Baseline Rack Requirements for the Platform

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The note describes the racks needed for the baseline design of the electronic platforms. A general description of the contents of each rack is given.

The following assignment of rack space has been approved by all subsystems which have equipment on the platform. This list was generated by asking each of the subsystems what is the number of racks that it plans to use. We have include a contingency of 30%. To make a request for additional space, sub-system managers should use the engineering change request procedure.

At this time, we have not established whether these racks and equipment can fit on the platform. If it is not possible to achieve that goal, then modifications to the allotment must be made. The diagram is not to scale. It is used to show the general location where the specified racks are desired.

The following people have agreed to these baseline requirements:

Slow Controls	Mike Cherney	5/23/95
CTB/TOF	Billy Bonner	5/10/95
Magnet	Ken Foley	5/23/95
FEE TPC	Fred Bieser	5/11/95
TPC	Howard Wieman	5/18/95
SVT	Rene Bellwied	6/9/95
EMC	Dave Underwood	5/11/95
Trigger	Hank Crawford	May-95

STAR Rack Layout

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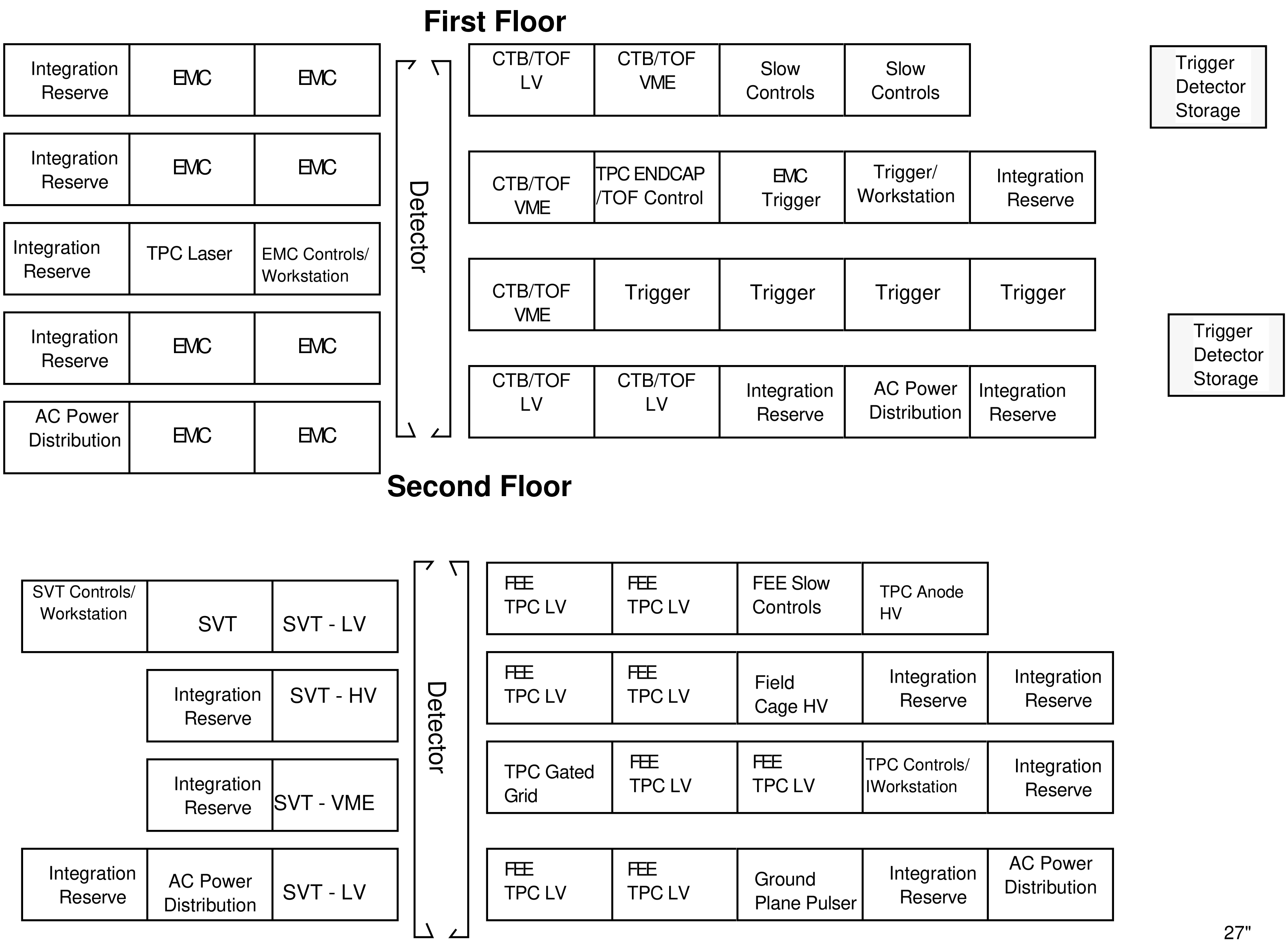

STAR Rack Layout

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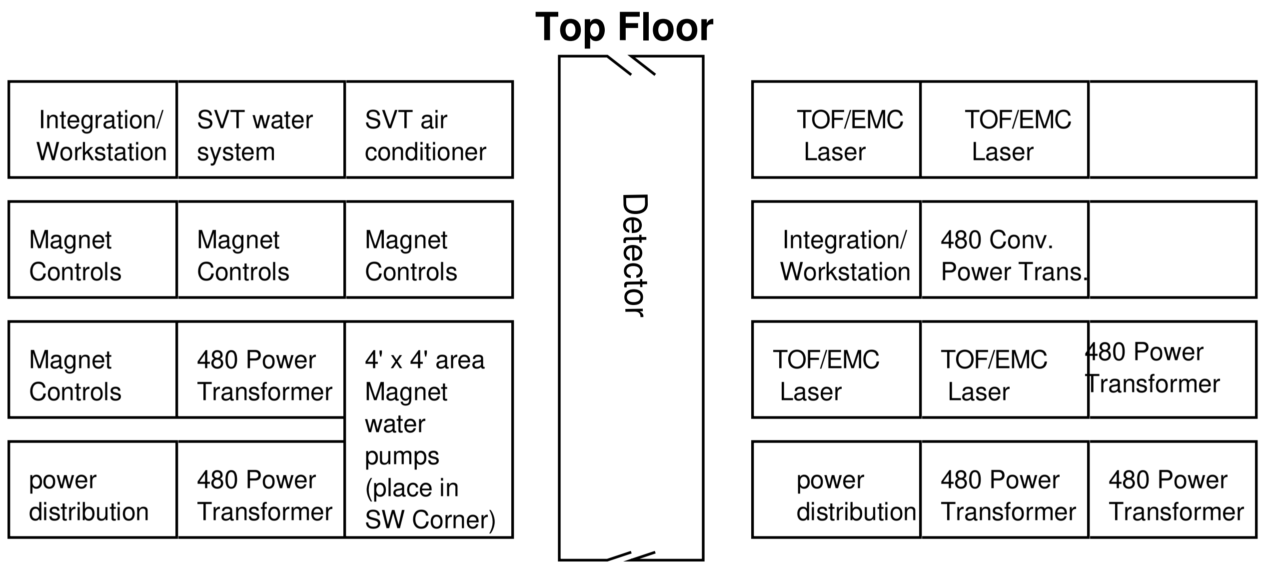

mechanical items/pumps, motors, etc. will be placed on this level

Baseline Rack Assignment for STAR Platform

24-Jul-95

Platform	Floor	Racks	HEAT Power /rack (watts)	Rack Name	Sub-system	Description	Comments
South	1	3	3000	CTB/TOF LV	CTB/TOF	Low Voltage Power Supplies	
	1	3	3000	CTB/TOF VME	CTB/TOF	VME Receiver Crates	3 - 9u VME Crates/rack
	1	0.3	500	TPC Anode/TOF Control	CTB/TOF	STAR control VME crate	1 - 6u VME Crate
	1	0.7	3000	TPC Anode/TOF Control	Trigger	TPC Endcap Trigger	2 - 9u VME Crates
	1	3	3000	Trigger	Trigger	Level 0 and Level 1 Trigger	3 - 9u VME Crates/rack
	1	1	2500	Trigger	Trigger	VPD and VTX electronics	
	1	0.3	1000	Trigger/Workstation	Trigger	to STAR controls	1-6u VME Crate
	1	0.7	1500	Trigger/Workstation	Convent. Sys.	Workstation, Communication	
	1	1	3000	EMC Trigger	EMC	EMC Level 1 Trigger input	
	1	2	3000	Slow Controls	Slow Controls	Main STAR Control System	
	1	1		AC Power Distribution	Convent. Sys	Clean AC Power Distribution	
	1	3		Integration Reserve	Integration	Reserve	
		19					
	2	9	3600	TPC LV	FEE TPC LV	Low Voltage Power Supplies	6 Power supply units + spare
	2	1		TPC Gated Grid	TPC	Gated Grid	
	2	1		Anode HV	TPC	2 -Lecroy 1440's + VME	
	2	1		Field Cage HV	TPC	includes TPC controls	2-VME, Nim and HV supply
	2	1		Ground Plane Pulser	TPC	GPP system	3-Nim, Camac,

	2	0.7	1500	TPC Controls/Workstation	Convent. Sys.	Workstation, Communication	
	2	1		AC Power Distribution	Convent. Sys	Clean AC Power Distribution	
	2	4.3		Integration Reserve	Integration	Reserve	
		19					
North	1	8		EMC	EMC	Low Voltage Power	
	1	0.3	1000	EMC Controls/Workstation	EMC	to STAR controls	1-6u VME Crate
	1	0.7	1500	EMC Controls/Workstation	Convent. Sys.	Workstation, Communication	
	1	1		TPC Laser	TPC	Laser Optics Control for TPC Laser	
	1	1		AC Power Distribution	Convent. Sys	Clean AC Power Distribution	
	1	4		Integration Reserve	Integration	Reserve	
		15					
	2	2	2000	SVT-LV	SVT	Low Voltage Supplies	
	2	1		SVT-HV	SVT	High voltage supplies	
	2	1		SVT-VME	SVT	vme, calibration	
	2	1		SVT	SVT	Cross connects	
	2	0.3	1000	SVT Controls/Workstation	SVT	to STAR controls	1-6u VME Crate
	2	0.7	1500	SVT Controls/Workstation	Convent. Sys.	Workstation, Communication	
	2	1		AC Power Distribution	Convent. Sys	Clean AC Power Distribution	

	2	3	Integration Reserve	Integration	Reserve			
		10						
		63	Total Number of Racks					
		14.3	Total Reserve Racks		**<u>Assume that there is 5' of usable rack space of the first and second floor</u>**			
		48.7	Used Racks					
		29%	% Reserve/Used Racks					
					Maximum Height for third floor including rack and cooling is 4'			
								Square Feet of equipment
South	3	1	Integration/work station	Convent. Sys.		3x3'		9
	3	1	480V Transformer	Convent. Sys.		39"x29"	48" high	18
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	3	1	480V Convent. Transformer	Convent. Sys.	(may be smaller)	3'x6'		18
	3	2	TOF/EMC Laser	TOF/EMC		4'x2'		8
	3	1	Power Distribution	Convent. Sys.		3'x3'		9
	3	1	spare space	Integration				29.4
			Total Space					127.4
North	3	1	SVT-Cool	SVT	cooling pumps (low pressure)	3'x3'		9
	3	1	SVT-Air	SVT	air conditioner	2'x5'		10
	3	1	480V Transformer	Convent. Sys.		39"x29"	48" high	18
	3	1	480V Transformer	Convent. Sys.		39"x29"	48" high	18

	3	1	Power Distribution	Convent. Sys.		3'x3'		9
	3	1	Magnet Water Pumps	Magnet		4'x4'		16
	3	4	Magnet Controls	Magnet	Racks for mag. control system	2'x2 1/2 '		20
	3	1	spare space	Integration	(May move mag racks to lower floor)		30	
			Total Space					130
??	??		SVT-Cool	SVT	cooling (high pressure)	5'x5'x?		

Subsystem: __________

Signature: __________

Date: __________