



Automated Cost Estimating Integrated Tools

ACE and POST Reports

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Introduction

- **This presentation is intended to compare and contrast the creation of reports in ACE and POST. While each application has reports unique to it, there are also reports common to both but with differences in how they are created.**
- **This presentation also hopes to highlight a little known reporting capability found in POST – Multiple Cases/ACE Sessions**



Time Phased Allocated Risk Report

- **What is a Time Phased Allocated Risk Report?**
 - It is a regular time phased report in Base Year, Then Year, or Same Year dollars that is adjusted to a specific confidence level
 - It is called allocated because confidence levels do not sum; therefore the analyst must decide what WBS/CES level is at what confidence and let the model adjust the other rows accordingly
- **Both ACE and POST have the ability to create a time phase allocated risk report**
 - In ACE you create a Phased Report template and adjust the RI\$K tab on the Phased Report template options dialog
 - In POST you adjust the Case Properties (or create a copy of the case of interest and adjust the Case Properties)
- **Demonstrate creating the report in both ACE and POST at the 80% confidence level allocated from the 2nd level of the WBS/CES – use Reports.aceit file**



Report Generated in ACE

ACE 7.1a - [Reports.aceit - TY Phased Funding (TY SK, Time Phased, Case: Point Estimate, 80% CL allocated at Level 2)]

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	Cost Element	Approp	Total	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
1	*My Program Estimate										
2	Missile System		\$ 934,905 (~81%)	\$ 8,569	\$ 14,047	\$ 10,111	\$ 4,505	\$ 47,787	\$ 39,157	\$ 433,519	\$ 377,209
3	Sys Dev and Demo	3600	\$ 38,226 (80%)	\$ 8,569	\$ 14,047	\$ 10,111	\$ 4,505	\$ 992			
4	Air Vehicle	3600	\$ 38,226 (80%)	\$ 8,569	\$ 14,047	\$ 10,111	\$ 4,505	\$ 992			
5	Design & Development	3600	\$ 38,226 (80%)	\$ 8,569	\$ 14,047	\$ 10,111	\$ 4,505	\$ 992			
6											
7	Production Phase	3020	\$ 896,679 (80%)					\$ 46,794	\$ 39,157	\$ 433,519	\$ 377,209
8	Air Vehicle	3020	\$ 492,114 (76%)					\$ 25,546	\$ 21,343	\$ 238,097	\$ 207,128
9	Payload	3020	\$ 16,546 (71%)					\$ 865	\$ 721	\$ 8,012	\$ 6,948
10	Propulsion	3020	\$ 23,428 (72%)					\$ 1,225	\$ 1,021	\$ 11,344	\$ 9,838
11	Airframe	3020	\$ 151,711 (72%)					\$ 7,933	\$ 6,611	\$ 73,460	\$ 63,707
12	Guidance and Control	3020	\$ 291,328 (73%)					\$ 15,233	\$ 12,695	\$ 141,065	\$ 122,335
13	Integration, Assembly, Test and Check	3020	\$ 9,102 (71%)					\$ 289	\$ 295	\$ 4,217	\$ 4,301
14	Engineering Changes	3020	\$ 31,884 (77%)					\$ 1,655	\$ 1,382	\$ 15,426	\$ 13,422
15	Sys Engineering/Program Management	3020	\$ 236,124 (77%)					\$ 12,253	\$ 10,238	\$ 114,238	\$ 99,396
16	System Test and Evaluation	3020	\$ 1,338 (77%)					\$ 325	\$ 331	\$ 338	\$ 344
17	Training	3020	\$ 64,976 (77%)					\$ 3,372	\$ 2,817	\$ 31,436	\$ 27,351
18	Initial Spares and Repair Parts	3020	\$ 70,242 (77%)					\$ 3,645	\$ 3,046	\$ 33,984	\$ 29,568

Ready NUM



Report Generated in POST

Funding in TY \$K							
WBS	Total	2008	2009	2010	2011	2012	2013
*My Program Estimate							
Missile System	\$934,905 (81%)	\$8,569	\$14,047	\$10,111	\$4,505	\$47,787	\$39,157
Sys Dev and Demo	\$38,226 (80%)	\$8,569	\$14,047	\$10,111	\$4,505	\$992	
Air Vehicle	\$38,226 (80%)	\$8,569	\$14,047	\$10,111	\$4,505	\$992	
Design & Development	\$38,226 (80%)	\$8,569	\$14,047	\$10,111	\$4,505	\$992	
Production Phase	\$896,679 (80%)					\$46,794	\$39,157
Air Vehicle	\$492,114 (76%)					\$25,546	\$21,343
Payload	\$16,546 (71%)					\$865	\$721
Propulsion	\$23,428 (72%)					\$1,225	\$1,021
Airframe	\$151,711 (72%)					\$7,933	\$6,611
Guidance and Control	\$291,328 (73%)					\$15,233	\$12,695
Integration, Assembly, Test and Checkout	\$9,102 (71%)					\$289	\$295
Engineering Changes	\$31,884 (77%)					\$1,655	\$1,382
Sys Engineering/Program Management	\$236,124 (77%)					\$12,253	\$10,238
System Test and Evaluation	\$1,338 (77%)					\$325	\$331
Training	\$64,976 (77%)					\$3,372	\$2,817
Initial Spares and Repair Parts	\$70,242 (77%)					\$3,645	\$3,046



Filter Reports

- **Filter Reports can be created in both ACE and POST, however there are filter options in ACE that are not found in POST**
- **Creating the equivalent report in POST requires a different approach**



Filter Report Options in ACE

- ACE will allow you to filter by only one sub-category at a time
- ACE gives you three options for filtering a report by Sub Category

A screenshot of the 'Phased Report Options' dialog box. The dialog has a blue title bar with a close button (X) in the top right corner. Below the title bar are several tabs: 'Description', 'Title', 'Header', 'Footer', 'Page Layout', 'Format', 'Rows', 'Table', 'Columns', and 'RI\$K'. The 'Table' tab is currently selected. The main area of the dialog contains three radio button options. The first is 'Detailed Matrix (All WBS/CES Rows)'. The second is 'Detailed Matrix by Category', which is selected. This option has two dropdown menus: 'Category' (set to 'Filter Ex') and 'Sub Category' (set to 'Contractor'). Below these are three sub-options: 'Include rows explicitly labeled with sub-category' (unselected), 'Include parent rows labeled with sub-category and child rows with same label or blank' (selected), and 'Include parent rows labeled with sub-category and all child rows' (unselected). The third main radio button option is 'Summary by Category', which has a dropdown menu below it. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.



Categories to Illustrate Options

- Categories in the Filter Ex column combined with the three filter options give different results (next slide)

ACE 7.1a - [Adv ACE - Category Reports Finish.aceit - WBS/CES (BY2009SM)]

File Edit View Documentation Calc Cases Reports Tools Window Help

WBS/CES

	WBS/CES Description	PME Matrix	Component Hardware	Cost Bins	Filter Ex	Category 4	Category 5	Category 6	Category 7
13	XYZ CES (MISSILE)								
14	RDT&E FUNDED ELEMENTS				Contractor				
15	DEVELOPMENT ENGINEERING								
16	AIR VEHICLE (Hardware)			Hardware					
17	AIR VEHICLE (Software)			Software					
18	PROTOTYPE MANUFACTURING			Hardware					
19	PROCESSOR		Prcs						
20	AMPLIFIERS		Amp						
21	COTS ANTENNA		Ant						
22	SYSTEMS ENGINEERING/MGMT			SEPM					
23	CONTRACTOR								
24	GOVERNMENT				Government				
25	SYSTEMS TEST AND EVAL			ST&E					
26	CONTRACTOR								
27	GOVERNMENT				Government				
28	TRAINING			Other					
29	OTHER RDT&E			Other					
30	RDT&E FEE								
31									

NUM



Filter Report Options Illustrated

#1 - Include rows explicitly labeled with sub-category

#2 - Include parent rows labeled with sub-category and child rows with same label or blank

#3 - Include parent rows labeled with sub-category and all child rows

Cost Element	Approp	Total
RDT&E FUNDED ELEMENTS	RDTEA	\$84.57

Cost Element	Approp	Total
RDT&E FUNDED ELEMENTS	RDTEA	\$84.57
DEVELOPMENT ENGINEERING	RDTEA	\$38.21
AIR VEHICLE (Hardware)	RDTEA	\$19.81
AIR VEHICLE (Software)	RDTEA	\$18.40
PROTOTYPE MANUFACTURING	RDTEA	\$14.95
PROCESSOR	RDTEA	\$2.17
AMPLIFIERS	RDTEA	\$10.04
COTS ANTENNA	RDTEA	\$2.74
SYSTEMS ENGINEERING/MGMT	RDTEA	\$20.10
CONTRACTOR	RDTEA	\$20.10
SYSTEMS TEST AND EVAL	RDTEA	\$2.24
CONTRACTOR	RDTEA	\$2.24
TRAINING	RDTEA	
OTHER RDT&E	RDTEA	\$9.06
RDT&E FEE	RDTEA	\$9.06

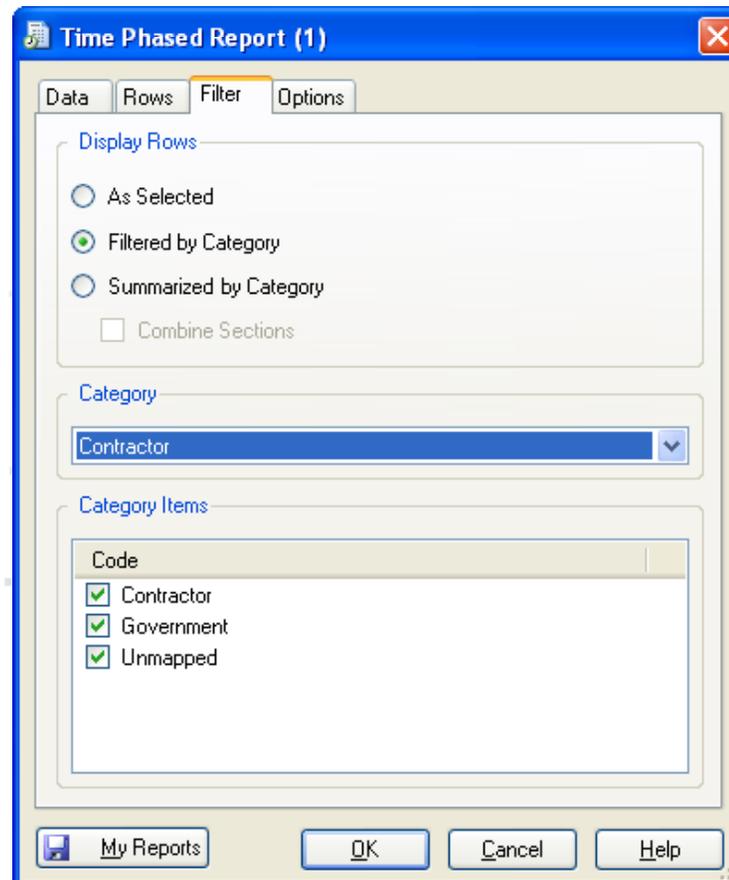
Cost Element	Approp	Total
RDT&E FUNDED ELEMENTS	RDTEA	\$105.57
DEVELOPMENT ENGINEERING	RDTEA	\$38.21
AIR VEHICLE (Hardware)	RDTEA	\$19.81
AIR VEHICLE (Software)	RDTEA	\$18.40
PROTOTYPE MANUFACTURING	RDTEA	\$14.95
PROCESSOR	RDTEA	\$2.17
AMPLIFIERS	RDTEA	\$10.04
COTS ANTENNA	RDTEA	\$2.74
SYSTEMS ENGINEERING/MGMT	RDTEA	\$32.24
CONTRACTOR	RDTEA	\$20.10
GOVERNMENT	RDTEA	\$12.15
SYSTEMS TEST AND EVAL	RDTEA	\$11.10
CONTRACTOR	RDTEA	\$2.24
GOVERNMENT	RDTEA	\$8.86
TRAINING	RDTEA	
OTHER RDT&E	RDTEA	\$9.06
RDT&E FEE	RDTEA	\$9.06

- **Note: The fiscal years were removed so everything would fit on slide**



Filter Report Options in POST

- **POST will allow you to filter by multiple sub-categories**
- **The three options for filtering found in ACE have to be handled differently in POST**





Option # 1 in POST

- **Open the session Filter.aceit and show the category column “Contractor”**
- **Select Time Phased Report in POST and select session Filter.aceit**
- **Demonstrate how to create ACE option #1 in POST**
 - On Rows tab ONLY pick the RDT&E Funded Elements row
 - On Filter tab pick Filter by Category, Contractor, and Contractor from Category Items section

Costs in BY2009 \$M							
WBS, Filtered by Contractor (Contractor)	Contractor	Total	2009	2010	2011	2012	2013
RDT&E FUNDED ELEMENTS	Contractor	\$84.567	\$12.065	\$26.542	\$25.689	\$16.081	\$4.190



Option #2 in POST

- **Select Time Phased Report in POST and select session Filter.aceit**
- **Demonstrate how to create ACE option #2 in POST**
 - On Rows tab pick XYZ CES (MISSILE)
 - On Filter tab pick Filter by Category, Contractor, and Contractor from Category Items section

Costs in BY2009 \$M							
WBS, Filtered by Contractor (Contractor)	Contractor	Total	2009	2010	2011	2012	2013
XYZ CES (MISSILE)	Contractor	\$84.567	\$12.065	\$26.542	\$25.689	\$16.081	\$4.190
RDT&E FUNDED ELEMENTS	Contractor	\$84.567	\$12.065	\$26.542	\$25.689	\$16.081	\$4.190
DEVELOPMENT ENGINEERING	Contractor	\$38.212	\$3.896	\$10.616	\$12.548	\$8.763	\$2.389
AIR VEHICLE (Hardware)	Contractor	\$19.810	\$1.146	\$5.135	\$7.229	\$5.154	\$1.146
AIR VEHICLE (Software)	Contractor	\$18.403	\$2.750	\$5.481	\$5.319	\$3.609	\$1.244
PROTOTYPE MANUFACTURING	Contractor	\$14.954	\$3.814	\$6.256	\$3.664	\$1.221	
PROCESSOR	Contractor	\$2.170	\$0.434	\$0.868	\$0.651	\$0.217	
AMPLIFIERS	Contractor	\$10.042	\$2.008	\$4.017	\$3.013	\$1.004	
COTS ANTENNA	Contractor	\$2.743	\$1.371	\$1.371			
SYSTEMS ENGINEERING/MGMT	Contractor	\$20.097	\$2.914	\$6.378	\$6.128	\$3.774	\$0.903
CONTRACTOR	Contractor	\$20.097	\$2.914	\$6.378	\$6.128	\$3.774	\$0.903
SYSTEMS TEST AND EVAL	Contractor	\$2.243	\$0.149	\$0.448	\$0.598	\$0.599	\$0.448
CONTRACTOR	Contractor	\$2.243	\$0.149	\$0.448	\$0.598	\$0.599	\$0.448
TRAINING	Contractor						
OTHER RDT&E	Contractor	\$9.061	\$1.293	\$2.844	\$2.752	\$1.723	\$0.449
RDT&E FEE	Contractor	\$9.061	\$1.293	\$2.844	\$2.752	\$1.723	\$0.449



Option #3 in POST

- **Select Time Phased Report in POST and select session Filter.aceit**
- **Demonstrate how to create ACE option #3 in POST**
 - On Rows tab pick the RDT&E Funded Elements row and its children
 - Do not use the Filter tab

Costs in BY2009 \$M						
WBS	Total	2009	2010	2011	2012	2013
RDT&E FUNDED ELEMENTS	\$105.574	\$13.046	\$28.465	\$32.712	\$24.444	\$6.907
DEVELOPMENT ENGINEERING	\$38.212	\$3.896	\$10.616	\$12.548	\$8.763	\$2.389
AIR VEHICLE (Hardware)	\$19.810	\$1.146	\$5.135	\$7.229	\$5.154	\$1.146
AIR VEHICLE (Software)	\$18.403	\$2.750	\$5.481	\$5.319	\$3.609	\$1.244
PROTOTYPE MANUFACTURING	\$14.954	\$3.814	\$6.256	\$3.664	\$1.221	
PROCESSOR	\$2.170	\$0.434	\$0.868	\$0.651	\$0.217	
AMPLIFIERS	\$10.042	\$2.008	\$4.017	\$3.013	\$1.004	
COTS ANTENNA	\$2.743	\$1.371	\$1.371			
SYSTEMS ENGINEERING/MGMT	\$32.242	\$3.895	\$8.301	\$8.956	\$7.470	\$3.621
CONTRACTOR	\$20.097	\$2.914	\$6.378	\$6.128	\$3.774	\$0.903
GOVERNMENT	\$12.145	\$0.981	\$1.923	\$2.828	\$3.696	\$2.718
SYSTEMS TEST AND EVAL	\$11.104	\$0.149	\$0.448	\$4.792	\$5.266	\$0.448
CONTRACTOR	\$2.243	\$0.149	\$0.448	\$0.598	\$0.599	\$0.448
GOVERNMENT	\$8.861			\$4.194	\$4.667	
TRAINING						
OTHER RDT&E	\$9.061	\$1.293	\$2.844	\$2.752	\$1.723	\$0.449
RDT&E FEE	\$9.061	\$1.293	\$2.844	\$2.752	\$1.723	\$0.449



Reports using Multiple ACE Sessions

- **Reports can be created that combine information from multiple ACE sessions**
 - The following reports can be created for multiple sessions: What-If Report, Delta Report, Time Phased Delta Report, System-of-Systems Report, Drill-Down Chart, and the Phased Line Chart
- **Considerations when using Multiple Sessions**
 - In order to generate meaningful reports there should be some WBS commonality between the sessions
 - POST uses the External Code to match row results across sessions. Make sure that rows common to all sessions have the same codes
 - Make sure that case names across all ACE sessions are unique so that you can distinguish them in the multi-session report
 - When generating a report with cases from multiple sessions you must select a single WBS to report against
 - When generating a report with cases from multiple sessions you must make sure that both ACE sessions are in the same Fiscal Year and Units



Multiple ACE Session Demonstration

- **Demonstrate a What-If report using two ACE sessions**
 - Use the same two ACE sessions used previously – Report.aceit and Filter.aceit
 - Report against the Filter.aceit WBS structure
- **Demonstrate a Phased Line Chart for the XYZ CES (Missile) row using the two ACE sessions**

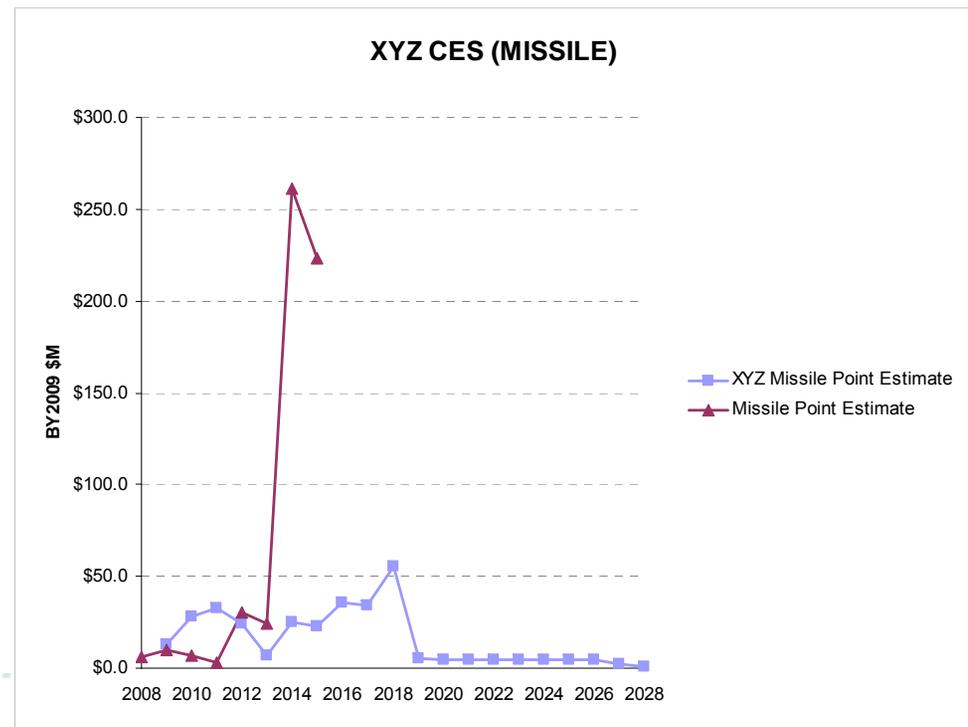


Multiple Session Results

What-If Report

Phased Line Chart

Costs in BY2009 \$M		
WBS	Point Estimate	Point Estimate
XYZ CES (MISSILE)	\$321.5	\$564.1
RDT&E FUNDED ELEMENTS	\$105.6	\$26.0
DEVELOPMENT ENGINEERING	\$38.2	
AIR VEHICLE (Hardware)	\$19.8	
AIR VEHICLE (Software)	\$18.4	
PROTOTYPE MANUFACTURING	\$15.0	
PROCESSOR	\$2.2	
AMPLIFIERS	\$10.0	
COTS ANTENNA	\$2.7	
SYSTEMS ENGINEERING/MGMT	\$32.2	
CONTRACTOR	\$20.1	
GOVERNMENT	\$12.1	
SYSTEMS TEST AND EVAL	\$11.1	
CONTRACTOR	\$2.2	
GOVERNMENT	\$8.9	
TRAINING		
OTHER RDT&E	\$9.1	
RDT&E FEE	\$9.1	
PROCUREMENT FUNDED ELEMENTS	\$157.6	\$538.2
RECURRING PRODUCTION	\$94.9	
MANUFACTURING	\$86.8	\$346.5
RECURRING ENGINEERING	\$5.6	
QUALITY CONTROL	\$2.5	
ENGINEERING CHANGES		\$17.3
SYSTEMS ENGINEERING/MGMT	\$36.9	\$97.0
CONTRACTOR	\$22.8	
GOVERNMENT	\$14.1	
TRAINING		\$34.7
DATA	\$4.2	
FIELDING	\$4.4	
INITIAL SPARES (REPRBLES)	\$3.9	\$41.6
TRANSPORTATION (TO UNIT)	\$0.5	
OTHER PROCUREMENT	\$17.2	
POST DEPLOYMENT SOFTWARE SUPPORT (PDS)	\$1.8	
PROCUREMENT FEE	\$15.4	





Multiple Case Demonstration

- **Create a Phased Delta Report in TY dollars that compares the Missile Point Estimate case with the Missile Point Estimate case adjusted to the 50% confidence level**
 - Use the Reports.aceit session
 - Create a case allocated at the 50% confidence level
 - Create the report at the Production level
 - Make the year range 2012-2015

Funding in TY \$M	Total	2012	2013	2014	2015
Missile Point Estimate	\$610.4	\$31.9	\$26.7	\$295.1	\$256.8
Missile Point Estimate 50%	\$736.8	\$38.5	\$32.2	\$356.2	\$309.9
Delta (Δ)	\$126.4	\$6.6	\$5.5	\$61.1	\$53.2
Percent Δ	20.70%	20.59%	20.56%	20.72%	20.71%
Threshold	High	High	High	High	High



- **Both ACE and POST can create certain reports but sometimes the way you create them is different**
 - Time Phased Allocated Risk Report
 - In ACE you adjust the RISK tab on the Phased Report template options dialog
 - In POST you create a copy of the case and adjust the Case Properties
- **Filter Reports can be created in both ACE and POST**
- **You can create reports from multiple ACE sessions or cases**



Questions?



Thank You



- **Back-up slides for the inevitable question about how ACE does the Risk allocation**



Key Objectives for any Allocation Scheme

- **The relative adjustment from the statistically correct result is minimized**
 - For example, if the result is requested for the 60% confidence level, then all the sub elements should be as close as possible to the 60% level.
- **The sub elements must sum to the parent.**
- **The allocation should be influenced by statistical results and the correlation at the lower levels.**



How to Allocate Risk Dollars

■ **Steps for Allocation:**

- Select the level in the WBS from which risk dollars will be allocated.
- Calculate the TBE in BY dollars.
- Generate the risk statistics in BY dollars.
- Allocate risk in BY dollars.
 - The risk dollars to allocate are the difference between the parent value and the sum of the children for a specific confidence level.
 - Use the standard deviation (not the point estimates) to prorate the risk dollars.
- Levels above the level at which you are allocating risk are merely the sum of their children.
- Time Phase the allocated risk dollars



ACE's Allocation Calculation

WBS Description	Baseline	Statistics @65%	Std Dev	Delta				Allocated @ 65%
Total	\$ 129,371.7 (19%)	\$161,737.8						\$161,737.8
Manufacturing	\$94,050 (31%)	\$114,979.1	\$22,241.0					?
Air Vehicle	\$81,782.6 (28%)	\$104,464.3	\$22,165.2					?
Integration	\$12,267.4 (75%)	\$11,800.6	\$1,916.0					?
SEPM	\$34,798.5 (25%)	\$48,978.9	\$12,680.3					?
Other	523.3 (50%)	\$594.2	\$181.5					?

■ Steps to Allocate Risk at 65% Level

- 1. What is the total cost at the desired confidence level (CL)?
- 2. What is the sum of immediate children at the desired CL?
- 3. What is the difference between the total cost at the desired CL and the sum of the children at the same CL?
- 4. The risk statistics at the children are adjusted by subtracting a prorated portion of the parent level risk delta.
- 5. Calculate the non risk adjusted time phased yearly percentages.
- 6. Prorate the Allocated total results using the Yearly percentages.
- 7. Sum the Parent Allocated Rows.
- 8. Determine the Confidence Level at each level of the WBS.
- 9. Not Shown – For then year budget results, Inflate Base Year to Then Year Results.

Steps 1-4 are repeated for the various WBS levels in an estimate.



ACE's Allocation Calculation

WBS Description	Baseline	Statistics @65%	Std Dev	Delta				Allocated @ 65%
Total	\$129,371.7	\$161,737.8		-\$2,814.4				
Manufacturing	\$94,050.0	\$114,979.1	\$22,241.0					
Air Vehicle	\$81,782.6	\$104,464.3	\$22,165.2					
Integration	\$12,267.4	\$11,800.6	\$1,916.0					
SEPM	\$34,798.5	\$48,978.9	\$12,680.3					
Other	\$523.3	\$594.2	\$181.5					

■ Calculate the Risk Allocation Adjustment

- 1. What is the total cost at the desired CL?
- 2. What is the sum of immediate children at the desired CL?
- 3. What is the difference between the total cost at the desired CL and the sum of the children at the same CL?



ACE's Allocation Calculation

WBS Description	Baseline	Statistics @65%	Std Dev	Delta	Calculated Cost At Child		Allocated @ 65%
Total	\$129,371.7	\$161,737.8		-\$2,814.4			
Manufacturing	\$94,050.0	\$114,979.1	\$22,241.0	-\$1,783.2	\$113,195.9	←	
Air Vehicle	\$81,782.6	\$104,464.3	\$22,165.2				
Integration	\$12,267.4	\$11,800.6	\$1,916.0				
SEPM	\$34,798.5	\$48,978.9	\$12,680.3	-\$1,016.7	\$47,962.2		
Other	\$523.3	\$594.2	\$181.5	-\$14.6	\$579.6		

Children need to sum to this value. Need to continue to Allocate.

4

Std Dev	Std Dev %	Delta
		-\$2,814.4
\$22,241.0	63.4%	-\$1,783.2
\$22,165.2		
\$1,916.0		
\$12,680.3	36.1%	-\$1,016.7
\$181.5	0.5%	-\$14.6

- The larger the Std Dev the greater the adjustment to the child statistical result.
 - 4. The risk statistics at the children are adjusted by subtracting a prorated portion of the parent level delta.



ACE's Allocation Calculation

WBS Description	Baseline	Statistics @65%	Std Dev	Delta	Calculated Cost at Child	Delta		Allocated @ 65%
Total	\$129,371.7	\$161,737.8		-\$2,814.4				
Manufacturing	\$94,050.0	\$114,979.1	\$22,241.0		\$113,195.9	-\$3,069.0		
Air Vehicle	\$81,782.6	\$104,464.3	\$22,165.2					
Integration	\$12,267.4	\$11,800.6	\$1,916.0					
SEPM	\$34,798.5	\$48,978.9	\$12,680.3		\$47,962.2			
Other	\$523.3	\$594.2	\$181.5		\$579.6			

Diagram annotations: A red box labeled '1' points to the 'Calculated Cost at Child' column. A blue box labeled '3' points to the 'Delta' column. A green box labeled '2' points to the 'Statistics @65%' column.

■ For Each Parent Row, Calculate the Risk Allocation Adjustment

- 1. What is the total cost at the desired CL?
- 2. What is the sum of immediate children at the desired CL?
- 3. What is the difference between the total cost at the desired CL and the sum of the children at the same CL?



ACE's Allocation Calculation

WBS Description	Baseline	Statistics @65%	Std Dev	Delta	Calculated Cost At Child	Delta	Calculated Cost At Child	Allocated @ 65%
Total	\$129,371.7	\$161,737.8		-\$2,814.4				
Manufacturing	\$94,050.0	\$114,979.1	\$22,241.0		\$113,195.9	-\$3,069.0		
Air Vehicle	\$81,782.6	\$104,464.3	\$22,165.2			-\$2,824.8	\$101,639.5	\$101,639.5
Integration	\$12,267.4	\$11,800.6	\$1,916.0			-\$244.2	\$11,556.4	\$11,556.4
SEPM	\$34,798.5	\$48,978.9	\$12,680.3		\$47,962.2			\$47,962.2
Other	\$523.3	\$594.2	\$181.5		\$579.6			\$579.6

4

Std Dev	Std Dev %	Delta
\$22,241.0		-\$3,069.0
\$22,165.2	92.0%	-\$2,824.8
\$1,916.0	8.0%	-\$244.2
\$12,680.3		
\$181.5		

- The larger the Std Dev the greater the adjustment to the child statistical result.
 - 4. The risk statistics at the children are adjusted by subtracting a prorated portion of the parent level delta.



ACE's Allocation Calculation

Cost Element	Total	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Total	\$129,371.7	\$14,435.3	\$14,432.7	\$28,737.3	\$28,735.1	\$43,031.3
Manufacturing	\$94,050.0	\$10,450.0	\$10,450.0	\$20,900.0	\$20,900.0	\$31,350.0
Air Vehicle	\$81,782.6	\$9,087.0	\$9,087.0	\$18,173.9	\$18,173.9	\$27,260.9
Integration	\$12,267.4	\$1,363.0	\$1,363.0	\$2,726.1	\$2,726.1	\$4,089.1
SEPM	\$34,798.5	\$3,866.5	\$3,866.5	\$7,733.0	\$7,733.0	\$11,599.5
Other	\$523.3	\$118.8	\$116.2	\$104.3	\$102.1	\$81.8

Cost Element		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Total						
Manufacturing						
Air Vehicle		11%	11%	22%	22%	33%
Integration		11%	11%	22%	22%	33%
SEPM		11%	11%	22%	22%	33%
Other		23%	22%	20%	20%	16%

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Cost Element	Total	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Total						
Manufacturing						
Air Vehicle	\$101,639.6	\$11,293.3	\$11,293.3	\$22,586.6	\$22,586.6	\$33,879.9
Integration	\$11,556.4	\$1,284.0	\$1,284.0	\$2,568.1	\$2,568.1	\$3,852.1
SEPM	\$47,962.2	\$5,329.1	\$5,329.1	\$10,658.3	\$10,658.3	\$15,987.4
Other	\$579.6	\$131.6	\$128.7	\$115.5	\$113.1	\$90.7

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Cost Element	Total	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Total	\$161,737.8	\$18,038.0	\$18,035.2	\$35,928.4	\$35,926.1	\$53,810.0
Manufacturing	\$113,195.9	\$12,577.3	\$12,577.3	\$25,154.7	\$25,154.7	\$37,732.0
Air Vehicle	\$101,639.6	\$11,293.3	\$11,293.3	\$22,586.6	\$22,586.6	\$33,879.9
Integration	\$11,556.4	\$1,284.0	\$1,284.0	\$2,568.1	\$2,568.1	\$3,852.1
SEPM	\$47,962.2	\$5,329.1	\$5,329.1	\$10,658.3	\$10,658.3	\$15,987.4
Other	\$579.6	\$131.6	\$128.7	\$115.5	\$113.1	\$90.7

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Time Phasing the Allocation Results

- 5. Calculate the non risk adjusted time phased yearly percentages.
- 6. Prorate the Allocated results using the Yearly percentages.
- 7. Sum the Parent Allocated Rows