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Subject: draft computing budget
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Please find appended a draft computing budget for 98-00 for discussion in
the Coord meeting tomorrow. I have mainly focused on Socorro (+ some
Tucson) purchases, let me know in the meeting (or by email) of items
missing or required at other sites. Comments on the "Unknown" items would
also be appreciated.

TB

Computing Hardware Requirements - 1998--2000

1998
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3 Desktop machines (3 new hires)	22500	(note 0)
1 Server level machine (MMA web/document server)	10000	(note 1)
1 Array control/Database machine	10000	
1 Antenna control computer (e.g. VME crate)	10000	
1 Notebook/laptop machine	4000	
2 Laserprinters (high volume)	6000	
Misc. hardware (network devs, cabling, storage, UPS)	20000 *	
Software (VXworks, Commercial database, CASE tools, cross compilers etc.)	50000 *	(note 2)

1999
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1 Desktop machine (1999 hire)	7500	
1 Antenna control computer (VME #2)	10000	
Misc. hardware (network, cabling, storage, UPS)	10000 *	
Upgrades (disks/memory)	5000	
Software	8000 *	

2000
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1 Desktop machine (2000 hire)	7500	
Misc. hardware (network, cabling, storage, UPS)	10000 *	
Upgrades (disks/memory)	5000	
Software	8000 *	

Unknowns

-Hardware/Software maintenance contracts included in purchases?
-1 Desktop machine + Software - BIMA?
-1 Desktop machine + Software - OV?

-MCB hardware/software included here or in Antenna budget?
-1998-99 First Light correlator control computer/software?
-1999-00 MMA correlator control computer/software?
-1999-00 Folkers/Hagan workstations?
---->$50k?

                current   203500
                1998-2000

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* => highly uncertain

note 0: Purchase based on recommendation of NRAO desktop replacement
        committee, currently considering $4-6k machines.

note 1: I propose to centralize both the web serving and project document
        exchange at one site (likely Tucson). Server includes additional
        disks + DAT drive (similar additions for Array control/Database
        machine)

note 2: Assuming $35k for new VxWorks system. NRAO existing
        license may suffice, new target licenses at $500/machine?
        VxWorks development system included?