Self-Assessment as part of the Quality Leader's Toolbox

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Learning Objectives

At the conclusion of this presentation attendees should be able to:

- Understand how self-assessment is used as a leadership tool to document issues and communicate status

- Understand the structure of the self-assessment tool

- Discuss the feasibility of self-assessment as it applies to ISO quality systems

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Some Facts and Figures

- Average 44K-46K calibration transactions annually = 200 per day

- Sailors and civilians work side by side = 125 total

- Support Navy assets world-wide

- Quality system is ANSI Z540.1 compliant, reviewed by Navy every 36 months

Why Self Assessment

- Immature organizations predominantly focus on solving today's problems

- Road to success requires a proactive preventative model
  - Avoiding today's problems
  - Finding the source of future problems

- Road to success starts with understanding where we are

Self – Assessment Purpose

- How we did → How we are
- Identify and communicate deficiencies
- Communication tool for horizontal and vertical discussion
- Helps set / reinforce leader strategy

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How we do Self-Assessment

- Business Process Management focus
  - SIPOC
  - SMART metrics
  - Integrate into current business processes
- "People, Process, Plant" structure
- Common communication platform that strives for clarity

C137 METCAL

Organizational/Functional Assessment
(Risk & Concerns + Process, People & Plant Report)

2nd Quarter FY2017

Risks & Concerns

PROCESS
- WIP management of non-workables has been targeted as a large area for self-improvement.
- Continue focus on overdue PMs and calibration standards.

PEOPLE
- Internal Trouble Report (temperature switches) identified weak shop/METCAL indoctrination program; this problem is deemed to be systemic across all shops and all branches.

PLANT
- Initiated a Risk Assessment Matrix tool to identify potential liabilities of systems (Calibration Standards) and certified personnel, tied to scope of competency
- HVAC – Cooling towers delivered, one installed, not hooked up.

Organizational Health Scorecard

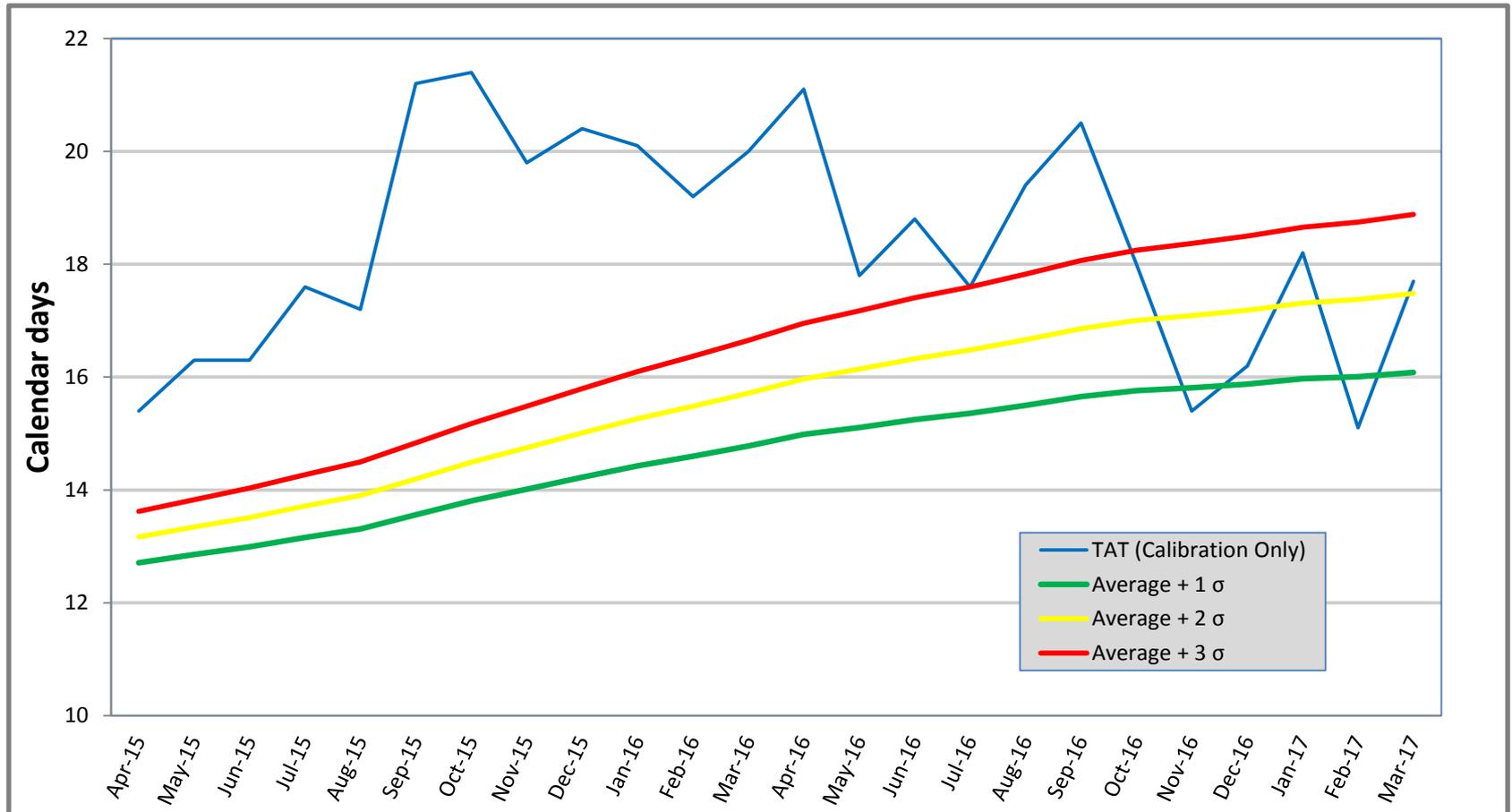| Metric or Area Rated (Each item and its score will be presented by a separate slide)	Quarterly Score 1.0 = Red 2.0 = Yellow 3.0 = Green	Objective Or Subjective
Turn-Around-Time	2.0	O
Administrative Error rate	3.0	O
Total WIP Summary	2.75	S
Throughput-Ratio	2.0	S
Risks & Concerns	2.2	S
Summary (average)	**2.35**	**O**

OVERALL ORGANIZATIONAL HEALTH

≤ 1.0   ≥ 3.0

Turn-Around-Time (Process)

*Establishing new baseline/goals based on statistical data, improved process and TAT calculation method; see next slide for more information.

TAT Cause Analysis Overview

Major STCAs
- Statistically calculate a realistic TAT goal and UCL considering real time data discovered during this analysis.
- QAC and/or senior QAR provide oversight of WIP to minimize time awaiting inspection i.e. WIP management.

Major LTCAs
- Reassign workload to shops that have less; there is no official line between RSL and PROD other than items that require ROC.
- Cross training of technicians must have more emphasis when low workload permits even if it decreases output the end result will pay-off.
- Review processes (SOPs) for streamline without losing consistency e.g. remove customer reject notification.
- Re-emphasis the importance of WIP management; this starts at the shop/technician level but involves all levels. Emphasis should ensure jobs are in their correct job state and involve follow-up actions; i.e. making inquiry's to supply, engineering, customer reps, other shops, etc.

METCAL Administrative Errors (Process)
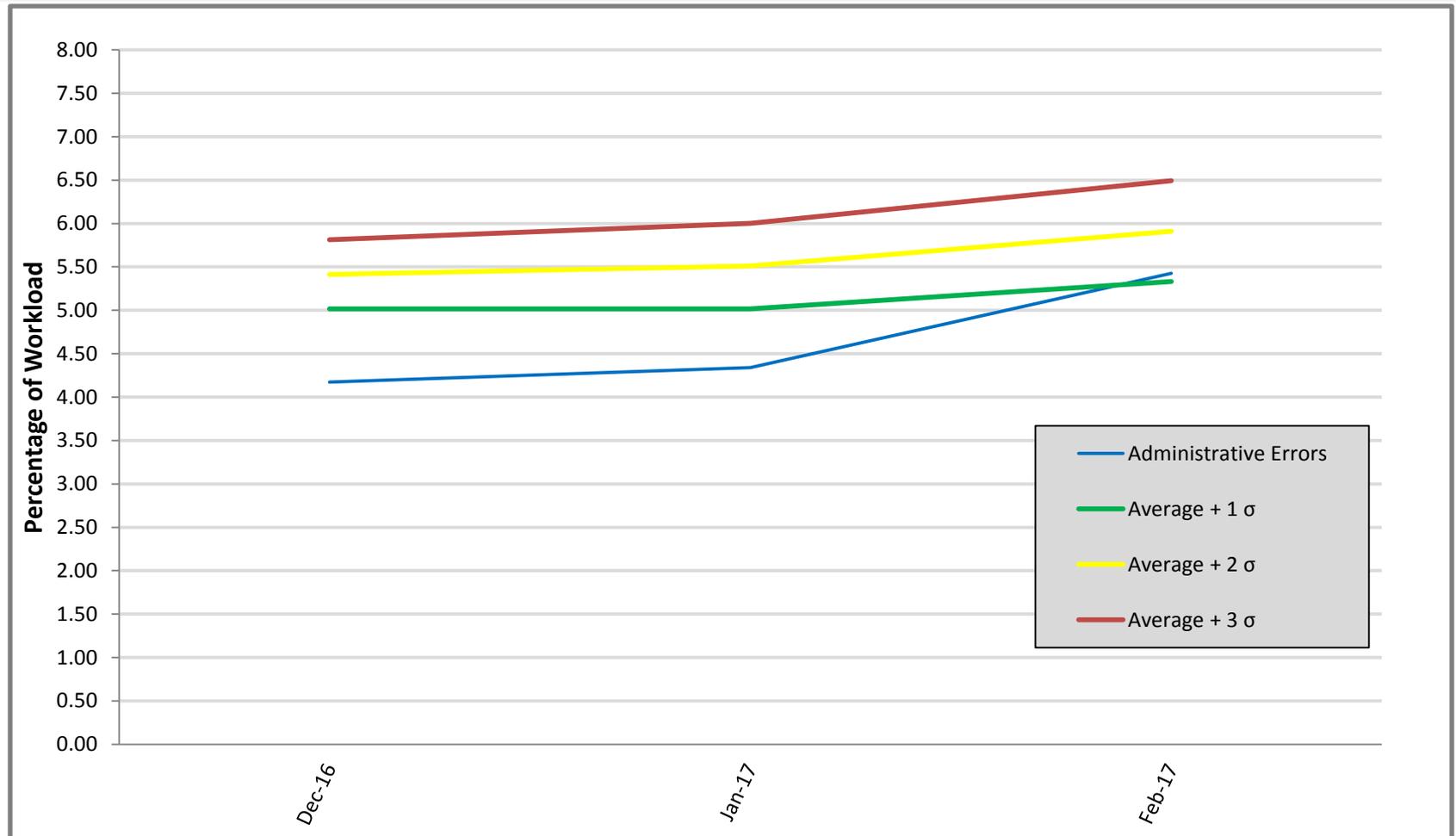
- December 2016 established a new baseline due to a change in reporting inspection process; product quality is not at risk given this is part of our internal process and all errors are corrected before release.

Total WIP Summary (Process)
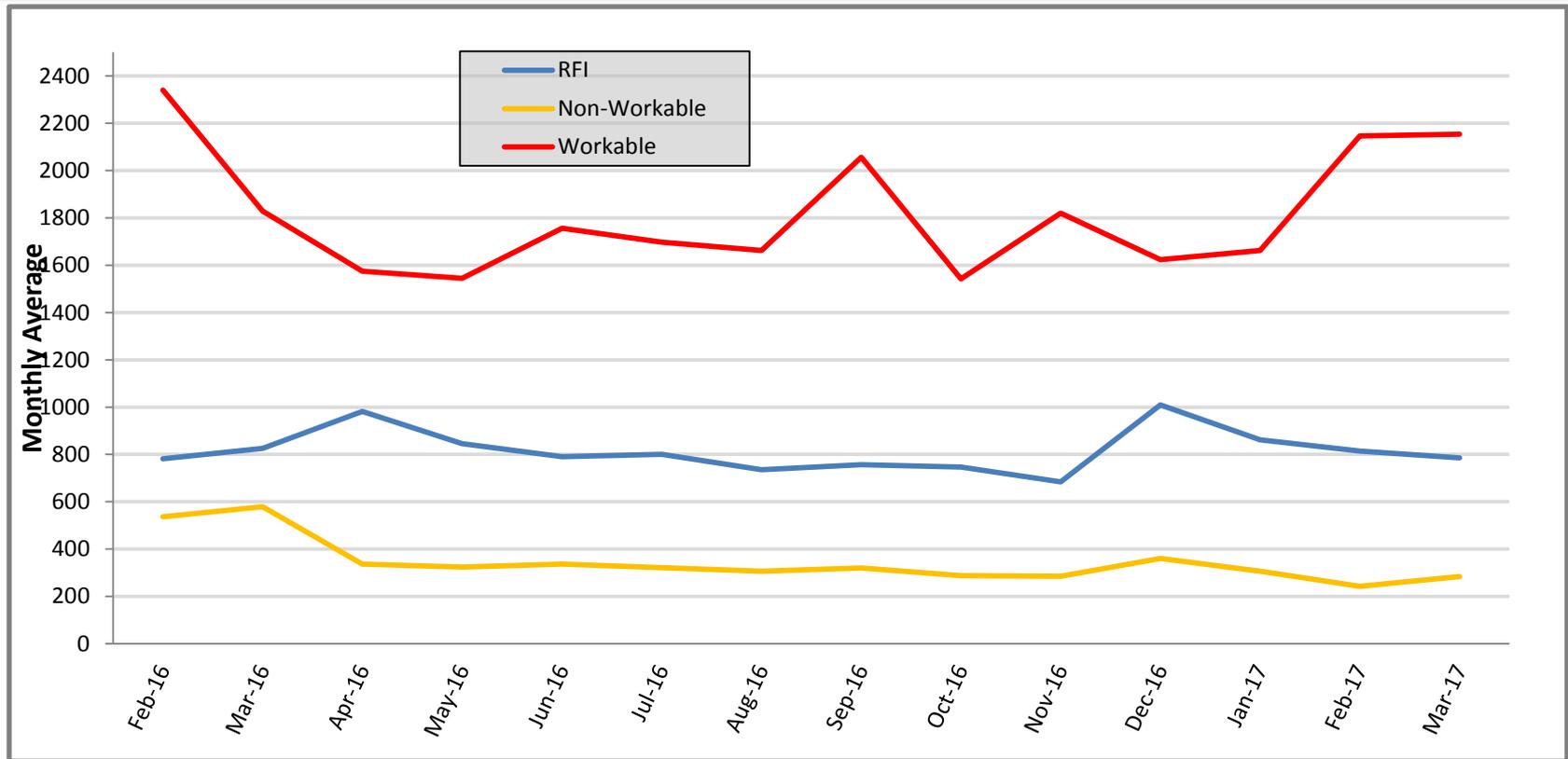
- Workables trending up and flattened (maintaining).
- RFI trending down is positive (proactive work by PC, S&R and BLDG 510).
- Non-Workable trending down (overall) is positive (standards, supply, tech data, etc.).

Total WIP HEALTH

≤ 1.0   ≥ 3.0

Top Four Non-Workable
(Does not include "Subcontracted" items)

Legend:
- ■ Engineering (LCP,LCG, Technical Guidance/Assitance)
- ■ Standards (MARCC standards are unavailible for use)
- ■ Parts (Federal supply system, commercial vendor)
- ■ Funds (C130S Process, Customer Funding Stream)

Y-axis: Monthly Average (0 to 220)

X-axis categories: Feb-16, Mar-16, Apr-16, May-.., Jun-16, Jul-16, Aug-16, Sep-16, Oct-16, Nov-16, Dec-16, Jan-17, Feb-17, Mar-17
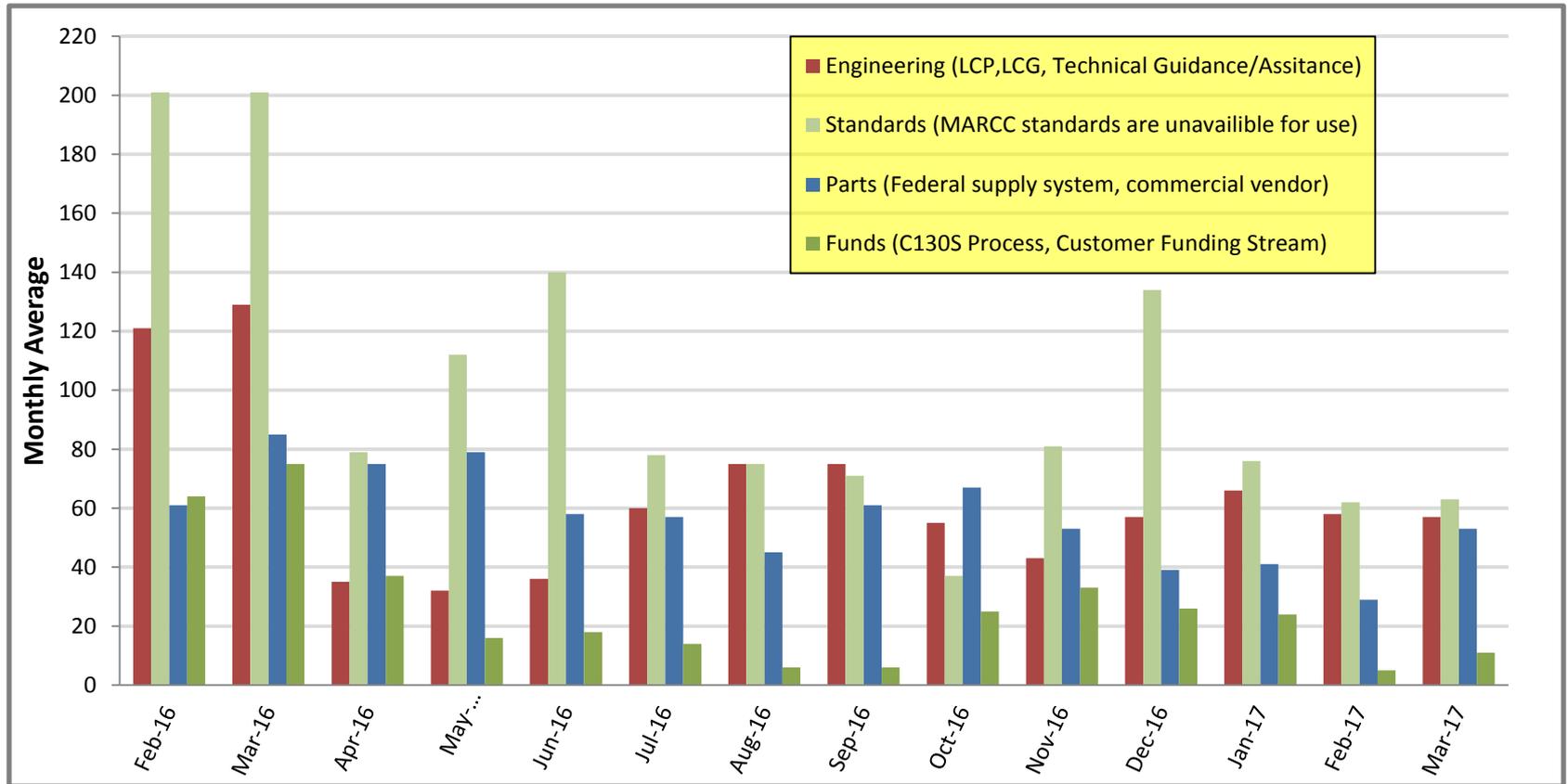
- MCMS "Job State" accuracy is vital; technicians are responsibility for inputs.
- Vigorous/continuous WIP management/oversight is the responsibility of the Branch Heads and Supervisors to "manage" and minimize where possible.

Non-Workable WIP
Subcontracted Calibrations Only (as of 4/21/17)

Number of assets in listed job state			
	< 30 days	30 – 90 days	> 90 days
Awaiting Subcontract	4	2	3
Subcontracted	6	12	3
Number of Jobs "delayed" due to Subcontracted process			
Customer		Jobs	
C137 Cal Lab		16	
NAVAIR		31	
NAVSEA & Other (Surface, Sub, etc.)		18	
NNSY		31	
Total:		**80**	

- Increase in numbers/delays awaiting subcontract.
- Decrease in numbers impacted by delay.

Throughput Ratio (Process)
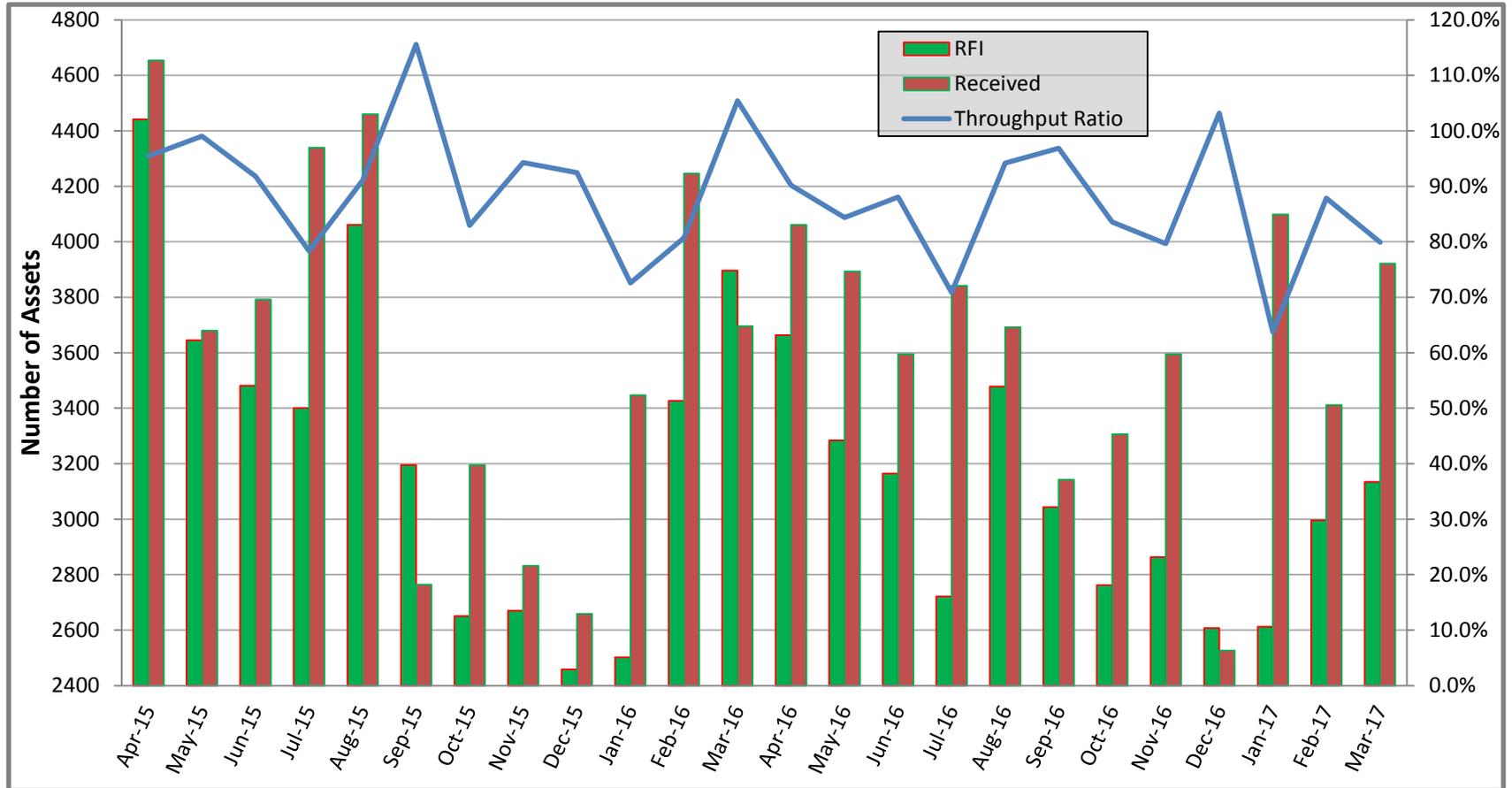
- Output (RFI) below expectations; maintaining with consideration to high receipts.

Throughput Ratio HEALTH

≤ 1.0   ≥ 3.0

Other QA Information (Process)

Metric	Amount	Goal
NNSM Surveillances (QPS)	12	18
MARCC (C137) Trouble Reports/Complaints (QPS)	1	0
NNSY Equipment Procurement Violations(QPS)	4	0
QA Process Failed (Label, interval, etc. external notification)	1	0
Replicate Tests (SME collateral duty inspector)	2.7%	3.5%
Overdue Standards (occurrences/outstanding)	38/0	0/0
Overdue PMs (occurrences/outstanding)	14/0	0/0

- Missing NNSM surveillance's due to emergent issues/normal churn/schedule.
- One Trouble Report (Temperature Switches), recall of 17 assets; ICP not being followed, LTCA improve shop indoctrination process/SOP.
- One returned item for incorrect calibration label; minor.
- Replicate tests not being performed by supervisors/QARs; QARs counseled on duties, supervisors need to take the time to delve into technician KSAs.

Civilian Personnel (People)

Grade		On-Board	Billeted
Division Head		1	1
Branch Heads		3	3
Staff (QAC/Training)		2	2
Engineers		4	4
Administrative Clerks		2	2
Supervisors		2	2
Work Leaders		4	5
RSL Technicians		12	15
Prod Technicians		21	20
Totals:		51	54

- Overload of Production Techs due to normal attrition; this will balance out in the future when RSL positions are filled from Production via the pending MIC.
- Work Leader for Production Mechanical has been selected.
- Internal RPA for three Production Mechanical pending.

Military Personnel (People)

	Grade	On-Board	Billeted	Expected Losses	Expected Gains
Officer in Charge	LT	1	--	--	--
Chiefs (ET,EM,LS)	E-7/E-8	6	4	--	--
Quality Assurance Reps (AT, ET, EM, IC)	E-4/E5/E-6	6	0	--	--
Administrative Clerks (AZ)	E-5/E-6	3	2	1	--
Logistics/Supply (LS)	E-5/E-6	4	5	4	--
2M Repair Technicians (AT, ET)	E-5	4	4	--	--
Elec Calibration Technicians (AT, ET)	E-4/E-5/E-6	36	38	9	10
Mech Calibration Technicians (EM, IC)	E-4/E-5/E-6	29	18	7	2
	Totals:	89	71	21	12

- On board -vs- allowed "totals" are aligned with current manning levels; however level of experience on the mechanical side is inadequate, see next slide.
- Technicians with no formal training are a risk and require extensive training/oversight ; they are only allowed to perform work in the mechanical area of measurement (torque, pressure, etc.)

Upcoming Audits/Inspections/Events

Area/Subject	Organization	Date
Pressure Test Chambers	NAVFAC	*Dec-16
Proficiency Testing (ILC), Audit D Section A	SSP	Apr-17
C136 METCAL Program (Annual)	NNSY	May-17
Proficiency Testing (ILC), Audit D Section B	SSP	Jul-17
2M & MTR Site Review (18 months)	NAVSEA	Sep-17
JNAC (now includes OICR) (3 years)	NAVSEA	Mar-18

- *Inspection (No findings) performed in November 2016; waiting for information concerning PTC used for barometers.

2018 JNACT Preps (3/8 – 3/21 2018)

	Review 2015 Findings 8/2017	Review 2015 Actions 9/2017	Review Scope 10/17	Review Quality Manual 11/17	Review Assignment Memos 12/17	Upload Website 1/18	Measure Light Levels 2/2018	Field Day 3/2018
Director	✓	✓		✓	✓			
Deputy		✓					✓	✓
QAC	✓	✓	✓	✓	✓	✓	✓	
Engineering	✓	✓						
Training		✓						
RSL B/H		✓	✓					✓
Prod B/H		✓	✓					✓

- Routine or annual operations i.e. inventories, PMs, fan cleaning, etc. are dictated by SOP and therefore are not listed here as milestones.

Major Division Projects (Process)
Active

Branch	Description	ECD
All	Management to collaborate on elements required for the Safety/HazMat program/SOP.	May-17
Production	Revise SOP-27 (Classified Equipment).	May-17
RSL	Revise SOP-28 (Nuclear).	May-17
QA	Revise SOP-17 (Issue & Receipt, PC, S&R and NNSY 510).	May-17
Deputy	Revise SOP-26 (ESD)	May 17
Engineering	Update calibration strategy and develop process for PTP-4297E-3Y16 (Lexeco) Flux meter / Core Loss Testers. Existing support rendered invalid due to modifications which effectively make these new items	Jul-17
Engineering	Support instrumentation calibration for SSN701 assets. This will include reviews of NNSY TWDs for calibration of instrumentation, assigning existing calibration processes where possible, developing local guidance where it is not, and coordinating onboard calibration with onsite.	Aug 17
Engineering	Update MARCC METRL to improve communication of technical direction to laboratory personnel.	Aug 17
QA	Collaborating with RSL/Production SMEs to identify Non-NCE standards; a prerequisite milestone required to re-evaluate the Non-NCE POAM created by Engineering.	Sep-17
Engineering	Develop calibration support for C900 Water Pump T/S or Thermal Spray Booth at C900's option.	Sep-17

Major Division Projects (Process)
Planned

| Branch	Description
QA	Revise SOP-14 (Internal Audits)
QA	Revise SOP-05 (On-Site)
Engineering	Analysis of non-NCE Standards; revise POAM, collaborate with C130S.
Engineering	In conjunction with QA, develop SOP content covering SPC and ILC processes, and incorporate it into SOP-03.
Engineering	Assess the laboratory's reagent water supply and determine if better means are available to source pure water within the lab.
Engineering	Evaluate LCP backlog (currently 9 in the queue) and work to complete preparation as resources allow.
Engineering	Migrate/update production software running on outdated hardware platforms to current and sustainable hardware/software.
RSL	Identify all subcontracted/CSP items for annual contract.
Production	Revise Position Descriptions for 3378 Job Classification.
Production	LTCA process-improvement ideas for 140; space, scope, resources, workload shift, etc.
QA	Tribal Knowledge

Naval Base Norfolk BLDG V-61 (Plant)
Facility Conditions

- ## Facility Repair Projects

    - One new cooling towers installed; not yet functional.

    - CDC Monitors – often have to wait 3+ days for a 15 minute fix.

    - Carpet in several workspaces, requires more C137 input; planned for FY-17. Waiting on floor plans from branches.

    - Security system not fully functional.

    - Re-keying of all doors pending.

- ## Environmental Concern

    - Work order submitted to NAVFAC to specifically requesting room 111 have its humidity adjusted; requires new thermostat. *JNAC

Naval Base Norfolk BLDG V-61 (Plant)
Environmental Readiness
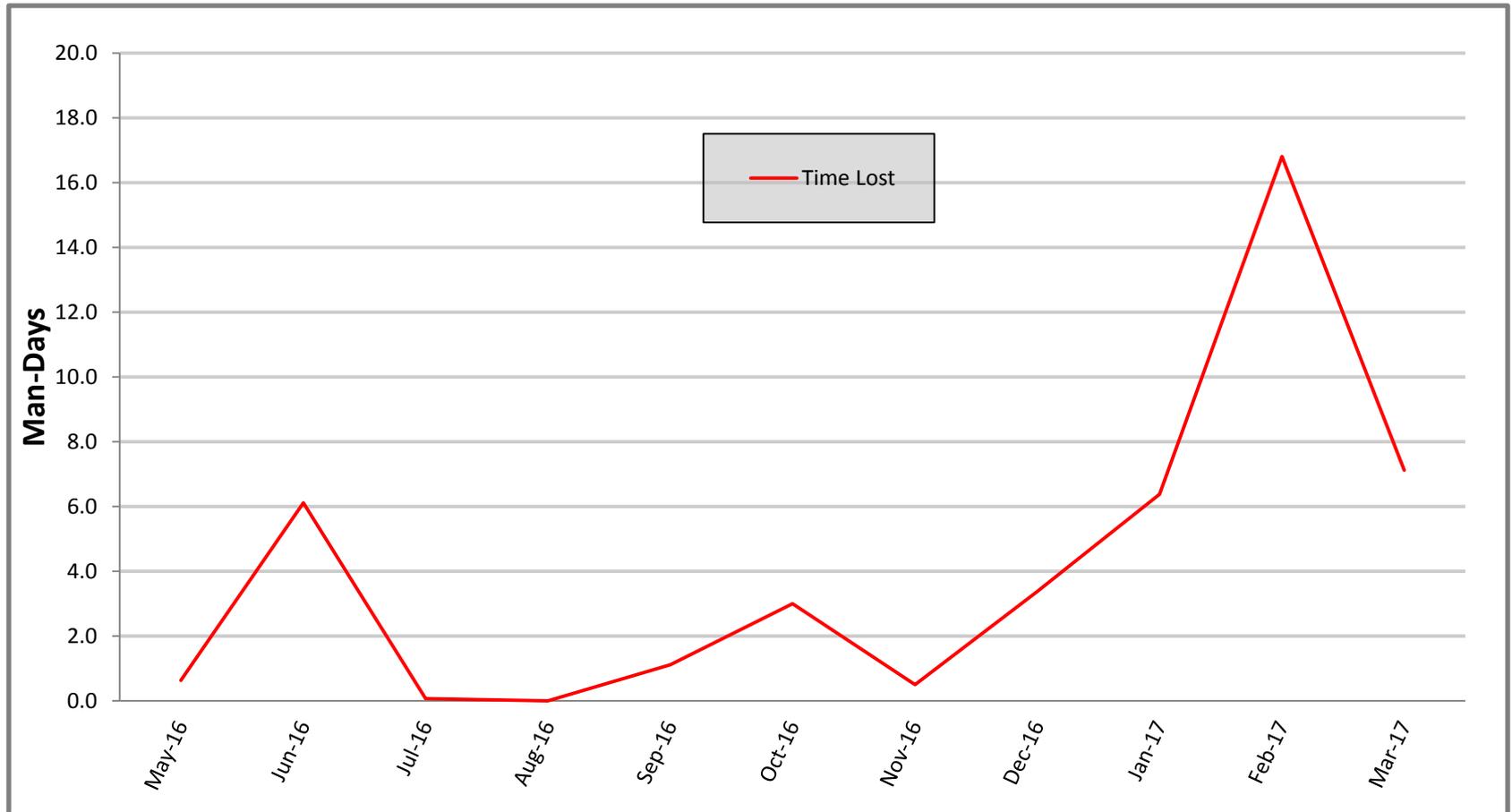
- Time lost due to environmental conditions being out of required specifications; data now being captured as of May 2016 by a specific JON in SPDSK.

Loss of Capability (Plant)

Measurement Area or TI	System/Standard	Days	Reason
Ammeters (> 20 A)	2555A		Awaiting Repair
MK 567 Test Bench	SD886583S		Awaiting Repair
High Accuracy Dew Point	M3		Subcontract Cal (CSP)
Accelerometers (Depot level Cal)	680		Subcontract Cal (NPSL)

Summary

- Self-assessment is a critical communication tool that relays the organization's story
- Self-assessment has to be integrated in the every day work
- Self-assessment discussions are healthy for the life of the organization
- Self-assessment is a reflection of the leadership team

What other comments or questions do you have?

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