

**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

1. CONTRACT ID CODE

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2. AMENDMENT/MODIFICATION NO.

40

3. EFFECTIVE DATE

See Block 16C

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. (If applicable)

ISSUED BY CODE

John F. Kennedy Space Center, NASA  
Procurement Office – ODIN – OP-MS  
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)

OA Corporation  
7500 Greenway Center Drive  
Greenbelt MD 20770

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

**NAS5-98144/CC90303B**

10B. DATED (SEE ITEM 13)

December 1, 2001

CODE FACILITY CODE

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).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  
**NAS5-98144 Contract Clause C.7 Technology Refreshment Process and 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,  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.)

**Stennis Space Center --- ODIN SERVICES**

Technology Infrastructure: SWR P203 2N06 00

Change in Delivery Order Price: \$74,972.06 (INCREASE)

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)

Director of Contracts  
Bonnie Brandon

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

Penelope A. Ebright  
Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY: (Signature of Contracting Officer)

NSN 7540-01-152-8070

30-105

STANDARD FORM 30 (Rev. 10-83)

PREVIOUS EDITION UNUSABLE

Prescribed by GSA  
FAR (48 CFR) 53.243

1. In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below is hereby incorporated into this Delivery Order at a fixed price of \$74,972.06.

SWR #	Subject	Amount
P203 2N06 00	Replace All Shared Media Network Hubs with Switched Media Network Hubs	\$74,972.06

**2. SWR P203 2N06 00**

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling and equipment installation) and materials necessary to replace all shared media network hubs with switched media network hubs as identified in OAO proposal dated May 20, 2002.

- a. The contractor shall perform the following tasks:

- 1) Remove all Marconi Ethernet switches from 1100M-hub closet (3) ES3810, and (1) PH7000.
- 2) Install a Cisco Cat6509 network hub e/w: (6) Catalyst 6000 48-port 10/100 cards, 1 Catalyst 6000 1-port Multimode OC-12 ATM Module.
- 3) Replace wiring in 1100M with 288 Cat5e solid core line cords from 110 blocks to Cat6509 network hub.
- 4) Install one ES3810 network hub network hub with 72 ports in building 2108.
- 5) Terminate 72 ports in building 2108 with solid core Cat5e line cords from the ES3810 network hub to the 110 blocks
- 6) Replace 1200A-H1 with one ES3810 network hub with 24 ports
- 7) Terminate 24 ports in hub closet of building 1200A with solid core Cat5e line cords from the ES3810 network hub to the 110 block.
- 8) Replace all Marconi Ethernet Switches in 1100N with a Cisco Cat6509 network hub e/w: (7) Catalyst 6000 48-port 10/100 cards, 1 Catalyst 6000 1-port Multimode OC-12 ATM Module
- 9) Terminate 48 ports in hub closet 1100N with solid core Cat5e line cords from Cisco Cat6509 network hub to 110 blocks.
- 10) Replace 1200-H1 network hub with an ES3810 network hub with 72 ports.
- 11) Terminate 72 ports with Cat5e line cords from the ES3810 network hub to the 110 blocks.
- 12) Replace 1100C-H1 network hub with an ES3810 network hub with 24 ports.
- 13) Replace MMAC8 network hub and PH7000 network hub in building 2204 with a Cisco Cat6509 network hub e/w: (3) 48port 10/100 cards, 1 Catalyst 6000 1-port Multimode OC-12 ATM Module.
- 14) Terminate 144 ports in building 2204 with Cat5e solid core line cords from the Cat6509 to the 110 blocks.
- 15) Replace 2420-H1 with a Catalyst 2950-24 with a GigE uplink to the Cat6509 in 2204
- 16) Terminate 24 ports in building 2420 with solid core Cat5e line cords with RJ-45 on one end to the 110 block (will use 110 block from other locations)
- 17) Replace 2204-H2 with a Catalyst 2950-24 with a GigE uplink to the Cat6509 in 2204
- 18) Terminate 12 ports in building 2204 –H2 wiring closet with solid core Cat5e line cords with RJ-45 on one end to the 110 block
- 19) Replace 2109-H1 with a Catalyst 2950-24 with GigE uplink to the Cat6509 in 2204

- 20) Terminate 24 ports in building 2204 wiring closet with solid core Cat5e line cords with RJ-45 on one end to the 110 block
- 21) Reroute existing fiber from current location in building 2120 to room 114
- 22) Replace 2120-H1 with a Catalyst 2950-24 with GigE uplink to Cat6509 in building 2204
- 23) Terminate 24 ports in building 2120 with Cat5e solid core line cords with RJ-45 on one end
- 24) Replace 8110-ES1 with a Catalyst 4000 with Gig uplink to 1201
- 25) Terminate 96 ports in building 8110 with Cat5e solid core line cords with RJ-45 on one end
- 26) Replace current Cabinet with one that will support 85 pounds or more
- 27) Replace UPS in 8110 with APC Smart UPS 3000, Smart UPS Battery Pack 48V
- 28) Replace HUB in 8120 with 2 10 Meg Ethernet to MM Fiber Transceivers (already in place)
- 29) Replace 4010-H1, 4010-ES2, 4010-PH1 with a Catalyst Cat6509: 5 48port 10/100 cards, 1 Catalyst 6000 1-port Multimode OC-12 ATM Module
- 30) Terminate 240 ports in building 4010 1<sup>st</sup> floor wiring closet with Cat5e solid core line cords with RJ-45 on one end from Cat6509 to 110 blocks
- 31) Replace 3407-H1 with a Catalyst 2950-24 with a fast Ethernet uplink
- 32) Install Cabinet in building 3407 using Cabinet, power strip, and ups from 8110
- 33) Terminate 24 ports in building 3407 with Cat5e solid core line cords with RJ-45 on one end from Cat6509 to 110 blocks
- 34) Replace 4995-ES1, 4995-ES2, 4995-PH1 with a Catalyst Cat6509: 5 48port 10/100 cards, OC-12 Multi-Mode Uplink.
- 35) Terminate 240 ports in Building 4995 with Cat5e solid core line cords with RJ-45 on one end from Cat6509 to 110 blocks.
- 36) Replace 1201S-PH1, 1201S-PH2, and 1201-ESX1 with a Catalyst 6506: 2 48 port 10/100 cards, OC-12 mm ATM Uplink.
- 37) Replace 1201S-ES1 network hub and 1201S-H1 network hub with a Catalyst 4000 e/w: (3) 48 port 10/100 cards.
- 38) Terminate 240 ports in Building 1201S with Cat5e solid core line cords with RJ-45 on one end to 110 blocks. (96 ports to go to the new Catalyst 6506, 144 ports to go to the new Catalyst 4000).
- 39) Replace 8101-H1 network hub with a Catalyst 2950-48 network hub with GigE uplink.
- 40) Terminate 48 ports in Building 8101 with Cat5e solid core line cords with RJ-45 on one end to 110 blocks.
- 41) Install one distributed Sniffer system in building 1201.
- 42) Replace 8301-H1 with a Catalyst 4000(3 48 port 10/100 port cards Gig uplink to 1201)
- 43) Terminate 144 ports in Building 8301 with Cat5e solid core line cords with RJ-45 on one end to 110 blocks.
- 44) Install new 7 FT equipment rack in building 8301.
- 45) Replace 3305-H1 with a Catalyst2950-48 with a GigE uplink to 1201
- 46) Terminate 24 ports from the 2950 network hub to a new 110 block in building 3305.
- 47) Terminate 24 jacks to a new 110 block in building 3305.
- 48) Replace 1201-LAB network hub with an ES3810 network hub.

- 49) Install 1 Catalyst 2950-24C network hub in wiring closet of building 1100N (victim net).
- 50) Terminate 24 ports from the 2950C network hub to the 110 block in building 1100N (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 51) Install 1 Catalyst 2950-24C network hub in building 3202-ES1 wiring closet.
- 52) Terminate 24 ports from the 2950C network hub to the 110 block in wiring closet of building 3202-ES1 (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 53) Install 1 Catalyst 2950-24C network hub in 1100M wiring closet.
- 54) Terminate 24 ports from the 2950C to the 110 block in wiring closet 1100M (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 55) Install 1 Catalyst 2950-24C network hub in building 4122 wiring closet.
- 56) Terminate 24 ports from the 2950-24C network hub to the 110 block in wiring closet of building 4122 (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 57) Install 1 Catalyst 2950-24C network hub in building 8100 wiring closet.
- 58) Terminate 24 ports from the 2950-24C network hub to the 110 block in the wiring closet of building 8100 (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 59) Install 1 Catalyst 2950-24C network hub in building 2205 wiring closet.
- 60) Terminate 24 ports from the 2950-24C network hub to the 110 block in the wiring closet of building 2205 (victim net) with Cat5e solid core line cords with RJ-45 on one end.
- 61) Install on Catalyst 3548 network hub in building 7001.
- 62) Terminate 48 ports from the Catalyst 3548 network hub to the 110 block in building 7001 wiring closet with Cat5e solid core line cords with RJ-45 on one end.

b. The contractor shall provide the following material:

- 1) 624 each 30 FT Cat5e solid core line cords with RJ-45 on one end
- 2) 576 each 20 FT Cat5e solid core line cords with RJ-45 on one end
- 3) 240 each 40 FT Cat5e solid core line cords with RJ-45 on one end
- 4) 188 each 10 FT Cat5e solid core line cords with RJ-45 on one end
- 5) 163 packs of 110C-4 connectors for 110 wiring blocks (073039) (10/each pack)
- 6) 34 each 3 meter ST-SC sm fiber jumpers
- 7) 32 each 3 meter ST-MTRJ mm fiber jumpers
- 8) 20 each 300 pair 110 blocks
- 9) 9 each 3 meter ST-ST sm fiber jumpers
- 10) 9 each 2 meter ST-ST sm fiber jumpers
- 11) 7 each 100 pair 110 wiring block
- 12) 4 each GL36WS Cabinet for building 8110,2120, 3407,8101
- 13) 4 each 7219-S Power Strip for building 8110 2120, 3407,8101
- 14) 4 each 7217 WS Fan Assembly for building 8110 2120, 3407,8101
- 15) 4 each 36WS-02 Plexiglass Door for building 8110 2120, 3407,8101
- 16) 4 each 3 meter sc-sc mm fiber jumpers
- 17) 2 each double sided vertical trough (11729-503) (166031)
- 18) 2 reels 1000 ft cat5 cross connect wire (J-2P24CBQE-5) (1000' reels)
- 19) 1 each APC Smart-UPS 3000(SU3000NET) for Building 8110
- 20) 1 each APC Smart –UPS 3000 Battery Pack, 48V(SU48BP) for Building 8110

- 21) 1 each 7 foot 19 inch rack for building 8301
  - 22) 1 each SC-SC 2 Meter Multi-Mode Fiber Jumper
  - 23) 1 each miscellaneous material (cable ties, screws, tape, etc.)
- c. NASA will provide the following material:
- 1) 8 each GFE 24 10/100 Ports with 2 100Base-FX uplinks Catalyst Switch WS-C2950C-24
  - 2) 8 each GFE Power Cord, 110V CAB-AC
  - 3) 8 each GFE 8X5XNBD SVC C2950 24 10/100 Ports 2 100Base-FX Port CON-SNT- C2950C24
  - 4) 1each GFE Distributed Sniffer 4 port 10/100 Ethernet HW and SW Pentium III SCAET05ADE
  - 5) 1 each GFE Helpdesk 1YR-12 X 5 (Perp.S/W) DSS/RMON Pro 4 Port ENET Bundle SSHET05ADM
  - 6) 1 each GFE 4 Port WAN HW and SW Distributed Sniffer SCAWANEADE
  - 7) 1 each GFE Helpdesk 1YR-12 X 5 (Perp.S/W) DSS/RMOB Pro 4 Port WAN Bundle SSHWANEADM
  - 8) 2 each GFE New Pentium 3HW and SW Bundle 1 Port GB SX and 1 Port 10/100 Ethernet Distribute SCAEGSXADEA
  - 9) 2 each GFE Helpdesk 1 YR-12 X 5 (Perp.S/W) DSS/RMON PRO 1 Port Gig SX/ENET SSHEGSXADM
  - 10) 4 each GFE Gigabit SX Splitter NGC-SXSP-NA-100
  - 11) 5 each GFE Catalyst Cat6509 Chassis WS-CCat6509
  - 12) 6 each GFE Catalyst 6000 2500W AC Power Supplies WS-CAC-2500W
  - 13) 6 each GFE Catalyst 6000 Second 2500W AC Power WS-CAC-2500W/2
  - 14) 12 each GFE Power Cord 2500VAC 16A Straight Blade NEMA 6-20 Plug US CAB-AC-2500W-US1
  - 15) 6 each GFE Catalyst 6000 Supervisor 1 Flash Image w/SSH, Release 7.1.1 SC6K-SUPK9-7.1.1
  - 16) 6 each GFE Catalyst 6000 Supervisor Engine 1 Enhanced QOS 2GE WS-X6K-SUP1A-2GE
  - 17) 23 each GFE Ethernet Modules ETHERNET MOD OPT
  - 18) 27 each GFE Catalyst 6000 48-Port 10/100 ENH QOS Inline Power RJ-45 WS-X6348-RJ45V
  - 19) 6 each GFE Catalyst 6000 1-Port Multimode OC-12 ATM Module WS-X6101-OC12-MMF
  - 20) 6 each GFE Cisco Catalyst 6000 Series IOS ATM OC12 Modules X6101 SC6ATM-12.0.5XS
  - 21) 5 each GFE 8x5Xnbd Service Catalyst Cat6509 CONT-SNT-WS-CCat6509
  - 22) 1 each GFE Catalyst 6508 Chassis WS-C6506
  - 23) 1 each GFE 8x5Xnbd Service Catalyst 6506 CONT-SNT-WS-C6506
  - 24) 3 each GFE Catalyst 4000 Chassis (6-Slot) SUPRVSR II (2) AC PS Fans WS-C4006-S2
  - 25) 4 each GFE 1000Base-SX Short Wavelength GBIC (Multimode Only) WS\_G5484
  - 26) 7 each GFE Catalyst 4000 Inline Power 10/100 48-Ports (RJ45) WS-X4148-RJ45V
  - 27) 3 each GGE Catalyst 4K Supervisor Flash Image, Release 6.3.3 SC4K-SUP-6.3.3
  - 28) 3 each GFE Catalyst 4000 AC PS Redundant WS-X40083
  - 29) 9 each GFE AC Power Cord North America CAB-7KAC

- 30) 3 each GFE 8x5XNBD SVC CAT 4000(6-slot) SUPRVSR II (2) AC PSFANS CONT-SNT- WS-C4006
- 31) 1 each GFE Catalyst 6000 8-Port GE, Enhanced QOS (Req. GBICS) WS-X6408A-GBIC
- 32) 15 each GFE 1000Base-LX/LH Long Haul GBIC (Singlemode or Multimode) WS-G5486
- 33) 1 each GFE Catalyst 4000 Supervisor II Console (RJ-45) MGT (RJ-45)(Spare) WS-X4013
- 34) 1 each GFE Catalyst 2950 48 10/100 with 2 GBIC Slots Enhanced Image WS-C2950-48-EI
- 35) 8 each GFE Power Cord, 1110V CAB-AC
- 36) 1 each GFE 8x5xNBD SVC, CONT-SNT-C2950G48
- 37) 5 each GFE Catalyst 2950 24 10/100 with 2 GBIC Slots Enhanced Image WS-C2950-24-EI
- 38) 1 each GFE 8x5xNBD SVC, WS-C2950G-24 CONT-SNT-C2950G24
- 39) 1 each GFE 10/100 Ports with 2 100Base-FX Uplinks Catalyst Switch WS-C2950C-24
- 40) 1 each GFE 8x5xNBD SVC C2950 24 10/100 Ports 2 100Base-FX Port CONT-SNT-C2950C24
- 41) 1 each GFE Catalyst 3548 XL enterprise Edition WS-C3548-XL-EN
- 42) 1 each GFE 8x5xNBD SVC Catalyst 3548

d. Schedule: The completion of this effort shall be (20) twenty weeks after the receipt of a signed Modification.

3. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$74,972.06 for these infrastructure upgrades:

**4. TOTAL DELIVERY ORDER VALUE (through Mod No. 40)**

Ordered Seats/Service Levels (Attachment A)	\$2,133,364.03
Catalog Actuals	\$87,819.69
Specialized Services	\$2,250.00
Infrastructure Upgrades	\$1,054,877.74
Sub-total	\$3,278,311.46
Less credits	(\$353.95)
Less retainage not earned	(\$13,356.31)
Sub-total	\$3,264,601.20
Seats/Service levels projected through 11/30/04	\$13,489,817.69
<b>Total Estimated Delivery Order Value:</b>	<b>\$16,754,418.89</b>

4. Part V “Technology Infusion (Infrastructure Upgrades)”, Item 2 is modified to include the subject infrastructure upgrades. The signed date and completion date will be completed in a future infrastructure upgrade modification.

Mod. No.	Description of Work	Date Signed	Completion Date	Modification Value
40	P203 2N06 00 Replace All Shared Media Network Hubs with Switched Media Network Hubs			\$74,972.06

5. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified).
6. Reporting requirements: The contractor shall provide monthly status reports to the SSC Alternate DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
7. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
8. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.