

Quarterly Management Report  
Prime Focus Imaging Spectrograph  
Quarter 2, 2002

Revised  
30 Sept, 2002

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This report contains a schedule and budget status for the PFIS instrument as of July 1, 2002. The last section has been revised to reflect the contingency allowance agreement of 24 Aug, 2002.

### **Management**

We have hired a "management intern", Qasim Munir, a Master of Science student in the "Manufacturing Technology Management" program, to do the data gathering and communication necessary to allow the planned quarterly assessments to be made more easily. He has been working since mid-May. For the budget, he has been helping to maintain the budget using the new University of Wisconsin "WISDM" on-line accounting system. For schedule, he has been developing a detailed schedule by interviewing the project staff and using Microsoft Project to develop a new baseline. The tasks have been broken down into less than 1-2 week increments.

We have established a document numbering scheme and a document library. The PFIS document library, including all numbered PFIS documents and current SALT documents, is accessible on the web site at <http://www.sal.wisc.edu/PFIS/docs/html/documents.html>.

### **Schedule**

A detailed reassessment of the schedule has started with the Critical Design Phase. The principal tasks are Optical, Mechanical, and Control System Design. A first iteration confirmed that the critical path is Mechanical Design. A detailed Mechanical Design baseline has been developed. This baseline shows a CDR no earlier than March 15, 2003, which is 2 months past the originally planned CDR in January. It is possible that time will be made up in the interval, since the most complex mechanisms have been completed or are underway, and the IDEAS learning curve has been surmounted. We will reassess this at the next quarterly report. The current Critical Design Phase schedule is attached.

Tasks for the next month include a similar detailed study of the Optical and Control System design. Beyond that, a detailed schedule for the Fabrication Phase will be developed.

## Budget

### Quarter 3, 2001 - Quarter 2, 2002 Actual Expenditures

PDF copies of the quarterly UW direct cost reconciliation spreadsheets for the last four quarters (corresponding to University Fiscal Year 2001) are attached.

Quarter 1, 2001 (the last quarter in the Definition Phase) contained a serious error in omitting many salaries for September. This was due to the changeover from a phase-based to a quarter-based reporting system. Definition Phase was originally to have ended Aug 31, 2001, but this was changed to Sept 30, 2001 to match up with quarters. The amount of the error is \$21,208 + Overhead = \$30,857. This was the only error found in past budgeting. ( The \$31,907 error in Quarter 4, 2001 seen in the reconciliation sheet was already noted in the last quarterly report.) The latest error has been disallowed as a legitimate expense by agreement, so does not appear as a delta.

### Cost to Completion Revisions

The US dollar inflation table has been updated to use the actual CPI through June, 2002, with an extrapolation of 0.74%/quarter after that (this is lower than for previous budgets, which used a straight 0.8418%/quarter for the entire project). The SAAO budget as of the Q2-2002 quarterly report has been included. The following two tables show the deltas, in current dollars and base dollars, from the last budget, April 10, 2002:

#### Current Dollars

	2002 Q1	2002 Q2	Delta
UW	\$2,957,428	\$2,977,814	20,386
SAAO	533,000	563,832	30,832
RU	810,000	810,000	0
Total	\$4,300,428	\$4,351,646	51,218

#### Base dollars

	2002 Q1	2002 Q2	Delta
UW	\$2,616,194	\$2,675,390	59,196
SAAO	484,786	506,581	21,795
RU	734,661	747,258	12,597
Total	\$3,835,640	\$3,929,229	93,589

The EXCEL budget is available at the report website.

The largest changes in the budget are explained as follows:

1) An EXCEL formula error in Quarter 4, 2004 did not count \$15,000 in travel. The net error is \$15,000 + Overhead = \$21,825. By agreement, this error in the PDR budget is to be accounted by capping the total travel budget at the PDR level, which is \$71,895 (direct), or \$104,607 total. As of this quarter, without this cap, the corrected travel total would be \$77,937 (direct), or \$113,398. With the cap, the total is reduced by \$8791. It is not reduced by \$21,825 because we have saved \$13,034 in travel costs since PDR. The remaining positive delta is this savings.

The following adjustments are based on experience of the last quarter:

2) We have found that the University is not taking tuition remission out of the PFIS funds as it does for grants. We have removed all tuition remission, for a savings of \$16,789.

3) Staffing levels in Quarter 4, 2002 have been adjusted to correspond to actual appointments, for a total increase of \$14,723. This was mainly in the electronic engineering area, to support the development of wiring diagrams for CDR and to assist the mechanical engineer in choices of sensors and actuators.

This accounts for all but \$9,000 of the UW delta, which is due to many small changes.

UW delta summary

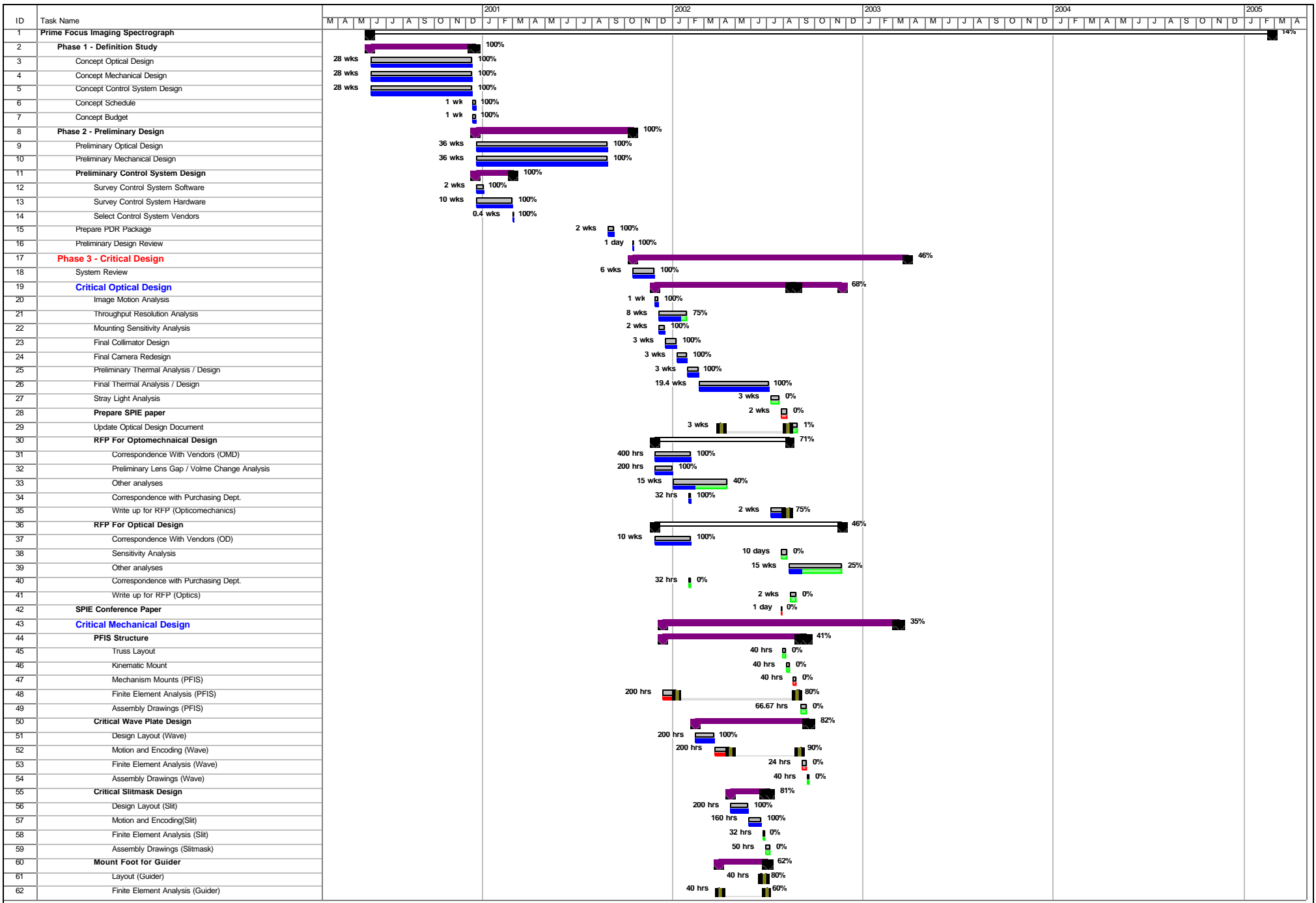
Delta	Explanation
13,034	Quarter 4, 2004 travel adjustment
-16,789	removal of tuition remission
14,723	Quarter 4, 2002 manpower change
10,968	Total

The \$30,832 current-dollar delta for SAAO is due to the recovery of the Rand vs the dollar, so that the fixed-cost Rand labor is worth more dollars.

The delta in base dollars is larger than that in current dollars because of the smaller dollar inflation rate adopted in the new budget. For SAAO this was offset by having moved the CCD expense from quarter 4, 2001 to quarter 1, 2003, when the CCD dollar cost is smaller in base dollars.

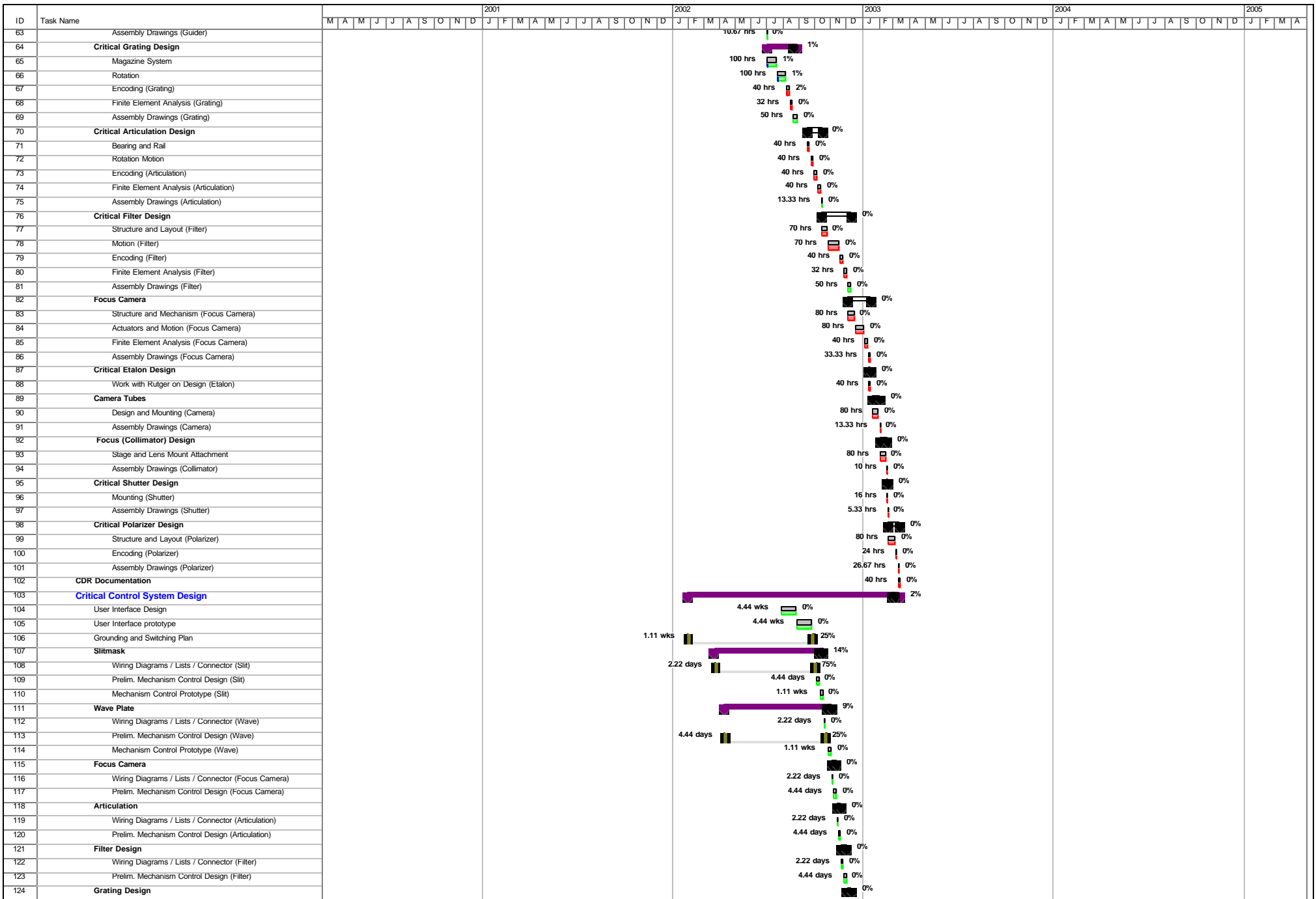
With respect to the contingency ceiling established at PDR, \$4,375,136 in base dollars, this budget would use 0.39 of the contingency, with \$445,907 base dollars remaining.

## Schedule



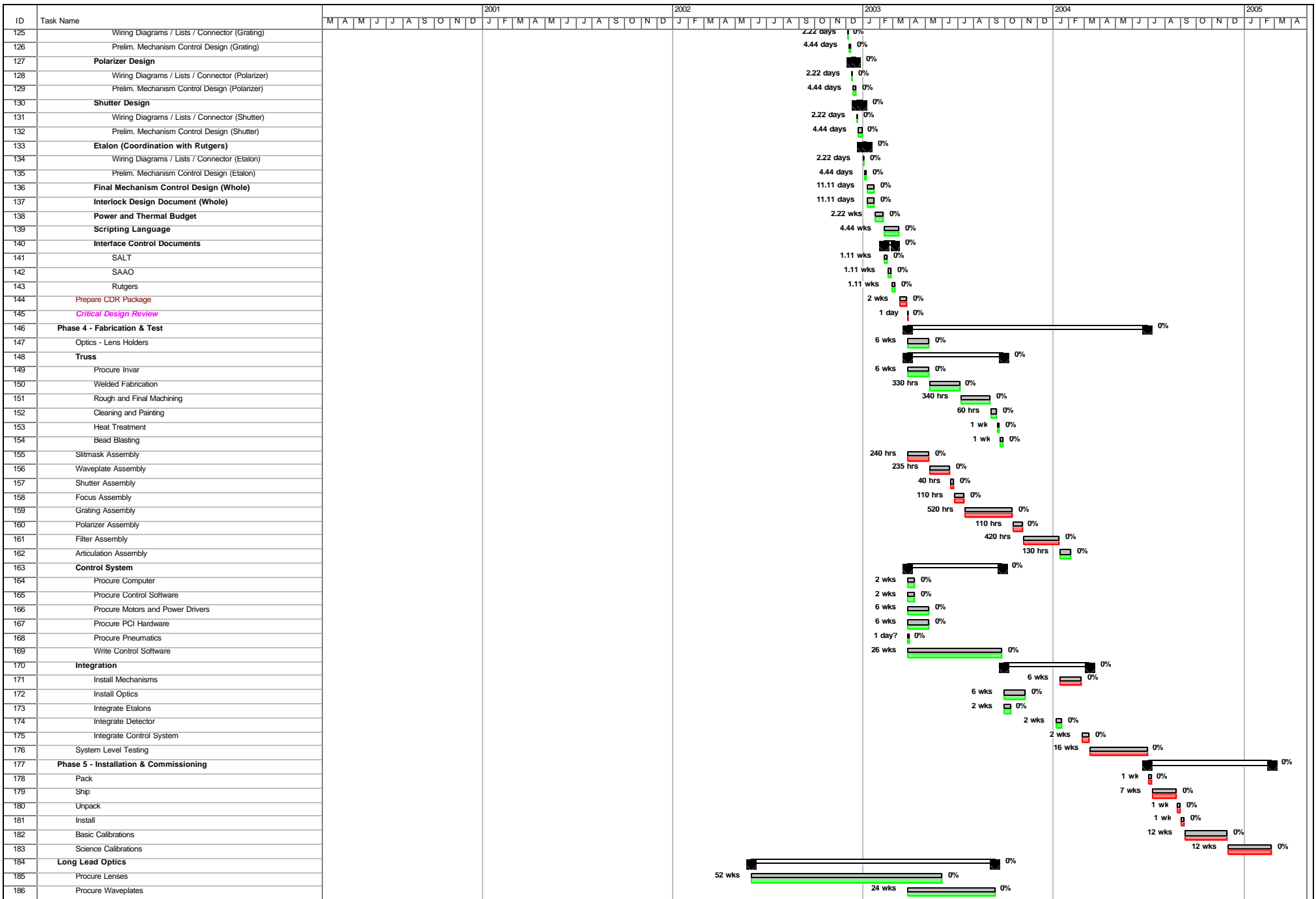
Project: pifisextra  
Date: Fri 7/19/02

Task		Baseline		Rolled Up Task		Rolled Up Baseline		External Tasks
Task Progress		Milestone		Rolled Up Critical Task		Rolled Up Baseline Milestone		Project Summary
Critical Task		Baseline Milestone		Rolled Up Milestone		Rolled Up Progress		
Critical Task Progress		Summary		Baseline Summary		Split		



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	Critical Task		Baseline Milestone		Rolled Up Milestone		Rolled Up Progress		
	Critical Task Progress		Summary		Baseline Summary		Split		

## Budget Reconciliation Pages



SALT  
Quarter 3 2001  
Actual Payments Made July-Sept 2001

PFIS Expenses	JULY	AUGUST	SEPTEMBER	QUARTER TOTAL	AMT. BUDGETED	DIFFERENCE
<b>Salary</b>	\$12,329	\$13,437	\$18,820	\$44,585	27416	
<b>Fringe</b>	\$3,929	\$4,163	\$4,788	\$12,879	8841	
<b>TOTAL</b>	<b>\$16,257</b>	<b>\$17,600</b>	<b>\$23,608</b>	<b>\$57,465</b>	<b>\$36,257</b>	<b>-\$21,208</b>
<b>Supplies</b>						
job app travel		\$534				
Software maint. Contract	\$534					
Workstation computer		\$3,756				
SGI hardware maint.			\$1,322			
FedEx			\$330			
First Technologies-AutoCAD			\$650			
Misc.			\$82			
credit		-\$47				
<b>Total Supplies</b>	<b>\$534</b>	<b>\$4,243</b>	<b>\$2,384</b>	<b>\$7,161</b>	<b>534</b>	<b>-\$6,627</b>
<b>Publications</b>						
SPIE etc.	\$0	\$0	\$0			
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>2000</b>	<b>\$2,000</b>
<b>Capital Equipment</b>						
Omnitech-Strata computer	\$2,226					
<b>Total Capital</b>	<b>\$2,226</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,226</b>	<b>5982</b>	<b>\$3,756</b>
<b>Subcontractor</b>						
SWALES	\$25,000				25000	\$0
<b>Total Payments</b>	<b>\$44,017</b>	<b>\$21,843</b>	<b>\$4,784</b>	<b>\$70,644</b>	<b>\$69,773</b>	<b>-\$22,079</b>
<b>Non PFIS expenses</b>						
Disallowed September Salaries			\$21,208			
<b>Total Non PFIS</b>	<b>\$0</b>	<b>\$0</b>	<b>\$21,208</b>	<b>\$21,208</b>		<b>\$21,208</b>

SALT  
 Quarter 4, 2001  
 Actual Payments Made Oct-Dec 2001

PFIS Expenses	OCTOBER	NOVEMBER	DECEMBER	QUARTER TOTAL	AMOUNT BUDGETED	DIFFERENCES
<b>Salaries</b>	\$20,598	\$20,284	\$21,033	\$61,915	61305	
<b>Fringes</b>	\$7,272	\$5,593	\$6,106	\$18,971	18868	
<b>TOTAL</b>	<b>\$27,869</b>	<b>\$25,878</b>	<b>\$27,139</b>	<b>\$80,886</b>	80173	<b>-\$713</b>
<b>Supplies</b>						
moving expenses, Smith and Burgh	\$1,074		\$1,500			
Halyron SC Pentium III	\$1,906					
Graphics card, antivirus SW, misc. off. expenses		\$1,329				
Burg computer upgrade			\$1,280			
<b>Total Supplies</b>	<b>\$2,980</b>	<b>\$1,329</b>	<b>\$2,780</b>	<b>\$7,089</b>	750	<b>-\$6,339</b>
<b>Travel</b>						
Domestic	\$0	\$0	\$0	\$0	2200	<b>\$2,200</b>
	\$0	\$0	\$0	\$0	1669	<b>\$1,669</b>
<b>Tuition Remission</b>	\$0	\$0	\$0	\$0		
<b>Capital Equipment</b>						
3 shutters, 8 spare blades	\$3,885					
Labview		\$985	\$987			
<b>Total Capital</b>	<b>\$3,885</b>	<b>\$985</b>	<b>\$987</b>	<b>\$5,857</b>	0	<b>-\$5,857</b>
<b>Subcontractor</b>						
SWALES Extension		\$31,907			0	<b>-\$31,907</b>
<b>Total Payments</b>	<b>\$34,734</b>	<b>\$60,099</b>	<b>\$30,906</b>	<b>\$125,739</b>	<b>\$84,792</b>	<b>-\$40,947</b>
<b>Non PFIS expenses</b>						
Brd mtg student worker salary	\$621					
Brd mtg lodging and parking	\$420					
Brd mtg travel		\$1,668				
UW mtg charges		\$840	\$3,361			
Duplicating		\$524				
<b>Total Non PFIS</b>	<b>\$1,041</b>	<b>\$3,032</b>	<b>\$3,361</b>	<b>\$7,434</b>		

SALT  
 Quarter 1 2002  
 Actual Payments Made Jan-Mar 2002

PFIS Expenses	JANUARY	FEBRUARY	MARCH	QUARTER TOTAL	AMOUNT BUDGETED	DIFFERENCE
<b>Salaries</b>	\$16,244	\$16,244	\$16,798	\$49,285		
<b>Fringes</b>	4,901	707	9,766	\$15,374		
<b>TOTAL</b>	<b>\$21,145</b>	<b>\$16,951</b>	<b>\$26,564</b>	<b>\$64,659</b>	\$64,780	<b>\$121</b>
<b>Tuition Remission</b>	\$0	\$0	\$0	<b>\$0</b>	417	<b>\$417</b>
<b>Supplies</b>						
Univ. Bookstore	\$145					
Software/books/mig-digibuy		\$143				
Misc office exp.-phone, toner, stamps, etc			\$295			
5 phase stepper motor			\$259			
Sun monitor			\$296			
SALT-(Matt) Access and provisions			\$514			
Office software (acrobot, office)			\$259			
<b>Total Supplies</b>	\$145	\$143	\$1,623	<b>\$1,911</b>	\$750	<b>-\$1,161</b>
<b>Capital Equipment</b>						
<b>Training-Percival</b>		\$1,216		<b>\$1,216</b>	\$5,000	<b>\$3,784</b>
<b>Travel-domestic</b>						
<b>Foreign Travel</b>						
Ron Reynolds	\$789					
Eric Burgh		\$358				
South Africa (Mike, Eric)			\$2,965			
<b>Total Travel</b>	\$789	\$358	\$2,965	<b>\$4,112</b>	\$10,720	<b>\$6,608</b>
<b>Total Payments</b>	<b>\$22,079</b>	<b>\$18,668</b>	<b>\$31,152</b>	<b>\$71,899</b>	<b>\$81,667</b>	<b>\$9,648</b>
<b>Non PFIS expenses</b>						
Brd mtg lodging and parking			\$5,047			
Brd mtg travel						
UW mtg charges						
Duplicating						
<b>Total Non PFIS</b>	\$0	\$0	\$5,047	\$5,047		

SALT  
 Quarter 2 2002  
 Actual Payments Made April - June 2002

PFIS Expenses	APRIL	MAY	JUNE	ADJUSTMENT AT THE END US		QUARTER TOTAL	AMT. BUDGETED	Diff
				FISCAL YEAR	FISCAL YEAR			
<b>Salary</b>	\$16,244	\$16,616	\$19,212	\$554	\$52,625	\$52,341		
<b>Fringe</b>	\$5,073	\$5,189	\$6,000	\$173	\$16,434	\$15,796		
<b>TOTAL</b>	<b>\$21,316</b>	<b>\$21,804</b>	<b>\$25,211</b>	<b>\$727</b>	<b>\$69,059</b>	<b>\$68,137</b>		<b>-\$922</b>
<b>Supplies</b>								
interviewing expenses	\$2,214	\$109	\$461					
software, office supplies			\$173					
TTI (Vishay/Dale resistor)-will be transferred off			-\$136					
credit office expenses	-\$132	-\$390						
Burgh computer upgrade (Focus SW)	\$500							
<b>Total Supplies</b>	<b>\$2,582</b>	<b>-\$281</b>	<b>\$498</b>		<b>\$2,799</b>	<b>\$750</b>		<b>-\$2,049</b>
<b>Travel</b>								
Foreign								
Eric			\$310					
Mike, Ken		\$748						
Mike	\$890							
Domestic								
Mike	\$103							
<b>Total Travel</b>	<b>\$890</b>	<b>\$851</b>	<b>\$310</b>		<b>\$2,051</b>	<b>\$2,200</b>		<b>\$149</b>
<b>Tuition Remission</b>	\$0	\$0	\$0		\$0	\$1,669		<b>\$1,669</b>
<b>Capital Equipment</b>								
Lenses						\$266,000		
Gratings						\$30,000		
Motion Controller	\$5,839	\$291	\$135					
Signal term. access								
PXI supplies								
<b>Total Capital</b>	<b>\$5,839</b>	<b>\$291</b>	<b>\$135</b>		<b>\$6,265</b>	<b>\$296,000</b>		<b>\$289,735</b>
<b>Total Payments</b>	<b>\$30,627</b>	<b>\$22,665</b>	<b>\$26,154</b>	<b>\$727</b>	<b>\$80,174</b>	<b>\$368,756</b>		<b>\$288,582</b>
<b>Non PFIS expenses</b>		\$903						
Ken and Matt Travel								
<b>Total Non PFIS</b>	<b>\$0</b>	<b>\$903</b>	<b>\$0</b>	<b>\$903</b>				