

NCSX June 2007 ETC
TABLE II - Materials and Subcontracts

WBS Number: 185							
WBS Title: Assembly of Field Periods							
Job Numbers: 1802, 1810, and 1815							
Job Title: FPA Oversight & Support (1802)							
Job Title: FPA Operations - Stations 1, 2, & 3 (1810)							
Job Title: FPA Operations - Station 5 (1815)							
Job Manager: Mike Viola							
Materials and Supplies							
Metrology Consumables - Input by Steve Raftopoulos							Basis of Estimate
CC	Item	Quantity	Cost	Annual cost	Years	FY'07-FY'09 Cost	Comment
5323	Generic replacement or consumables						
	Surface probe kits	2	\$7,500	\$15,000	1	\$15,000	Consumable
	Replacement Leica Workstation Computer	1	\$3,000	\$3,000	1	\$3,000	Recent procurements
	Replacement Laptops for Romer Arms	3	\$3,000	\$9,000	1	\$9,000	Recent procurements
	Replace Thommen Sensor for Leica Tracker	1	\$1,500	\$1,500	2	\$3,000	Recent procurements
	Replacement tips for Leica and FARO surface probes	4	\$300	\$1,200	3	\$3,600	Consumable
	1.5" CCRs 2 per year, per tracker	4	\$2,000	\$8,000	3	\$24,000	Consumable
	0.5" CCRs 2 per year, per tracker	4	\$1,200	\$4,800	3	\$14,400	Consumable
	Replacement misc. computer parts	1	\$700	\$700	3	\$2,100	Consumable
	Replacement/additional extension bar kits	2	\$1,000	\$2,000	3	\$6,000	Consumable
	Replacement and special nests and adapters	15	\$300	\$4,500	3	\$13,500	Consumable
	Replacement/additional 1.5" CCR drift nest pucks	30	\$30	\$900	3	\$2,700	Consumable
	Replacement Probe Tips for Romer Arms	6	\$600	\$3,600	3	\$10,800	Consumable
			Subtotal	\$54,200		\$107,100	
5323	Generic one-time needs						
	2 - Prortable Brunson Stands	2	\$2,000	\$4,000	1	\$4,000	One-time need
	Dial indicators for Coil Winding Turning fixture	6	\$200	\$1,200	1	\$1,200	One-time need
	Brunson Adapter plates	6	\$500	\$3,000	1	\$3,000	for mounting of equipment in various configurations
	Recondition/maintenance of K&E stands	4	\$500	\$2,000	1	\$2,000	stands are old and need maintenance
			Subtotal	\$10,200		\$10,200	
Job 1810	9450 NCSX specific needs						
	Monuments/nests for floor grid in NCSX test cell	75	\$75	\$5,625	2	\$11,250	NCSX specific one-time need
	Reflector holders for wall - NCSX test cell	50	\$150	\$7,500	1	\$7,500	NCSX specific one-time need
	Leica fixed position reflectors for NCSX test cell walls	50	\$300	\$15,000	1	\$15,000	NCSX specific one-time need
	Leica 0.5" CCRs	15	\$1,200	\$18,000	1	\$18,000	reflectors required to track FPA assembly in mid-air flight and positioning
			Subtotal	\$46,125		\$51,750	
5323	Annual software and hardware maintenance costs						
	Annual Service Contract for Leica Tracker	1	\$17,500	\$17,500	3	\$52,500	Consumable
	Annual Software maintenance Verisurf	2	\$1,750	\$3,500	3	\$10,500	Annual software renewal to stay current
	Annual Software maintenance Romer	3	\$1,750	\$5,250	3	\$15,750	Annual software renewal to stay current
	Romer Arm Maintenance agreements	3	\$4,500	\$13,500	3	\$40,500	We've been spending \$5k/arm (\$15K tot) each year for repairs. Maint. agreement provides for loaner and/or quicker turnaround.
			Subtotal	\$39,750		\$119,250	
	Total			\$150,275		\$288,300	
	Total Cost to NCSX			\$46,125		\$51,750	