

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
PAGE OF PAGES
1 6

2. AMENDMENT/MODIFICATION NO. **118**
3. EFFECTIVE DATE **See Block 16C**
4. REQUISITION/PURCHASE REQ. NO.
5. PROJECT NO. (If applicable)

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)
**OA0 Corporation
7375 Executive Place
Seabrook, MD 20706-2278**
(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

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 Infrastructures: Incorporation of SWRs J1P0 E605 04 and P203 4212 F4

Change in Delivery Order Price: \$106,728.32 (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) Keith L. Spencer Sr. Contracts Manager	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Penelope A. Ebright Contracting Officer
15B. CONTRACTOR/OFFEROR <i>Keith L. Spencer</i> (Signature of person/authorized to sign)	16B. UNITED STATES OF AMERICA BY <i>Penelope A. Ebright</i> (Signature of Contracting Officer)
15C. DATE SIGNED 5/7/04	16C. DATE SIGNED 5/14/04

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 \$106,728.32

SWR #	Subject	Amount
J1P0 E605 04	Install (60) Belden 9274 RG59/U coax cables for Rocketdyne between B4110 and B4120 to monitor the testing of engines	\$34,988.20
P203 4212 F4	Install network cabinets, Cat6 wiring and fiber for support in B1201 for NASA networks	\$71,740.12
TOTAL		\$106,728.32

2. SWR J1P0 E605 04

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary to install (60) Belden 9274 RG59/U coax cables from bay 1006 in room 102B of B4110 to bay 38/39, Level 6 of B4120 for Rocketdyne as outlined in OAO proposal dated March 30, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Install (60) Belden 9274 RG59/U coax cables from room 102B in B4110 through cable tunnel to level 6 bay 38 /39 in B4120 and leave 20 feet of slack on each end.
 - (2) Attach temporary labels on both ends with sequential numbers from 1 to 60.
- b. The contractor shall provide the following material:
 - (1) 96,000 feet of Belden 9274, RG59/U coaxial cable (B9274)
 - (2) 12 rolls of 1" vinyl tape
 - (3) 2 packs of 15" cable ties
 - (4) 1 pack Panduit labels
- c. Schedule: The completion of this effort shall be (8) eight weeks after receipt of a signed modification.

3. P203 4212 F4

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 install (3) new equipment cabinets in room 106A to accommodate all four point rack installations from room 116 in B1201 to support NASA networks, relocate existing 4-point equipment into racks; install Cat6 and fiber to support the following equipment moves as reflected in OAO proposal dated February 17, 2004.

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Install 3 new Great Lakes Cabinets in room 106A of building 1201.
 - (2) Install flextray under floor between new cabinets and current cabinets.
 - (3) Install (3) new visipatch panels on east wall of room 116 where other visipatch panels are mounted.

- (4) Install (48) Cat6 wires from each cabinet in room 106A to room 116 to new visipatch panels.
 - (5) Install (1) new LGX panel in first cabinet in room 106A.
 - (6) Install (1) 24-strand multimode fiber cable from existing LGX panels in room 116 to first cabinet in room 106A.
 - (7) Install (1) 24-strand singlemode fiber cable from existing LGX panels in room 116 to first cabinet in room 106A.
 - (8) Test and label Cat6 wiring in both rooms.
 - (9) Test and label fiber in both rooms.
 - (10) Provide OAO with redline drawings showing flextray, fiber and Cat6 wiring runs.
- b. The contractor shall provide the following material:
- (1) 12,000 feet of Avaya 2071 level 7 wiring (CMP-00424AVA-7U-06)
 - (2) 75 feet of Corning MIC 24-strand multimode fiber cable (370-949-FDDI-24)
 - (3) 75 feet of Corning MIC 24-strand singlemode fiber cable (370-948-SMODE-24)
 - (4) 60 each Avaya visipatch distribution rings (532421)
 - (5) 50 each Velcro ties
 - (6) 48 each C2000A multimode ST couplers (088987)
 - (7) 48 each C3000A-2 singlemode ST couplers (105263)
 - (8) 48 each cool cure consumables (142172)
 - (9) 48 each P2020C-C-125 multimode ST connectors (170290)
 - (10) 48 each P3020A-C-125 singlemode ST connectors (157475)
 - (11) 30 each cable organizer (CM-05) Great Lakes (215648)
 - (12) 10 each 8-inch L brackets (217074)
 - (13) 10 each stanchion clamp (216883)
 - (14) 10 each stationary shelves (7206-EIA) Great Lakes (131892)
 - (15) 6 each mesh doors (front & rear) (8402E-M29) Great Lakes
 - (16) 6 each power strips (7215-20) Great Lakes (248813)
 - (17) 6 each vertical cable management (CME-8429) Great Lakes
 - (18) 5 each Flextray 2" x 8" x 10" (174337)
 - (19) 3 each Avaya 24-port Cat6 PatchMax patch panel (246722)
 - (20) 3 each Avaya 336-pair visipatch panel (532210)
 - (21) 3 each Avaya visipatch horizontal duct (539650)
 - (22) 3 sets of casters (2-unlocking & 2-locking) (7208) Great Lakes
 - (23) 3 each black equipment cabinets (GL8401E-2936) Great Lakes
 - (24) 3 packs M6 cage nuts e/w screws (HDW-105-50) Great Lakes
 - (25) 3 pair 19" EIA mounting rails to accept M6 cage nuts (8405-E2P)
 - (26) 3 each sliding shelf (7206_FRSL-ADHD) Great Lakes
 - (27) 3 each black louvered top panel e/w (2) 4" holes (TPE-29L) Great Lakes
 - (28) 1 pack of 1000ST panels for LST1U-072/7 (106730)
 - (29) 2 each Flex tray Z bracket (174353)
 - (30) 1 each LST1U-072/7 termination shelf (106722)
 - (31) 2 packs of washer splice kit (214856)
 - (32) 1 pair of side panels for equipment cabinets (8411-36ELL) Great Lakes
 - (33) 1 each Network Technologies console switch Serimux (SE-RS-32-R)
 - (34) 1 each Network Technologies RM Intelligent term (RACKMUX-Term)
 - (35) 10 each Network Technologies 9D female to 9D female Null Modem (Dint-6-FF)
 - (36) 10 each Network technologies 25D male to 9D female (25DM-9DF-6)
 - (37) 10 each Network Technologies RJ45 to 9D female (RJ45-9DF-6)
 - (38) 1 each Blackbox servswitch 16-port (SW725A-R4)
 - (39) 1 each Blackbox rack kit for servswitch (RMK19C)
 - (40) 1 each Blackbox Serview II Ultra (KVT130A)

- (41) 1 each Blackbox servswitch to KVM cable 5 feet (EHN154-005)
- (42) 16 each BlackBox CPU/Server to ServSwitch Cable 10 foot PN EHN151-0010
- (43) 30 each st-sc 1 meter single mode fiber jumpers (152036)
- (44) 20 each st-sc 5 meter single mode fiber jumpers (152039)
- (45) 20 each st-sc 1 meter multi-mode fiber jumpers (152011)
- (46) 20 each 3 foot blue CAT6 cables with RJ45 on both ends (MM03-AV7E-06)
- (47) 20 each 7 foot blue CAT6 cables with RJ45 on both ends (MM07-AV7E-06)
- (48) 20 each 10 foot blue CAT6 cable with RJ45 on both ends (MM10-AV7E-06)
- (49) 20 each 14 foot blue CAT6 cable with RJ45 on both ends (MM14-AV7E-06)
- (50) 20 each 19 foot blue CAT6 cable with RJ45 on both ends (MM19-AV7E-06)
- (51) 20 each 3 foot lilac CAT6 cable with RJ45 on both ends (MM03-AV7E-10)
- (52) 20 each 7 foot lilac CAT6 cable with RJ45 on both ends (MM07-AV7E-10)
- (53) 20 each 10 foot lilac CAT6 cable with RJ45 on both ends (MM10-AV7E-10)
- (54) 20 each 14 foot lilac CAT6 cable with RJ45 on both ends (MM14-AV7E-10)
- (55) 20 each 19 foot lilac CAT6 cable with RJ45 on both ends (MM19-AV7E-10)
- (56) 20 each 3 foot orange CAT6 cable with RJ45 on both ends (MM03-AV7E-08)
- (57) 20 each 7 foot orange CAT6 cable with RJ45 on both ends (MM07-AV7E-08)
- (58) 20 each 10 foot orange CAT6 cable with RJ45 on both ends (MM10-AV7E-08)
- (59) 20 each 14 foot orange CAT6 cable with RJ45 on both ends (MM14-AV7E-08)
- (60) 20 each 19 foot orange CAT6 cable with RJ45 on both ends (MM19-AV7E-08)
- (61) 20 each 3 foot red 15 foot CAT6 cable with RJ45 on both ends (MM03-AV7E-03)
- (62) 20 each 7 foot red 15 foot CAT6 cable with RJ45 on both ends (MM07-AV7E-03)
- (63) 20 each 10 foot red 15 foot CAT6 cable with RJ45 on both ends (MM10-AV7E-03)
- (64) 20 each 14 foot red 15 foot CAT6 cable with RJ45 on both ends (MM14-AV7E-03)
- (65) 20 each 19 foot red 20 foot CAT6 cable with RJ45 on both ends (MM19-AV7E-03)
- (66) 20 each 3 foot yellow CAT6 cables with RJ45 on both ends (MM03-AV7E-05)
- (67) 20 each 7 foot yellow CAT6 cables with RJ45 on both ends (MM07-AV7E-05)
- (68) 20 each 10 foot yellow CAT6 cable with RJ45 on both ends (MM10-AV7E-05)
- (69) 20 each 14 foot yellow CAT6 cable with RJ45 on both ends (MM14-AV7E-05)
- (70) 20 each 19 foot yellow CAT6 cable with RJ45 on both ends (MM19-AV7E-05)
- (71) 20 each 3 foot greenCAT6 cables with RJ45 on both ends (MM03-AV7E-04)
- (72) 20 each 7 foot green CAT6 cables with RJ45 on both ends (MM07-AV7E-04)
- (73) 20 each 10 foot green CAT6 cable with RJ45 on both ends (MM10-AV7E-04)
- (74) 20 each 14 foot green CAT6 cable with RJ45 on both ends (MM14-AV7E-04)
- (75) 20 each 19 foot green CAT6 cable with RJ45 on both ends (MM19-AV7E-04)
- (76) 1 each Network Technologies console switch Serimux (SE-RS-32-R)
- (77) 1 each Network Technologies RM Intelligent Term (RACKMUX-TERM)
- (78) 10 each Network Technologies 9D female to 9D female null modem cable (DINT-6-FF)
- (79) 10 each Network Technologies 25D male to 9D female cable (25DM-9DF-6)
- (80) 10 each Network Technologies RJ45 to 9D female cable (RJ45-9DF-6)
- (81) 1 each Blackbox Servswitch 16-port (SW725A-R4)
- (82) 1 each Blackbox rack kit for Servswitch (RMK19C)
- (83) 1 each Blackbox Servview II Ultra (KVT130A)
- (84) 1 each Blackbox Servswitch to KVM cable 5' (EHN154-0005)
- (85) 16 each Blackbox CPU/Server to Servswitch cable 10' (EHN151-0010)
- (86) 30 each st-sc 1 meter single mode fiber jumpers (152036)
- (87) 20 each st-sc 5 meter single mode fiber jumpers (152039)
- (88) 20 each st-sc 1 meter multi-mode fiber jumpers (152011)
- (89) 20 each 3 foot blue CAT6 cables with RJ45 on both ends (MM03-AV7E-06)
- (90) 20 each 7 foot blue CAT6 cables with RJ45 on both ends (MM07-AV7E-06)
- (91) 20 each 10 foot blue CAT6 cable with RJ45 on both ends (MM10-AV7E-06)
- (92) 20 each 14 foot blue CAT6 cable with RJ45 on both ends (MM14-AV7E-06)

- (93) 20 each 19 foot blue CAT6 cable with RJ45 on both ends (MM19-AV7E-06)
- (94) 20 each 3 foot lilac CAT6 cable with RJ45 on both ends (MM03-AV7E-10)
- (95) 20 each 7 foot lilac CAT6 cable with RJ45 on both ends (MM07-AV7E-10)
- (96) 20 each 10 foot lilac CAT6 cable with RJ45 on both ends (MM10-AV7E-10)
- (97) 20 each 14 foot lilac CAT6 cable with RJ45 on both ends (MM14-AV7E-10)
- (98) 20 each 19 foot lilac CAT6 cable with RJ45 on both ends (MM19-AV7E-10)
- (99) 20 each 3 foot orange CAT6 cable with RJ45 on both ends (MM03-AV7E-08)
- (100) 20 each 7 foot orange CAT6 cable with RJ45 on both ends (MM07-AV7E-08)
- (101) 20 each 10 foot orange CAT6 cable with RJ45 on both ends (MM10-AV7E-08)
- (102) 20 each 14 foot orange CAT6 cable with RJ45 on both ends (MM14-AV7E-08)
- (103) 20 each 19 foot orange CAT6 cable with RJ45 on both ends (MM19-AV7E-08)
- (104) 20 each 3 foot red 15 foot CAT6 cable with RJ45 on both ends (MM03-AV7E-03)
- (105) 20 each 7 foot red 15 foot CAT6 cable with RJ45 on both ends (MM07-AV7E-03)
- (106) 20 each 10 foot red 15 foot CAT6 cable with RJ45 on both ends (MM10-AV7E-03)
- (107) 20 each 14 foot red 15 foot CAT6 cable with RJ45 on both ends (MM14-AV7E-03)
- (108) 20 each 19 foot red 20 foot CAT6 cable with RJ45 on both ends (MM19-AV7E-03)
- (109) 20 each 3 foot yellow CAT6 cables with RJ45 on both ends (MM03-AV7E-05)
- (110) 20 each 7 foot yellow CAT6 cables with RJ45 on both ends (MM07-AV7E-05)
- (111) 20 each 10 foot yellow CAT6 cable with RJ45 on both ends (MM10-AV7E-05)
- (112) 20 each 14 foot yellow CAT6 cable with RJ45 on both ends (MM14-AV7E-05)
- (113) 20 each 19 foot yellow CAT6 cable with RJ45 on both ends (MM19-AV7E-05)
- (114) 20 each 3 foot green CAT6 cables with RJ45 on both ends (MM03-AV7E-04)
- (115) 20 each 7 foot green CAT6 cables with RJ45 on both ends (MM07-AV7E-04)
- (116) 20 each 10 foot green CAT6 cable with RJ45 on both ends (MM10-AV7E-04)
- (117) 20 each 14 foot green CAT6 cable with RJ45 on both ends (MM14-AV7E-04)
- (118) 20 each 19 foot green CAT6 cable with RJ45 on both ends (MM19-AV7E-04)

c. Schedule: The completion of this effort shall be (16) sixteen weeks after the receipt of a signed modification.

4. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$106,728.32 for this infrastructure upgrade:

ESTIMATED TOTAL (Contract Item 4) (through Mod 118)

Ordered Seats and Services	\$ 10,936,603.27
Catalog Actuals	\$ 676,781.44
Specialized Services Actuals	\$ 224,796.72
Infrastructure upgrades	\$ 3,232,684.15
Fast Track Mods Authorized	\$ 18,968.25
Subtotal	\$ 15,089,833.83
Less credits	\$ (2,625.55)
Less retainage not earned	\$ (33,905.56)
Subtotal	\$ 15,053,302.72
Seats/service levels projected through 11/30/04	\$ 2,689,097.60
Total Estimated Delivery Order Value	\$ 17,742,400.32

5. 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	Description	Date Signed	Date Completed	Amount
118	J1P0 E605 04 Install (60) Belden 9274 RG59/U coax cables for Rocketdyne between B4110 and B4120 to monitor the testing of engines			\$34,988.20
118	P203 4212 F4 Install network cabinets, Cat6 wiring and fiber for support in B1201 for NASA networks			\$71,740.12

6. 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).
- a. The following payment schedule is applicable for **SWR P203 4212 F4** only:
 - i. Upon receipt of material and acceptance by the ADOCOTR or his designee the contractor may invoice for \$42,054.72
 - ii. At the completion of this infrastructure upgrade and acceptance by the ADOCOTR or his designee, the contractor may invoice for the balance, \$29,685.40.
7. 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.
8. 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.
9. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.