

GNIRS BI-WEEKLY REPORT

August 99 to May 00

Project Title: Gemini Near InfraRed Spectrograph (GNIRS)

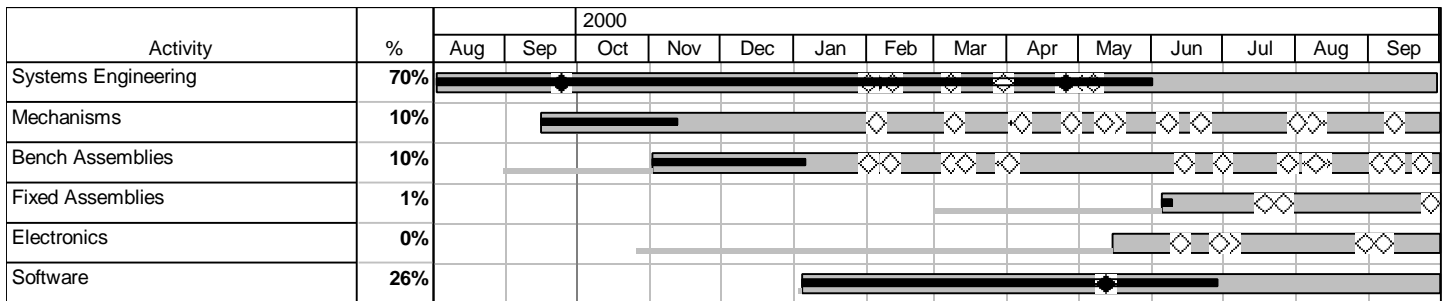
WBS: 5.1

Project Description: 1-5 um Spectrograph with multiple filters, slits, Deckers, prisms, gratings and cameras.

WPM: N. Gaughan

	Original Budget	Actual Spent Cum	Est. To Go	Est. Project Total
Labor Cost	\$3,391,232	\$814,140	\$2,577,092	\$3,391,232
Capital	\$836,462	\$204,350	\$632,112	\$836,462

Key Personnel			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Title	Name	% Dedicated										
PM	Gaughan	100										
PS	Elias	100										
ME	Hileman	100										
ME	Muller	100										
EE	Penegor	100										
MD	Andrew	100										
Labor Costs (\$K)												
Planned Labor			\$53,542	\$94,126	\$98,952	\$75,981	\$55,385	\$106,421	\$94,730	\$129,787	\$114,861	\$123,511
Actual Labor			\$34,302	\$50,463	\$51,277	\$47,901	\$48,380	\$67,504	\$53,823	\$65,825	\$37,314	
Cum Over/Under			\$19,240	\$62,903	\$110,578	\$138,658	\$145,663	\$184,580	\$225,487	\$289,449	\$366,996	
FTE Loading (FTE)												
Planned			12	15	14	13	13	14	16	19	20	19
Actual			8.6	12.6	12.8	12.0	12.1	16.9	13.5	16.5	9.3	
Capital (\$K)												
Planned Capital			\$0	\$34,100	\$6,250	\$9,810	\$8,780	\$19,450	\$1,500	\$8,851	\$8,1330	\$53,940
Actual Capital			\$12,798	\$1,608	\$718	\$4,409	\$4,351	\$17,057	\$30,828	\$12,604	\$42,707	



% Complete: 20%
Total Milestones: 192
Completed Milestones: 5
Key Milestone: Pre-Fabrication Review

BCWS	383,515	SPI	1.45
BCWP	554,930	CPI	1.81
ACWP	306,474		

Scope Changes:

- There are no new technical scope changes.

Pending Issues & Resolutions:

- A revised schedule will be presented at the Pre-Fabrication Review. The schedule update will include a new estimated cost to complete (ECC), and a revised FTE requirements estimate.
- The IFU CDR will be held on May 23 in Durham. Jay Elias and Neil Gaughan will attend.
- Not all prototype testing will be complete by the Pre-Fab Review, but we will have sufficient data to proceed with mechanism design. Parts are being fabricated for two additional configurations of the Rotary Prototype to evaluate more adequate methods of achieving position repeatability at temperature.
- There is a possibility that the structural analysis will not be complete by the Pre-Fabrication Review. Ed Hileman is working to finish as much as possible.

Project Manager's Assessment of Project Health:

- Good. Significant progress has been made on the Optical Bench design effort.

GNIRS BI-WEEKLY REPORT

August 99 to May 00

Project Title: GNIRS Systems Engineering

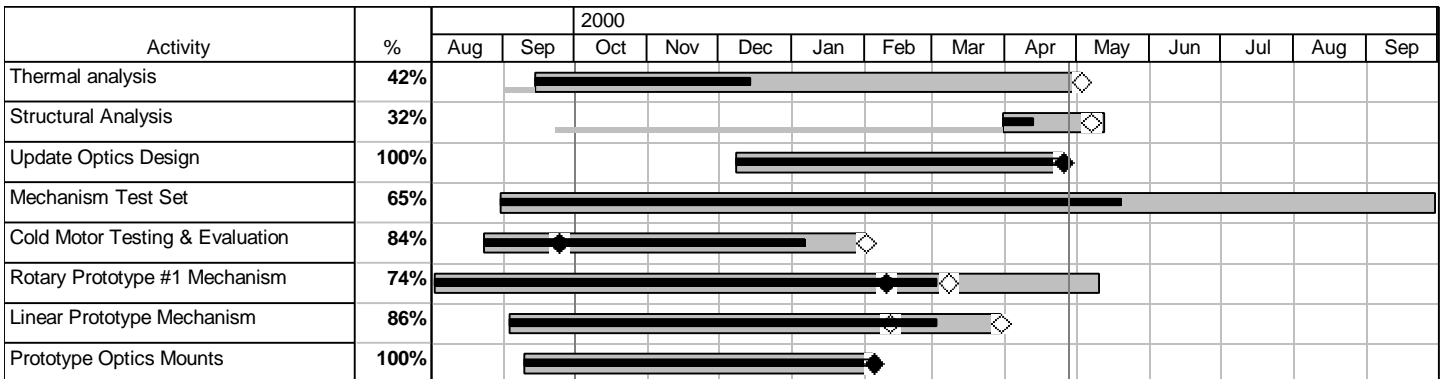
WBS: 5.2

Project Description: Includes analyses, prototyping, and optical design updates.

WPM: J. Elias

	Original Budget	Actual Spent Cum	Est. To Go	Est. Project Total
Labor Cost	\$166,174	\$139,983	\$26,191	\$166,174
Capital	\$16,910	\$37,341	-\$20,431	\$16,910

Key Personnel			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Title	Name	% Dedicated										
PS	Elias	100										
ME	Hileman	100										
ME	Muller	100										
OE	Liang	10										
IM	Rath	100										
Key Milestones			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Activity	Date	Status										
Analysis												
Cold Motor T&E												
Prototyping												
Optics Update												
Labor Costs (\$K)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned Labor			\$ 2,882	\$49,723	\$36,877	\$20,824	\$ 13,982	\$26,756	\$ 5,130	\$ 0	\$ 0	\$ 0
Actual Labor			\$5,352	\$22,723	\$20,913	\$ 17,980	\$ 17,224	\$25,122	\$ 11,865	\$ 10,876	\$ 7,928	
Cum Over/Under			\$7,530	\$27,000	\$50,494	\$53,338	\$50,096	\$51,730	\$44,995	\$34,119	\$26,191	
FTE Loading (FTE)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned			2	8	6	3	2	2	1	0	0	0
Actual			13	5.7	5.2	4.5	4.3	6.3	3.0	2.7	2.0	
Capital (\$K)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned Capital			\$0	\$3,100	\$5,000	\$8,810	\$0	\$0	\$0	\$0	\$0	\$0
Actual Capital			\$525	\$2,178	\$ 197	\$2,186	\$4,544	\$18,351	\$1,654	\$3,259	\$4,447	



% Complete: 70%
Total Milestones: 10
Completed Milestones: 4

Scope Changes:

- None.

Pending Issues & Resolutions:

- The deflection analysis is probably not going to be complete before the Pre-Fab Review.
- The Linear Prototype cold testing may not be finished by the time of the Review.
- The IFU ICD and drawing will be sent to Durham this week.

Project Manager's Assessment of Work Package Health:

- Acceptable.

GNIRS BI-WEEKLY REPORT

August 99 to May 00

Project Title: GNIRS Mechanisms

WBS: 5.3.1

Project Description: Includes the design, fabrication and test of the 9 mechanisms used in GNIRS.

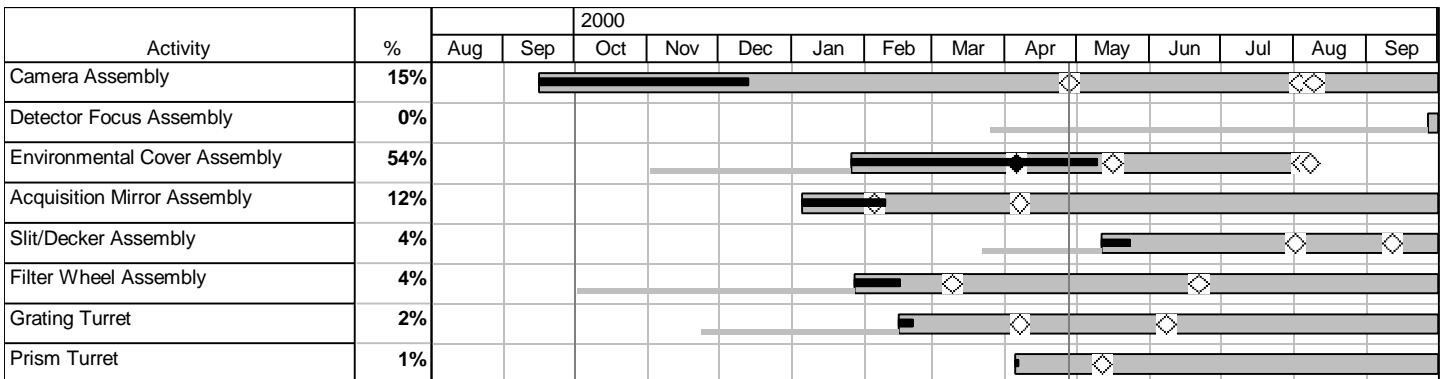
WPM: G. Muller

	Original Budget	Actual Spent Cum	Est. To Go	Est. Project Total
Labor Cost	\$607,628	\$98,622	\$509,006	\$607,628
Capital	\$274,217	\$29,604	\$244,613	\$274,217

Key Personnel		
Title	Name	% Dedicated
ME	Muller	100
MD	Andrew	100
MD	Rosin	100
MD	Downey	100
MD	Robles	100
MT	Davis	100

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Labor Costs (\$K)										
Planned Labor	\$0	\$4,123	\$18,012	\$18,411	\$17,560	\$28,447	\$33,220	\$39,303	\$45,729	\$52,896
Actual Labor	\$0	\$2,014	\$12,274	\$10,033	\$9,187	\$12,676	\$17,321	\$23,937	\$11,180	
Cum Over/Under	\$0	\$2,109	\$7,847	\$16,225	\$24,598	\$40,369	\$56,267	\$71,634	\$106,183	
FTE Loading (FTE)										
Planned	0	1	3	3	3	5	5	6	8	9
Actual	0.0	0.5	3.1	2.5	2.3	3.2	4.3	6.0	2.8	
Capital (\$K)										
Planned Capital	\$0	\$0	\$0	\$0	\$4,080	\$4,450	\$0	\$7,151	\$6,380	\$52,000
Actual Capital	\$0	\$475	\$472	\$6	\$7	\$0	\$28,644	\$0	\$0	

Key Milestones		
Activity	Date	Status



% Complete: 10%
Total Milestones: 46
Completed Milestones: 1

Scope Changes:

- None.

Pending Issues & Resolutions:

- We are moving ahead on Camera Assembly barrel design.
- The Filter Wheel and Environmental Cover will be the first mechanisms fabricated.

Project Manager's Assessment of work Package Health:

- Good. Work is proceeding at a good pace with few problems. Interface details are being resolved and there is excellent engineering direction taking place. The design drafters are focusing on these tasks while the engineers are focused mainly on optics bench solid model design and analysis.

GNIRS BI-WEEKLY REPORT

August 99 to May 00

Project Title: GNIRS Fixed Assemblies

WBS: 5.3.3

Project Description: All assemblies with no moving parts except the optical benches.

WPM: G. Muller

	Original Budget	Actual Spent Cum	Est. To Go	Est. Project Total
Labor Cost	\$353,533	\$4,328	\$349,205	\$353,533
Capital	\$188,986	\$18	\$188,968	\$188,986

Key Personnel			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Title	Name	% Dedicated										
ME	Muller/Hilemar	100										
MD	Andrew	100										
MD	Rosin	100										
MD	Downey	100										
MD	Robles	100										
MT	Davis	100										
Labor Costs (\$K)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned Labor			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,044	\$4,636	\$6,612
Actual Labor			\$0	\$358	\$195	\$0	\$0	\$0	\$130	\$388	\$3,257	
Cum Over/Under			\$0	-\$358	-\$553	-\$553	-\$553	-\$553	-\$683	\$7,973	\$9,352	
FTE Loading (FTE)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned			0	0	0	0	0	0	0	1	1	1
Actual			0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8	
Capital (\$K)			Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Planned Capital			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$640
Actual Capital			\$0	\$0	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Activity	%	2000														
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Entrance Window Assembly	0%															
Detector Mount Assembly	0%															
Cryo Cooler Assembly	0%															
Environmental Cover Filter	0%															
Bulkhead Assembly	2%															
Front Radiation Shield Assembly	0%															
Rear Radiation Shield Assembly	0%															
Front Dewar Shell	9%															
Rear Dewar Shell and Covers	0%															
Vertical Installation Frame Assembly	0%															
Horizontal Installation Frame Assembly	0%															
Dewar Mount Truss Assembly	0%															
Thermal Enclosure Mount Assembly	0%															

% Complete: 1%
Total Milestones: 67
Completed Milestones: 0

Scope Changes:

- None.

Pending Issues & Resolutions:

- None.

Project Manager's Assessment of Work Package Health: Good. This is all work-ahead on assemblies not planned to start until much later.

GNIRS BI-WEEKLY REPORT

August 99 to May 00

Project Title: GNIRS Electronics

WBS: 5.4

Project Description: Design and fabrication of the GNIRS electronics subsystems

WPM: J. Penegor

	Original Budget	Actual Spent Cum	Est. To Go	Est. Project Total
Labor Cost	\$132,658	-\$5,509	\$138,167	\$132,658
Capital	\$11,900	-\$3,340	\$15,240	\$11,900

Key Personnel		
Title	Name	% Dedicated
PS	Elias	20
EE	Penegor	100

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Labor Costs (\$K)										
Planned Labor	\$0	\$0	\$1,216	\$6,080	\$8,512	\$16,606	\$12,312	\$22,800	\$12,768	\$11,552
Actual Labor	\$0	-\$5,509	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cum Over/Under	\$0	\$5,509	\$6,725	\$12,805	\$21,317	\$37,923	\$50,235	\$73,035	\$85,803	\$97,355
FTE Loading (FTE)										
Planned	0	0	0	1	1	3	2	4	2	2
Actual	0.0	-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital (\$K)										
Planned Capital	\$0	\$0	\$750	\$0	\$4,200	\$1,500	\$200	\$750	\$3,000	\$0
Actual Capital	\$0	-\$3,707	\$364	\$3	\$0	\$0	\$0	\$0	\$0	\$0

Key Milestones		
Activity	Date	Status
Project Start	1/1/1999	C

Activity	%	2000																
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep			
Spectrograph Thermal Enclosure	0%												◇	◇			◇	
Ext. Inst Wiring & Cables	0%																	
Dewar Electronics	0%																	◇
Software Test Fixture	0%																	

% Complete: 0%
Total Milestones: 14
Completed Milestones: 0

Scope Changes:

- None.

Pending Issues & Resolutions:

- Jerry Penegor, the new EE, is assessing and revising the work package.

Project Manager's Assessment of Work Package Health:

- Good.

