

***PERCEPTION***<sup>®</sup>

# **The Project Manager**

*A Training Guide*

**This training guide outlines the basic responsibilities for a shipyard project manager.**

**It is intended to be a guide for ensuring that any shipyard project is executed according to a rational, achievable plan.**

**It also is intended to outline steps to ensure that *PERCEPTION* is fully utilized to provide the cost and schedule performance visibility that management requires for a successful project.**

**Other related training tutorials are the following:**

- 1. *PERCEPTION* - Starting A New Project**
- 2. *PERCEPTION* Reports - Labor Cost & Work Progress**
- 3. *PERCEPTION* Reports - Material Cost & Status**

# Project Manager

Every project should have someone responsible for tracking and managing costs and schedules.

This is the responsibility of the project manager.

The project manager needs to be proactive and should be an effective expeditor.

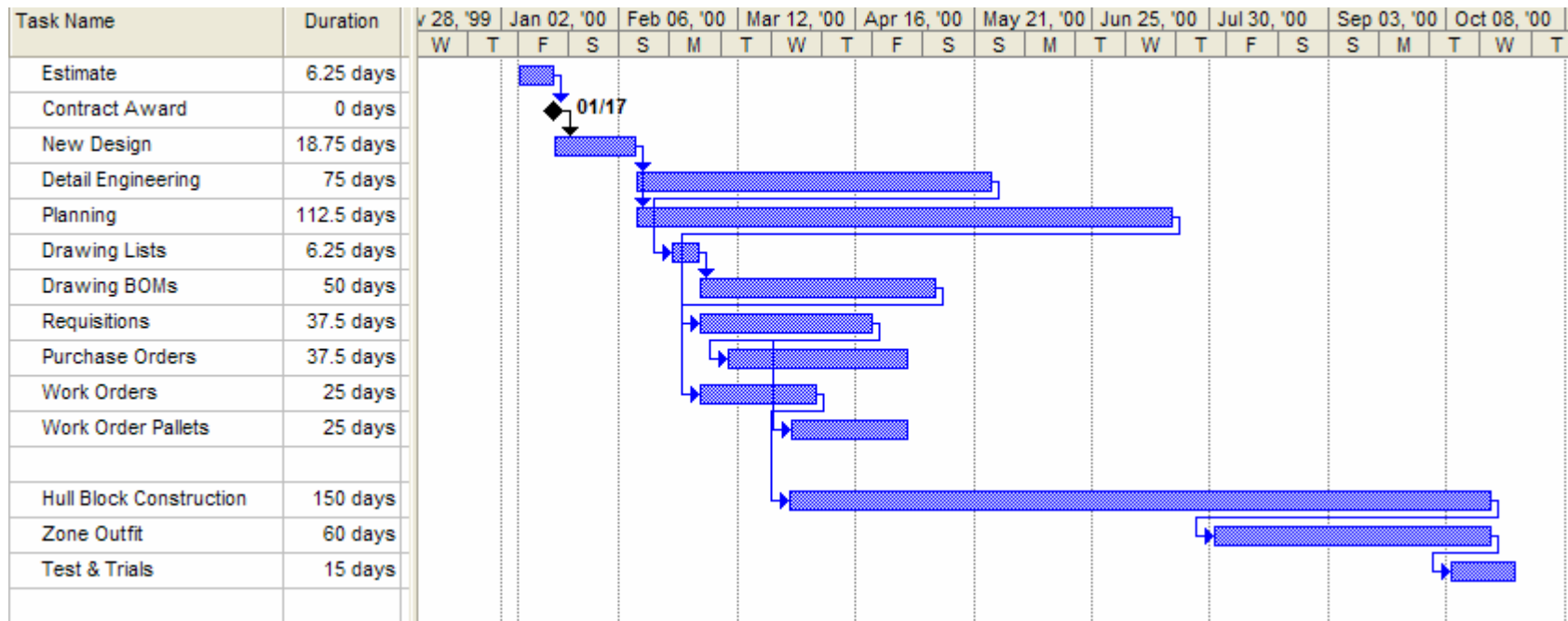
**The project manager should closely monitor all project costs and schedules.**

# Project Planning

The project manager should be involved in the planning process to the point that he/she understands the scope of work and the hard issues that need to be addressed as the contract unfolds.

The project manager should be fully engaged in the development of the build strategy, planned schedules and the assignments of responsibilities.

# The basic master plan for new construction :



# Design & Engineering

The project manager needs to follow and help expedite the engineering work to ensure that the engineering is being done in ways that best support production and purchasing.

# Production Works Orders

The project manager should ensure that production work orders are:

1. Developed in time to meet production schedules
2. Consistent in supporting the planned build strategy
3. Have realistic budgets and schedules

## The project manager should

1. Ensure that all work orders are budgeted and scheduled.
2. Identify any instances of work orders issued without budgets and/or schedules. **Such missing information will prevent the system from identifying performance problems as they occur.**
3. Ensure all work orders are properly assigned to the project's work breakdown structure.
4. Monitor on a regular basis (weekly) all cost and schedule data.
5. Make sure that the errors, etc., are corrected quickly by those departments who develop the data.

# Purchasing

The project manager also should be responsible for monitoring purchasing to be sure that

- a) Material budgets are being maintained, and
- b) Material will be available when production needs it.

# Material Requirements

The project manager should ensure that material requirements are

1. Developed in time to meet production schedules, and
2. Have realistic budgets and schedules.

## The project manager should

1. Ensure that project WBS material budgets have been established.
2. Identify any instances of requisition items without quantity requirements and *Need Dates*. **Such missing information will prevent the system from identifying performance problems as they occur.**
3. Ensure all requisition items are properly assigned to the project's work breakdown structure.
4. Monitor on a regular basis (weekly) all cost and schedule data.
5. Make sure that the errors, etc. be corrected quickly by those departments who develop the data.

# Labor Performance Reporting

*PERCEPTION* produces many excellent high-level status and tracking reports.

These reports provide the project manager with the visibility and status of labor costs and schedules. These reports quickly identify problem areas of costs and schedules.

The quicker someone recognizes the problems, the sooner they can be resolved and any damage to costs and schedules minimized.

**The project manager should produce quality labor status and forecast reports to management weekly...without fail:**

- 1. Top level tracking graphics reports**
- 2. Project WBS progress and labor cost reports**
- 3. Project WBS reports for material status**
- 4. Current project manpower planned versus actual versus forecast to complete**
- 5. Work Order Listings**

**And, to compliment these reports, a brief overview of identifiable problems and enacted/recommended solutions.**

# Production Rollups

Most labor cost and schedule performance reports require that a *Production Rollup* be performed prior to users generating updated reports.

**The project manager should be responsible for ensuring that rollups are performed regularly and be the basis for any reports issued to management.**

# WBS Performance Reports

**This function of tracking and managing requires accurate and timely feedback of costs and schedules which can be measured against a baseline of budgets and planned schedules.**

***PERCEPTION* can produce a wide variety of reports that provide visibility of project performance at different levels of detail.**

# SWBS Summary Progress Reports Available At Group and Account Levels.

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(Date format: MM/DD/YYYY)

## Chesapeake Marine Industries SWBS Group Progress Report (PROG02)

Page 1 of 1

Contract TSHIP CONTRACT - T-SHIP Series Contract

Project: 0 to ZZZZZZZZ Group: 0 to ZZZZZZZZ

Group	Description	Percent Progress				Current Labor Hours				Final Hours			
		Planned	Actual	Ahead	Weeks	BCWS	BCWP	Actual Hours	Schedule Ahead	Budget	EAC	ETC	Savings
Project	2002	Effective Date: 01/14/1993 Severn Bulk Carrier (work orders)											
		68.66	68.04	-0.62	-0.33	698,984	692,646	660,706	-6,338	1,017,998	984,817	324,111	33,181
0	STEELWORK	90.85	95.36	4.51	3.65	431,102	452,518	450,719	21,416	474,528	474,895	24,176	-367
1	ACCOMODATIONS OUTFIT	16.55	26.00	9.45	4.70	9,138	14,358	16,020	5,221	55,222	58,120	42,100	-2,898
2	CARGO SYSTEMS OUTFIT	56.66	64.47	7.81	1.58	31,964	36,370	26,925	4,406	56,418	44,712	17,787	11,706
3	MECHANICAL SYSTEMS OUTFIT	38.56	32.92	-5.64	-1.47	31,921	27,265	20,641	-4,656	82,784	73,453	52,812	9,331
4	PIPING SYSTEMS	55.66	48.02	-7.64	-3.40	45,891	39,601	26,504	-6,290	82,450	62,160	35,656	20,290
5	MACHINERY SYSTEMS	54.17	39.12	-15.05	-6.11	15,112	10,913	7,712	-4,199	27,899	23,832	16,120	4,067
6	ELECTRICAL SYSTEMS	38.33	8.95	-29.38	-9.20	22,242	5,195	4,821	-17,047	58,027	55,591	50,770	2,436
7	PRODUCTION SERVICES	57.24	62.95	5.71	3.99	73,617	80,951	81,089	7,334	128,601	131,270	50,181	-2,669
8	OWNER CHANGES	55.12	16.71	-38.41	-25.13	13,485	4,089	4,282	-9,396	24,466	32,702	28,420	-8,236
9	DESIGN & DRAWING	88.80	77.66	-11.14	-8.93	24,512	21,436	21,993	-3,076	27,603	28,084	6,091	-481
<b>Group Totals for Project - 2002</b>		<b>68.66</b>	<b>68.04</b>	<b>-0.62</b>	<b>0.62</b>	<b>698,984</b>	<b>692,695</b>	<b>660,706</b>	<b>-6,289</b>	<b>1,017,998</b>	<b>984,817</b>	<b>324,111</b>	<b>33,181</b>



**Critical Information: Weeks Ahead (or behind), Scheduled Hours Ahead (or behind) & Labor Hours EAC**

# A variety of PWBS progress and cost/schedule status reports.

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## Chesapeake Marine Industries

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### PWBS Zone Progress Report (PROG04)

:t TSHIP CONTRACT - T-SHIP Series Contract

Project: 0 to ZZZZZZZZ      Zone: 0 to ZZZZZZZZ

Zone	Percent Progress				Current Labor Hours				Final Hours							
	Planned	Actual	Ahead	Weeks Ahead	BCWS	BCWP	Actual Hours	Schedule Ahead	Budget	EAC	ETC	Savings				
<b>Project 2002</b>	<b>Effective Date: 01/14/1993</b>				<b>Sevren Bulk Carrier (work orders)</b>											
<b>Default WBS - SWBS</b>	<b>Project Totals:</b>				<b>68.66</b>	<b>68.04</b>	<b>-0.62</b>	<b>-0.33</b>	<b>698,984</b>	<b>692,646</b>	<b>660,706</b>	<b>-6,338</b>	<b>1,017,998</b>	<b>984,817</b>	<b>324,111</b>	<b>33,181</b>
O	MISC TOTAL SHIP	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	
A	TANK TOP MIDSHIP	100.00	100.00	0.00	0.00	26,658	26,658	30,225	0	26,658	30,225	0	-3,567			
B	LST MIDSHIP	100.00	100.00	0.00	0.00	47,424	47,424	51,275	0	47,424	51,275	0	-3,851			
C	UST MIDSHIP	98.92	99.00	0.08	0.14	56,039	56,086	54,903	47	56,653	55,302	399	1,351			
D	SPAR DK TWEEN HATCH	100.00	100.00	0.00	0.00	16,725	16,725	11,728	0	16,725	11,728	0	4,997			
E	SCREEN BHDS	98.49	98.86	0.37	0.57	15,198	15,254	12,823	56	15,430	12,971	148	2,459			
F	AFT PEAK UNITS	98.25	96.22	-2.03	-0.43	17,843	17,474	15,845	-369	18,160	16,467	622	1,693			
G	FORE PEAK UNITS	82.87	96.12	13.25	2.14	29,013	33,654	33,110	4,640	35,012	34,447	1,337	565			
H	CROSS TANKS	100.00	100.00	0.00	0.00	10,314	10,314	10,153	0	10,314	10,153	0	161			
I	SHEDDER PLATES	100.00	92.20	-7.80	-7.14	2,332	2,150	1,906	-182	2,332	2,067	161	265			
J	HOPPERS	100.00	100.00	0.00	0.00	10,838	10,838	9,154	0	10,838	9,154	0	1,684			
K	MACHINERY DECK	100.00	100.00	0.00	0.00	2,576	2,576	2,564	0	2,576	2,564	0	12			
L	MAIN DK & ER BHD	100.00	100.00	0.00	0.00	4,860	4,860	5,478	0	4,860	5,478	0	-618			
M	LOOP BELT UNIT	100.00	100.00	0.00	0.00	1,816	1,816	2,118	0	1,816	2,118	0	-302			
N	DECKHOUSES & FUNNEL	58.43	91.77	33.34	6.86	23,263	36,536	35,952	13,273	39,813	39,126	3,174	687			
P	AFT SHELL UNITS	100.00	99.00	-1.00	-3.14	14,506	14,361	15,745	-145	14,506	15,851	106	-1,345			
R	ENG RM TTOP	100.00	100.00	0.00	0.00	5,962	5,962	7,312	0	5,962	7,312	0	-1,350			
S	TANK TOP FWD E AFT	100.00	100.00	0.00	0.00	9,036	9,036	9,567	0	9,036	9,567	0	-531			
T	LST FWD & AFT	100.00	100.00	0.00	0.00	18,936	18,936	23,254	0	18,936	23,254	0	-4,318			
U	UST FWD & AFT	77.00	92.93	15.93	2.14	11,924	14,390	16,329	2,466	15,485	17,571	1,242	-2,086			
00	MISC TOTAL SHIP	44.08	45.58	1.50	0.57	22,206	22,963	15,977	757	50,379	40,632	24,655	9,747			

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## WORK-PAC Trade Progress Report (PROG15)

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### Labor Hours

**Contract:** 19060 Tanker to WBS Shells  
**Project:** 0 to ZZZZZZZZ  
**Trade:** 0 to ZZZZZZZZ

Trade	Description	Percent Progress		Weeks Ahead	% Diff	Current Labor Hours				Final Hours			
		Planned	Actual			BCWS	BCWP	Actual Hours	Schedule Ahead	Budget	EAC	ETC	Savings
AD-HR-F	Personnel Manager	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
CT-PT-1	Painter	0.00	100.00	0	100.00	0	0	8	0	0	8	0	-8
CT-PT-PI	Painter / Blaster	0.00	40.00	12	40.00	0	16	16	16	40	40	24	0
Demo1	Welder	0.00	100.00	0	100.00	0	0	11,394	0	0	11,394	0	-11,394
EL-1	Electrician Class I	0.00	100.00	0	100.00	0	0	560	0	0	560	0	-560
EL-A	Electrician Apprentice	0.00	100.00	0	100.00	0	0	16	0	0	16	0	-16
HO-CM-1	Cabinet Maker	0.00	100.00	0	100.00	0	0	9	0	0	9	0	-9
HO-CM-1	Cabinet Maker Apprentice	0.00	100.00	0	100.00	0	0	23	0	0	23	0	-23
HO-CP-1	Carpenter Class I	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
HO-CP-1	Carpenter Apprentice	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
HV-SM-1	Sheet Metal Apprentice	0.00	100.00	0	100.00	0	0	8	0	0	8	0	-8
MA-1	Machinist Class I	0.00	0.00	-52	0.00	0	0	0	0	168	168	168	0
MA-A	Machinist Apprentice	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
PI-FT-1	Pipe Fitter Class I	100.00	99.00	-5	-1.00	4,137	4,096	9,813	-41	4,137	9,813	0	-5,676
PI-FT-2	Pipe Fitter Class II	100.00	99.00	-5	-1.00	4,520	4,475	11,251	-45	4,520	11,251	0	-6,731
PI-FT-A	Pipe Fitter Apprentice	100.00	99.00	-5	-1.00	3,038	3,008	10,131	-30	3,038	10,131	0	-7,093
PI-PL-1	Plumber Class I	0.00	100.00	0	100.00	0	0	7,857	0	0	7,857	0	-7,857
PI-PL-2	Plumber Class II	0.00	100.00	0	100.00	0	0	7,158	0	0	7,158	0	-7,158
PS-CO	Crane Operator	0.00	0.00	-52	0.00	0	0	0	0	160	160	160	0
PS-FM	Foremen & Assistant Foremen	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
PS-PM	Plant Maintenance	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
PS-SP	Superintendents	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0
PS-WM	Watchman	0.00	100.00	0	100.00	0	0	0	0	0	0	0	0

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**Chesapeake Marine Industries**

**CLIN Summary Report (SUM13)**

Contract USCG WHEC FRAM Sample USCG Repair Spec

CLIN: 0 to //

CLIN	Description	Budgeted		Actual		Rework		Premium		After Close	
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
12313	FEED WATER TANKS	0	0	0	0	0	0	0	0	0	0
12314	POTABLE WATER TANKS	0	0	0	0	0	0	0	0	0	0
12315	LUBE OIL TANKS	0	0	0	0	0	0	0	0	0	0
12316	BALLAST TANKS	0	0	0	0	0	0	0	0	0	0
12317	CONTAMINATED OIL TANKS	0	0	0	0	0	0	0	0	0	0
12320	TRUNKS AND VOIDS	0	0	0	0	0	0	0	0	0	0
1501	SUPERSTRUCTURE	0	0	0	0	0	0	0	0	0	0
167	HULL STRUCTURAL CLOSURES (HATCHES)	0	0	0	0	0	0	0	0	0	0
1671	HULL STRUCTURAL CLOSURES (WATERTIGHT)	0	0	0	0	0	0	0	0	0	0
1681	DECKHOUSE STRUCTURAL CLOSURES (WATER	0	0	0	0	0	0	0	0	0	0
19211	COMPARTMENT TESTING, AIR	0	0	0	0	0	0	0	0	0	0
23511	PROPULSION GENERATOR, MAIN - NO. 1	0	0	0	0	0	0	0	0	0	0
2411	PROPULSION REDUCTION GEARS	0	0	0	0	0	0	0	0	0	0
24111	PROPULSION REDUCTION GEAR - SHAFT 1	0	0	0	0	0	0	0	0	0	0
24112	PROPULSION REDUCTION GEAR - SHAFT 2	0	0	0	0	0	0	0	0	0	0
24211	PROPULSION CLUTCHES AND COUPLINGS - SHA	0	0	0	0	0	0	0	0	0	0
24212	PROPULSION CLUTCHES AND COUPLINGS - SHA	0	0	0	0	0	0	0	0	0	0
31121	GENERATOR SET, SHIP SERVICE DIESEL - NO.1	0	0	0	0	0	0	0	0	0	0
31212	GENERATOR SET, EMERGENCY DIESEL - NO. 2	0	0	0	0	0	0	0	0	0	0
3131	SWITCHBOARD BATTERY CHARGING	0	0	0	0	0	0	0	0	0	0
4201	TESTING, NAVIGATION SYSTEM INTRA-SYSTEM	0	0	0	0	0	0	0	0	0	0

# Management Report Graphics

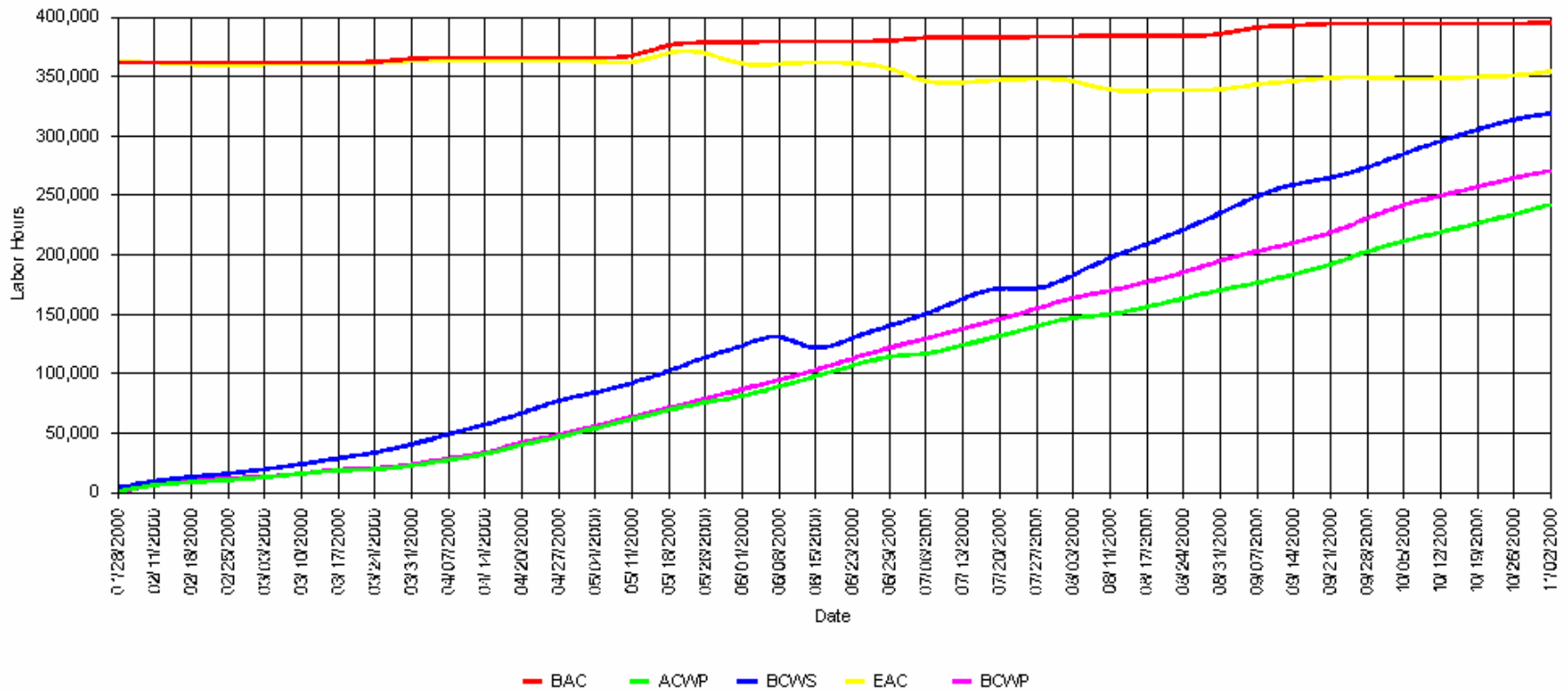
**Other high-level reports track a project's performance throughout the course of its execution.**

**These can best be reviewed in graphical form.**

**These reports are accessed via the Project Navigator. Click on the *Project Navigator* button  on the tool bar.**

# Tracking Performance Costs

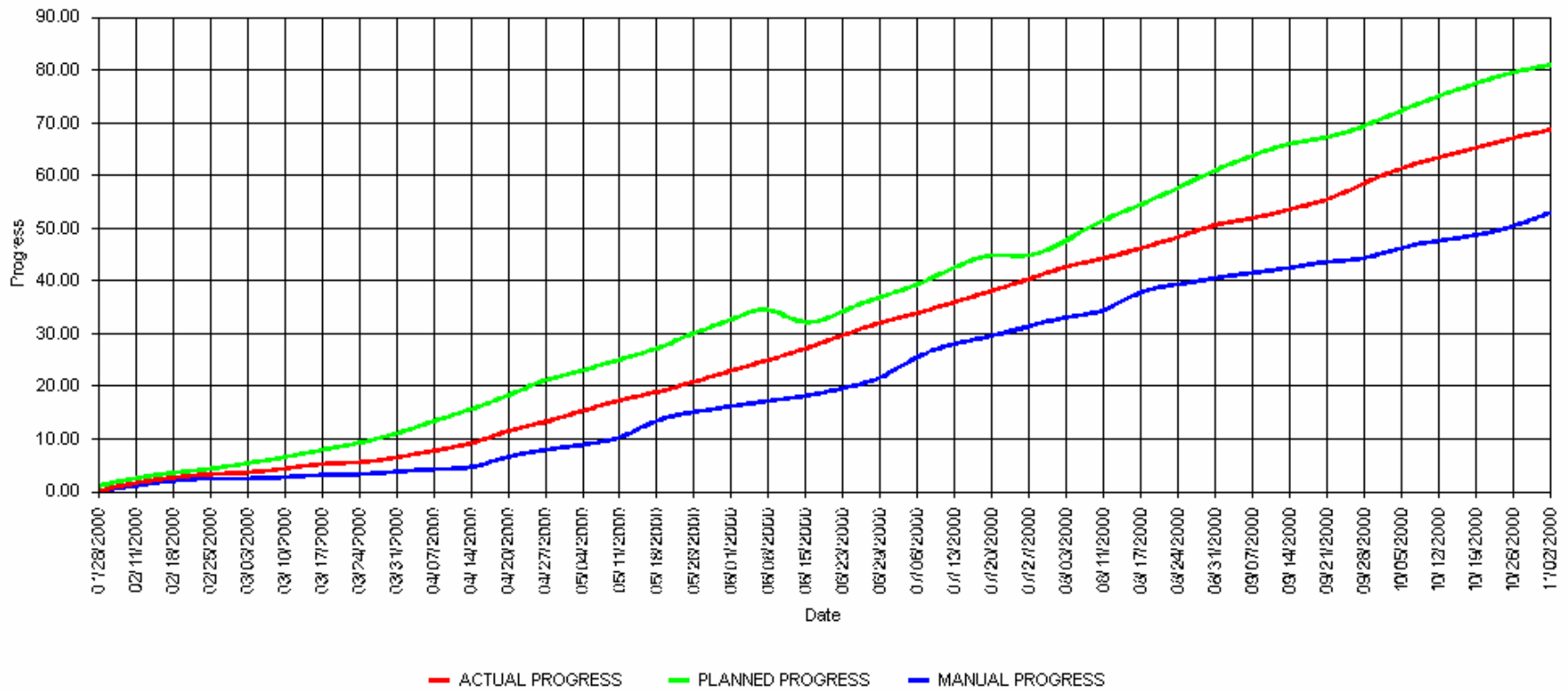
Cost Performance For Contract 47K Tanker Project 1



Perception

# Tracking Progress

Planned vs. Actual Progress For Contract 47K Tanker Project 1

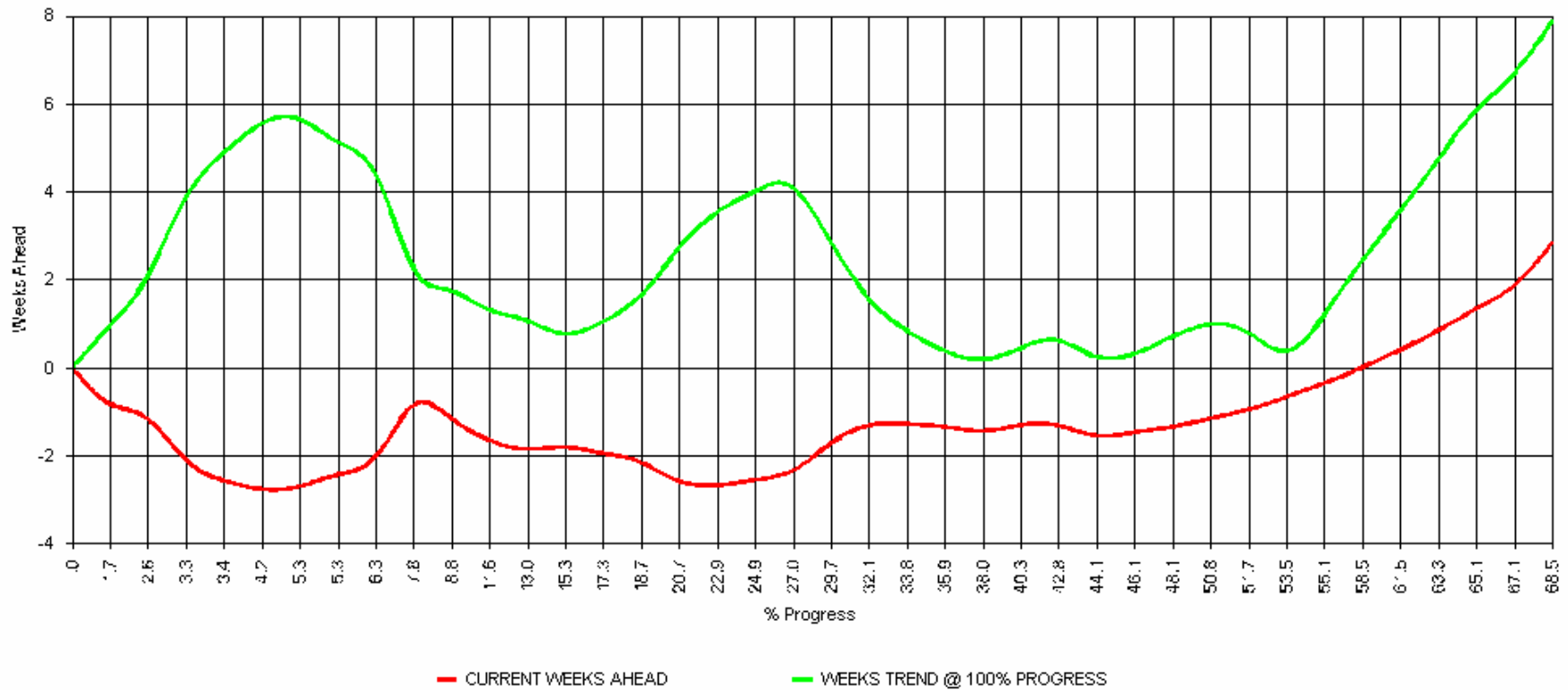


Perception



# Tracking & Forecasting Schedule Variance

Ahead/Behind Schedule For Contract 47K Tanker Project 1

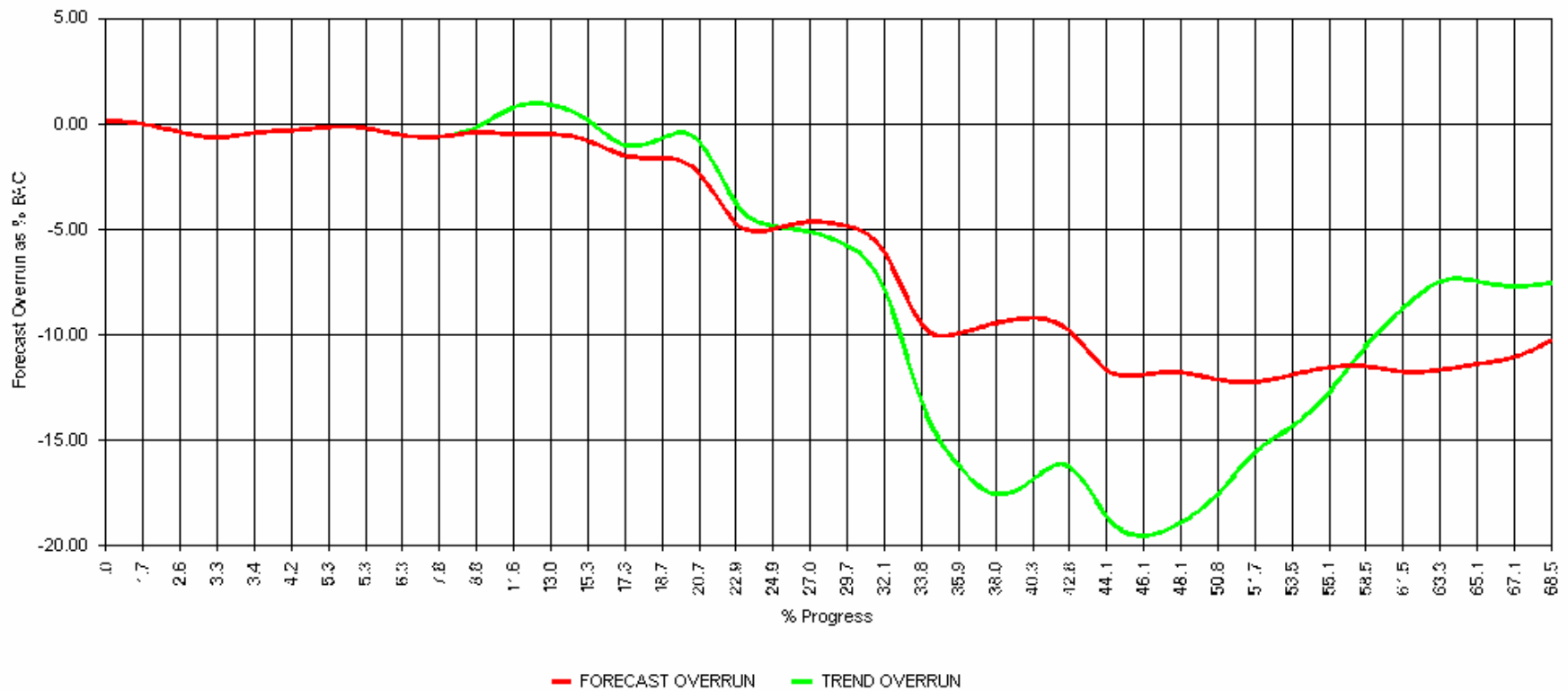


Perception



# Tracking & Forecasting Over-Budget/Savings Variance

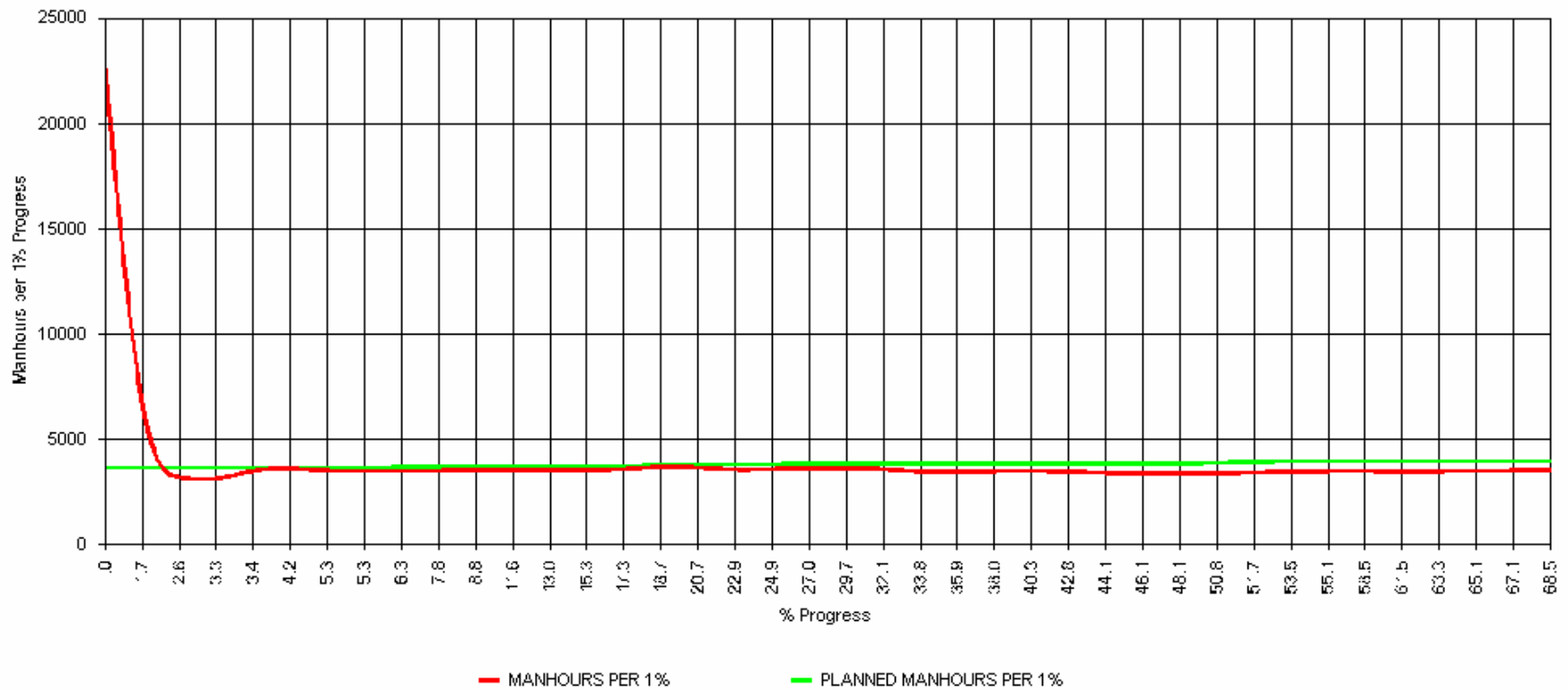
Forecast Overrun For Contract 47K Tanker Project 1



Perception

# Tracking Cost/1% Progress

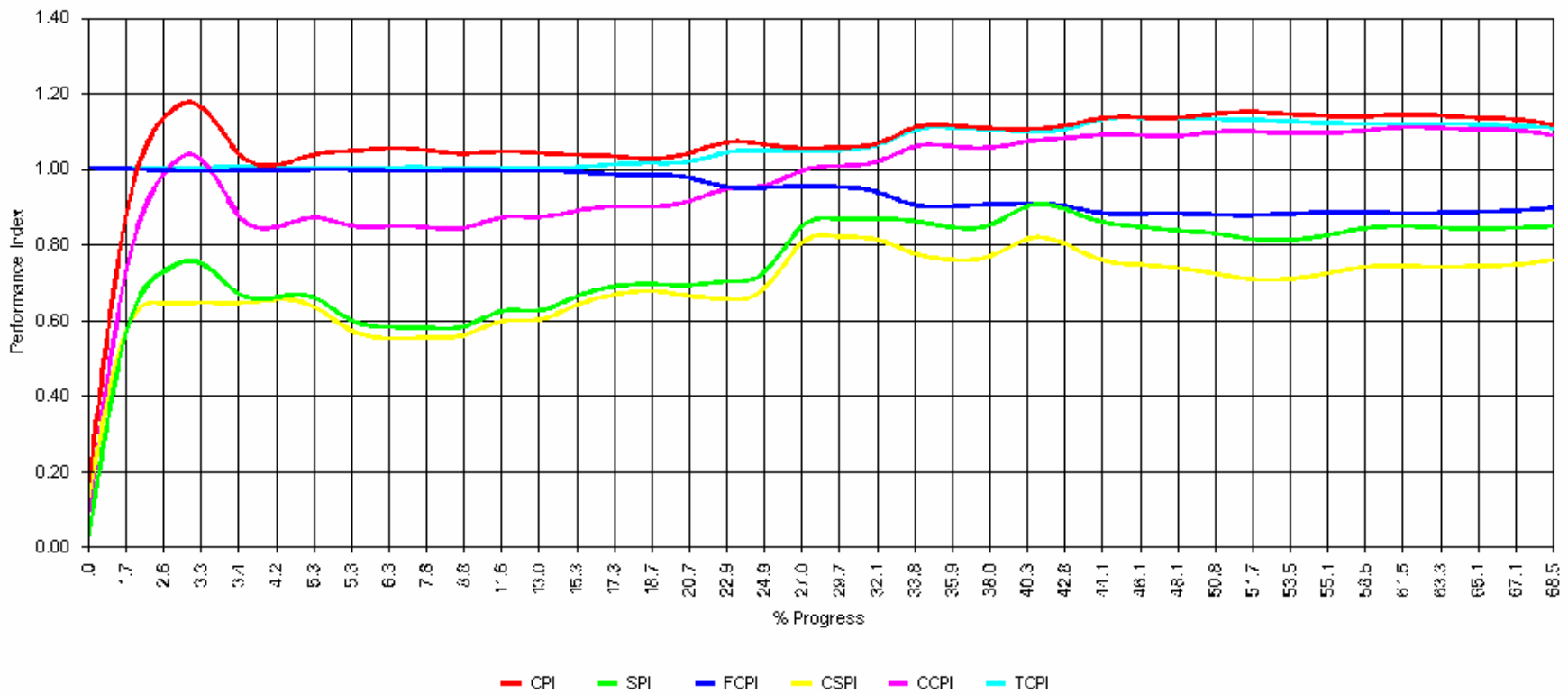
Cost of 1% Progress For Contract 47K Tanker Project 1



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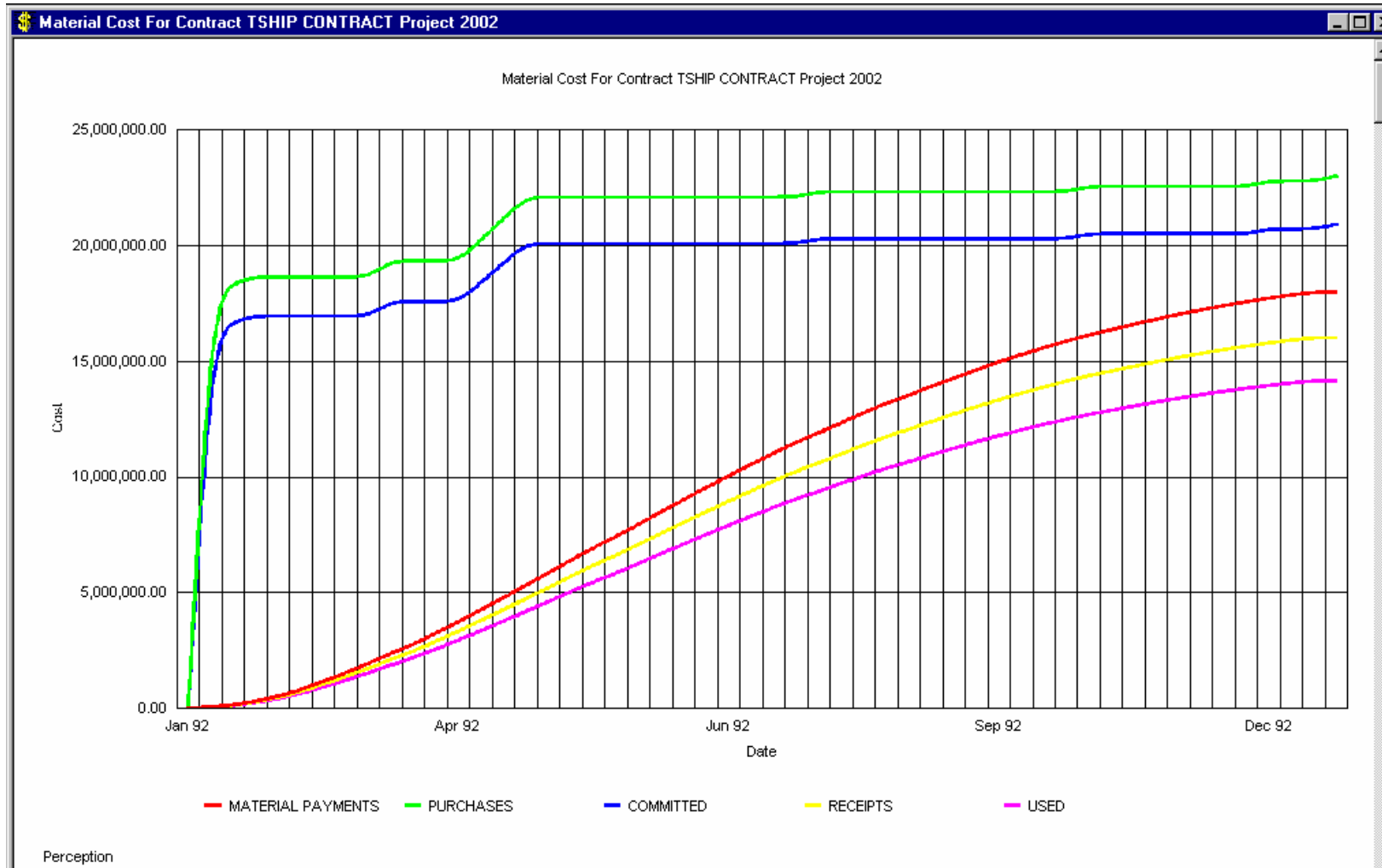
# Tracking Performance Indexes

Performance Indices For Contract 47K Tanker Project 1



Perception

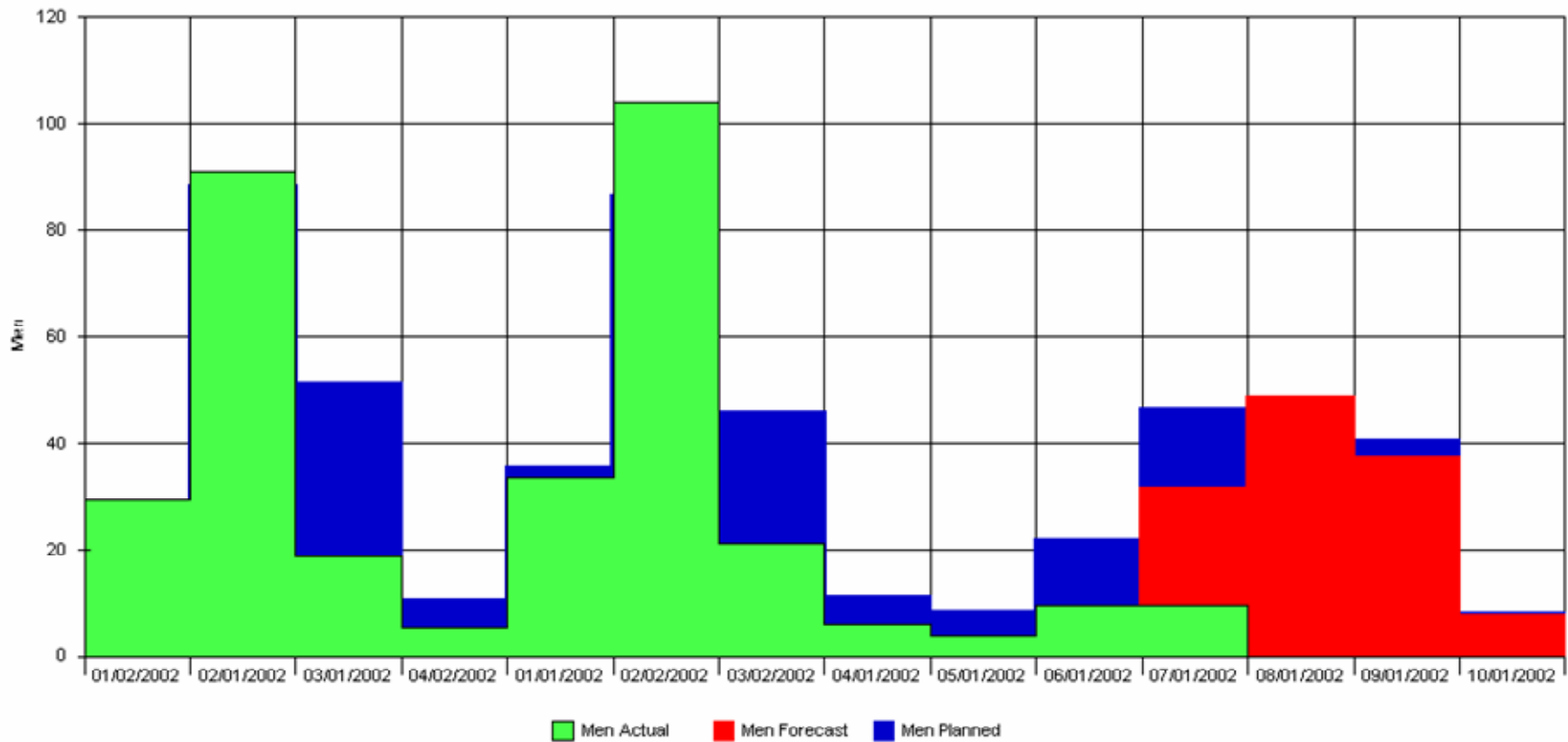
# Tracking Material Costs



# Tracking Manpower Requirements

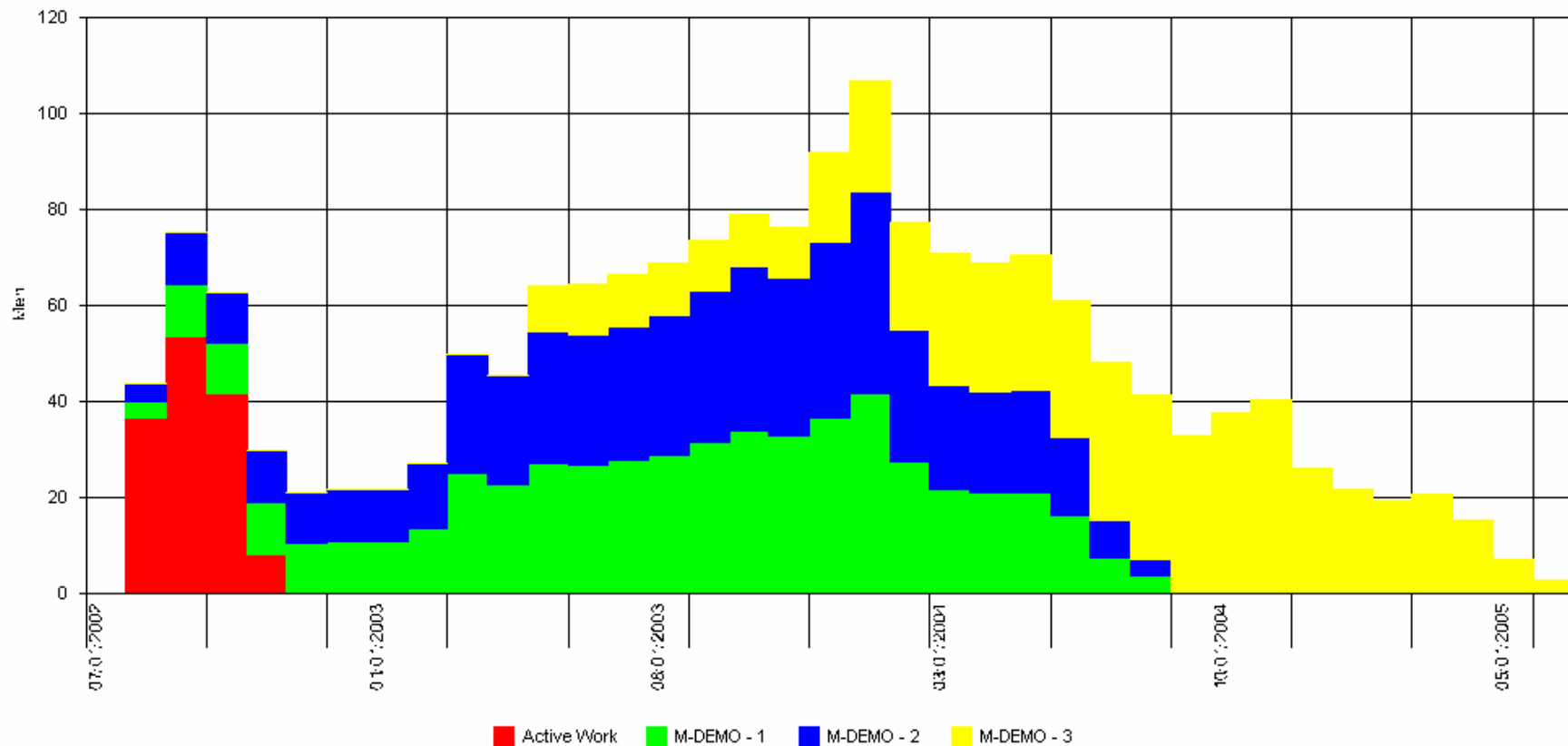
**In addition to monitoring project costs and schedules, the project manager should periodically review the impact of project performance and changes upon the shipyard's manpower resources.**

## Tracking Manpower Requirements (Planned Vs Actual Vs Forecast)



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# New Work Manpower Modeled On Top Of Active Work Manpower



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# Work Order Listings

*PERCEPTION* generates a variety of work order listings.

With the exception of time charge transactions that the system also tracks, work orders represent the lowest level of detail for managing labor hours, costs and schedules.

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(Date format: MM/DD/YYYY)

SPAR Associates, Inc.

Work Order Listing Report (WO04)

Project/SWBS Account/WC/WO Sort

at TSHIP CONTRACT - T11

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(Date format: MM/DD/YYYY)

SPAR Associates, Inc.

Work Order Listing Report (WO05)

Project/Zone/Planned Start Sort

at TSHIP CONTRACT - T32

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Work %  
rs Prog

Work Center	Order	Heading	Unit	Acct	Auth	Planned Start	Planned Finish	Actual Start	Actual Finish	Budget Hours	Actual Hours	Over Run	Premium Hours	After Close	Rework Hours	% Prog
Project 2002		Effective Date: 01/14/1993				Severn Bulk Carrier (work orders)										0 100.00
Zone 00		MISC TOTAL SHIP														0 100.00
T32	24600	FABRICATE RIGGING	246	N		12/23/1992	02/02/1993	06/19/1992	00/00/0000	*	384	75.00		0	0	0 0.00
T36	60300	UNLOAD MCC CONNECT	603	N		12/23/1992	07/26/1993	00/00/0000	00/00/0000	LS	373	0.00		0	0	0 0.00
T23	30413	31-40 BBOARDS+TIMBER	304	N		01/05/1993	02/02/1993	09/23/1992	10/02/1992	C	497	490.00		0	0	0 100.00
T33	30422	WAY 21-30 TOP PACKED	304	N		01/05/1993	01/26/1993	07/21/1992	09/10/1992	C	277	285.00 *		0	0	0 100.00
T33	30442	CLEAR BERTH + HULL	304	N		01/05/1993	02/17/1993	00/00/0000	00/00/0000	LS	3,451	0.00		35	0	0 0.00
T33	31900	WT + OIL TIGHT DOORS	319	N		01/05/1993	05/14/1993	00/00/0000	00/00/0000	LS	111	0.00		0	0	0 0.00
T36	60600	FAB NAVAIID FITTINGS	606	N		01/05/1993	02/09/1993	00/00/0000	00/00/0000	LS	870	0.00		0	0	0 0.00
T23	30423	WAY 31-40 TOP PACKED	304	N		01/12/1993	02/02/1993	10/02/1992	10/09/1992	C	277	260.00		0	0	0 100.00
T33	30404	WAY 41-50 SET+PACKED	304	N		01/12/1993	02/09/1993	10/01/1992	10/30/1992	C	456	370.00		13	0	0 100.00
T33	30414	41-50 BBOARDS+TIMBER	304	N		01/12/1993	02/09/1993	08/20/1992	10/30/1992	C	497	328.00		11	0	0 100.00
T33	30436	JACKING SHORES+LUGS	304	N		01/12/1993	02/02/1993	00/00/0000	00/00/0000	LS	324	0.00		0	0	0 0.00
T33	30438	ROPE + STRAP TIMBERS	304	N		01/12/1993	02/02/1993	07/06/1992	11/06/1992	C	787	0.00		8	0	0 100.00
T33	30440	18 DRAG CHAINS+BOXES	304	N		01/12/1993	02/17/1993	00/00/0000	00/00/0000	LS	1,628	0.00		34	0	0 0.00
T36	60200	MASTS CABLING	602	N		01/12/1993	04/21/1993	00/00/0000	00/00/0000	LS	180	0.00		0	0	0 0.00
T31	16790	SIDELIGHTS SHOPWORK	167	N		01/20/1993	06/22/1993	08/12/1992	00/00/0000	*	152	41.00		0	0	0 0.00
T33	30424	WAY 41-50 TOP PACKED	304	N		01/20/1993	02/09/1993	10/12/1992	10/30/1992	C	277	147.00		0	0	0 100.00



# Material Cost Performance Reports

*PERCEPTION* produces many excellent high-level material status and tracking reports.

These reports provide the project manager with the visibility and status of material costs and schedules. These reports quickly identify problem areas of costs and schedules.

The quicker someone recognizes the problems, the sooner they can be resolved and any damage to costs and schedules minimized.

# Material Rollups

Most material cost status reports require that a *Material Rollup* be performed prior to users generating updated reports.

**The project manager should be responsible for ensuring that rollups are performed regularly and be the basis for any reports issued to management.**

**The project manager should produce quality material status and forecast reports to management weekly... without fail:**

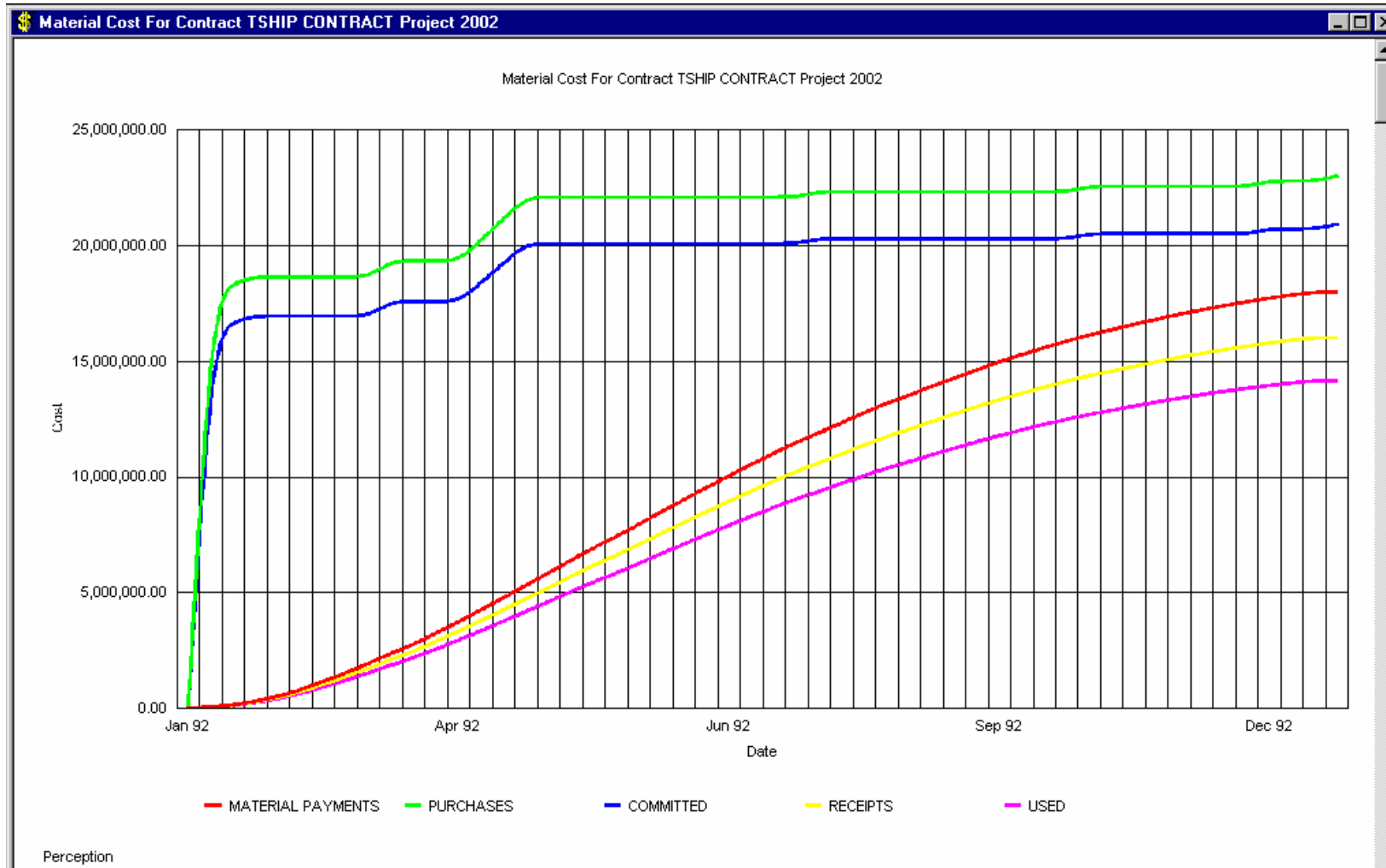
- 1. Top level tracking graphics reports**
- 2. Contract Material Cost Status Report (C12)**
- 3. Labor/Material Status Reports (C7)**
- 4. Requisition Cost Summary Report (C1S)**
- 5. Drawing List (BOM01)**

**To compliment these reports, a brief overview of identifiable problems and enacted/recommended solutions.**

# ***PERCEPTION* tracks material costs at various stages and levels of detail:**

- ❖ **Total Committed Costs:  
Purchases + Stock Used + Stock Reserved**
- ❖ **Total Purchases**
- ❖ **Purchases Received**
- ❖ **Purchases Used**
- ❖ **Purchases Paid**
- ❖ **Stock Used**
- ❖ **Stock Reserved**

# Tracking Material Costs



## **Contract Material Cost Status Report (C12)**

**The C12 Material Report provides a good summary of the status of material costs.**

**C12 summarizes costs of direct purchases, stock usage and the status of total committed costs as compared to both the total material budget and its estimated value at completion (EAC).**

# Contract Material Cost Status Report (C12)

04/16/2003 08:47:24  
(Date format: MM/DD/YYYY)

## SPAR Associates, Inc. Contract Material Cost Status Report (C12)

Page 1 of 1

Contract Range: 19060 Tanker to WBS Shells  
Project: 0 to ZZZZZZZZ

Project	Description	Direct Purchase Material					Stock Material		Material Cost			Progress Material	
		Total Purchases	Cost Received	Cost Left to Receive	Vendor Invoices	Cost Received Not Invoiced	Cost Used	Stock Reserved	Stock Used	Budgeted	Committed		EAC
<b>Contract: A-DEMO - Demo Contract for MAT-PAC Tutorial</b>													
01	Sample Material Data	128.00	128.00	219,000.00	0.00	128.00	24.00	0.00	0.00	0.00	128.00	0.00	0.00%
	<b>Project Totals for Contract: A-DEMO</b>	<b>128.00</b>	<b>128.00</b>	<b>219,000.00</b>	<b>0.00</b>	<b>128.00</b>	<b>24.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>128.00</b>	<b>0.00</b>	<b>0.00%</b>
<b>Contract: D-DEMO - Demo Contract for Hull Block Const.Tutorial</b>													
101	Sample Hull Block Construction Work Orders	0.00	0.00	122.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
	<b>Project Totals for Contract: D-DEMO</b>	<b>0.00</b>	<b>0.00</b>	<b>122.41</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00%</b>
<b>Contract: TSHIP CONTRACT - T-SHIP Series Contract</b>													
2002	Severn Bulk Carrier (work orders)	25,982,031.87	0.00	25,982,031.86	0.00	0.00	0.00	0.00	0.00	29,193,294.00	28,840,055.37	29,193,294.00	98.79%
	<b>Project Totals for Contract: TSHIP CONTRACT</b>	<b>25,982,031.87</b>	<b>0.00</b>	<b>25,982,031.86</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>29,193,294.00</b>	<b>28,840,055.37</b>	<b>29,193,294.00</b>	<b>98.79%</b>
	<b>Grand Totals:</b>	<b>25,982,159.87</b>	<b>128.00</b>	<b>26,201,154.27</b>	<b>0.00</b>	<b>128.00</b>	<b>24.00</b>	<b>0.00</b>	<b>0.00</b>	<b>29,193,294.00</b>	<b>28,840,183.37</b>	<b>29,193,294.00</b>	

## **Labor/Material Status Report (C7)**

**The C7 Reports, available at various levels of the project WBS, summarize the status of labor hours and material costs.**

**Actual and estimated at completion (EAC) hours and material costs are summarized and compared against budgets with savings/over-runs indicated.**

# Labor/Material Status Report (C7)

04/17/2003 09:20:06

(Date format: MM/DD/YYYY)

## Chesapeake Marine Industries

Page 1 of 1

### Labor/Material Status (C7) - By Group

Contract 031

Project 031 Severn Harbor Tug

Project Range: 0 to ZZZZZZZZ      Group Range: 0 to ZZZZZZZZ

Group	Description	Budgets		Current Status			Estimate at Completion			
		Labor Man-hours	Material Cost	Actual Hours	% Prog	Committed Material	Total Labor Man-hours	Man-hour Savings	Total Material Dollars	Material Savings
1	Group 100 Steelwork	75,040.00	1,180,670.00	89,834.10	3.01	1,296,632.14	163,958.50	-88,918.50	1,329,487.01	-148,817.01
19	Production Support Services	0.00	0.00	0.00	0.00	3,521.64	0.00	0.00	3,521.64	-3,521.64
2	Group 200 Main Machinery	448.00	100,200.00	0.00	0.00	110,569.00	448.00	0.00	110,569.00	-10,369.00
3	Group 300 Electrical	676.00	37,080.00	1.50	0.23	338.08	676.00	0.00	37,080.00	0.00
4	Group 400 Electronics/ Nav aids	140.00	97,250.00	2.00	1.43	79,631.56	140.00	0.00	97,250.00	0.00
5	Group 500 Piping Systems	13,630.50	639,354.00	5,083.01	28.45	499,738.83	15,510.84	-1,880.34	639,354.00	0.00
6	Group 600 Outfitting	11,110.00	728,160.00	1,180.47	17.70	580,861.17	10,152.82	957.18	728,160.00	0.00
8	Group 800 Production Support	2,470.00	125,500.00	1,474.05	17.16	132,611.94	3,526.74	-1,056.74	132,611.94	-7,111.94
9	Group 900 tests / misc.	3,700.00	86,000.00	17,593.40	66.95	102,807.19	18,822.85	-15,122.85	102,807.19	-16,807.19
<b>Project 031</b>	<b>Total # Groups Reported 9</b>	<b>107,214.50</b>	<b>2,994,214.00</b>	<b>115,168.53</b>	<b>54.01</b>	<b>2,806,711.55</b>	<b>213,235.75</b>	<b>-106,021.25</b>	<b>3,180,840.78</b>	<b>-186,626.78</b>

## **Requisition Cost Summary Report (C1S)**

**The C1S report summarizes costs by individual requisition.**

**The C1S report provides some details of actual costs as they are incurred from purchases.**

**The supporting C1 reports provides further details at individual requisition items.**

# Requisition Cost Summary Report (C1S)

04/17/2003 09:18:22

(Date format: MMDD/YYYY)

## Chesapeake Marine Industries

### Requisition Cost Summary (C1S)

Contract 023 - Honga River Transit Company

Project 023 - Choptank Carriers

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Requisition	Req Heading	Group Acct	Zone Unit	Work Center	Work Order	Req Create Date	Material Cost	Taxes	Freight	Total Cost	Budgeted Cost	Variance
02023109	Flanges/tees					09/27/2002	647.60	0.00	0	647.60	0.00	-647.60
02023110	Steel tread					10/01/2002	502.15	0.00	0	502.15	0.00	-502.15
02023111	Nuts/bolts					10/02/2002	365.10	0.00	0	365.10	0.00	-365.10
02023112	Hatches					10/03/2002	7,699.59	0.00	0	7,699.59	0.00	-7,699.59
02023113	Freight					10/03/2002	340.14	0.00	0	340.14	0.00	-340.14
02023114	Painting					10/04/2002	174.00	0.00	0	174.00	0.00	-174.00
02023115	Pipe					10/07/2002	0.00	0.00	0	0.00	0.00	0.00
02023116	Calculations	8-831				10/08/2002	19,300.00	0.00	0	19,300.00	0.00	-19,300.00
02023117	Painting					10/15/2002	400.08	0.00	0	400.08	0.00	-400.08
02023119	Angle					10/18/2002	6,678.00	0.00	0	6,678.00	0.00	-6,678.00
02023120	Gasket cutter					10/21/2002	215.09	0.00	0	215.09	0.00	-215.09
02023121	Gasket material					10/21/2002	485.80	0.00	0	485.80	0.00	-485.80
02023122	Flanges					10/22/2002	145.35	0.00	0	145.35	0.00	-145.35
02023123	Pipe					10/23/2002	126.42	0.00	0	126.42	0.00	-126.42
02023124	Pipe/flat bar					10/28/2002	2,966.76	0.00	0	2,966.76	0.00	-2,966.76
02023125	weld flange					10/24/2002	440.42	0.00	0	440.42	0.00	-440.42
02023127	Plastic					10/28/2002	1,680.00	0.00	0	1,680.00	0.00	-1,680.00
02023128	Reducers/flanges					10/28/2002	187.38	0.00	0	187.38	0.00	-187.38
02023129	Bolts/nuts/washers					10/31/2002	1,041.34	0.00	0	1,041.34	0.00	-1,041.34
02023130	Plate					10/31/2002	126.30	0.00	0	126.30	0.00	-126.30

## **Drawing List (BOM01)**

**The BOM01 report lists the status of engineering drawings (optional).**

**The BOM01 report presents the schedule and approval status of drawings.**

**The supporting BOM02 report provides the status of detail drawing bills of materials.**

# Drawing List (BOM01)

04/17/2003 09:16:43

(Date format: MMDD/YYYY)

**Chesapeake Marine Industries**

**Drawing Listing (BOM01)**

Contract 031 - Honga River Transit Company

Project 031 - Severn Harbor Tug

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Drawing	Description	Revision	Revision Date	App'd	Approval Date	Plan Start	Plan Finish	Drawing File Name	Change Code
31BOT7-08	Girder, Longitudinal 10'-6" off CL	0	05/07/2002	Y	01/07/2003	00/00/0000	00/00/0000		
31BOT7-09	Girder, Longitudinal 21'-9" off CL	0	05/07/2002	Y	01/07/2003	00/00/0000	00/00/0000		
31BOT7-10	Girder, Longitudinal 33'-0" off CL	1	08/22/2002	Y	01/07/2003	00/00/0000	00/00/0000		031002
31BOT7-11	BOM	0	05/07/2002	Y	01/07/2003	00/00/0000	00/00/0000		
31DCK1-01	Trunk Deck Mod 1 Nomenclature	0	09/05/2002	Y	01/10/2003	00/00/0000	00/00/0000		
31DCK1-02	General Notes	0	09/05/2002	Y	01/10/2003	00/00/0000	00/00/0000		
31DCK1-03	Module 1 Assy	0	09/05/2002	Y	01/10/2003	00/00/0000	00/00/0000		
31DCK1-04	Deck Plating	0	09/05/2002	Y	01/10/2003	00/00/0000	00/00/0000		
31DCK1-05	Typ Trans Deck Plating, Mod 1	1	09/05/2002	N		00/00/0000	00/00/0000		02031brk
31DCK1-06	Stiffener Table, Mod 1	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-01	Work Package, Mod 2	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-02	General Notes, Mod 2	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-03	Module 2	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-04	Deck Plating, Mod 2	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-05	Typ Trans Deck Plating, Mod 2	1	09/05/2002	N		00/00/0000	00/00/0000		
31DCK2-06	Stiffener Table, Mod 2	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK3-01	Work Package, Mod 3	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK3-02	General Notes, Mod 3	0	09/05/2002	N		00/00/0000	00/00/0000		
31DCK3-03	Module 3	0	09/05/2002	N		00/00/0000	00/00/0000		

# Comparing Actual Costs With Estimate

**Actual labor and material costs should be monitored and compared against the original estimate.**

***PERCEPTION* generates summary reports at any level of the project WBS comparing the estimate against the current budgets and actual costs.**

**SWBS Group - Estimate vs Production Labor/Material Status Report (EvsP02)**

Contract TSHIP CONTRACT - T-SHIP Series Contract

Project Range: 0 to ZZZZZZZZ Group Range: 0 to ZZZZZZZZ

Group	Description	Estimated Hours	Production Budget Hours	Actual Hours	EAC Hours	Estimated Material Cost	Budget Material Cost	Committed Material Cost
<b>Project 2002</b>	<b>Severn Bulk Carrier (work orders)</b>	<b>1,106,520</b>	<b>1,017,998</b>	<b>660,706</b>	<b>984,817</b>	<b>32,080,543</b>	<b>29,193,294</b>	<b>25,982,032</b>
0	STEELWORK	515,791	474,528	450,719	474,895	17,150,061	15,606,555	13,889,834
1	ACCOMODATIONS OUTFIT	60,024	55,222	16,020	58,120	1,932,770	1,758,821	1,547,103
2	CARGO SYSTEMS OUTFIT	61,324	56,418	26,925	44,712	1,910,240	1,738,318	2,193,595
3	MECHANICAL SYSTEMS OUTFIT	89,983	82,784	20,641	73,453	2,708,477	2,464,714	2,108,533
4	PIPING SYSTEMS	89,620	82,450	26,504	62,160	2,603,448	2,369,138	687,686
5	MACHINERY SYSTEMS	30,325	27,899	7,712	23,832	849,100	772,681	1,376,678
6	ELECTRICAL SYSTEMS	63,073	58,027	4,821	55,591	1,699,813	1,546,830	1,981,189
7	PRODUCTION SERVICES	139,784	128,601	81,089	131,270	2,446,215	2,226,055	376,916
8	OWNER CHANGES	26,593	24,466	4,282	32,702	465,386	423,501	255,146
9	DESIGN & DRAWING	30,003	27,603	21,993	28,084	315,034	286,681	1,565,350
	<b>Grand Total</b>	<b>1,106,520</b>	<b>1,017,998</b>	<b>660,706</b>	<b>984,817</b>	<b>32,080,543</b>	<b>29,193,294</b>	<b>25,982,032</b>

**The selected reports represent only a small number of reports available from *PERCEPTION*. They generally provide visibility at higher levels of the project work breakdown structure.**

**The intent of these high level reports is to help the project manager identify general areas of problems within the project.**

**The project manager should then proceed to lower level reports to identify more precisely the cause of the problems and initiate appropriate remedial actions as may be necessary.**