

SEMAT Details

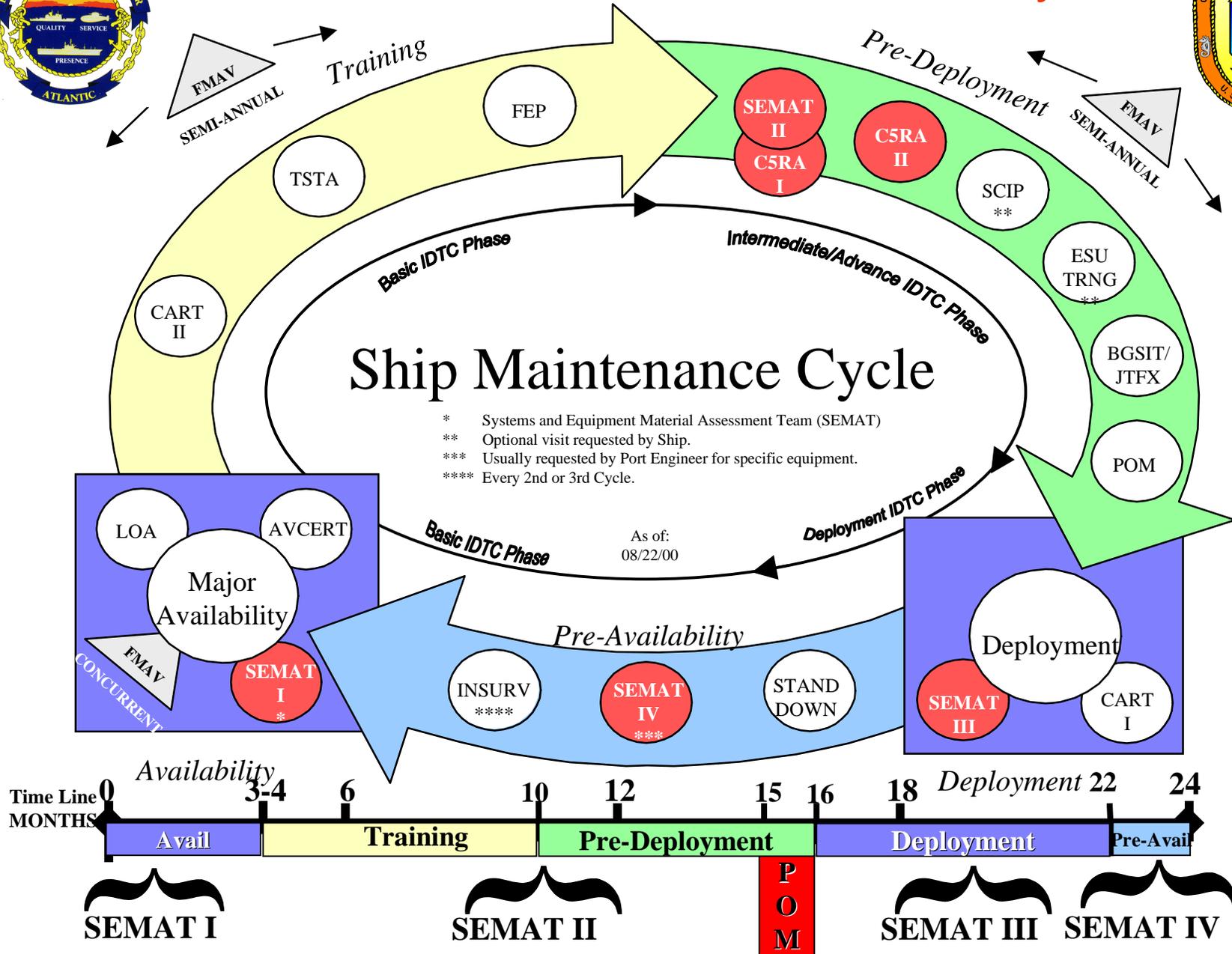
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SEMAT II/IV - Revised Maintenance Philosophy

- Sep/Oct 98 Navy set a course to reduce time spent on inspections/certifications/etc., during a Ship's Inter-Deployment Training Cycle (IDTC) and provide more time to Ship's Commanding Officers
- New inspection philosophy is two part:
 - Only inspect the right things at the right time
 - Only inspect them once during a Ship's IDTC
- Apr 99 Fleet Review Board consolidated/canceled majority of inspections/assist visits across entire Fleet
- Sep 99 COMNAVSURFLANT revised Atlantic Fleet surface HM&E assessments into single process: Systems and Equipment Material Assessment Team (SEMAT)



CNSL Continuous Maintenance Cycle



SEMAT II/IV - Visit Types

- SEMAT I (Formerly SNAPSHOTS)
 - Duration: 10 Working Days
 - Lead Assessment Activity: SUPSHIP Portsmouth C220
 - When: Executed in current Depot avail for next Depot avail
 - Focus: Prepare for next Depot Availability
 - Sample Assessment Objects: Tanks, Voids, Decks, Vents, Hull Structures, Remote Operating Gear (ROG), Watertight Closures

SEMAT II/IV - Visit Types (Cont.)

- SEMAT II (Formerly TARGET)
 - Duration: 10 Working Days (15 for LHA/LHD/MCS) in conjunction with CSRR Phase I
 - Lead Assessment Activity: FTSCCLANT 4101
 - When: Prior to Deployment
 - Focus: Pre-Deployment preparation and input for next Major Availability
 - Sample Assessment Objects: Rotating Machinery and Equipment, Electrical Equipment, Main Propulsion and Auxiliary Systems, Sea Valves, Elevator Support Unit, SEMAT I Objects (Structural, Piping, ROG, Watertight Closures (partial)), Oily Waste Separators, Sonar Dome Pressurization System, Cathodic Protection System

SEMAT II/IV - Visit Types (Cont.)

- SEMAT III (Formerly MSA)
 - Duration: 1 Week
 - Lead Assessment Activity: SUPSHIP Portsmouth C220
 - When: Accomplished during Deployment
 - Focus: Preparation for upcoming Availability and assess equipment/systems not assessed by other visits.
 - Sample Assessment Objects: Zone Inspection Discrepancies, Stanchions, Piping, Drains, Scuppers, Lighting/Power/Telephone Distribution Systems, Boats, Ladders, Washdown System, Damage Control Items

SEMAT II/IV - Visit Types (Cont.)

- SEMAT IV (Formerly AEC II)
 - Duration: Variable based on visit agenda
 - Lead Assessment Activity: FTSCCLANT 4101
 - When: At end of or after Deployment and prior to Depot Availability
 - Focus: Specific assessment by request
 - Sample Assessment Objects: Specific equipment by request of Port Engineer/Maintenance Manager to eliminate certain jobs or refine job parameters for the purpose of reducing or clarifying the FMAV and depot work packages; or to assess certain high-cost equipment that has incurred high usage rates during the deployment to determine if overhaul is required

SEMAT II/IV - Guiding Principles

To ensure successful accomplishment of, and future benefit from SEMAT visits, COMNAVSURFLANT and executing activities follow these guiding principles:

- Maximum of one look per object per cycle (IDTC).
- SEMAT uses existing Navy systems and databases: 3-M, CSMP, Regional Maintenance Automated Information System (RMAIS), Integrated Class Maintenance Plan (ICMP), SCLISIS/CDMD-OA, Master Assessment Index (MAI), and SNAPSHOTS.
- SEMAT develops and uses standard test procedures in PMS. Although assigned for assessment team accomplishment, these test procedures are also available for Ship's Force self-assessment.

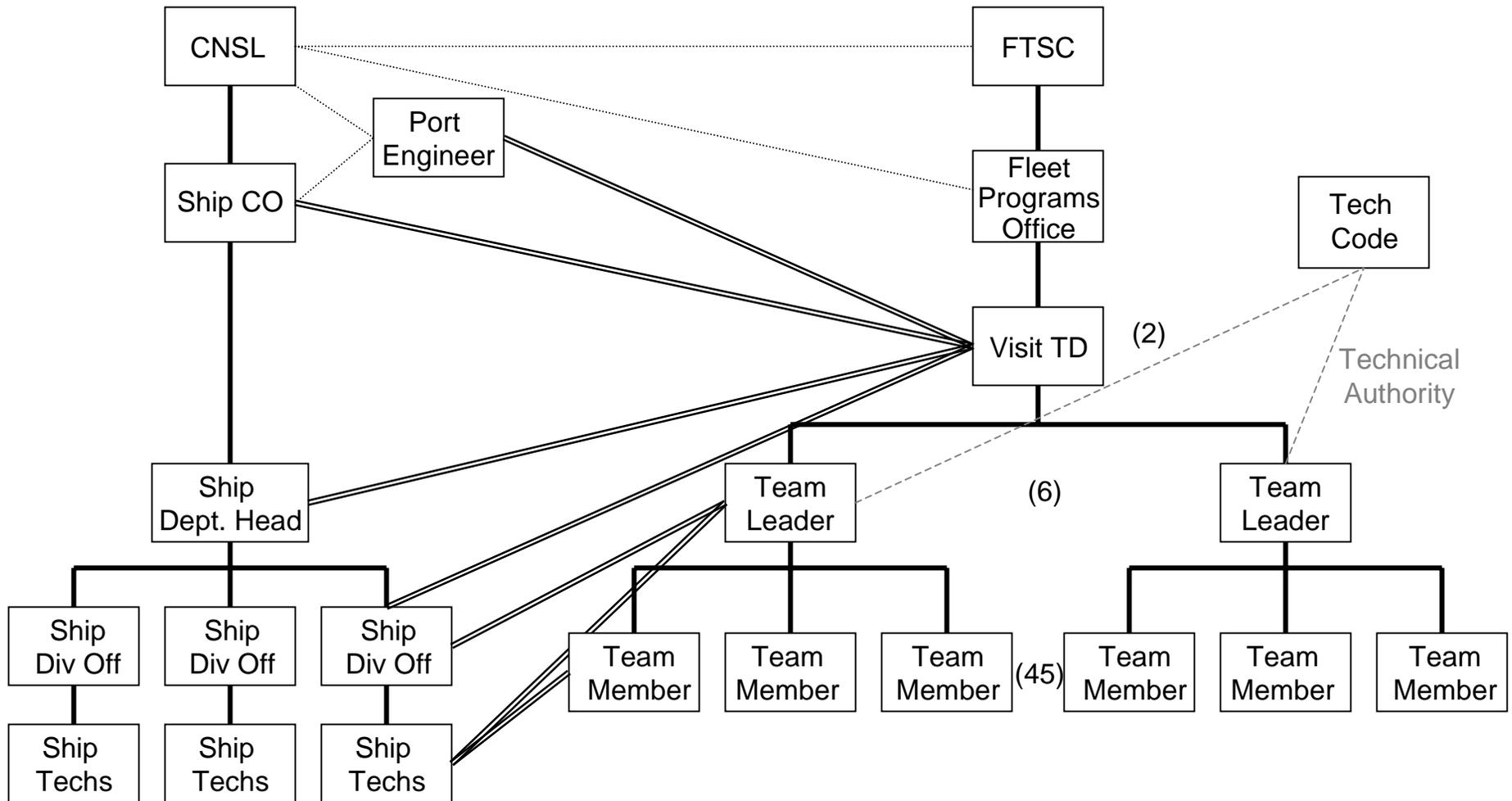
SEMAT II/IV - Guiding Principles (Cont.)

- SEMAT documents material discrepancies on OPNAV 4790/2Ks. Discrepancies are reviewed and screened by Ship's Force and Maintenance Manager. All discrepancies are entered into the CSMP.
- SEMAT documents configuration discrepancies on OPNAV 4790/CKs and uploads via CDMD-OA when possible.
- SEMAT uses the Navy supply system. SEMAT attempts to expedite delivery, locate items not carried by the supply system, addresses recurring problems, and maximizes use of no-cost programs (e.g., CRAMSI, RAM, Gold Disk for electronic diagnosis and repair, etc.).

SEMAT II/IV - Guiding Principles (Cont.)

- SEMAT uses existing financial systems for parts support. Repair parts are purchased using EMRM, FMA parts using ROV, and depot-level repairs using ship depot maintenance funding.
- SEMAT follows standard Navy Maintenance and QA processes for criticality and level of work.
- No grades or performance evaluations are assigned. Copies of Visit Final Summary Books are provided only to Ship's CO, FTSCCLANT/SUPSHIP program manager, and the CNSL sponsor.

SEMAT II/IV - Visit Relationships



SEMAT II/IV - Visit Personnel

- Visit Technical Director (TD) - Technical/logistics coordinator for SEMAT II and SEMAT IV visits
- Visit Assistant Technical Director - Assists TD and coordinates tag outs with Ship's Force
- Visit Team Leader - Senior subject matter expert in charge of series of systems or equipment during visit
- Visit Team Member - Subject matter expert who conducts assessments, repair assistance, maintenance training
- Visit Team Support - Data entry and repairs parts researcher/ locator/expeditor

SEMAT II/IV - Execution Summary

- In-brief Ship's Force on visit specifics and first day test plan
- Conduct material condition assessments
- Provide maintenance training
- Assist with repairs
- Daily progress and planning briefings
- Review, validate and correct 2-Kilos already in CSMP
- Find and expedite repair parts
- Document discrepancies
- Provide risk assessments
- Generate feed backs
- Collect metrics data
- Debrief ship on visit results and material condition

SEMAT II/IV - Visit Assessment Procedures/Equipment

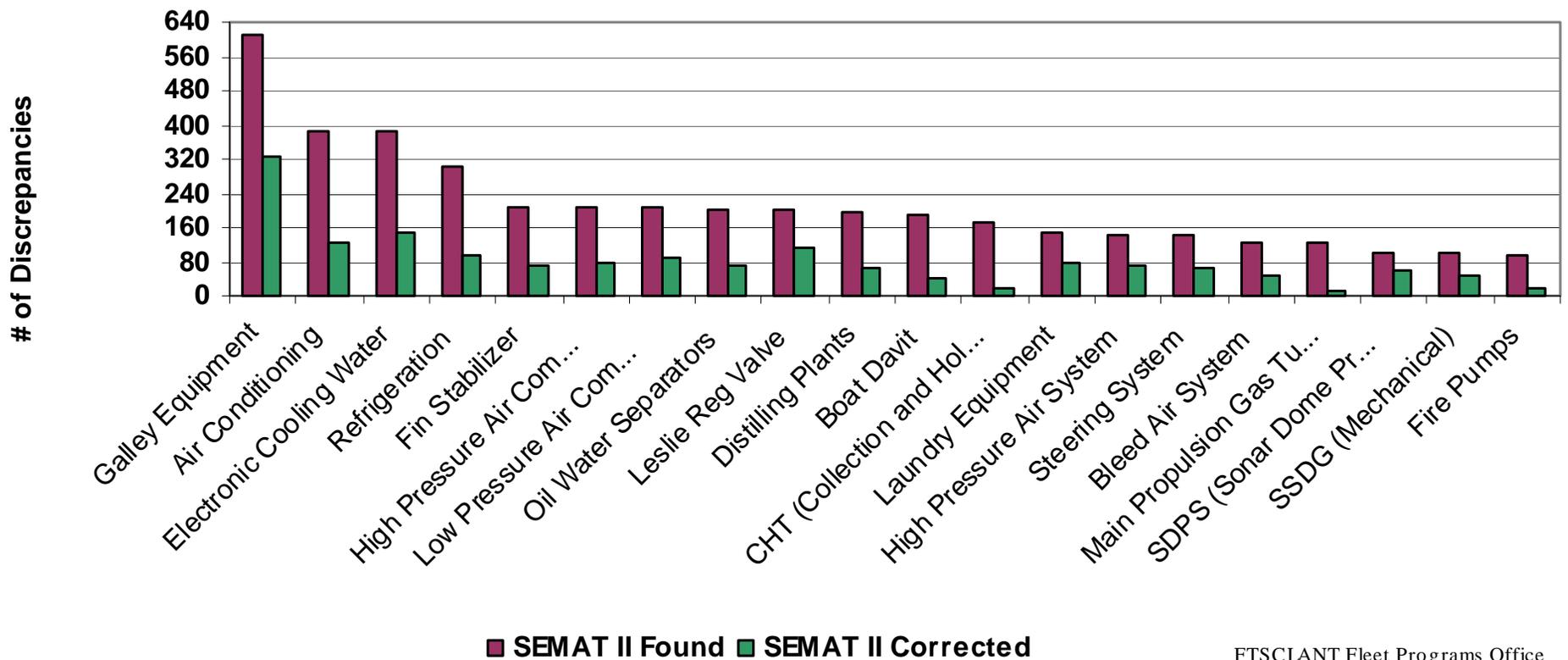
- Vibration Analysis/Alignment Checks on rotating machinery
- Infra-Red testing on motor controllers, switchboards, electrical distribution boxes, lagging on steam ships
- Flow test of sea water systems, centrifugal pumps
- Electrical testing of generators and electrical equipment
- Leak detection of sea valves
- Bore scope on boilers and ventilation
- Ultrasonic testing as required
- Integrated Condition Assessment System (ICAS) diagnostics used as available
- Gas Turbine Readiness Review

SEMAT II/IV - Visit Outcomes

FY 1998 - FY 2000

9/5/00

FFG 7 Class SEMAT II MOE 2b: Top 20 Systems for SEMAT II Discrepancies



of Visits: 30

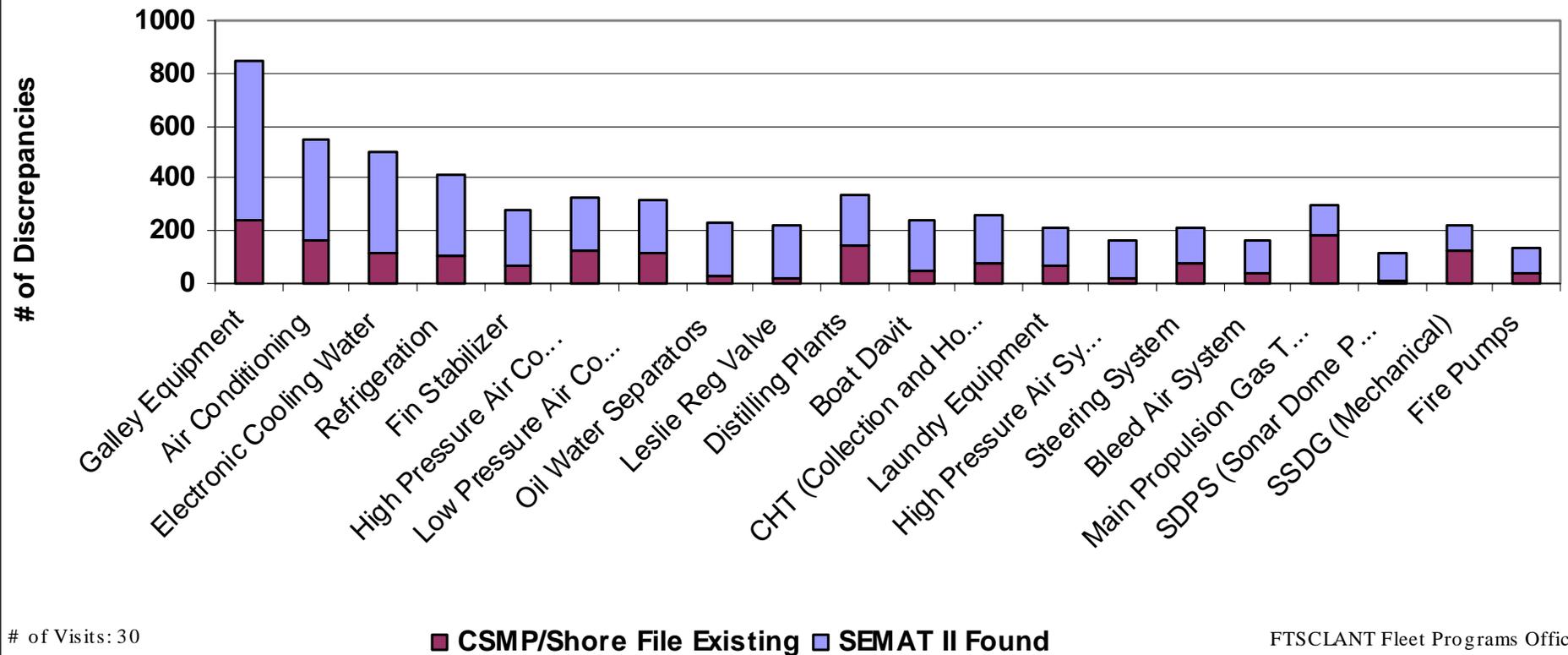
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SEMAT II/IV - Visit Outcomes

FY 1998 - FY 2000

9/5/00

FFG 7 Class SEMAT II MOP 6a: Top 20 Systems for Total Discrepancies



SEMAT II/IV - Conclusion

- SEMAT II/IV are vital parts of Fleet Maintenance Philosophy.
- Objective System/Equipment Assessment.
- No report for Chain-of-Command; all documentation is via the CSMP and 3-M.
- The true customer is Ship's Force and Port Engineer/Maintenance Manager.
- Visit Team stays connected to Fleet via Technical Assists, other visits, and Direct Fleet Support.
- Validated material condition of ship improved maintenance planning (validated work candidates).