DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
RESEARCH, DEVELOPMENT AND ACQUISITION
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000

OCT 05 2000

MEMORANDUM FOR DISTRIBUTION

Subj: EARNED VALUE MANAGEMENT REPORTING FOR ACAT I & II PROGRAM CONTRACTS

Ref: (a) ASN(RD&A) memo of 22 October 1999, subject: Semiannual ACAT I/II Program Reviews

Reference (a) provided guidance for reporting Earned Value on ACAT I & II Program contracts. Under this guidance we have collected and analyzed extensive Earned Value Management (EVM) data, which has helped us not only in assessing contract performance but also in communicating with our supporting contractors. We have continued to assess ways we can more clearly focus on EVM, enhance government-to-government and government-to-contractor communication, and be more closely aligned with other performance reporting, such as the DAES. The attached new guidance is a result of our assessment.

The new guidance is to be used for reporting on those contracts that will be addressed in the forthcoming ACAT I & II Program briefings and that use EVM, and for other reporting that uses the chart described therein. The ASN(RD&A) point of contact for this guidance is Larry Szutenbach at Szutenbach.Larry@hq.navy.mil, Telephone: (703) 693-8825.

H. Lee Buchanan

Attachment

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OCTOBER 2000 GUIDANCE

FOR

REPORTING EARNED VALUE

ON

ACAT I & II PROGRAM CONTRACTS

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

Purpose Of This Document:

Provide revised guidance for ACAT I & II Program reviews for contracts that use Earned Value Management (EVM).

Contents:

- Example New Master Chart
- Parts of the New Master Chart, With Explanatory Comments
- General Guidance for Reporting on ACAT I & II Program Contracts

October 2000 Guidance – Example Master Chart

Contract Performance for [give short contract title]

Y

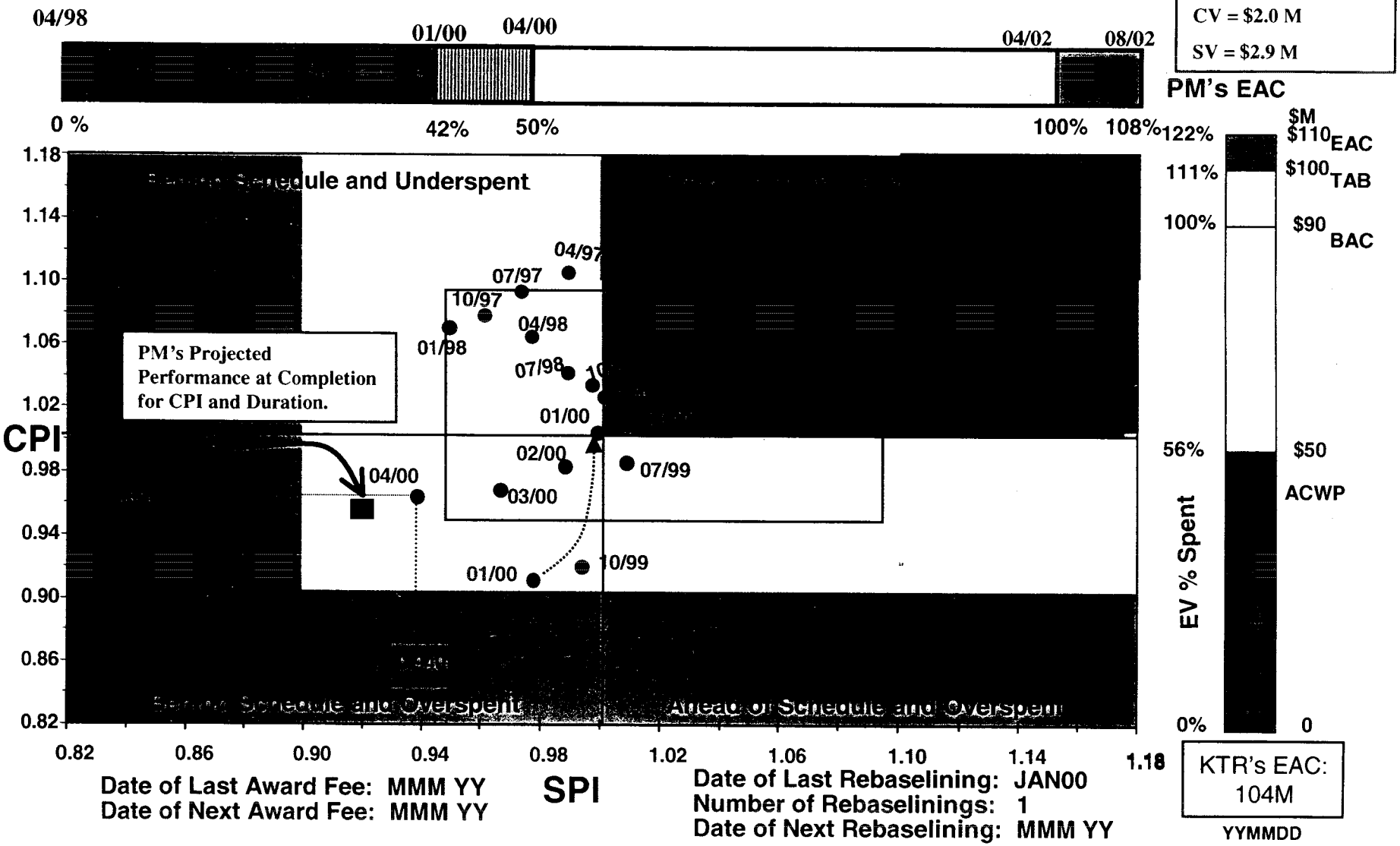
Solvency

Program Acronym ACAT XX

PEO and Program Manager/PMS-XXX **Briefed: APR 00**

Nxxxxx-YY-Cxxxx **Contractor Name [Prime or Significant Sub]**

[$TCPI_{EAC}$ = 0.76]
CV = $2.0 M
SV = $2.9 M



Date of Last Award Fee: MMM YY
Date of Next Award Fee: MMM YY

Date of Last Rebaselining: JAN00
Number of Rebaselinings: 1
Date of Next Rebaselining: MMM YY

KTR's EAC: 104M

YYMMDD

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

The following slides show parts of the new chart, with explanatory comments.

Contract Performance for [give short contract title]

Y

Solvency

Program Acronym ACAT XX

PEO and Program Manager/PMS-XXX **Briefed: APR 00**

Nxxxxx-YY-Cxxxx **Contractor Name [Prime or Significant Sub]**

The Contract Reported: The Contract Performance chart reports the Earned Value Management (EVM) performance, within an ACAT I or II program, for each prime contract, associate prime contract, or significant subcontract that has an anticipated total price of at least $60 million in research, development, test and evaluation or $250 million in procurement or ship construction in fiscal year 1990 constant dollars; or that are major contracts in accordance with the current series of DoD Regulation 5000.2; or that in the best judgment of the PM are determined to be critical to the program regardless of the dollar value.

- Provide the short title and number for the contract, and name of the contractor.
- Indicate in slide notes if this is a prime contract, associate prime contract, or subcontract.
- Indicate in slide notes whether this is the same contract and tasking as indicated in the previous semiannual briefing or prior briefings.
- Provide a separate Contract Performance chart for each prime associate prime contract, or significant subcontract.

PEO and Program Manager: Indicate the cognizant PEO, such as PEO(TSC) or PEO(A). Provide the name of the Program Manager and the program alphanumeric designation.

Contract Performance for [give short contract title]

PEO and Program Manager/PMS-XXX **Briefed: APR 00**

Y

Solvency

Program
Acronym
ACAT XX

Nxxxxx-YY-Cxxxx **Contractor Name [Prime or Significant Sub]**

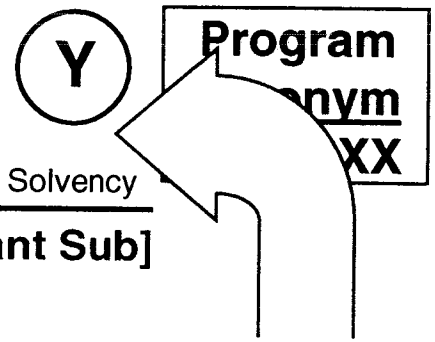
Program: Include the program acronym and ACAT designation.

Briefed: Indicate the month and year briefed.

Contract Performance for [give short contract title]

PEO and Program Manager/PMS-XXX **Briefed: APR 00**

Nxxxxx-YY-Cxxxx **Contractor Name [Prime or Significant Sub]**



Solvency:

On this chart, report solvency only for the contract indicated. *(A Total Program Solvency "stoplight" is on the "Budget Chart.").* Indicate whether there is enough money in the budget now, i.e., without adding money, to accomplish the result. The guidelines for colors indicating risk are as follows:

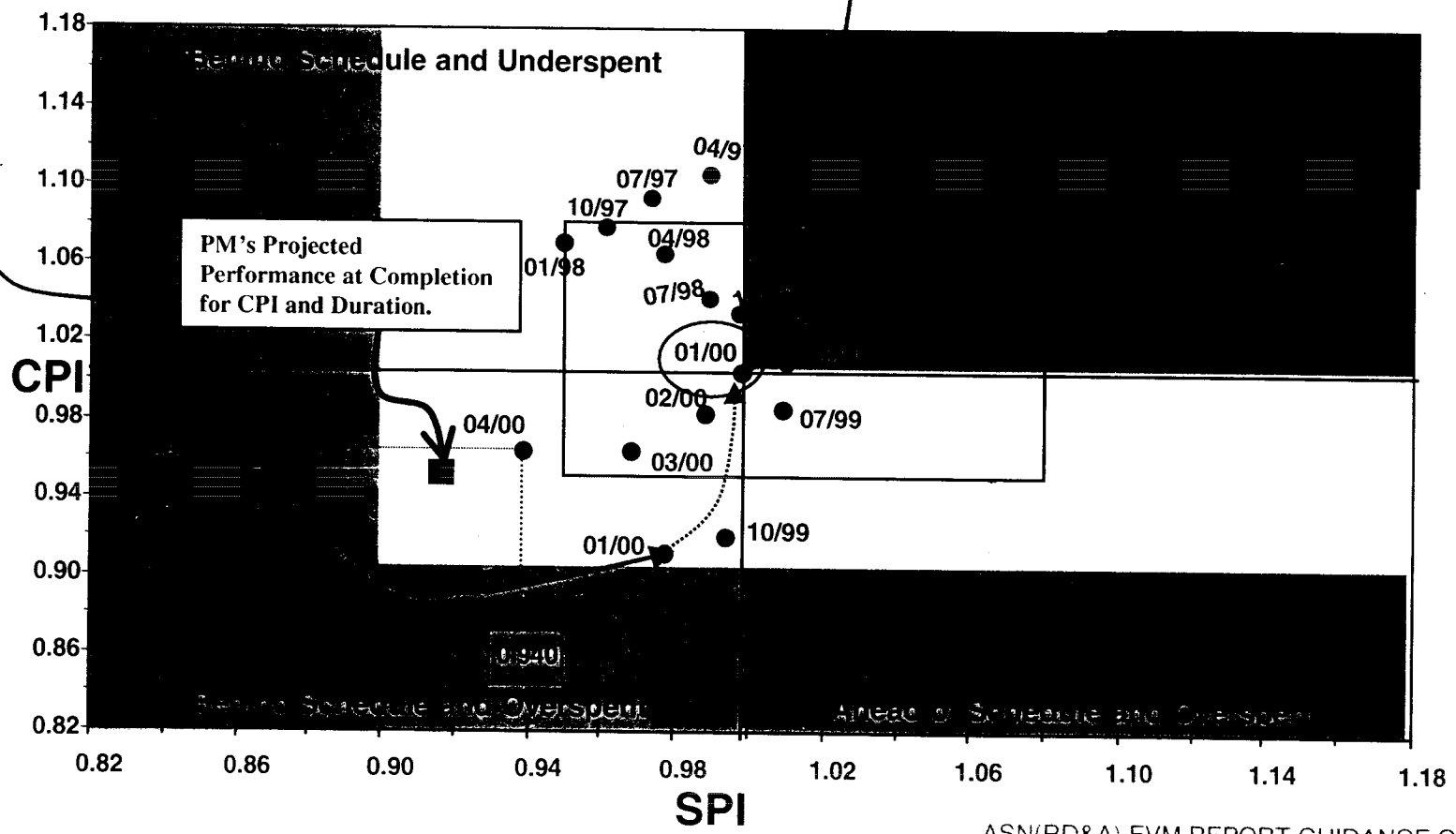
- **RED**: There is a shortfall in the current execution year or next fiscal year with no available offsets or workarounds, or a workaround that requires congressional approval for a current year reprogramming; or, additional out-year resources are required. In short, program requires outside help.

: Can resolve within existing program resources by out-year transfer of funds between appropriations or de-scoping effort, such as adjusting KPPs.

- **GREEN**: Can handle within existing resources without de-scoping effort or affecting KPPs.

CPI/SPI Indices: Show information on the Contract Performance (EVM) chart as indicated on the example. For cumulative CPI and SPI indices, each reporting period (quarterly for the first 30 months; and monthly for the last six months, unless it is only collected quarterly) for the last three years should yield a single point to capture a trend. Write in the CPI and SPI values for the latest point.

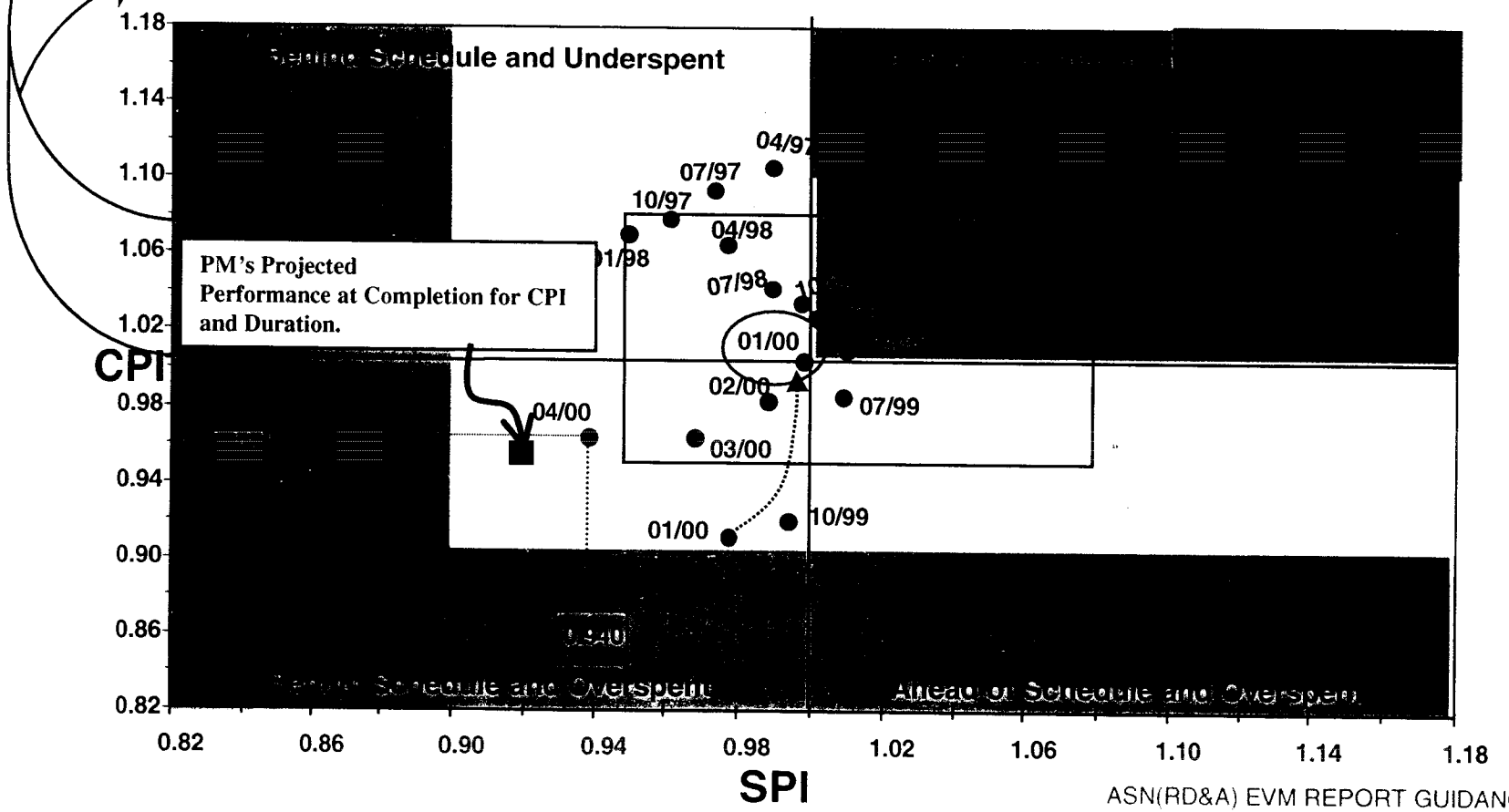
After rebaselining, retain the points that show the trend of CPI/SPI before rebaselining. Show the latest point just before rebaselining and connect that point with a dotted line to the point after rebaselining.



PM's Projected Performance at Completion:

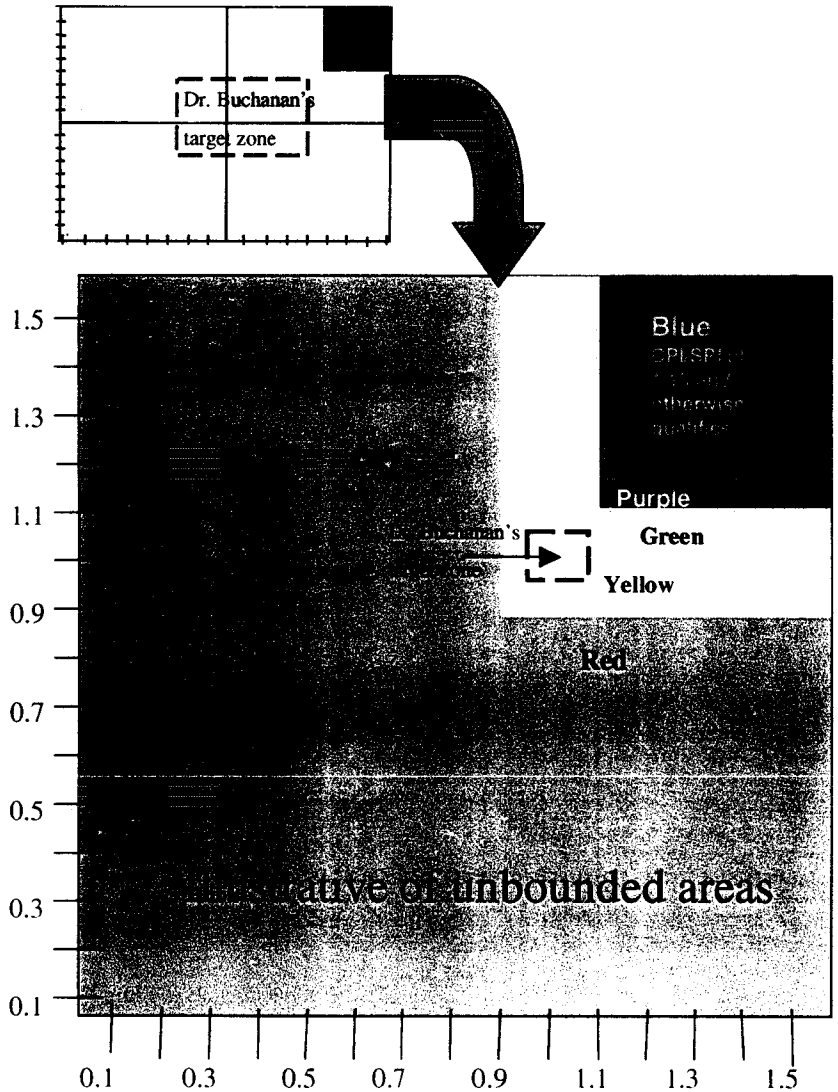
For cost, this point is based on the PM's projection against the current baseline, just before the final rebaselining is approved. For CPI calculations use: Current BAC/(PM's EAC).

For SPI calculations use: (Baseline Duration in months) ÷ (PM's Estimated Duration in Months). This is not a true EVM plot, but serves to graphically show the schedule slip, which is of interest to the ASN and Warfighters.



Guidance for the Example Master Chart Colors

Typical bounded Bulls-eye chart



<u>Criteria</u> :

Blue **Must have CPI≥1.15 and SPI≥1.15, and also have "Exceptional" performance exceeding many requirements to government's benefit, with few minor problems all resolved by contractor.**

Purple	**CPI≥1.1**	**and**	**SPI≥1.1**
Green	**CPI≥1.0**	**and**	**SPI≥1.0**
	CPI<1.0	**or**	**SPI<1.0**
Red	**CPI<0.9**	**or**	**SPI<0.9**

Dr. Buchanan's Target area

CPI = .95 to 1.08

SPI = .95 to 1.08

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

Comments on Risk Thresholds shown on previous slide.

•Many consider 0.95 as the standard lower threshold for Green. However, at any one time:

- About 25% of Navy ACAT I & II Program contracts report in the Red.
- About 50% of contracts report in the ASN(RD&A) defined Yellow, and 40% of those (20% of total) are outside the "ASN (RD&A) Target Area."
- About 25% of contracts are in the Green. None are achieving Blue based on Navy EVM threshold.

Typically, the contracts decline in performance over time, and many achieve the level of "Green" only initially or after rebaselining. So, the current guidelines help highlight that we should not become unrealistically comfortable at a threshold of CPI and SPI $\geq$ 0.950.

• The use of five colors, ascending in order from Red to Blue, is consistent with OSD's qualitative guidelines for contractor performance assessments.

•For Blue the threshold is CPI and SPI of 1.15. Additionally, for assigning "Blue" note that there is a qualitative requirement that the contractor demonstrate "Exceptional" performance, exceeding many requirements to government's benefit, with few minor problems all resolved by the contractor."

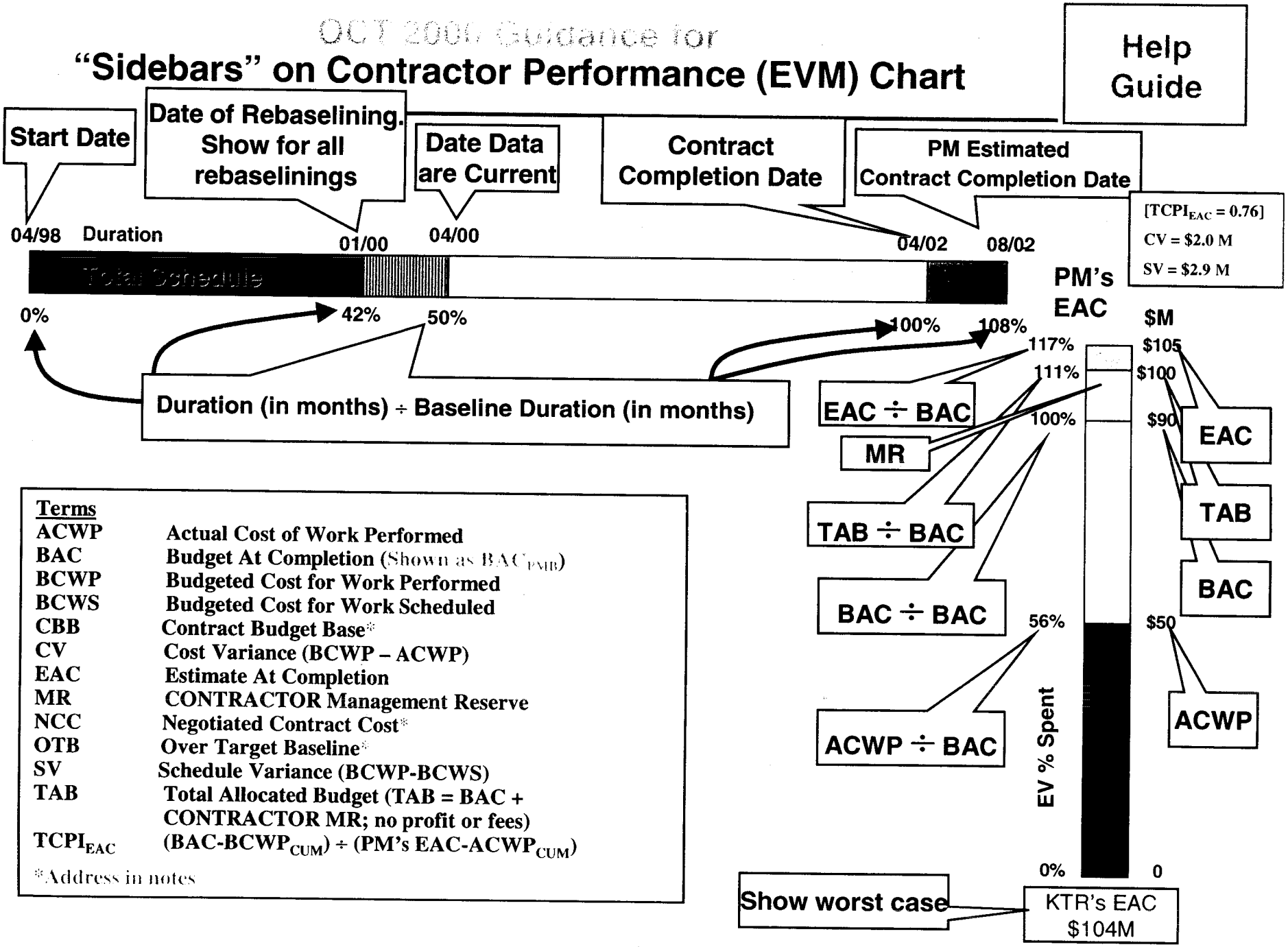
New Master Chart "Sidebars"

The following slide shows the new Example Master Chart "Sidebars" and provides formulas for the various terms used on the chart.

Additional explanatory comments are included in subsequent slides.

OCT 2000 Guidance for

"Sidebars" on Contractor Performance (EVM) Chart



Terms

ACWP	Actual Cost of Work Performed
BAC	Budget At Completion (Shown as BAC_{PMB})
BCWP	Budgeted Cost for Work Performed
BCWS	Budgeted Cost for Work Scheduled
CBB	Contract Budget Base*
CV	Cost Variance (BCWP – ACWP)
EAC	Estimate At Completion
MR	CONTRACTOR Management Reserve
NCC	Negotiated Contract Cost*
OTB	Over Target Baseline*
SV	Schedule Variance (BCWP-BCWS)
TAB	Total Allocated Budget (TAB = BAC + CONTRACTOR MR; no profit or fees)
$TCPI_{EAC}$	$(BAC\text{-}BCWP_{CUM}) \div (PM's\ EAC\text{-}ACWP_{CUM})$

*Address in notes

Guidance for Spent "Sidebar" on Contractor Performance (EVM) Chart

- **"Total Spent" Bar:** Show the fraction of the total cost that has been consumed from the very beginning to the very end and show overspend projections.
- **Projected Over Cost:** Explicitly show total cost overrun at the end of the bar.
- **EVM Terms and Definitions:** More terms have been added to the chart, with their definitions: BCWS, CBB, CV, MR, NCC, OTB, SV, TAB, TCPI.
- **Management Reserve**: Only Contractor MR is shown on this chart, and it is depicted, specifically in EV terms, as the difference between Total Allocated Budget (TAB) and the Performance Measurement Baseline (PMB) Budget at Completion (BAC_{PMB}).
- **BAC_{PMB}:** This is comprised of the Negotiated Contract Cost (NCC), Contract Budget Base (CBB), and Government approved Over Target Baseline (OTB), but is exclusive of the Contractor MR and profit and fees.
- **Contractor's EAC:** The Contractor's (KTR's) EAC is to be shown on the chart, and must be addressed when different from the Government PM's EAC.

Guidance for Spent "Sidebar" on Contractor Performance (EVM) Chart (continued)

Total Allocated Budget (TAB): For TAB, provide in slide notes, and if deemed necessary by the PEO/PM address at the briefing to the ASN(RD&A), the following costs for the current TAB. If there has been a rebaselining since the last reporting period, provide these costs, along with the TAB and MR, just before rebaselining. These are associated directly with the contract, and their change, recorded over time, show the results of rebaselinings, if any:

- Negotiated Contract Cost (NCC)
- Contract Budget Base (CBB), which is NCC plus Authorized Unpriced Work (AUW)
- Government approved Over Target Baseline (OTB) included in the contract price. This does not include a Contractor overrun that is reflected in the KTR's or PM's EAC but which is not part of the TAB.

TCPI, CV, and SV: The formulas for computing these numbers are given in the guidance for "Sidebars." Show these numbers above the Spent Sidebar.

Guidance for Schedule "Sidebar" on Contractor Performance (EVM) Chart

- **"Total Schedule" Bar:** Show the fraction of the total schedule in duration that has been consumed from the very beginning to the very end. Show projected overrun in months and percent.

- **Duration:**

- At the top of the bar, show in progression:

  - Start date
  - Rebaselining date(s)
  - Date data are current
  - Contract completion date
  - PM Estimated Contract Completion Date, which also explicitly shows total schedule overrun, in duration, at the end of the bar.

- At the bottom of the bar, show in progression the percentages for progress as indicated in duration on the top of the bar.

- **EVM Terms and Definitions:** More terms have been added to the chart, with their definitions: BCWS, CBB, CV, MR, NCC, OTB, SV, TAB, TCPI.

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

Contract Rebaselining:

Proposed guidance: This information is desired for determining the effect of rebaselining on ***contract*** performance. Provide, in slide notes, dates and reasons for contract rebaselining, defined as a realignment of the contract value or requirements that changes the CPI and/or SPI on the chart to, or close to, 1.0.

Date of Last Award Fee: MMM YY
Date of Next Award Fee: MMM YY

SPI

Date of Last Rebaselining: MMM YY
Number of Rebaselinings: N
Date of Next Rebaselining: MMM YY

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

Date of Last Award Fee: MMM YY
Date of Next Award Fee: MMM YY

SPI

Date of Last Rebaselining: MMM YY
Number of Rebaselinings: N
Date of Next Rebaselining: MMM YY

Award Fee: Award fee is included for emphasizing the connection of performance with award fee.

REPORTING EARNED VALUE ON ACAT I & II PROGRAM CONTRACTS

General Guidance

PEO/PM Judgment: A PEO or PM might determine that following this guidance will not provide information necessary for ASN(RD&A) oversight or action. In those cases, it is expected that the PEO or PM will vary from this guidance, provide the necessary information, and advise the ASN(RD&A) of the variance.

Budget Data: Ensure that all schedules and budgets (especially the CPI/SPI plots) reflect the current program of record. Do not display a schedule or budget that anticipates an expected rebaselining, promise of a Comptroller adjustment, or expectation of Congressional adds. This allows the Navy to ensure consistency across PMs and PEOs, as well to communicate effectively with the corporate offices of contractors on individual and aggregated contract performance.

Current Status Outside the "Target Area": When the current status falls outside the ASN(RD&A) target area, the ASN(RD&A) must be apprised of the PM's plan of action. Those contracts in the Red area will also have their special review, as directed in separate correspondence.

PM/Contractor Difference in Assessment: The PMs must note and explain the difference between the PM's and contractor's assessment, especially EAC.