#### Advanced EAM Planning & Scheduling August 24, 2012



John Reeve Manager/Practice Leader Maintenance & Reliability Solutions















And much, much more...

WW.MT-ONLINE.COM



Node



Bang for the

**Buck** 

MRO Inventory Have the Experts Failed Us?

www.uptimemagazine.com



### **Advanced EAM Planning & Scheduling**



### Speaker Agenda

#### Advanced EAM Planning and Scheduling (plus life stories)

**EAM System Vision** 

EAM purpose & advanced processes overview

**Problem Statement & Definition** 

Maintenance world reality – there is no guarantee of success

Planning / Scheduling Theory

WS Process, Business Case and Definitions

Weekly Schedule Requirements

**Requirements, Prerequisites & Screen Design** 

Bad Practices: be aware of what can go wrong

Understand the problem – and chart a course

A Strategy for Moving Forward

Ideal process flow and Empowering the Users

### Scheduling Background and Experience



3 year consulting assignment



The question is, how can **mid-to-small size organizations** take advantage of advanced processes?



**Basic Processes** have little ROI

## What are EAM Goals

Service Level Optimization Track where-used; BOM Auto-reorder based on ROP, EOQ, safety levels & lead-time Part reservations & staging

> Materials Management

PMs, Job Plans & Safety Plans Task Instructions Craft, material & tool estimates Attached documents Lock-out, tag-out, & permits

#### **Work Planning**

Backlog

Management

Work Force Efficiency

#### Advanced Scheduling Techniques

Weekly Schedule; frozen set Daily plan – derived from weekly Resource pool identified Minimal click-count to create Weekly Schedule compliance

Backlog 90% planned Backlog growth trending Open backlog reviews for accuracy Completed repair work reviews



# **Maintenance World Realities**

#### Of the total CMMS client sites:

- 25% -- do not plan **any** work
- 40% -- have inaccurate maintenance **backlogs**
- 70% -- fail to perform any form of **failure analysis.** Further, *"failure history"* is stored in **text fields**, or in file cabinets.
- 90% -- are not able to generate, store, or measure against a resource leveled weekly schedule



#### Advanced Processes





# No Guarantee of Success

- Generically speaking, you cannot assume that all EAM products will support true maintenance scheduling, or in this case, a resource leveled weekly schedule.
- Although most product implementations expect to be successful just by installing the software and attending training (e.g. calibrations, lockout-tagout) ...
- … the weekly schedule design is an advanced process and requires careful thought. History has proven this.



CAUTIO

### Where's the Beef! The Solution is missing a Real-World Process for Maintenance Management

You just can't say...

"**you need to plan** and **schedule your work"**.

What **kind** of schedule?

Different schedules have different requirements.



# This is like throwing darts at a board and hoping that something hits the target.





**\*\* ESPECIALLY IMPORTANT FOR ADVANCED PROCESSES \*\*** 

#### **Some Terms for Discussion**

Frozen work set Automatic resource leveling WS Process Job Planner Role

Backlog Management

*Order of Fire* Availability & Calendars Theory, Function and Roles

### The Focus is Day-to-Day Maintenance



Craft Efficiency + Asset Reliability = = Cost Optimization

#### Planning & Scheduling dramatically improves Productivity

13% Personal	10% Clerical	15% Waiting for Jobs	22% Travel Time and Trips to Store	10% Waiting for Instructions	30% Productive Work
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Before **P&S** is fully implemented

Crafts generally **like to be scheduled** so they **know in advance** what to expect. Conversely they do not like to be jerked off one job to go to another which introduces more errors & impacts safety. Business Case



After P&S is fully implemented

As one of the most recognized **authors** and books on the subject of **Weekly Maintenance Scheduling**, **Doc Palmer** said ...

> Weekly Scheduling is the most significant benefit yet to be realized by the EAM community.

 Most top performing maintenance organizations desire to create a weekly schedule and measure compliance against it.



### **Doc Palmer – key concepts**

Definition of a Weekly Schedule	A <u>one week period</u> strikes a balance between creating <b>set goals</b> and still allowing for the <b>dynamics</b> of an ever-changing system.
Subjective Selection	<i>Not a best practice</i> . The attendees of this meeting are mostly focused on what work came in the <b>last 48</b> hours. Plus there is no way they did a review of entire backlog during this meeting.
Definition of Opportunistic scheduling	One of the purposes of holding a weekly schedule meeting is to review/approve the work. More importantly it is advantageous to <b>add lower priority</b> <b>work where similar high priority work</b> (on same asset or location) was selected.
70% Loading	The organization expects (on average) 30% reactive each week. The goal is to produce a <b>believable</b> <b>schedule</b> from which the working level is fully expected to perform in that time period.

#### **Weekly Schedule Process**



#### If your Backlog is large, how do you really know what jobs to work on next week?

More importantly, how is it the Maint Supervisor can identify work in his head for next weeks schedule in a 45 minute meeting when you have a very large backlog?

#### QUICKPOLL

If you were to **rank** the **maintenance backlog** such that these work orders were selected for a **weekly schedule**, what field would you prefer to rank on? Assuming the answer is PRIORITY, then describe why this would **not be** such a good idea?

WO Priorities in-use are only 1,2,3 and thus not valid for ranking work.

**18**%

Our maintenance backlog is terribly inaccurate in terms of Statuses.

22%

PM's are not given fair Pri value which can be compared to CM Pri.

32%

Backlog is mostly unplanned (e.g. no craft est.) which negates leveling

**28**%

What this really means is .... the management team is **forced** to conduct meetings to **select the work** because they cannot rely on the EAM system.





to see all Prerequisites

### **Quick Review: Different Types of Schedules**



# What are the benefits of creating a Resource-leveled Weekly Schedule?

- 1. The schedule represents **upper management goals** and expectations. The weekly schedule (scope) is expected to be 100% done. It is not simply a "list of work".
- The schedule improves coordination between maintenance, operations and engineering departments. Warehouse can stage parts for pickup.
- 3. A resource-leveled, weekly schedule also provides the most effective means for **reducing the backlog**
- Checks-and-balances (the Scheduler takes initial cut at scope and loads up the work week)
- 5. Utilize a fair & organized method of selecting work in backlog as opposed to *subjective selection*. Searches entire backlog.
- 6. <u>Increased visibility</u> prevents **rework**. (weekly & long range plan)

#### Resource-Leveled Weekly Schedule



### **Weekly Schedule Requirements**

- Frozen work set
- A maintenance backlog with craft estimates
- Ability to capture/process ETC by craft for carry-over work
- Leveling program recognizes EAM system resource pool

### **Resource Pool: "how to calculate"**

- 1) Establish company **calendar**. This should reflect annual holidays.
- 2) Identify number of active **workers** by craft.
- 3) Link each worker (person record) to company **calendar** and **shift**
- 4) Once a week, prior to locking down next weeks schedule, capture worker requests for **planned absences** (for next week). This would include vacations, day-off, jury duty, etc.
- 5) Identify by craft the **expected amount** of **reactive** (unscheduled work) which occurs each week. If 30% reactive, then multiply by 70%.



Starting Point Availability



Note: all maintenance craft should have a Calendar assigned

#### **Technique for Selecting Work** from Maintenance Backlog

It is not as simple as selecting the backlog and sorting by priority, report date.



CALCPRIORITY DESC WOPRIORITY DESC

CALCPRIORITY WOPRIORITY

SCHEDSTART

This is a <u>sample design</u> which could process the backlog in a fair and orderly fashion.

#### **Requirements for Carry-over Work capture**

#### **ETC (estimate to complete)**

Ĺ	.abor	Mate	erials Se	ervices To	ols						
La	ibor	▶ Filter >	180 - 🗇 E -	1-2	of 2 🧇						
	Task		<u>Crew ID</u>		<u>Craft</u>		Skill Level		<u>Quantity</u>	Est. Hrs	Remaining Hrs
•		₽	MECH	P	MECH	1		₽	2	5:00	4:00
•		₽	ELEC	P	ELEC	×		P	2	6:00	7:12
										Prog	ress Reporting
Ę i	Remain	ing Work	_	_			(	_		_	1   ?   🖂
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L	abor	▶ <u>Filter</u>	> <b>d‰</b> + ⊠ }	* 🖗 🕴 🔶 1 - 2	2 of 2 🗇					E) Downly a	₫   ?   🚍
<u>Τ</u> ε	ask	Crew	Craft	Skill	<u>Quantity</u>	Use Est - Actual?	ETC Percent Complet	e <u>Tot Hrs</u> l	Limit for Week	Calculated R	emaining Hrs
		MECH	MECH		2	Y					
		ELEC	ELEC		2	Ν	40				
										Save	Cancel

- for the ELEC line ....
- 2 guys for 6 hours == 12 mnhrs total
- If 40% complete, then 60% remains.
- Thus .6 times 12 == 7.2 mnhrs
- Where .2 hours equates to 12 minutes, thus 7:12

#### What logic do you apply to introduce the right WO's to Scheduler?

Big Bucket of WO's (backlog)



# (Frozen set of WO #) Apply "Order of Fire" Logic Maximo Scheduler 8/28/1 8/29/12

Small Collection of Weekly WO's

Resource Leveled Weekly Schedule



✓ **Software** (Data, Screens, Reports)

✓ Process (Lack of business rules, WS meeting, no freeze)

✓ Organization (Lack of buy-in, clear roles, mgmt support)

#### **Bad Practices can lead to Bad Results**



If ... 1) Mostly Reactive environment.

- 2) Missing Job Planner roles.
- 3) No planning function.
- 4) No P&S fundamentals.
- 5) No craft estimates. Inaccurate backlog.
- 6) No weekly schedule **process.,** or mostly **subjective.** No frozen work set.
- 7) No automated resource leveling.
- 8) No schedule compliance.

**Limited Ability** 

of improving **work force** efficiencies due to the above conditions.



#### Choose a Path: Proactive, or Reactive



### Whadaya gonna do?

- 1. Recognize that *technology alone will not solve your problem*.
- Become educated. Read/listen to user forums and webinars on leading practices.
- Consider external assessment and/or advanced P&S workshop.
- 4. Go visit other sites, e.g. benchmarking.
- 5. Communicate internally.



Is the vision clear? What type of Scheduling process are you after?



If you are unclear where you are going, then you may not get the **desired results**.

#### **New Construction**

Special Project Major Maintenance

#### Outage / Shutdown

Weekly Maintenance

**Daily Plan** 

**Dispatching Only** 

# Anyone can install software. But to create a true knowledge base you need the right combination of ...



Working on the right asset at the right time by the right skill. Productive Work Force. Minimal Delays. Efficient Backlog Reduction. Less rework. Less safety issues. Optimized costs.

### Your Input, Our Knowledge, Industry Best Practice



#### Contact information for follow-up questions: Matt Logsdon Mlogsdon@CohesiveSolutions.com





### **Five Year Capital Improvement Plan**

Category	NO.	PROJECT NAME	Funding Source*	TOTAL - Not Including Prior Years	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
		SEWER PROJECTS							
Α	1	(CIP 730) WWTP Expansion Phase II	CS	\$550,000	\$550,000				
Α	2	(New CIP) Sewer System Rehabilitation - Gravity Mains & Manholes	CS	\$800,000		\$150,000	\$650,000		
A	3	(New CIP) Sanitary Sewer Lift Station Improvements Project	CS	\$3,000,000			\$250,000	\$2,750,000	
		TOTAL SEWER PROJECTS	3	\$4,350,000	\$550,000	\$150,000	\$900,000	\$2,750,000	\$0
		WATER PROJECTS							
Α	4	(CIP 790) Water Valve Replacement (2007-2008)	CW	\$100,000	\$100,000				
Α	5	(CIP 760) Water Main Condition Survey (2008-2009)	CW	\$200,000		\$200,000			
Α	6	(New CIP) Water Valve Replacement (2009-2010)	CW	\$300,000			\$300,000		
Α	7	(New CIP) Water Main Condition Survey (2010-2011)	CW	\$200,000				\$200,000	
Α	8	(New CIP) Water Valve Replacement (2011-2012)	CW	\$300,000					\$300,000
		TOTAL WATER PROJECTS	5	\$1,100,000	\$100,000	\$200,000	\$300,000	\$200,000	\$300,000
		STREETS/TRAFFIC PROJECTS							
A	9	(New CIP) Arterial and Collector Overlay Project (2007-2008)	MA, CC	\$1,125,000	\$1,125,000				
Α	10	(New CIP) Residential Street Resurfacing and Repairs (2008-2009)	MA	\$750,000		\$750,000			
Α	11	(New CIP) Arterial and Collector Overlay Project (2009-2010)	MA, GT	\$750,000			\$750,000		
Α	12	(New CIP) Residential Street Resurfacing and Repairs (2010-2011)	MA	\$750,000				\$750,000	
A	13	(New CIP) Arterial and Collector Overlay Project (2011-2012)	MA, GT	\$750,000					\$750,000
В	14	(CIP 762) Follow-up on Biannual Caltrans Bridge Inspections	CC	\$400,000			\$400,000		
		TOTAL STREETS/TRAFFIC PROJECTS	6	\$4,525,000	\$1,125,000	\$750,000	\$1,150,000	\$750,000	\$750,000
		STORMWATER/LAGOON PROJECTS							
В	15	(CIP 736) Rehabilitation of City-Owned Lagoon Structures	CC	\$100,000	\$100,000				
В	16	(CIP 782) Storm Sewer Cleaning	CC	\$200,000	\$200,000				
		TOTAL STORMWATER/LAGOON PROJECTS	2	\$300,000	\$300,000	\$0	\$0	\$0	\$0
		PARKS PROJECTS							
С	17	(New CIP) Sea Cloud Park S-3 and Catamaran Park - Synthetic Turf and Park Improvements	PIL, FCF	\$2,700,000	\$2,700,000				
С	18	(New CIP) Park Infrastructure Improvements (2007-2008)	CC	\$93,500	\$93,500				
С	19	(New CIP) Park Infrastructure Improvements (2008-2009)	CC	\$507,200		\$507,200			
С	20	(CIP 798) Park Infrastructure Improvements (Levee / Pedway Improvements and Repairs)	PIL	\$220,600		\$220,600			
С	21	(New CIP) Park Infrastructure Improvements (2009-2010)	CC	\$82,500			\$82,500		
С	22	(New CIP) Park Infrastructure Improvements (2010-2011)	CC	\$198,400				\$198,400	
С	23	(New CIP) Levee Park and Sea Cloud S-4 - Synthetic Turf and Park Improvements	PIL, CC	\$1,925,000					\$1,925,000



### **LRP: Long Range Planning**



### **Backlog Management - - Growth Trending**

4

It is helpful to track/trend past labor hours for completed work – scheduled and otherwise.



Notice: that when less WS work is scheduled & performed, Now then the Backlog typically increases for that week.

#### **Weekly Schedule by Foreman**

MEB	- 7	Mill	Electrica	al Foreman	(A	cr	ew)									
Line							STA-	Work	LEAD	SCHED	TARG	EST	ACT			
No.	WO NO	JOB TITL	E		1	INDE	TUS	PRI	. CRAFT	DATE	START	HRS	HRS	DUR	EQnum	Location
1	95253	FLOTATIO	ON CELL MOTOR P	<u>M - B</u>		PM	INPRG	2	ELC		10/28/07	12	63	12		24-3-79
2	95411	PLEASE	FERMINATE AND T	EST TAILINGS FIR		INS	INPRG	3				12	29	0		24-1-98
3	96093	REGRIND	CFP MOTOR GREA	ASING		PM	INPRG	2	ELC		11/21/07	2	1	2	24-3-71-117	24-3-63
4	96094	REGRIND	CFP MOTOR GREA	ASING		PM	INPRG	2	ELC		11/21/07	2	0	2	24-3-71-118	24-3-63
5	91092	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	) 3				2	0	0		44-E & I
6	91094	PM SAND	IS PLANT 600V MA	AIN/PUMP B		СМ	WPCC	2	ELC			1	10	1		44-E & I
7	91096	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	41-NGR-301	41-NGR
8	91097	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	) 3				1	0	0	41-NGR-302	41-NGR
9	91098	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	41-NGR-303	41-NGR
10	91099	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	41-NGR-304	41-NGR
11	91100	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	) 3				1	0	0	41-NGR-305	41-NGR
12	91101	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	43-NGR-405	43-NGR
13	91102	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	41-NGR-401	41-NGR
14	91103	TEST AND	D RECORD GROUN	D FAULT MO		СМ	WPCC	3				1	0	0	40-NGR-407	41-NGR
15	91121	PM 25KV	BREAKER/HIPOT \	VACUUM		PM	WPCC	3	ELC			2	0	1	60-0-76-009	60-0-76
16	88362	INSPECT	ION OF 200 SERIES	5 MOTOR BREAKER		PM	WPCC	2	ELC		03/15/07	2	0	1	41-GM-207	41-GE
17	88363	INSPECT	ION OF 200 SERIES	5 MOTOR BREAKER		PM	WPCC	2	ELC		03/15/07	2	0	1	41-GM-208	41-GE
18	88364	INSPECT	ION OF 200 SERIES	5 MOTOR BREAKER		PM	WPCC	2	ELC		03/15/07	2	0	1	41-GM-209	41-GE
- 19	88365	INSPECT	ION OF 200 SERIES	5 MOTOR BREAKER		PM	WPCC	2	ELC		03/15/07	2	0	1	41-GM-210	41-GE
20	88366	INSPECT	ION OF 200 SERIES	5 MOTOR BREAKER		PM	WPCC	2	ELC		03/15/07	2	0	1	41-GM-211	41-GE
21	89175	PLEASE	NSPECT 5KV SWI1	ICHGEAR CABINETS		CM	WPCC	3				24	0	0	24-2-73-301	24-2-73
- 22	90218	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-2-71-111	24-2-63
- 23	90219	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-2-71-112	24-2-63
24	90220	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-2-71-113	24-2-63
- 25	90221	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-2-71-114	24-2-63
26	90222	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-3-62-004	24-3-62
27	90223	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-3-71-117	24-3-63
- 28	90224	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-3-71-118	24-3-63
- 29	90225	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-3-71-2032	24-3-62
30	90226	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	24-3-71-2033	24-3-62
31	90227	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	53-1-71-127	53-1-65
32	90228	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	53-1-71-128	53-1-65
33	90229	5KV MOT	OR BREAKER PM			PM	WPCC	2	ELC		05/18/07	1	0	1	53-1-71-129	53-1-65
34	90250	PLEASE P	PERFORM DOBLE 1	FEST TRANSFORME	R	SC	WPCC	2	ELC			8	0	4	41-XFMR-2303	41-XFMR
35	90251	PLEASE	PERFORM DOBLE 1	EST TRANSFORME	R	SC	WPCC	2	ELC			8	0	4	41-XFMR-2304	41-XFMR
								+								

#### **Daily Schedule Graphic**

#### The Maintenance Supervisor can create a Daily Schedule

DAILY AR2	SCHEDULE							y 2006 av	5			
Wonum	Crew Zone	Eqnum	Location	Description	Dur			,		Lead Craft	Worker	Supv Instructions/Comments
-	I	I		~	1	/lorn	iing E Noon	vening Mi	idnight			
CT080798		HVAC	GENERAL	REPAIR #2.	4					BM	CELOOMIS	Check warranty on air conditione
CT108085		GN0013	REFINERY		3						CELOOMIS	
ED092522	CONTR	GN0013	A2		8		 				CMTALBOT	
AL107190		TK0443	REFINERY	CHAIN BROKE OF	3						CRILEY	
<u>CT097958</u>		EXE001	35EXE001	AIR COND. B"	32						CRSEGER	
AL107579	AREA1	INSTRUME	GENERAL	#2 SENSO"	1		 				DLMESSER	
AL081009		GN0015	REFINERY	NEED A VAU. YMER.	2						DLMESSER	
AL081668		GN0015	REFINERY	A/C AT ALKY Cu RDER	8		 				DRGARBER	
CT107697	AREA1	GN0013	A2	REPAIR CABLE ON # 'E POS.	1		 				GAWAUGH	
LM109271	AREA1	GN0026	A2	CLEAN EXTRA	4						LJGREEN	Observe safety regmts. for tanks
<u>CT109491</u>	AREA1	35PC6	A2	WORK ON ' MIN FOR BLOWER	2		 				MDGOFOUR	
LM102567		T0126	11T002A		1		 				MSBLAKE	
CT110499		GN0026	404615	<u> suck o.</u>	4						TJMANSFI	

 $\mathbf{\Delta}$ 

### Auto-Schedule a Daily Plan (post Weekly)

The Daily Schedule would read the Assignment Manager tables based on (prompt) date and output a format similar to following.

DAILY SCHEDULE DAY: <u>Monday</u> DATE: 01/3/11 SUPERVISOR: <u>MECH-DARRELL</u>						uben Grim	tor Clark	Brown	llie Hurst	ddie Poling	
WO#	KKS	PRI	DESCRIPTION	ŝ	Bri	Re	Nic	20Y	Ī	E.	COMMENTS
293601		3	Pump vibrates	6		10125					
291800		3	Valve won't operate		6						
293105		3	Heat exchanger leaks			7					
283382		2	Steam leak				5				
282702		3	Controller No signal					6			
297111		3	Oil leak						5		
280551		4	Needs paint							5	
SPECIAL CODES: V – VACATION SPECIAL CODE T – TRAINING or HOURS					1 - 01			< - 01			
0 - OTHER TOTAL					6	7	5	6	5	5	

### **Resource Pool Report**

#### PEOPLE.sar Page: 1 of Resource Pool Validation 22-JUN-2011 14:14 RLP Active June July August 22 23 24 25 26 27 28 29 30 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 31 01 02 WeTh Fr Sa Su MoTu Name Op Area Group Craft Skill Calnum Su Mo Tu Batty, James A 8F8 ME CSU-HOLIDAYY 88 в OR 3 8 JBATTY Treatment Spec 8 8 Brailsford, Russ 8F8 ME CSU-HOLIDAYY 8 RBRAILSFORD OR 3 Treatment Spec Clark, Larry D 8F8 ME OR γ No Calendar for this person 3 Default Calendar will be used LCLARK Treatment Spec Conkle, Allan D 8F8 ME WPME DAYS Y OR 2 No Work Periods for this Calendar. Default Calendar will be used ACONKLE Mechanic Spec (W) Crandall, Randy M 8F8 ME Default Calendar will be used IN 3 No Calendar for this person RCRANDALL Instr Elec & Control Elwell, John R 8F8 ME OR WPME OPD Y No Work Periods for this Calendar. Default Calendar will be used 3 JELWELL Treatment Spec 8F8 ME 8 8 8 8 8 B NMCINTYRE McIntvre, Nichola ME 2 CSU-HOLIDAYY 8 Mechanic Spec (W) Owens, Steve 8F8 ME IN WPME DAYS Y SOWENS 3 No Work Periods for this Calendar. Default Calendar will be used Instr Elec & Control Porvaznik, Morgan 8F8 ME ME 3 No Calendar for this person. Default Calendar will be used MPORVAZNIK Mechanic Spec (W) ME Post Joe P 8F8 OR 3 WPME OPD Y No Work Periods for this Calendar. Default Calendar will be used JPOST Treatment Spec ME Rooks, Frank 8F8 % No Calendar for this person Default Calendar will be used FROOKS Treatment Spec Sell, Chad C 8F8 ME OR 3 Y No Calendar for this person. Default Calendar will be used CSELL Treatment Spec Williams, Chris W 8F8 ME Y No Calendar for this person. Default Calendar will be used Mechanic Spec (W) ME 2 CWWILLIAMS 19 17 24 0 0 24 24 0 24 24 24 0 24 24 0 24 24 0 24 24 0 24 0 24 12 Active out of 13 total records

#### Planned Absences

JBATTY 24-JUN-2011 7 MILITARY DUTY JBATTY 22-JUN-2011 5 PERSONAL

#### Input Prompts: % 8F8

%