US-TES CIP15

FY15 CIP US-TES – Four (4) SCSI (SAS) 4TB Hard Drives

The Government requires four Dell (4) SCSI (SAS) 4TB Hard Drives. These hard drives will be used as spares for a Dell PowerVault NX3200 by the NAVAIR 4.6.8.8, Unmanned Systems - Training Experimentation & Simulation (US-TES) lab and for extra storage in support of research and development of Live, Virtual and Constructive (LVC) training systems.

The hard drives must meet the following minimum specifications:

Compatibility	Dell PowerVault NX3200
Type	HDD
Data transfer rate	6 Gbit/s
Capacity	4000 GB
Interface	Serial Attached SCSI (SAS)
Speed	7200 RPM
Hot-swap	Yes
SMART technology	Yes

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires twenty four (24) Hard Drive Carriers (Caddies) in the recreation of an existing training system. Since this is a recreation brand name and type are critical.

These hard drive carriers (caddies) must compatible with Dell R7910 workstations and meet the following minimum specifications:

Compatible With	Dell R7910 computation system
Part number:	Dell Part# : 342-4167

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires twenty (20) Dell 23" Touch Screen Monitors

The government is recreating an existing training system and requirement monitors that meet an exact brand name and specification. These monitors must be the Dell 23" Touch Monitor Model S2340T. The monitors must meet the following minimum specifications:

Equivalent To	Dell 23" Touch Monitor Model S2340T
Required Option	10-point multi-touch capability Capable
Connectors	DisplayPort, HDMI, USB3.0 Ports, G/Ethernet, Headphone & Microphone
Diagonally Viewable Size	58.42 cm (23")
Horizontal	533.2 mm (20.99")
Vertical	312.0 mm (12.28")
Maximum Resolution	Full HD 1920 x 1080 at 60 Hz
Aspect Ratio	16:9
Pixel Pitch	0.27 mm
Brightness: (typical)	270 cd/m2
Color Support	Color Gamut (typical): 82% Color Depth: 16.78M colors
Contrast Ratio	1,000:1 (typical) 8 million:1 (Max Dynamic Contrast Ratio)
Max Viewing Angle: (typical)	(178° vertical / 178° horizontal)
Response Time: (typical)	8 ms with overdrive (gray to gray)
Panel Type	In-plane switching, Glossy
Panel Backlight	LED light bar system
Stand	Articulating and Tilt
Integrated camera and microphone	Full HD with dual mic
Security	Security lock slot
Electrical Power	AC input voltage/frequency/Current (typical): 100 to 240 VAC/50 or 60 Hz ± 3 Hz/1.5 A
Power consumption (normal operation, typical)	27 W
Power consumption (active-off mode)	<0.5 W

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires twenty (20) Dell 23" Touch Screen Monitors

The government is recreating an existing training system and requirement monitors that meet an exact brand name and specification. These monitors must be the Dell 23" Touch Monitor Model S2340T. The monitors must meet the following minimum specifications:

Equivalent To	Dell 23" Touch Monitor Model S2340T
Required Option	10-point multi-touch capability Capable
Connectors	DisplayPort, HDMI, USB3.0 Ports, G/Ethernet, Headphone & Microphone
Diagonally Viewable Size	58.42 cm (23")
Horizontal	533.2 mm (20.99")
Vertical	312.0 mm (12.28")
Maximum Resolution	Full HD 1920 x 1080 at 60 Hz
Aspect Ratio	16:9
Pixel Pitch	0.27 mm
Brightness: (typical)	270 cd/m2
Color Support	Color Gamut (typical): 82% Color Depth: 16.78M colors
Contrast Ratio	1,000:1 (typical) 8 million:1 (Max Dynamic Contrast Ratio)
Max Viewing Angle: (typical)	(178° vertical / 178° horizontal)
Response Time: (typical)	8 ms with overdrive (gray to gray)
Panel Type	In-plane switching, Glossy
Panel Backlight	LED light bar system
Stand	Articulating and Tilt
Integrated camera and microphone	Full HD with dual mic
Security	Security lock slot
Electrical Power	AC input voltage/frequency/Current (typical): 100 to 240 VAC/50 or 60 Hz ± 3 Hz/1.5 A
Power consumption (normal operation, typical)	27 W
Power consumption (active-off mode)	<0.5 W

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires eight (8) Wired Business Multimedia Keyboards. The government is recreating an existing training system so brand name and model type are required.

The keyboards must meet the following minimum specifications:

Dell Model	KB522
Interface	Wired USB Interface
Hub	Function as a 2-port USB hub
Layout	104 Key QWERTY
Hotkeys	Multimedia Hot Keys
Other	Spill-resistant

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires eight (8) Wired Optical Mice. The government is recreating and existing training system so there can be no deviation of brand name or model number without incurring additional risk:

The mice should be optical, connected via wired USB and have no moving parts that would break. The wired optical mice must also meet the following specifications:

Model Number	Dell MS111
Connectivity Technology	Wired
Interface	1 x USB - 4 pin USB Type A
Movement Detection Technology	Optical
Features	Scrolling wheel
Buttons Qty.	3
Movement Resolution	1000 dpi
Interface	1 x USB - 4 pin USB Type A
Orientation	Right and Left-Handed

US-TES CIP15

FY15 CIP US-TES – Network Attached Storage Specs

The Government requires one Network Attached Storage (NAS) workstation. The NAS workstation will be used by the NAVAIR 4.6.8.8, Unmanned Systems - Training Experimentation & Simulation (US-TES) lab for data storage in the research and development of Live, Virtual and Constructive (LVC) training systems. The Networks Attached Storage will be the primary backup station for virtual images must be of brand and model type Dell PowerVault NX3200. The government is recreating an existing training system so there can be no deviation from the model, version and specifications listed below without incurring additional risk.

The NAS workstation must meet the following minimum specifications:

Model	Dell PowerVault NX3200
Form Factor	2U rack-mount system
CPU	Intel®Xeon®E5-2630v2, 2.6GHz
Memory	16GB Mem
Operating System	WSS2012 R2 Standard Edition
RAID Configuration	RAID 1 OS, RAID 5 DATA NX3200
Hard Drives for DATA RAID	4 4TB (16TB total) 7.2K RPM Near-Line SAS 6Gbps 3.5in Hot-plug Hard Drive
Select Network Adapter	Broadcom 5720 QP 1Gb Network Daughter Card
Embedded Management	iDRAC7 Express
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 750W
Power Cords	C13 to C14, PDU Style, 12 AMP, 6.5 Feet (2m), Power Cord
Rack Rails	ReadyRails™ Sliding Rails With Cable Management Arm
Remote Consulting Service	Declined Remote Consulting Service
Slots	6 PCIe slots: Two x16 full-length, full-height One x8 full-length, full-height Three x8 half-length, half-height
File access protocols	CIFS, NFS, FTP, SMB3.0, SMB Direct (RDMA)
Block access protocols	Microsoft iSCSI target
Number of drives	Up to 12 – 3.5" drives for a total of 48TB*
Drive types	SAS, NL-SAS and SATA
RAID	OS (RAID 1), data drives RAID 5 or RAID 6 (minimum 4HDDs)
Chassis dimensions	Height: 8.73cm (3.44"); Width: 48.2cm (18.98"); Depth: 75.58cm (29.75"); Max Weight: 32.5kg (71.65lb)
Power	Platinum efficiency 495W, 750W or Platinum+ efficiency 1100W power supplies, auto-ranging power supplies
Fans	Standard redundant cooling
Availability	Hot-plug hard drives, hot-plug power

US-TES CIP15

FY15 CIP US-TES – Rack Workstation Specs

The Government requires twelve (12) rack workstations. These workstations will be used by the NAVAIR 4.6.8.8, Unmanned Systems - Training Experimentation & Simulation (US-TES) lab for research and development of Live, Virtual and Constructive (LVC) training systems. The workstations are used in the replication of existing simulation trainers and must meet the following specifications. These rack workstations must be of brand name and model number Dell Precision R7910 Rack Workstation and meet or exceed to following specifications.

Model Number	Dell Precision R7910
Dimensions	HxWxD: 3.41" x 17.0" x 28.37" (29.78" with bezel); 86.8mm x 434.0mm x 720.8mm (756.5mm with bezel)
Bays	Eight external 2.5" bays; one external 5.25" slimline optical drive bay;
Ports	Front – 2 USB 2.0, 1 system ID button/LED; Internal – 1 USB 2.0;
	Rear- 2 USB 3.0, 1 serial, 4 RJ45 with either NIC option, 1 system ID button/LED
Slots	Up to seven PCIe full-length Gen 3 slots with two CPUs in 3 riser cards, max 2 double width x16 cards
Processor	Intel® Xeon® Processor E5-2687W v3 (10C, 3.1GHz, Turbo, HT, 25M, 160W
Operating System	Windows 7 Professional, 64-bit, English
Graphic Cards	NVIDIA® Quadro® K5200 8GB (2 DP, 2 DL-DVI-I) (2 DP to SL-DVI adapter)
Memory	64GB (8x8GB) 2133MHz DDR4 RDIMM ECC
Hard Drive RAID	No RAID
Optical Drives	8x Slimline DVD+/-RW Drive
Hard Drive Controller	2 X Integrated Intel 4 port AHCI SATA chipset controllers (tot 8 X 6.0Gb/s) SW RAID 0,1,5,10
Rack Mounting Rails	ReadyRails™ Sliding Rails with Cable Management Arm
Internal Hard Drive Configuration	C1 SATA/SSD 2.5", 1-8 Hard Drives
Boot Hard Drive	512GB 2.5" Serial-ATA Solid State Drive
2nd Hard Drive	512GB 2.5" Serial-ATA Solid State Drive
Power Cords	US/Thailand/Philippines/Guam Power Cord
Power Supply	1100W Power Supply
Riser Card:	Left Riser (Riser 3) with 2 PCI-e x16 wired as x8 single width slots
Chassis	Precision R7610 Chassis
Front Bezel	Bezel, Dell Precision R7910
Virtualization	WS virtualization Workstation virtualization for up to four users via GPU pass-through & one to many with Grid K2(A) with certified hypervisors
Communications Base	Intel I350 QP, 4 port Intel 1Gb/s NIC (network daughter card) Intel Remote Wake UP, PXE and Jumbo frames support
Sound Card	Integrated Realtek ALC269Q High Definition Audio
Speakers	Dell 2.0 and 2.1 stereo speaker systems available; Dell sound bar for select flat-panel displays.
Audio	Integrated Realtek ALC269Q High Definition Audio
Security	Trusted Platform Module 1.2 (TPM 1.2)

US-TES CIP15

FY15 CIP US-TES – Station Peripherals

The government requires four (4) Del Rackmount LED Consoles with English Keyboard. The government is recreating and existing training solution so there can be no deviation from name brand or version number.

The 1U Rackmount LED Console must be the Dell 18.5 in 1U Rackmount LED KMM Console Manufacturer Part# : DKMMLED185-G01 | Dell Part# : A7546778. The rackmount consoles provide a rack workstation with a keyboard, mouse and KVM. The 1U Rackmount LED Console must meet the following minimum specifications:

Device Type	KVM console - 18.5"
KVM Switch	USB
Built-in Devices	Keyboard, touchpad , USB 3.0 hub
Aspect Ratio	Widescreen - 16:9
Native Resolution	1366 x 768
Color Support	16.7 million colors
Dimensions (WxDxH)	17.4 in x 20.6 in x 1.8 in
Height (Rack Units)	1U
Compliant Standards	Plug and Play, VESA DPMS, RoHS
Diagonal Size	18.5"
Built-in Devices	USB 3.0 hub
Backlight Technology	LED backlight
Flat Panel Mount Interface	Yes
Rack Mounting Kit	Yes
Voltage Required	AC 120/230 V
Power Consumption	20 Watt