n

# AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

| 1. CONTRACT ID CODE | PAGE OF PAGES 1 | 2 |
|---|---|---|

| 2. AMENDMENT/MODIFICATION NO. | 3. EFFECTIVE DATE | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. *(If applicable)* |
|---|---|---|---|
| 088 | See Block 16C | | |

6. ISSUED BY CODE

John F. Kennedy Space Center, NASA
Procurement Office – ODIN –OP-OS-ODIN
Kennedy Space Center, FL 32899

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State, and Zip Code)*

OAO Corporation
7375 Executive Place
Seabrook MD 20706

CODE FACILITY CODE

(x)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

10A. MODIFICATION OF CONTRACT/ORDER NO.
**NAS5-98144/CC90300B**

10B. DATED *(SEE ITEM 13)*
December 1, 2001

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[ ] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

XX C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
**FAR CLAUSE 52.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS, (c) CHANGES**

D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [ X ] is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

## KENNEDY SPACE CENTER --- ODIN SERVICES

Subject: Modify Attachment F "Listing of Accepted Seat Certifications" – Quarter 19, July2003

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

| 15A. NAME AND TITLE OF SIGNER *(Type or print)* | 16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)* |
|---|---|
| Keith L. Spencer<br>Sr. Contract Manager | Penelope A. Ebright<br>Contracting Officer |

| 15B. CONTRACTOR/OFFEROR | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA | 16C. DATE SIGNED |
|---|---|---|---|
| Keith L. Spencer<br>*(Signature of person authorized to sign)* | 30 Sep 2003 | BY Penelope A Ebright<br>*(Signature of Contracting Officer)* | 10/1/03 |

1. As set forth in Part III, Section B, Item 6 of this Delivery Order, entitled "Master Contract Attachment R Baseline Core Seat Components", this modification modifies Delivery Order Attachment F "Listing of Accepted Seat Certifications" to incorporate the UNIX seat certifications for Quarter 19, July 2003 as reflected below:

| Quarter (Beginning date) | Seat | Platform | System Configuration | Date Alterion Certified | Rating |
|---|---|---|---|---|---|
| Q19 (Jul 2003) | SE1 – Entry Level (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.66 GHz | N/A | N/A |
| Q19 (Jul 2003) | SE2 - Mid Range (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.8 GHz | N/A | N/A |
| Q19 (Jul 2003) | SE3 - High End (ODIN Default) | UNIX-Desktop | Dell Workstation 650 (Dual), 533MHz, 2.8 GHz | N/A | N/A |
| Q19 (Jul 2003) | SE1 - Entry Level (HP) | UNIX-Desktop | HP B2600 Workstation-500MHz | N/A | N/A |
| Q19 (Jul 2003) | SE2 - Mid Range (HP) | UNIX-Desktop | HP C3750 Workstation- 875MHz | N/A | N/A |
| Q19 (Jul 2003) | SE3 - High End (HP) | UNIX-Desktop | HP C6750 Workstation-Dual 875MHz | N/A | N/A |
| Q19 (Jul 2003) | SE1 - Entry Level (Sun) | UNIX-Desktop | Sun SunBlade 150, 650 MHz | N/A | N/A |
| Q19 (Jul 2003) | SE2 - Mid Range (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 1.2, 1.2 GHz | N/A | N/A |
| Q19 (Jul 2003) | SE3 - High End (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 1.2, 1.2 GHz | N/A | N/A |
| Q19 (Jul 2003) | SE1 - Entry Level (SGI) | UNIX-Desktop | None Offered | N/A | N/A |
| Q19 (Jul 2003) | SE2 - Mid Range (SGI) | UNIX-Desktop | SGI Fuel V10, 700 MHz | N/A | N/A |
| Q19 (Jul 2003) | SE3-High End (SGI) | UNIX-Desktop | SGI Next Generation Dual 700 MHz, MIPS R16000, 700 MHz | N/A | N/A |

2. The Quarter 19 systems offered for the above identified seats are accepted without the Alterion certification.

3. Copies of the signed certifications (11 pages) for Quarter 19 and unsigned certification forms for the waived systems are attached. The data is hereby incorporated into Attachment F (Master Contract Attachment R), Page F-3.

4. All other terms and conditions remain unchanged.

| Quarter (Beginning date) | Seat | Platform | System Configuration | Date Alterion Certified | Rating | Mod |
|---|---|---|---|---|---|---|
| Q17 (Jan 2003) | GP1 - Entry | PC-Desktop | Dell GX260, P4 1.8 GHz | January 10, 2003 | 73.3% | 65 |
| Q17 (Jan 2003) | GP2 - Mid Range | PC-Desktop | Dell GX260, P4, 2.26 GHz | January 10, 2003 | 85.9% | 65 |
| Q17 (Jan 2003) | SE1/SE2 High End | PC-Desktop | Dell OptiPlexGX260 P4, 2.53 GHz | January 10, 2003 | 92.2% | 65 |
| Q17 (Jan 2003) | SE2 - Premium | PC-Desktop | Dell Precision Workstation 650, Xeon 2.8 GHz[1] | N/A | N/A | 65 |
| Q17 (Jan 2003) | GP3 - Entry | PC-Laptop | Dell Latitude C640, P3, 1.7 GHz | January 10, 2003 | 85.9% | 65 |
| Q17 (Jan 2003) | GP3 - Mid Range | PC-Laptop | Dell Latitude C840, P3, 1.8 GHz | January 10, 2003 | 85.3% | 65 |
| Q17 (Jan 2003) | GP3 - High End | PC-Laptop | Dell Latitude C840, P3, 2.0 GHz | January 10, 2003 | 90.8% | 65 |
| Q17 (Jan 2003) | GP3 – Lightweight | PC-Laptop | Dell Latitude C400, P3, 1.2 GHz | January 10, 2003 | 65.6% | 65 |
| Q17 (Jan 2003) | GP1-Entry | Mac-Desktop | Apple eMac G4, 700 MHz | January 10, 2003 | 94.6% | 65 |
| Q17 (Jan 2003) | GP2 - Mid Range | Mac-Desktop | Apple PowerMac G4, iMac, 800 MHz | January 10, 2003 | 100% | 65 |
| Q17 (Jan 2003) | SE1/SE2 - High End | Mac-Desktop | Apple PowerMac G4, , 1GHz[2] | N/A | N/A | 65 |
| Q17 (Jan 2003) | GP3 - Mid Range | Mac-Laptop | Apple TiPowerBook G4, 867 MHz | January 10, 2003 | 100% | 65 |
| Q17 (Jan 2003) | SE1 – Entry Level (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.4 GHz[3] | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE2 - Mid Range (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.66 GHz[3] | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE3 - High End (ODIN Default) | UNIX-Desktop | Dell Workstation 650 (Dual), 533MHz, 2.66GHz[3] | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE1 - Entry Level (HP) | UNIX-Desktop | HP B2600 Workstation-500MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE2 - Mid Range (HP) | UNIX-Desktop | HP C3750 Workstation- 875MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE3 - High End (HP) | UNIX-Desktop | HP C6750 Workstation-Dual 875MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE2 - Entry Level (Sun) | UNIX-Desktop | Sun SunBlade 150, 650 MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE2 - Mid Range (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 900, 900MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE3 - High End (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 900, 1.015 GHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE1 - Entry Level (SGI) | UNIX-Desktop | None Offered | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE2 - Mid Range (SGI) | UNIX-Desktop | SGI Fuel V10, 700 MHz | N/A | N/A | 65 |
| Q17 (Jan 2003) | SE3-High End (SGI) | UNIX-Desktop | SGI Octane 2 V10, Dual MIPS R14000A, 600 MHz | N/A | N/A | 65 |
| Q18 (April 2003) | GP1 - Entry | PC-Desktop | Dell GX260, P4 1.8 GHz | April 11, 2003 | 73.3% | 72 |
| Q18 (April 2003) | GP2 - Mid Range | PC-Desktop | Dell GX260, P4, 2.4 GHz | April 11, 2003 | 83.1% | 72 |
| Q18 (April 2003) | SE1/SE2 High End | PC-Desktop | Dell OptiPlexGX260 P4, 2.8 GHz | April 11, 2003 | 100% | 72 |
| Q18 (April 2003) | SE2 - Premium | PC-Desktop | Dell Precision Workstation 650, Xeon 2.8 GHz | N/A | N/A | 72 |
| Q18 (April 2003) | GP3 - Entry | PC-Laptop | Dell Latitude C840, P4, 1.8 GHz | April 11, 2003 | 81.8% | 72 |
| Q18 (April 2003) | GP3 - Mid Range | PC-Laptop | Dell Latitude C840, P4, 2.0 GHz | April 11, 2003 | 87.1% | 72 |
| Q18 (April 2003) | GP3 - High End | PC-Laptop | Dell Latitude C840, P4, 2.2 GHz | April 11, 2003 | 96% | 72 |
| Q18 (April 2003) | GP3 – Lightweight | PC-Laptop | Dell Latitude C400, P3, 1.33 GHz | April 11, 2003 | 68.6% | 72 |
| Q18 (April 2003) | GP1-Entry | Mac-Desktop | Apple eMac G4, 800 MHz | N/A | N/A | 72 |
| Q18 (April 2003) | GP2 - Mid Range | Mac-Desktop | Apple PowerMac G4, iMac, 1.0 GHz | April 11, 2003 | 87.2% | 72 |
| Q18 (April 2003) | SE1/SE2 - High End | Mac-Desktop | Apple PowerMac G4, , 1.0GHz | April 11, 2003 | 100% | 72 |
| Q18 (April 2003) | GP3 - Mid Range | Mac-Laptop | Apple TiPowerBook G4, 1.0 GHz | April 11, 2003 | 100% | 72 |

| Quarter (Beginning date) | Seat | Platform | System Configuration | Date Alterion Certified | Rating | Mod |
|---|---|---|---|---|---|---|
| Q19 (July 2003) | GP1 - Entry | PC-Desktop | Dell GX270, P4 2.4 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | GP2 - Mid Range | PC-Desktop | Dell GX270, P4, 2.4 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | SE1/SE2 High End | PC-Desktop | Dell OptiPlex GX270 P4, 2.8 GHz | July 17, 2003 | 93.2% | 85 |
| Q19 (July 2003) | SE2 - Premium | PC-Desktop | Dell Precision Workstation 650, Xeon 3.06 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | GP3 - Entry | PC-Laptop | Dell Latitude D600, PM, 1.4 GHz | July 17, 2003 | 87.4% | 85 |
| Q19 (July 2003) | GP3 - Mid Range | PC-Laptop | Dell Latitude D800, P4M, 1.4 GHz | July 17, 2003 | 88.1% | 85 |
| Q19 (July 2003) | GP3 - High End | PC-Laptop | Dell Latitude D800, P4M, 1.6 GHz | July 17, 2003 | 100% | 85 |
| Q19 (July 2003) | GP3 – Lightweight | PC-Laptop | Dell Latitude D400, PM, 1.4 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | GP1 – Entry | MAC-Desktop | Apple PowerPC G4, 1.0 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | GP2 - Mid Range | Mac-Desktop | Apple PowerMac G4, iMac, 1.0 GHz | July 11, 2003 | 87.2% | 85 |
| Q19 (July 2003) | SE1/SE2 - High End | Mac-Desktop | Apple PowerMac G4, 1.25 GHz | N/A | N/A | 85 |
| Q19 (July 2003) | GP3 - Mid Range | Mac-Laptop | Apple TiPowerBook G4, 1.0 GHz | July 10, 2003 | 100% | 85 |
| Q19 (July 2003) | SE1 – Entry Level (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.66 GHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE2 - Mid Range (ODIN Default) | UNIX-Desktop | Dell Precision Workstation 650, 533MHz, 2.8 GHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE3 - High End (ODIN Default) | UNIX-Desktop | Dell Workstation 650 (Dual), 533MHz, 2.8 GHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE1 - Entry Level (HP) | UNIX-Desktop | HP B2600 Workstation-500MHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE2 - Mid Range (HP) | UNIX-Desktop | HP C3750 Workstation- 875MHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE3 - High End (HP) | UNIX-Desktop | HP C6750 Workstation-Dual 875MHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE1 - Entry Level (Sun) | UNIX-Desktop | Sun SunBlade 150, 650 MHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE2 - Mid Range (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 1.2, 1.2 GHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE3 - High End (Sun) | UNIX-Desktop | Sun SunBlade 2000 Model 1.2, 1.2 GHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE1 - Entry Level (SGI) | UNIX-Desktop | None Offered | N/A | N/A | N/A |
| Q19 (July 2003) | SE2 - Mid Range (SGI) | UNIX-Desktop | SGI Fuel V10, 700 MHz | N/A | N/A | N/A |
| Q19 (July 2003) | SE3-High End (SGI) | UNIX-Desktop | SGI Next Generation Dual 700 MHz, MIPS R16000, 700 MHz | N/A | N/A | N/A |

# ODIN Attachment "R

**Contractor: NASA/KSC**
**Quarter: Q19 – July 03**
**Platform: Unix Dell -Desktop-Entry Level**

**Prime:OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Dell Precision Workstation 650**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | Dell | Workstation 650 | | MiniTower |
| Motherboard | Dell | Dual CPU capable | | 533MHz Bus Speed |
| CPU | Intel | Pentium Xeon | | 2.66 GHz |
| BIOS | Intel | E7505 | | |
| Hard Disk | Dell | Ultra SCSI 10k RPM | | 36.0GB |
| HD Controller | Dell | Wide Ultra SCSI2 | | |
| Floppy Drive | Dell | | | 3.5 " 1.44 Mb |
| Keyboard | Dell | | | 104 Extended |
| Mouse | Microsoft | IntelliMouse | | 3 - Button |
| Power Supply | Dell | | | 410 Watt |
| Network Interface Card | 3COM | Fast XL | | 10/100Base-TX |
| Monitor | Dell | P1130 | | 21" |
| CD-ROM | Dell | CDRW | | 48X/24X/48X |
| Sound Card | Dell | AC97 | | 16-bit full duplex |
| Speaker(s) | Harman/Kardon | Speakers | | 2 piece |
| Headset/Microphone | | | | |
| Microphone | | | | |
| Video Card | ATI | Radeon VE 32 | | AGP |
| | | | | |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Various | 1 | 1.0 GB | 266MHz | RAMBUS |
| Cache | Intel | 1 | 512K | 275MHz | L2 ECC |
| Video RAM | | 1 | 32MB | | SGRAM |

# ODIN Attachment "R

**Contractor: NASA/KSC**
**Quarter: Q19 – July 03**
**Platform: Unix Dell -Desktop-Mid Range**

**Prime:OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Dell Precision Workstation 650**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | Dell | Workstation 650 | | MiniTower |
| Motherboard | Dell | Dual CPU capable | | 533MHz Bus Speed |
| CPU | Intel | Pentium Xeon | | 2.8GMhz |
| BIOS | Intel | E7505 | | |
| Hard Disk | Dell | Ultra SCSI 10k RPM | | 2 X 36.0GB |
| HD Controller | Dell | Wide Ultra SCSI2 | | |
| Floppy Drive | Dell | | | 3.5 " 1.44 Mb |
| Keyboard | Dell | | | 104 Extended |
| Mouse | Microsoft | IntelliMouse | | 3 - Button |
| Power Supply | Dell | | | 410 Watt |
| Network Interface Card | 3COM | Fast XL | | 10/100Base-TX |
| Monitor | Dell | P1130 | | 21" |
| CD-ROM | Dell | CDRW | | 48X/24X/48X |
| Sound Card | Dell | AC97 | | 16-bit full duplex |
| Speaker(s) | Harman/Kardon | Speakers | | 2 piece |
| Headset/Microphone | | | | |
| Microphone | | | | |
| Video Card | ATI | Fire GL | | AGP |
| | | | | |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Various | 1 | 2.0GB | 266MHz | RAMBUS |
| Cache | Intel | 1 | 512K | 275MHz | L2 ECC |
| Video RAM | | 1 | 128MB | | SGRAM |

# ODIN Attachment "R

**Contractor: NASA/KSC**
**Quarter: Q19 – July 03**
**Platform: Unix Dell -Desktop-High End**

**Prime:OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Dell Workstation 650 (Dual)**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | Dell | Workstation 650 | | MiniTower |
| Motherboard | Dell | Dual CPU | | 533MHz Bus Speed |
| CPU | Intel | Dual Xeon | | 2.8Ghz |
| BIOS | Intel | E7505 | | |
| Hard Disk | Dell | Ultra SCSI 10k RPM | | 2 X 36.0GB |
| HD Controller | Dell | Wide Ultra SCSI2 | | |
| Floppy Drive | Dell | | | 3.5 " 1.44 Mb |
| Keyboard | Dell | | | 104 Extended |
| Mouse | Microsoft | IntelliMouse | | 3 - Button |
| Power Supply | Dell | | | 410 Watt |
| Network Interface Card | 3COM | Fast XL | | 10/100Base-TX |
| Monitor | Dell | P1130 | | 21" |
| CD-ROM | Dell | CDRW | | 48X/24X/48X |
| Sound Card | Dell | AC97 | | 16-bit full duplex |
| Speaker(s) | Harman/Kardon | Speakers | | 2 piece |
| Headset/Microphone | | | | |
| Microphone | | | | |
| Video Card | nVidia | Quadro4 900XGL | | AGP |
| | | | | |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | Various | 1 | 2.0 GB | 266MHz | RAMBUS |
| Cache | Intel | 1 | 512K | 275MHz | L2 ECC |
| Video RAM | | 1 | 128MB | | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX HP Entry Level**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP B2600 Workstation, 500MHz**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | HP | B2600 | July 03 | PA-Risc 8600 |
| Motherboard | HP | | | |
| CPU | HP | Risc 8600 | | 500MHZ |
| BIOS | HP | N/A | | N/A |
| Hard Disk | HP | A4998A | | 36GB |
| HD Controller | HP | | | Ultra SCSI |
| Floppy Drive | HP | INTERNAL | | 1.44MB |
| Keyboard | HP | PS/2 Compatible | | 104 Keys |
| Mouse | HP | PS/2 Compatible | | PS/2 Compatible |
| Power Supply | HP | | | 620W |
| Network Interface Card | HP | Integrated | | 10/100Base-TX |
| Monitor | HP | P1103 | | 21"Performance CRT |
| CD-ROM | HP | DVD ROM | | |
| Sound Card | HP | Integrated | | Integrated |
| Speakers | HP | Internal | | Internal |
| Headset/Microphone | HP | No | | |
| Microphone | HP | Internal | | |
| Video Card | HP | VISUALIZE Graphics | | VISUALIZE-fxe |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP | 1 | 1.0GB | 120MHz | SDRAM |
| Cache | HP | 1 | 1.5MB | | L2 ECC |
| Texture Memory | HP | 1 | 9.5MB | | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX HP Mid Range**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP C3750 Workstation, 875MHz**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | HP | C3750 | July 03 | PA-Risc 8700 |
| Motherboard | HP | | | |
| CPU | HP | Risc 8700 | | 875MHZ |
| BIOS | HP | N/A | | N/A |
| Hard Disk | HP | A6031A | | 73GB 15k RPM |
| HD Controller | HP | | | Ultra SCSI |
| Floppy Drive | HP | INTERNAL | | 1.44MB |
| Keyboard | HP | PS/2 Compatible | | 104 Keys |
| Mouse | HP | PS/2 Compatible | | PS/2 Compatible |
| Power Supply | HP | | | 1500W |
| Network Interface Card | HP | Integrated | | 10/100Base-TX |
| Monitor | HP | P1130 | | 21" Performance CRT |
| CD-ROM | HP | DVD ROM | | |
| Sound Card | HP | Integrated | | Integrated |
| Speakers | HP | Internal | | Internal |
| Headset/Microphone | HP | No | | |
| Microphone | HP | Internal | | |
| Video Card | HP | VISUALIZE Graphics | | VISUALIZE-fxe |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP | 1 | 1.0GB | 120MHz | SDRAM |
| Cache | HP | 1 | 2.25MB | | L2 ECC |
| Texture Memory | HP | 1 | 48MB | 166MHz | SGRAM |

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX HP High End**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: HP C6750 Workstation, 875MHz**

# ODIN Attachment "R

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | HP | J6750 | July 03 | PA-Risc 8700 |
| Motherboard | HP | | | |
| CPU | HP | Risc 8700 | | Dual 875MHz |
| BIOS | HP | N/A | | N/A |
| Hard Disk | HP | A6031A | | 73GB 15k RPM |
| HD Controller | HP | | | Ultra SCSI |
| Floppy Drive | HP | INTERNAL | | 1.44MB |
| Keyboard | HP | PS/2 Compatible | | 104 Keys |
| Mouse | HP | PS/2 Compatible | | PS/2 Compatible |
| Power Supply | HP | | | 620W |
| Network Interface Card | HP | Integrated | | 10/100Base-TX |
| Monitor | HP | P1130 | | 21" CRT |
| CD-ROM | HP | DVD | | 48X |
| Sound Card | HP | Integrated | | Integrated |
| Speakers | HP | Internal | | Internal |
| Headset/Microphone | HP | No | | |
| Microphone | HP | Internal | | |
| Video Card | HP | VISUALIZE Graphics | | VISUALIZE-fxe |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | HP | 1 | 1.0GB | 120MHz | SDRAM |
| Cache | HP | 1 | 2.25MB | | L2 ECC |
| Texture Memory | HP | 1 | 110MB | 200MHz | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX Sun Entry Level**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Sun SunBlade 150**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | SUN | A41UTA19C-2.0M-BA | Jan 02 | Workstation, 650MHz |
| Motherboard | SUN | | | |
| CPU | SUN | Ultra Sparc-IIe | | 1 x 650MHz |
| BIOS | N/A | | | |
| Hard Disk | Seagate | 2 / 40GB HD | | 80GB 7200 RPM |
| HD Controller | SUN | Integrated | | EIDE |
| Floppy Drive | NEC | | | Internal 1.44 MB |
| Keyboard | SUN | USB | | UNIX Type 5 |
| Mouse | SUN | | | Opto-mechanical, 3 button |
| Standard Interface | SUN | 1 Serial, 1 Parallel, 4 audio, 3 PCI , 4 USB, 2 IEEE 1394 | | |
| Power Supply | SUN | | | 10-120; 220-240 VAC |
| Network Interface Card | SUN | Integrated | | 10/100 Base T |
| Monitor | SUN | p/n X7136A | | 21" Color Monitor |
| CD-ROM/DVD | SUN | DVD-ROM | | Internal 16X IDE |
| Sound Card | SUN | Integrated | | |
| Speakers | N/A | Internal | | |
| Headset/Microphone | N/A | | | |
| Microphone | SUN | Microphone II | | |
| Video Card | SUN | Sun Expert3D-Lite Graphics Accelerator | | 24-bit |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | SUN | 1 | 2.0GB | 133Mhz | SDRAM |
| Cache | SUN | 1 | 256-KB | | L2 |
| Video RAM | SUN | 1 | 8MB | | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX Sun Mid Range**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Sun SunBlade 2000 Model 1.2**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | SUN | A29-PS1-9C-1GAJ | | Workstation 1.2GHz |
| Motherboard | SUN | | | 150MHz |
| CPU | SUN | Ultra Sparc-III | | 1.2GHz |
| BIOS | N/A | | | |
| Hard Disk | Seagate/Fujitsu | | | 73GB 10KRPM |
| HD Controller | SUN | Integrated | | FC-AL |
| Floppy Drive | Sony | p/n X6004A | | 3.5" 1.44MB |
| SCSI Controller | SUN | Ultra SCSI | | Ultra SCSI |
| Keyboard | SUN | p/n X8515 | | UNIX Type 6 |
| Mouse | SUN | p/n X8515 | | Opto-mechanical, 3 button |
| Standard Interface | SUN | 2 Serial, 1 Parallel, 4 audio, 4 PCI , 4 USB, 2 IEEE 1394 | | |
| Power Supply | SUN | | | 100-120; 220-240 VAC |
| Network Interface Card | SUN | Integrated | | 10/100 Base T |
| Monitor | SUN | p/n X7136A | | 21" Color Monitor |
| DVD-Rom | SUN | p/n X6168A | | 10x |
| Sound Card | SUN | Integrated | | 16-bit Stereo |
| Speakers | | Internal | | |
| Headset/Microphone | N/A | | | |
| Microphone | SUN | MicroPhone II | | |
| Video Card | SUN | Sun PGX64 | | 24-bit |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | SUN | 4 | 1.0GB ECC | 133Mhz | SDRAM |
| Cache | SUN | 1 | 8MB | | SRAM |
| Video RAM | SUN | 1 | 15MB | 120MHz | |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX Sun High End**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: Sun SunBlade 2000 Model 1.2**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | SUN | A29-PY1-9C-2GMAJ | July 03 | Workstation 1.2GHz |
| Motherboard | SUN | | | 150MHz |
| CPU | SUN | Dual Ultra Sparc-III | | 1.2GHz |
| BIOS | N/A | | | |
| Hard Disk | Seagate/Fujitsu | 73GB HD 10KRPM | | 73GB |
| HD Controller | SUN | Integrated | | FC-AL |
| Floppy Drive | Sony | p/n X6004A | | 3.5" 1.44MB |
| SCSI Controller | SUN | Ultra SCSI | | Ultra SCSI |
| Keyboard | SUN | p/n X8515 | | UNIX Type 6 |
| Mouse | SUN | p/n X8515 | | Opto-mechanical, 3 button |
| Standard Interface | SUN | 2 Serial, 1 Parallel, 4 audio, 4 PCI , 4 USB, 2 IEEE 1394 | | |
| Power Supply | SUN | | | 100-120; 220-240 VAC |
| Network Interface Card | SUN | Integrated | | 10/100 Base T |
| Monitor | SUN | p/n X7136A | | 21" Color Monitor |
| DVD-Rom | SUN | p/n X6168A | | 10x |
| Sound Card | SUN | Integrated | | 16-bit Stereo |
| Speakers | | Internal | | |
| Headset/Microphone | N/A | | | |
| Microphone | SUN | MicroPhone II | | |
| Video Card | SUN | Sun PGX64 | | 24-bit |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | SUN | 3 | 3.0GB | 133Mhz | SDRAM |
| Cache | SUN | 1 | 8MB | | SRAM |
| Video RAM | SUN | 1 | 15MB | 120MHz | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX SGI Mid Range**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: SGI Fuel V10 700MHz**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | SGI | WF-700V10-518 | July 03 | Fuel V10 Workstation |
| Motherboard | SGI | NSP | | |
| CPU | SGI | R16000A | | 700MHZ |
| BIOS | SGI | N/A | | |
| Hard Disk | SGI | P9-36G-INT | | 36GB 3.5" 10k RPM |
| HD Controller | SGI | N/A | | Ultra SCSI |
| Floppy Drive | SGI | Optional | | |
| Keyboard | SGI | KBA-US | | 104 Keys |
| Mouse | SGI | KBA-US | | PS/2 Compatible |
| Power Supply | SGI | NSP | | 623W |
| Network Interface Card | SGI | Integrated | | 10/100Based-TX |
| Monitor | SGI | D-MON21A-NC | | 21" Flat Trinitron Tilt-swivel Color stereo Monitor |
| CD-ROM | SGI | P-CDR32-EXT | | Ext.32X CD ROM SCSI Drive |
| Sound Card | SGI | Integrated | | ADAT Optical Digital 8-Channels |
| Speakers | SGI | External | | |
| Headset/Microphone | | No | | |
| Microphone | | Internal | | |
| Video Card | SGI | Integrated | | |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | SGI | 1 | 512MB | 20ns | DRAM |
| Cache | SGI | 1 | 4MB | 5ns | L2 ECC |
| Video RAM | SGI | | Up to 90% of RAM | 20ns | SGRAM |

# ODIN Attachment "R

**Contractor: NASA-KSC**
**Quarter: Q19 – July 03**
**Platform: UNIX SGI High End**

**Prime: OAO Corporation**
**Prime Contract Number: NAS5-98144**
**System: SGI Next Generation Dual 700MHz**

## System Configuration

| Item | Manufacturer | Model # | Revision or Date | Size & Speed |
|---|---|---|---|---|
| System Unit | SGI | WS-2P700-RM | July 03 | 700MHZ |
| Motherboard | SGI | NSP | | |
| CPU | SGI | R16000 | | Dual MIPS R16000 700MHZ |
| BIOS | SGI | N/A | | ARC load |
| Hard Disk | SGI | P9-36G-INT | | 36GB 3.5" 10k RPM |
| HD Controller | SGI | Integrated | | Ultra SCSI |
| Floppy Drive | SGI | Optional | | |
| Keyboard | SGI | KBA-US | | 104 Keys |
| Mouse | SGI | KBA-US | | PS/2 Compatible |
| Power Supply | SGI | NSP | | 623W |
| Network Interface Card | SGI | Integrated | | 10/100-TEX |
| Monitor | SGI | D-MON21A-NC | | 21" Flat Trinitron Tilt-Swivel Color stereo Monitor |
| CD-ROM | SGI | P-CDR32-EXT | | 32X CD ROM SCSI Drive |
| Sound Card | SGI | Integrated | | ADAT Optical Digital 8-Channels |
| Speakers | SGI | External | | |
| Headset/Microphone | | No | | |
| Microphone | | Internal | | |
| Video Card | SGI | Integrated | | |

## Memory Module Configuration

| Item | Manufacturer | Quantity | MB (Total) | Speed | Type |
|---|---|---|---|---|---|
| RAM | SGI | 1 | 1.0GB | 20ns | DRAM |
| Cache | SGI | 1 | 4MB | 5ns | L2 ECC |
| Video RAM | SGI | | Up to 90% of RAM | 20ns | SGRAM |