displays a range from 0 to 200 psig. An HP gauge displays the air pressure upstream of the regulator. The face of the HP gauge displays a range from 0 to 5,000 psig. Both gauges are the Bourdon-tube type. See Figure 7-4.

When the supply pressure drops to 500 psig, an LP audible alarm should sound, and the PASP/RASP operator should switch to a new air cylinder. The alarm is located behind the LP gauge isolation valve and cannot be seen on the panel. Gauge isolation valves are provided for the HP and LP gauges, and allow the operator to isolate the gauges in case of gauge failure. The distribution manifold area is located at the bottom portion of the CPA. Four brass QDs Quick Disconnect are located on the front of the manifold. Air supply hose(s) connect to the QD(s). A protective dust cap is attached to each QD and covers the opening when the unit is not in service. An LP manifold bleed valve is also located in the air distribution manifold area. This spring-loaded valve, allows the operator to bleed excess air from the system after operations are completed.

3-3.1.2 HP Air Cylinders and Valves (PASP/RASP)

The PASP and RASP use the same model HP air cylinder. Each cylinder holds up to 87 scf Standard Cubic Feet of compressed air at a rated service pressure of 4,500 psig. A full cylinder can supply up to 55 minutes of air, depending on the number of users and respiration rates. Approximate air consumption rates according to number of users are shown in Table 7-1. Each air cylinder contains an aluminum liner and is wrapped with carbon fiber or fiberglass composite material. Each cylinder must be filled with Grade D air or higher. Each cylinder has an integral assembly consisting of a handwheel, a cylinder valve, pressure indicator, and a rupture disk. The handwheel opens airflow from the cylinder to the PASP. The air pressure inside the cylinder is displayed by a pressure indicator located on the cylinder valve. The indicator displays air pressure levels from 0 to 4,500 psig. If cylinder is overpressurized, the excess air is released through a rupture disk. When connecting to the PASP, the HP air hoses connect a handtight coupling (CGA-347) to the outlet on the cylinder valve. See Figure 6-30.

Table 3-1. Approximate Air Consumption Rates for PASP/RASP Cylinders in Minutes

Number of Users	Number of Fully Charged Cylinders					
	1	2	3	4	5	6
1	55	105	165	219	274	329
2	27	55	82	110	137	165
3	18	37	55	73	91	110
4	14	27	41	55	69	82

Fully charged to 4,500 psig and discharged to 500 psig. Air consumption rates based on a 40 liter per minute standard work rate.

3-3.1.3 HP Hose Assemblies

Each PASP is equipped with two HP hose assemblies. The HP hose assembly is displayed in Figure 6-31. The hoses are thermoplastic and connect the PASP and RASP cylinders to the 3-way valve on top of the PASP control panel. The major components of the hose assembly are a 3-ft hose with fittings, wire rope, bleed valve, and hand-tight coupling (CGA-347) air connection. The bleed valve is mounted on a union tee and allows the operator to safely release air from the hose. This valve is spring loaded and automatically snaps shut when not in use. It is identical to the LP manifold bleed valve located on the PASP CPA. The hand-tight coupling (CGA-347) allows for the connection of the hose to the cylinder valve. All of the above major components have a working pressure rating of 4,500 psig. The HP hose assembly is also equipped with a wire rope lanyard with loops at opposite ends to prevent the hose from presenting a whip hazard in the event of failure. Nylon cord binds the wire rope to the

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Questions?

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