

## Statement of Work

by

the CDF Run IIB Group at <Institution>

for Activities Related to the Run IIB CDF Detector Project  
<SUBSYSTEM> Subsystem

During Fiscal Year 2003

### 1. Introduction

This Statement of Work (SOW) is made to provide the yearly details of the work agreed to between the CDF Run IIB Project and the CDF Run IIB group at <Institution>. It covers the specific period of performance from October 1, 2002 through September 30, 2003.

### 2. Personnel

#### 2.1. List of Scientific Personnel

Participating scientists with anticipated fraction of their research time committed to CDF during this period of performance are listed below. No support for these individuals comes from project funds.

Name or Position	CDF Run IIB Fraction	Other Commitments	
		Research	Other (teaching, admin., etc.)
	50%	Atlas(1%), CDF (49%)	.001%
	50%	Atlas(1%), CDF (49%)	.001%
	50%	Atlas(1%), CDF (49%)	.001%

#### 2.2. List of Technical Personnel

Participating technical personnel with the anticipated work hours of their time (work hours are estimates and are not cost shares) committed to Run IIB CDF during this period of performance is indicated below. The WBS numbers at the lowest level to which the salary costs should be charged, should be filled in with the appropriate fraction of the salary charge if this cost is covered by a grant supplement.

Name or Occupation	CDF hours	Cost on CDF Project this FY (\$K)	WBS #'s	Salary fraction
Fred	100	2.5	1.2.3.4.5	0.5
Frieda	50	1.25	1.5.4.3.2	0.5
Mechanical Technician	500	10	1.2.3.4.5	0.75
Designer	100	2.5	1.2.3.4.5	0.5

### 3. Responsibilities for this Period of Performance

**3.1 WBS Items at the lowest level, Estimated Cost and Deliverable**

During this period of performance the CDF Run IIB group at <Institution> agrees to supply the following deliverables at a cost not to exceed the estimated base cost given in the CDF Run IIB WBS. The following itemized list describes the items (or partial completion of items) provided in this period (Statements of Work).

WBS	Task - Deliverable	WBS Base Cost (FY02\$)	FY03 Cost (FY03\$)			Completion by end of FY 2003 (%)	Finish Date
			From Project Funds	From <Institution >	Total		
1.5.5.5.5	Widget	10,000	10,200			100	1 July 2003
1.5.1.5.1	Brackets for widgets	5000	5100			50	30 Sep. 2003
Total	Requested FY03 funds (\$)	---	15,300				

A detailed description of the work to be performed by <Institution> is given below:

**3.2. Coordination and Reporting**

The CDF Run IIB Level 2 Manager for the <SUBSYSTEM> subsystem is <name1>. The institution contact person for <SUBSYSTEM> activities at <Institution> is <name2>. The task managers for <SUBSYSTEM> activities carried out by the CDF Run IIB group at <Institution> are as follows:

Task	Task Manager

**3.3. Procurement Authorization**

Item purchases exceeding the delegated limit (currently \$10k) must be authorized in advance of obligation by the CDF Run IIB Level 2 manager. Major procurements (currently \$100k) must in addition have the written authorization of the CDF Run IIB Project Manager..

**3.4. Reporting to CDF Run IIB Project Management**

The CDF Run IIB group at <Institution> will report all CDF related expenditures and labor charges together with associated technical progress in each item of work by Work Breakdown Structure (WBS) category.

Technical progress will be reported by WBS element to the Level 2 Manager on a quarterly basis and will cover all items covered in this Statement of Work regardless of the specific nature of the funding support.

The CDF Run IIB group at <Institution> agrees to furnish complete documentation of the quality control and performance checks which are carried out for CDF Run IIB in the performance of this work.

**3.5. Collaboration with Other Groups and Institutions**

Design, construction and installation related to the <SUBSYSTEM> subsystem will be carried out in close communication and collaboration with other groups working on this and related subsystems.

WBS / Task (L4)	Collab. Group	Responsibility with CDF Run IIB group at <Institution>

**4. Contribution of Effort, Services and Equipment**

Subject to adequate funding by DOE or NSF, the CDF Run IIB group at <Institution> will provide support for the scientific and technical personnel as indicated in section 2 during this period of performance. This contribution refers only to support provided outside the CDF Run IIB Project.

**5. Fermilab (as host institution) Effort, Services and Facilities**

Tracking of Fermilab CDF support, whether provided by Fermilab or paid by the CDF Run IIB Project, will be done using appropriate effort reporting codes. The costs incurred will be reported to the Fermilab Director.

**6. Costs and Funding**

A total amount of \$<x,xxx> is detailed above for the full fiscal year. The portion covered by Fermilab purchase order will be paid upon receipt and approval of invoices for the work by the Project Office at Fermilab. Management control requires the review and concurrence of the Level 2 Manager and the Project Office, as needed, for major expenditures, as defined above. The release of funds above the given thresholds will be contingent upon this concurrence.

**7. Schedules and Milestones**

The CDF Run IIB group at <Institution> will make every effort to carry out their institutional responsibilities consistent with the overall CDF schedule. In this Statement of Work are listed the program milestones for this period of performance.

The program milestones for this period of performance relevant to the CDF Run IIB group at <Institution> are listed here:

Program Milestones	Baseline Milestone Date	Current Milestone Date

## 8. Makers and Concurrence

The following persons concur in the terms of this Statement of Work. These terms will be updated as appropriate in later Statements.

Makers of this Memorandum:

\_\_\_\_\_  
Patrick Lukens (date)  
CDF Run IIB Project Manager

\_\_\_\_\_  
<Name> (date)  
CDF Run IIB Group Principal Investigator  
<Institution>

\_\_\_\_\_  
<Name> (date)  
Grants/Contracts Officer  
<Institution>

\_\_\_\_\_  
<Name> (date)  
CDF Run IIB Level 2 Manager  
<SUBSYSTEM> Subsystem

\_\_\_\_\_  
<Name> (date)  
Procurement/Purchasing  
Department Representative  
<Institution>

Concurrence:

\_\_\_\_\_  
John Cooper (date)  
Particle Physics Division Head  
Fermilab

\_\_\_\_\_  
Hugh Montgomery (date)  
Associate Director for Research  
Fermilab