

Program No. 2385-S. Term: Date of Award Thru September 30, 2016 plus up to 4 Options Years						
Title: CD/DVD Products						
			Audio and Video Labs, Inc. DB	CDI Media , Inc.		
		BASIS OF	290-27876	430-16146		
ITEM NO	DESCRIPTION	AWARD	UNIT RATE	COST	UNIT RATE	COST
I.	CD-ROMs and DVD-ROM:					
(1)	CD-ROM:					
(a)	Mastering.....per master	99	68.42	6,773.58	95.00	9,405.00
(b)	Replication of CD-ROM discs.....per 100 discs	1558	25.44	39,635.52	22.70	35,366.60
(c)	Pre-production check discs.....per disc	20	9.35	187.00	110.00	2,200.00
(2)	DVD-ROM: DVD - 5					
(a)	Mastering.....per master	45	84.21	3,789.45	105.00	4,725.00
(b)	Replication of DVD-ROM discs.....per 100 discs	371	36.71	13,619.41	33.40	12,391.40
(c)	Pre-production check discs.....per disc	15	11.55	173.25	120.00	1,800.00
(3)	DVD-ROM: DVD - 9					
(a)	Mastering.....per master	3	126.32	378.96	210.00	630.00
(b)	Replication of DVD-ROM discs.....per 100 discs	19	42.28	803.32	35.80	680.20
(c)	Pre-production check discs.....per disc	1	13.75	13.75	225.00	225.00
II.	Printing, Construction, and Packaging:					
(a)	One Disc Individual Self-Mailer.....per mailer					
(1)	Black Ink or a Color Other Than Black MR & SU Charges	119	270.95	32,243.05	90.00	10,710.00
(2)	Black Ink or a Color Other Than Black per 100 Copies	1736	41.84	72,634.24	80.00	138,880.00
(3)	EA Additional Ink Color MR & SU Charges	10	44.47	444.70	75.00	750.00
(4)	EA Additional Ink Color per 100 Copies	330	2.74	904.20	8.25	2,722.50
(b)	Two Disc Individual Self-Mailer.....per mailer					
(1)	Black Ink or a Color Other Than Black MR & SU Charges	6	270.95	1,625.70	90.00	540.00
(2)	Black Ink or a Color Other Than Black per 100 Copies	40	46.05	1,842.00	86.00	3,440.00
(3)	EA Additional Ink Color MR & SU Charges	1	44.47	44.47	75.00	75.00
(4)	EA Additional Ink Color per 100 Copies	20	2.74	54.80	8.25	165.00
(c)	Three Disc Individual Self-Mailer.....per mailer					
(1)	Black Ink or a Color Other Than Black MR & SU Charges	5	316.11	1,580.55	90.00	450.00
(2)	Black Ink or a Color Other Than Black per 100 Copies	20	68.74	1,374.80	102.00	2,040.00
(3)	EA Additional Ink Color MR & SU Charges	1	88.95	88.95	75.00	75.00
(4)	EA Additional Ink Color per 100 Copies	20	2.74	54.80	8.25	165.00
(d)	Four Disc Individual Self-Mailer.....per mailer					
(1)	Black Ink or a Color Other Than Black MR & SU Charges	1	338.68	338.68	90.00	90.00
(2)	Black Ink or a Color Other Than Black per 100 Copies	20	82.53	1,650.60	122.00	2,440.00
(3)	EA Additional Ink Color MR & SU Charges	1	88.95	88.95	75.00	75.00
(4)	EA Additional Ink Color per 100 Copies	20	2.74	54.80	8.25	165.00
(e)	Five Disc Individual Self-Mailer.....per mailer					
(1)	Black Ink or a Color Other Than Black MR & SU Charges	1	410.53	410.53	90.00	90.00
(2)	Black Ink or a Color Other Than Black per 100 Copies	20	105.89	2,117.80	147.00	2,940.00
(3)	EA Additional Ink Color MR & SU Charges	1	88.95	88.95	75.00	75.00
(4)	EA Additional Ink Color per 100 Copies	20	2.74	54.80	8.25	165.00
III.	Additional Operations					
(a)	Packing individual self-mailers into shipping containers	4585	1.86	8,528.10	1.60	7,336.00
(b)	Pallets..... per pallet.....	12	30.53	366.36	20.00	240.00
	<b>CONTRACTOR TOTALS</b>			<b>191,966.07</b>		<b>241,051.70</b>
	<b>DISCOUNT</b>		5.00%	<b>\$9,598.30</b>	1.00%	<b>\$2,410.52</b>
	<b>DISCOUNTED TOTALS</b>			<b>\$182,367.77</b>		<b>\$238,641.18</b>
				<b>AWARD</b>		
	Abstracted by: Ledo Ulerio					
	Reviewed by: Richard Gilbert					

U.S. GOVERNMENT PRINTING OFFICE  
Virginia Beach, Virginia

GENERAL TERMS, CONDITIONS, AND SPECIFICATIONS

For the Procurement of

CD/DVD Products

as requisitioned from the U.S. Government Printing Office (GPO) by the

Department of the Army

Single Award

**TERM OF CONTRACT:** The term of this contract is for the period beginning Date of Award, and ending September 30, 2016, plus up to four (4) optional 12-month extension periods that may be added in accordance with the "OPTION TO EXTEND THE TERM OF THE CONTRACT" clause in Section 1 of this contract.

**BID OPENING:** Bids shall be publicly opened at 2:00p.m., prevailing Eastern Standard Time, on September 18, 2015.

**BID SUBMISSION:** Submit bids to: U.S. Government Publishing Office, 291 Independence Blvd. Suite 401, Virginia Beach, VA 23462. Facsimile bids in response to this solicitation are permitted. Facsimile bids may be submitted directly to the GPO Fax No. (757) 490-7950. The program number and bid opening date must be specified with the bid. Refer to Facsimile Bids in Solicitation Provisions of GPO Contract Terms, GPO Publication 310.2, as revised June 2001. **NOTE: FAXED BIDS RECEIVED AFTER 2:00 P.M. WILL NOT BE CONSIDERED FOR AWARD.**

Do NOT fax double sets or extra copies of forms that have not been requested; only fax the pages in SECTION 4 of these specifications, with all of the information completed as requested.

**BIDDERS PLEASE NOTE:** The WARRANTY clause on p.5 has been extended.

Abstract of previous procurement for 2385-S, contract prices are available at [www.gpo.gov/gpo/abstracts/abstract.action?region=Virginia Beach](http://www.gpo.gov/gpo/abstracts/abstract.action?region=Virginia%20Beach)

For information of a technical nature call Richard Gilbert at (757) 490-7944 (no collect calls).

## SECTION 1.- GENERAL TERMS AND CONDITIONS

**GPO CONTRACT TERMS** Any contract which results from this Invitation for Bid will be subject to GPO Contract Terms (GPO Publication. 310.2, effective December 1, 1987 (Rev. 6-01)) and Quality Assurance Through Attributes Program for Printing and Binding (GPO Publication. 310.1, effective May 1979 (Rev. 8-02)).

GPO PUBLICATION. 310.2 IS AVAILABLE ON THE GPO WEB SITE AT  
<http://www.gpo.gov/pdfs/vendors/sfas/terms.pdf>

GPO PUBLICATION. 310.1 IS AVAILABLE ON THE GPO WEB SITE AT  
<http://www.gpo.gov/pdfs/vendors/ac-sfas/qatap.pdf>

**DISPUTES:** GPO Publication 310.2, GPO Contract Terms, Contract Clause 5. Disputes, is hereby replaced with the June 2008 clause found at <http://www.gpo.gov/pdfs/vendors/contractdisputes.pdf>. This June 2008 clause also cancels and supersedes any other disputes language currently included in existing contractual actions.

**PREDOMINANT PRODUCTION FUNCTION:** The predominate production functions for this procurement is the replication of the CD/DVDs and Printing in Quality Level III. It is important to note that the printing portion of this contract is as important as the disc replication portion. **Bidder who must subcontract either of these operations will be declared non-responsible.**

**Duplication of CD/DVD's will not be acceptable.**

**DVD DUPLICATION/REPLICATION:** Several firms claim patent rights, which may be applicable to DVD replication. For example, see <http://www.licensing.philips.com>. U.S. Philips Corporation and Sony Corporation claim to hold patents for certain technologies essential to the manufacture and replication of DVDs and assert it is impossible to manufacture or replicate a DVD without infringing these patents. The patent claims cover, among other things, both the physical structure of and the manner in which data is encoded on a DVD. Other firms, including Discovision Associates, Irvine, CA, also claim similar patent rights.

By submission of a bid, bidders certify that they hold a license under all patents applicable to their duplication/replication of DVDs.

Each bidder's attention is invited to the patent indemnification provisions of GPO Contract Terms (GPO Publication 310.2, effective December 1, 1987 (Rev.6-01)) since the successful bidder will be responsible for compliance with all applicable patents, including any for DVDs.

**QUALITY ASSURANCE LEVELS AND STANDARDS:** The following levels and standards shall apply to these specifications:

Product Quality Levels:

- (a) Printing Attributes -- Level III.
- (b) Finishing Attributes -- Level III.
- (c) Exception -- Printing attributes do not apply to the disc label.

Inspection Levels (from ANSI/ASQC Z1.4):

- (a) Non-destructive Tests - General Inspection Level I.
- (b) Destructive Tests - Special Inspection Level S-2.

Specified Standards: The specified standards for the attributes requiring them shall be:

Attribute

Specified Standard

P-7. Type Quality and Uniformity

Electronic Media/Average type dimension

P-9. Solid and Screen Tint Color Match

Pantone Matching System

**OPTION TO EXTEND THE TERM OF THE CONTRACT:** The Government has the option to extend the term of this contract for a period of 12 months by written notice to the contractor not later than 30 days before the contract expires. If the Government exercises this option, the extended contract shall be considered to include this clause, except, the total duration of the contract may not exceed 5 years as a result of, and including, any extension(s) added under this clause. Further extension may be negotiated under the "Extension of Contract Term" clause. See also "ECOMOMIC PRICE ADJUSTMENT" for authorized pricing adjustment(s).

**EXTENSION OF CONTRACT TERM:** At the request of the Government, the term of any contract resulting from this solicitation may be extended for such period of time as may be mutually agreeable to the GPO and the contractor.

**ECONOMIC PRICE ADJUSTMENT:** The pricing under this contract shall be adjusted in accordance with this clause, provided that in no event will any pricing adjustment be made that would exceed the maximum permissible under any law in effect at the time of the adjustment. There will be no adjustment for orders placed during the first period specified below. Pricing will thereafter be eligible for adjustment during the second and any succeeding performance period(s). For each performance period after the first, a percentage figure will be calculated as described below and that figure will be the economic price adjustment for that entire next period. Pricing adjustments under this clause are not applicable to reimbursable postage or transportation costs, or to paper, if paper prices are subject to adjustment by separate clause elsewhere in this contract.

For the purpose of this clause, performance under this contract will be divided into successive periods. The first period will extend from Date of Award to September 30, 2016, and the second and any succeeding period(s) will extend for 12 months from the end of the last preceding period, except that the length of the final period may vary. The first day of the second and any succeeding period(s) will be the effective date of the economic price adjustment for that period.

Pricing adjustments in accordance with this clause will be based on changes in the seasonally adjusted "Consumer Price Index For All Urban Consumers - Commodities Less Food" (Index) published monthly in the CPI Detailed Report by the U.S. Department of Labor, Bureau of Labor Statistics.

The economic price adjustment will be the percentage difference between Index averages as specified in this paragraph. An index called the variable index will be calculated by averaging the monthly Indexes from the 12-month interval ending three (3) months prior to the beginning of the period being considered for adjustment. This average is then compared to the average of the monthly Indexes for the 12-month interval ending June 31, 2016, called the base index. The percentage change (plus or minus) of the variable index from the base index will be the economic price adjustment for the period being considered for adjustment.

The Government will notify the contractor by contract modification specifying the percentage increase or decrease to be applied to invoices for orders placed during the period indicated. The contractor shall apply the percentage increase or decrease against the total price of the invoice less reimbursable postage or transportation costs and separately adjusted paper prices. Payment discounts shall be applied after the invoice price is adjusted.

**PREAWARD SURVEY:** In order to determine the responsibility of the prime contractor or any subcontractor, the Government reserves the right to conduct an on-site preaward survey or to require other evidence of technical, production, managerial, financial, and similar abilities to perform, prior to the award of a contract.

**POSTAWARD CONFERENCE:** The total requirements of the job as indicated in these specifications may be reviewed by Government representatives with the contractor's representatives at the U.S. Government Publishing Office, Virginia Beach, VA, immediately after award.

**ASSIGNMENT OF JACKETS, PURCHASE AND PRINT ORDERS:** A GPO jacket number will be assigned and a purchase order issued to the contractor to cover work performed. The purchase order will be supplemented by an individual print order for each job placed with the contractor. The print order, when issued, will indicate the quantity to be produced and any other information pertinent to the particular order.

**ORDERING:** Items to be furnished under the contract shall be ordered by the issuance of print orders by the Government. Orders may be issued under the contract from Date of Award through September 30, 2016, plus for such additional period(s) as the contract is extended. All print orders issued hereunder are subject to the terms and conditions of the contract. The contract shall control in the event of conflict with any print order. A print order shall be "issued", for purposes of the contract, when it is either deposited in the U.S. Postal Service mail or otherwise furnished to the contractor in conformance with the schedule.

**SECURITY OF DATA:** The contractor shall not release, or sell, to any person any technical or other data received from the Government under the contract; nor shall the contractor use the data for any purpose other than that for which it was provided to the contractor under the terms of the contract.

Items placed on this contract identified as "Restricted Distribution" on the print orders must be produced under conditions requiring the following:

1. All data and any physical products to include masters, intermediates, proofs, stampers, replications, are to be stored in a closed, secure area when not in use.
2. After production, all materials not delivered to the Government are to be destroyed by shredding, grinding, or any method that will prevent disclosure of contents, or reconstruction of data.
3. All electronic data is to be handled on a secure system not connected to a network.

**REQUIREMENTS:** This is a requirements contract for the items and for the period specified herein. Shipment/delivery of items or performance of work shall be made only as authorized by orders issued in accordance with the clause entitled "ORDERING". The quantities of items specified herein are estimates only, and are not purchased hereby. Except as may be otherwise provided in this contract, if the Government's requirements for the items set forth herein do not result in orders in the amounts or quantities described as "estimated", it shall not constitute the basis for an equitable price adjustment under this contract.

Except as otherwise provided in this contract, the Government shall order from the contractor all the items set forth which are required to be purchased by the Government activity identified on page 1.

The Government shall not be required to purchase from the contractor, requirements in excess of the limit on total orders under this contract, if any.

Orders issued during the effective period of this contract and not completed within that time shall be completed by the contractor within the time specified in the order, and the rights and obligations of the contractor and the Government respecting those orders shall be governed by the terms of this contract to the same extent as if completed during the effective period of this contract.

If shipment/delivery of any quantity of an item covered by the contract is required by reason of urgency prior to the earliest date that shipment/delivery may be specified under this contract, and if the contractor will not accept an order providing for the accelerated shipment/delivery, the Government may procure this requirement from another source.

The Government may issue orders which provide for shipment/delivery to or performance at multiple destinations.

Subject to any limitations elsewhere in this contract, the contractor shall furnish to the Government all items set forth herein which are called for by print orders issued in accordance with the "ORDERING" clause of this contract.

**WARRANTY:** The provisions of article 15, "Warranty", of Contract Clauses in GPO Contract Terms (Pub. 310.2, effective December 1, 1987, Rev. 6-01) is amended for the solicitation to the effect that the warranty period is EXTENDED from 120 days to one calendar year from the date the check is tendered as final payment, for all replications which prove to be defective in material, manufacture, or labeling. All other provisions remain the same.

**RETURN OF GOVERNMENT FURNISHED PROPERTY:** The contractor must deliver all material furnished by the Government or digital deliverables, together with one printed sample of each job to the address under "DISTRIBUTION." These materials must be packaged, properly labeled, and delivered separate from the job. The contractor must be able to produce a signed receipt for these materials at any time during the term of the contract.

**PAYMENT:** Submit all billing to: U.S. Government Publishing Office, Comptroller, Stop FMCE, Financial Management Service, Washington, DC 20401.

TO INSURE PAYMENT FROM GPO, PLEASE MAKE SURE TO USE THE GPO BAR CODE COVER SHEET WITH YOUR INVOICE. REFER TO THE FOLLOWING WEB PAGE FOR INSTRUCTIONS:  
<http://winapps.access.gpo.gov/fms/vouchers/barcode/instructions.html>.

## SECTION 2.- SPECIFICATIONS

**SCOPE:** These specifications cover the replication of Compact Discs - Read Only Memory (CD-ROM) and Digital Versatile Discs-Read Only Memory (DVD-ROM) requiring the manufacturing of masters from Government furnished premastered CD-R's, and DVD-R's, replication of discs, printing of title on discs, printing of self-mailers, construction of self-mailers, insertion, packing and distribution.

**TITLE:** CD/DVD Products

**FREQUENCY OF ORDERS:** Based on current activity, approximately 8 to 15 orders per month, with up to 4 orders being placed in any one day. Majority of the orders will be for a one disc set.

**QUANTITY:** Approximately 90% of the orders placed on this contract will be for quantities of 1,000 to 10,000 discs. The remaining 10% of the orders will be for quantities under 1,000 discs or greater than 10,000 sets.

**TRIM SIZE:** Self-mailers 6x4-7/8" finished size. One, two, three, four, and five-disc mailers are required. For instance, a 1-disc mailer is 12-5/8x4-7/8" flat, while a 4-disc mailer is 25-1/4x4-7/8" flat. Flat size does not include the 3" flap.

### GOVERNMENT TO FURNISH:

CD and DVD Read Only Format

All Government-furnished data are premastered to conform with International Standard ISO 9660.

PDF file for title information to appear on disc label and self-mailer.

One reproduction proof, Form 905 (R. 6/03) with labeling and marking specifications.

**WARNING:** All electronic media provided by the Government, or any duplicates made by the contractor or their representatives, must be kept accountable and under reasonable security to prevent their unauthorized release. Discs are not to be duplicated in whole or part for any other purpose than to create material to be used in the performance of this contract. All duplicate media shall be degaussed or securely overwritten and any printouts and nonerasable media shall be destroyed by the contractor.

**NOTICE:** Prior to image processing, the contractor is responsible for performing a basic check (pre-flight) of the furnished publishing files to assure accurate output of the required reproduction image. Any errors, media damage or data corruption that might interfere with proper file imaging must be reported to the contract administrator. Contractor must notify the Government as soon as necessary in order to comply with the shipping schedule.

In addition, the contractor is responsible for creating or altering any necessary trapping, setting proper screen angles and screen frequency, and defining file output selection for the imaging device being utilized. All furnished files must be imaged as necessary to meet assigned quality level.

**CONTRACTOR TO FURNISH:** All materials and operations, other than those listed under "Government to Furnish," necessary to produce the product in accordance with these specifications.

### CD-ROM -

**DATA FORMAT VERIFICATION:** Upon receipt of the input media, the contractor shall review the files for usability and completeness. The contractor shall verify compliance of each image with the requirements of ISO 9660. The contractor shall immediately notify the Government of any problems with the furnished data files, including files which are damaged, unreadable, oversized, or not in compliance with ISO 9660. Any delay by the contractor in

notifying the Government of defective furnished material will not release the contractor from meeting the delivery and distribution schedule.

**DATA CAPACITY:** The contractor shall be capable of producing CD-ROMs containing up to 80 minutes of user data, (ie, 805,920,000 bytes of data in mode 2).

**STAMPER MARKS:** The contractor shall image the jacket and print order number on the inner buffer zone unless the contractor is permitted to image other identification marks necessary for production in the IBZ.

**CD-ROM MANUFACTURING SPECIFICATIONS:**

Discs produced under this contract shall be 120 mm and 80 mm CD-ROMs as governed by the International Standards IEC 908 and Amendment, ISO 9660, and ISO 10149. All sectors containing user data shall have their Sector Mode Byte set to (01)H, and the sector content and layout shall be structured accordingly. Furthermore, discs MUST comply with the following requirements:

**Metalizing:** The reflective layer shall be completely sealed with lacquer on both the inner and outer edges of the disc.

**Local Defects:** The maximum allowable diameter of black spots, with or without increased birefringence, is 100 micrometers. All other specifications concerning local defects remain unchanged from those of the International Standards.

**Modulation Amplitude:** The relationship between I3 and Itop shall be:  $0.35 \leq I3/I_{top} \leq 0.7$ . The relationship between I11 and Itop shall be:  $I11/I_{top} \geq 0.65$ .

**Signal Asymmetry:** The absolute value of the asymmetry shall be lower than or equal to 15%.

**Block Error Rate (BLER):** Block Error Rate (BLER) may not exceed 80 when averaged over any one second interval; BLER may not exceed 25 when averaged over the entire User Data Area.

**E22 Errors:** E22 errors arising from the mastering and electroforming stages of manufacturing, i.e. present on the stamper, shall not be permitted. An E22 error shall be considered to be on the stamper if the discs produced from the same stamper contain E22 errors in the same time location (minute:second). Discs may contain E22 errors arising from the replication stage of manufacturing, but the number shall not exceed 1.0 percent of the total quantity, and no disc shall contain more than 3 E22 errors.

**Storage Tests:** Annex F of International Standard IS 10149 shall be treated as normative to the standard. Discs subjected to testing in accordance with Annex F shall remain in compliance with these specifications.

**Jitter, Effect Length Deviation:** In accordance with Compact Disc System specifications for jitter and effect length deviation, the following requirements shall apply:

1. For each run-length of land and pit (3T, ..., 11T), jitter shall be less than 35ns.
2. Effect Length Deviation shall not exceed the following:

<u>Pit/Land Length</u>	<u>Maximum Deviation (+/-)</u>	<u>Nominal Length Pit</u>	<u>Nominal Length Land</u>
3T	40.0ns	660ns	675ns
4T	42.5ns	910ns	925ns
5T	45.0ns	1165ns	1165ns
6T	47.5ns	1400ns	1400ns



7T	50.0ns	1635ns	1635ns
8T	52.5ns	1875ns	1875ns
9T	55.0ns	2110ns	2110ns
10T	57.5ns	2340ns	2335ns
11T	60.0ns	2570ns	2560ns

All other Compact Disc System mandated requirements for jitter and effect length deviation shall apply.

#### **CD-ROM QUALITY CONTROL:**

Each delivered replicate must meet or exceed the requirements of these specifications. In addition to the contractor's existing quality control procedures, the following steps must be performed:

Data Integrity: For each stamper used, the contractor shall:

1. Verify the integrity of all user data against the original Government-furnished media;
2. Verify the integrity of EDC/ECC (error detection and error correction coding) for each sector of the User Data Area;
3. Verify the integrity and consistency of the Table of Contents and the subcode data; and
4. Verify the absence of E22 errors.

Verification for 1, 2, and 3 above may be performed on a CD replicate. Replicates not meeting these specifications must be reproduced and redelivered at the contractor's expense and the contractor shall be considered late.

#### **CD-ROM PRODUCT TESTING:**

The contractor will be required to test CD-ROM replicates for compliance to the specifications of this contract. The contractor is responsible for ensuring comparability of his test results with those of the Philips CD and Laserdisc System Evaluation Laboratory. The following test results shall be reported.

1. Exact diametric locations of the following parts of the spiral data track.
  - a. Starting diameter of the lead in zone.
  - b. Starting diameter of the user data zone.
  - c. Starting diameter of the lead out zone.
2. Eccentricity.
3. Average track pitch.
4. Average scanning velocity.
5. Push/pull.
6. Crosstalk.
7. High frequency and tracking signal properties. These must be read continuously along the spiral track. Minimum, maximum, and average values must be reported. Minima and maxima must be identified by A-Time.
  - a. I<sub>top</sub> or reflectivity.
  - b. Symmetry of I<sub>11</sub> relative to I<sub>d</sub>.
  - c. I<sub>3</sub> normalized by reflectivity.
  - d. I<sub>11</sub> normalized by reflectivity.
  - e. Radial noise.
8. Digital errors. The following errors and error rates must be measured continuously along the spiral track. Where applicable, minimum, maximum, and average values must be reported. Minima and maxima must be identified by A-Time.
  - a. One second moving averages for block error rate.
  - b. One second counts of E22 errors.
  - c. Burst error length.
  - d. Errors in the table of contents.
  - e. Errors in the subcode data.
9. Total playing time.
10. Birefringence.

### 11. Jitter and Effect Length Deviation.

The following test results may be reported, at the option of the contractor:

1. Maximum vertical deviation from the clamping plane.
2. Maximum angular light beam deflection from the clamping plane.

### DVD-ROM -

**DATA VERIFICATION:** Upon receipt of the input media, the contractor shall review the files for usability and completeness. The contractor shall verify compliance of each disc image with the requirements of the DVD Standard Specification version 1.0. The contractor shall immediately notify the Government of any problems with the furnished data files, including files which are damaged, unreadable, oversized, or not in compliance with the DVD Standard Specification version 1.0.

**DATA CAPACITY:** The contractor shall be capable of producing DVD-ROMs containing 4.7 (DVD-5) gigabytes (4,700,000,000 bytes) of data (DVD-5, single side, single layer) and 8.5 gigabytes (8,540,000,000 bytes) of data (DVD-9, single side, double layer).

**STAMPER MARKS:** The contractor shall image the jacket and print order number on the inner buffer zone unless the contractor is permitted to image other identification marks necessary for production in the inner buffer zone.

**DVD-ROM FILE SYSTEM:** All DVD-ROM discs produced under this contract shall comply with the *OSTA Universal Disc Format Specification: 1996 (Appendix 6.9) "OSTA UDF Compliant Domain" of ISO/IEC 13346:1995 Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange*. Also known as the UDF Bridge (UDF/ISO 9660) file structure.

### DVD-ROM MANUFACTURING SPECIFICATIONS:

All DVD-ROM discs produced under this contract shall comply with the applicable sections of the DVD Standard Specification version 1.0. All DVD-ROM discs produced under this contract shall comply with the specifications cited in the following tables.

Digital Errors (Reed Solomon Product Code):

<u>Parameter</u>	<u>Acceptable Value(s)</u>
PI 8 ECC Sum	< 280
PI Fails	<i>Not specified</i>
PO Fails	= 0 (zero)
Percent of PI rows with Errors	<i>Not specified</i>

*Comments: The PI 8 ECC Sum error is the total error across 8 ECC blocks. PI 8 Sum under 40 is preferred.*

HF/Tracking Real-time Measurements (made before signal "equalization"):

<u>Parameter</u>	<u>Acceptable Value(s)</u>
I3/I14	Single layer: > 0.15 Dual layer: > 0.20
I14/I14H	> 0.6
Tangential Push Pull	< 0.9
Asymmetry	In the range -0.05 to 0.15

HF/Tracking Station Measurements:

<u>Parameter</u>	<u>Acceptable Value(s)</u>
DPD Track Crossing	> 0.10
DPD Tracking Amplitude	> 0.5
DPD Tracking Asymmetry	< 0.2

Reflectivity	Single layer: in the range 45% to 85% Dual layer: in the range 18% to 30%
--------------	--

*Comments: HF signals must be strong enough to avoid decoding failures. The tracking signal must be strong enough to support the variable bit functions.*

Physical Measurements:

<u>Parameter</u>	<u>Acceptable Value(s)</u>
Track Pitch	0.74 ± 0.01 μm/track
Pit Length	Single layer: in the range 0.394 to 1.873 μm Double layer: in the range 0.434 to 2.058 μm
Local Defects	Air bubbles: 100 μm maximum Black spots: 200 μm maximum
Scanning Velocity	Single layer: 3.49 ± 0.03 m/sec Dual layer: 3.84 ± 0.03 m/sec
Jitter (Data to Clock)	< 8.0%, independent of tilt effects
Angular Deviation (Tilt)	Radial tilt: < ± 0.80 degrees Tangential tilt: < ± 0.30 degrees
Birefringence	< 100 nm

*Comment: The combination of the effects of jitter and tilt will be considered in the evaluation of a disc.*

LEAD-IN AREA CONTENTS: Contractor shall set the values of the lead-in area as follows:

<u>Parameter</u>	<u>Value(s)</u>
Book Type	DVD-ROM
Book Version	[determined by contractor]
Disc Size	120 mm
Number of Layers	1 or 2, as specified in Print Order
Dual Layer Track Path	Parallel Track Path (PTP)
Layer Type	Read-only
Linear Density	Single Layer: 0.2667 μm/data bit Dual Layer: 0.293 μm/data bit
Track Density	0.74 μm/track
Starting Sector Number	030000h
Ending Sector Number (Main)	[determined by contractor]
Ending Sector Number (layer 0)	[determined by contractor]
Burst Cutting Area (BCA) Flag	Exists (on) [BCA encodes disc volume ID as specified by USPTO]
Copy Protection System	None [copy protection off]
Region Management Flags	None [unrestricted access in all regions]
Encryption Data	None [no encryption]
Manufacturing Data	[As supplied by Contractor]
Content Provider Information	[Insert contents of provided file CPI.TXT]

**DVD-ROM PERFORMANCE:** The DVD-ROMs shall read on the Pioneer DVD-302 reader specified and a DVD-ROM will be considered a reject when it cannot be correctly read on this player. The contractor will be required to immediately replace, at no cost to the Government, any DVD-ROM discs that fail to function properly due to the contractor's failure to properly manufacture discs.

**DVD-ROM QUALITY CONTROL:** Each delivered replicate must meet or exceed the requirements of these specifications. In addition to the contractor's existing quality control procedures, the following steps must be performed:

Data integrity: For each stamper used, the contractor shall:

1. Verify the integrity of all user data against the original Government-furnished media;
2. Verify the integrity of error detection and error correction coding for each sector of the user data area;
3. Verify the UDF/ISO 9660 directory structure.

Verification may be performed on a replicate or pre-production check disc. Replicates not meeting these specifications must be reproduced and redelivered at the contractor's expense and the contractor shall be considered late.

**DVD-ROM PRODUCT TESTING:** The contractor is required to test DVD-ROM replicates for compliance to the specifications of this contract. The contractor is responsible for ensuring that all DVD-ROM discs produced will function correctly.

The contractor is responsible for ensuring comparability of their test results with those of the CD Associates DVD100MG.

The following test results shall be reported.

1. Average track pitch.
2. Average scanning velocity.
3. Tangential push/pull.
4. Track crossing signal magnitude.
5. High frequency and tracking signal properties. These must be read continuously along the spiral track. Minimum, maximum, and average values must be reported. Minima and maxima must be identified by A-Time.
  - a. Itop or reflectivity.
  - b. Signal asymmetry.
  - c. I3 normalized to I14.
  - d. I14 normalized to I14H.
6. One-second moving values for PI 8 ECC Sum and PI fails, measured continuously along the spiral track; minimum, maximum, and average values must be reported.
7. Total playing time and total sectors tested.
8. Maximum disc birefringence.
9. Data to clock jitter.

**CD/DVD-ROM PRE-PRODUCTION CHECK DISCS:** On occasional orders, the contractor will be required to produce a pre-production check disc for Government inspection prior to replication of the ordered quantity. After notification to pickup the print order and furnished material, the pre-production check disc must be delivered to the address listed under SCHEDULE as soon as the contractor deems necessary in order to comply with the delivery schedule. The Government will contact the contractor with approval or disapproval within 1 workday after receipt of the check disc. If the check disc is disapproved due to faulty production by the contractor, the contractor must then provide a corrected check disc for approval, and one extra day will be allowed in the production schedule. No additional charges will be allowed for this corrected pre-production check disc.

If the pre-production check disc is faulty because of defective source data or DLT (digital linear tape) media furnished by the Government, instructions will be provided to the contractor for return of the defective data or media and new corrected data or media will be furnished to the contractor. The contractor will be allowed to charge for the pre-production check disc produced from the defective data or media. The schedule will start over upon the contractor's receipt of the corrected tape.

All pre-production check discs must be placed in CD/DVD-safe jewel boxes. Although the contractor will not be required to print a color product label on check discs, the following information must be written legibly on the face of the disc: product name, year, volume, and issue. The shipping package containing this preproduction check disc must be identified by the GPO jacket number, program number, print order number, and title.

Contractor is cautioned not to proceed with the replications until Government approval of the pre-production check disc is received. The contractor must not begin disc production prior to receipt of an "OK to print" when check discs are requested.

**STOCK/PAPER:** The specifications of all paper furnished must be in accordance with those listed herein or listed for the corresponding JCP Code numbers in the "Government Paper Specification Standards No. 12" dated March 2011. Government Paper Specification Standards No. 12 – [http://www.gpo.gov/pdfs/customers/sfas/vol12/vol\\_12.pdf](http://www.gpo.gov/pdfs/customers/sfas/vol12/vol_12.pdf)

All paper used in each copy must be of a uniform shade.

Self-mailer: White Coated One Side Cover (C1S), 0.015" thick (equal to JCP Code L70).

**PRINTING:** Most orders (95%) are for printing CD/DVD-ROM labels and self-mailers in black only. An occasional order may require printing in two Pantone colors, or in a color other than black, on self-mailers or face of disc.

Self-mailer: Prints one side only on the glossy side of stock.

Disc labels must be screen printed directly onto disc. Adhesive labels are NOT acceptable.

**SELF-MAILER EXHIBIT:** The construction diagram of a 4-disc CD self-mailer is representative of the die-cutting and construction/assembly requirements for the self-mailers which will be ordered under this contract.

The contractor may vary slightly the construction/assembly from the diagram as long as the final finished size of the self-mailers will accommodate the number of discs required.

**PACKAGING:** Place the disc(s) in the die-cut, self-mailer. The self-mailer shall have 1,2,3,4 or 5 die-cut pocket(s) as indicated on the print order, and a self-covering flap (see Exhibit). Pockets shall be of sufficient size to allow easy insertion and/or removal of discs. Each pocket shall be completely covered with a protective flap. Self-mailer heat seals for mailing with tamper-proof adhesive and has a tear-open strip with an integral tuck-in tab and slit for reclosing. Die cut, score and fold to final size for shipping. Allow sufficient space for sealing mailer to avoid damage.

Note: Contractor shall ensure proper die-cutting of the tear-open strip to ensure that the tear off strip functions as intended.

**PACKING:** Package each CD/DVD-ROM set in the appropriate self-mailer. Pack individual self-mailers in suitable shipping containers not to exceed 16-1/2 x 11 x 10-1/8".

Shipping containers shall have a minimum bursting strength of 275 pounds per square inch or a minimum edge crush test (ECT) of 44 pounds per inch width.

Pallets are required for shipments to the U.S. Army Operations facility in St. Louis, MO. MUST BE A SINGLE COMPLETE SHIPMENT delivered on workdays between the hours of 8:00 a.m. and 2:00 p.m. (local time). (Split shipments are reported as "SHORT" shipments). Bulk shipments must be palletized with the voids to the outside dimensions of the pallets. A minimum of 3/4" void must be on the outside dimensions of the pallets. Shipping layers over 2 layers must be on pallets.

**LABELING AND MARKING:** All cartons/containers must be labeled with title, quantity, and total number of cartons contained in shipment.

**QUALITY ASSURANCE INSPECTION SAMPLES:** When indicated on the print order, the contractor will be required to submit quality assurance inspection samples to test for compliance against the specifications. This quality assurance inspection sample package must include three CD-ROM/DVD-ROM discs for each stamper used. The first disc shall be randomly selected from the first five minutes of the production run, and the second disc shall be randomly selected from the last five minutes of the production run. The third disc shall be randomly selected from the remainder

of the production lot. For CD-ROM only, at least one disc shall be tested as described under PRODUCT TESTING, and the test results from this disc must be included in the package. Replicates will be paid for at the running rate offered in the contractor's bid and their cost will not be considered for award.

Business Reply Mail labels (green labels) will be furnished for mailing the quality assurance inspection samples. The package containing the samples must be of sufficient quality to prevent damage during transit, must be identified by the GPO jacket number, program number, print order number, and title, and must contain a copy of the print order. The samples are to be mailed at the same time as the first scheduled shipment.

**DISTRIBUTION:** Deliver F.O.B. Destination to approx. 2 to 7 addresses within the commercial zones of Washington, D.C., Huntsville, AL, and St. Louis, MO.

Complete addresses and quantities will be furnished with the print orders.

The bulk (approximately 75% to 98%) of each order will be delivered to St. Louis, MO.

All expenses incidental to picking up and returning materials, submitting check discs, and furnishing samples must be borne by the contractor.

**SCHEDULE:** Adherence to this schedule must be maintained. Contractor must not start production of any job prior to receipt of the individual print order (GPO Form 2511).

No definite schedule for pickup of material can be predetermined. Contractor will be notified via telephone or email as to when to pickup furnished material and print order.

All furnished material must be picked up from:  
Army Publishing Directorate  
9301 Chapek Rd  
Bldg. 1458  
Ft. Belvoir, VA 22060  
ATTN: Richard Sowell 703-693-1442

The following schedule begins the workday after notification of pickup of the premastered data; the workday after notification of pickup of the premastered data will be the first workday of the schedule.

When ordered, a check disc(s) is to be sent for each master on the order within 2 to 5 workdays after receipt of the order. The contractor is cautioned not to proceed with the replications until Government approval of the check disc is received. Approval/Rejection will be given within 2 workdays.

Complete production and delivery is to be made within the following schedule unless a check disc is required. If so, this schedule begins the day after receiving check disc approval.

- Within 4 to 10 workdays for CD or single layer DVD as specified on print order
- Within 5 to 12 workdays for dual layer DVD-ROM as specified on print order

One additional workday will be allowed for orders requiring more than 1 disc per set. Unscheduled material such as shipping documents, receipts or instructions, delivery lists, labels, etc., will be furnished with the order or shortly thereafter. In the event such information is not received in due time, the contractor will not be relieved of any responsibility in meeting the shipping schedule because of failure to request such information.

**SECTION 3.- DETERMINATION OF AWARD**

The Government will determine the lowest bid by applying the prices offered in the "Schedule of Prices" to the following units of production which are the estimated requirements to produce one year's production under this contract. These units do not constitute, nor are they to be construed as, a guarantee of the volume of work which may be ordered for a like period of time.

The following item designations correspond to those listed in the "SCHEDULE OF PRICES".

I.	1.(a)	99			
	(b)	1,558			
	(c)	20			
	2. (a)	45			
	(b)	371			
	(c)	15			
	3. (a)	3			
	(b)	19			
	(c)	1			
		(1)	(2)	(3)	(4)
II.	(a)	119	1,736	10	330
	(b)	6	40	1	20
	(c)	5	20	1	20
	(d)	1	20	1	20
	(e)	1	20	1	20
III.	(a)	4,585			
	(b)	12			

**SECTION 4.- SCHEDULE OF PRICES**

Bids offered are F.O.B. Destination for deliveries within the commercial zones of Washington, D.C., Huntsville, AL, and St. Louis, MO.

Bidder must make an entry in each of the spaces provided. Bids submitted with any obliteration, revision, or alteration of the order and manner of submitting bids, may be declared nonresponsive.

An entry of NC (No Charge) shall be entered if bidder intends to furnish individual items at no charge to the Government.

Bids submitted with NB (No Bid) or blank spaces for an item may be declared nonresponsive.

The Contracting Officer reserves the right to reject any offer that contains prices for individual items of production (whether or not such items are included in the Determination of Award) that are inconsistent or unrealistic in regard to other prices in the same offer or to GPO prices for the same operation if such action would be in the best interest of the Government.

All vouchers submitted to the GPO shall be based on the most economical method of production. Fractional parts of 100 will be prorated at the per 100 rate.

I. **CD-ROMs and DVD-ROMs:** Prices offered shall be all-inclusive for the production and delivery of discs in accordance with the term of these specifications; and must include the cost of all required materials and operations, including the printing of labels on discs. Only one mastering charge will be allowed per CD/DVD regardless of the number of replications produced.

**CD-ROM:**

1.

- (a) Mastering..... per master.....\$ \_\_\_\_\_
- (b) Replication of CD-ROM discs ..... per 100 discs .....\$ \_\_\_\_\_
- (c) Pre-production check discs..... per disc.....\$ \_\_\_\_\_

**DVD-ROM:**

2.

DVD-5:

- (a) Mastering..... per master .....\$ \_\_\_\_\_
- (b) Replication of DVD-ROM discs ..... per 100 discs.....\$ \_\_\_\_\_
- (c) Pre-production disc..... per disc .....\$ \_\_\_\_\_

3.

DVD-9:

- (a) Mastering..... per master .....\$ \_\_\_\_\_
- (b) Replication of DVD-ROM discs ..... per 100 discs.....\$ \_\_\_\_\_
- (c) Pre-production disc..... per disc .....\$ \_\_\_\_\_

(Initials) \_\_\_\_\_



The prices offered for disc replication shall be all inclusive for the printing of the disc label in one or two ink colors. It is anticipated that 95% of all disc labels will print in one ink color.

**II. PRINTING, CONSTRUCTION AND PACKAGING:** The prices offered must be all-inclusive for construction, printing, and packaging, in accordance with the terms of these specifications and shall include the cost of all required materials and operations.

	<u>Black Ink or a Color Other Than Black</u>		<u>Each Additional Ink Color</u>	
	<u>Makeready and Setup</u>	<u>Per 100 Copies</u>	<u>Makeready and Setup</u>	<u>Per 100 Copies</u>
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>
(a) One disc individual self-mailer..... per mailer	\$_____	\$_____	\$_____	\$_____
(b) Two disc individual self-mailer .....per mailer	\$_____	\$_____	\$_____	\$_____
(c) Three disc individual self-mailer .....per mailer	\$_____	\$_____	\$_____	\$_____
(d) Four disc individual self-mailer .....per mailer	\$_____	\$_____	\$_____	\$_____
(e) Five disc individual self-mailer .....per mailer	\$_____	\$_____	\$_____	\$_____

**III. ADDITIONAL OPERATIONS:**

- (a) Packing individual self-mailers  
into shipping containers..... per container.....\$\_\_\_\_\_
- (b) Pallets ..... per pallet.....\$\_\_\_\_\_

**INSTRUCTIONS FOR BID SUBMISSION:** Fill out "Section 4.- Schedule of Prices", initialing or signing each page in the space(s) provided. Submit two copies (original and one exact duplicate) of the "Schedule of Prices" with two copies of the GPO Form 910, "BID" form. Do not enter bid prices on GPO Form 910; prices entered in the "Schedule of Prices" will prevail.

Bidder\_\_\_\_\_

\_\_\_\_\_  
(City - State)

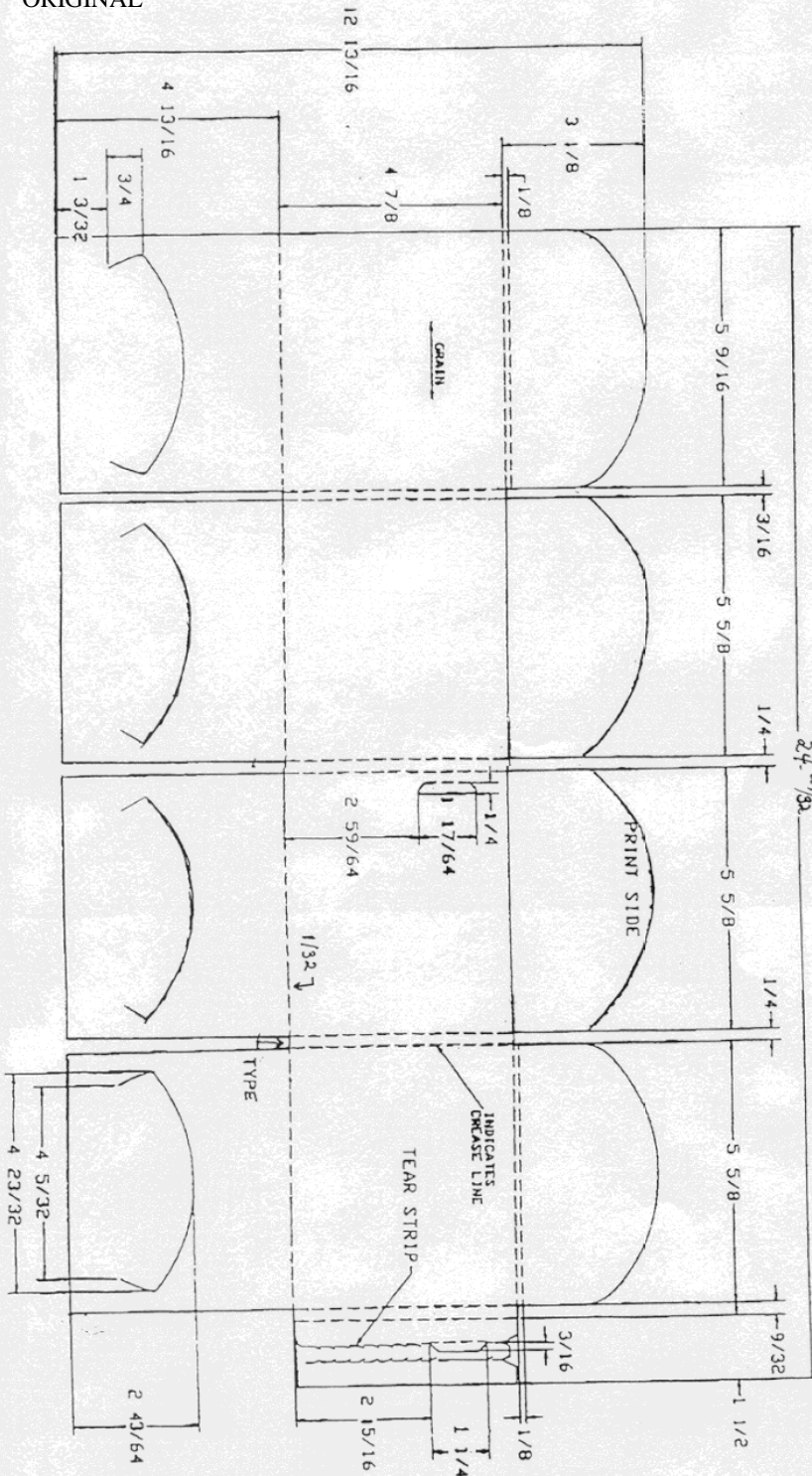
By\_\_\_\_\_ (Signature and title of person authorized to sign this bid)

\_\_\_\_\_  
(Person to be contacted)

\_\_\_\_\_  
(Telephone Number)

GPO Form 910  
(R5-99) P.57021-4  
Part 1  
ORIGINAL

**EXHIBIT 3  
(FOUR DISC MAILER)**



3

Printing Procurement Department  
**BID**

All bids are subject to: (i) GPO Contract Terms (Pub. 310.2); (ii) the specifications; and (iii) representations and certifications (on reverse) which are enclosed or incorporated herein by reference. Check or complete all applicable boxes of representations and certifications printed on reverse of part one. See representations and certifications in their entirety in GPO Contract Terms (Pub. 310.2). Attach all required certificates to this bid form.

Shipment(s) will be made from: City \_\_\_\_\_, State \_\_\_\_\_

(The city(ies) indicated above will be used for evaluation of transportation charges when shipment f.o.b. contractor's city is specified. If no shipping point is indicated above, it will be deemed that the bidder has selected the city and state shown below in the address block and the bid will be evaluated and the contract awarded on that basis. If shipment is not made from evaluation point, contractor will be responsible for any additional shipping costs incurred.)

PROGRAM NO. \_\_\_\_\_ 2385-S \_\_\_\_\_ (BIDDER TO ATTACH SCHEDULE OF PRICES TO THIS BID FORM)

BID \_\_\_\_\_  
Additional \_\_\_\_\_ Rate \_\_\_\_\_

Discounts are offered for prompt payment as follows: \_\_\_\_\_ percent, \_\_\_\_\_ calendar days.  
See Provision 12 "Discounts" in GPO Contract Terms (Pub. 310.2).

Bidder hereby acknowledges amendment(s) number(ed) \_\_\_\_\_

In compliance with the above the undersigned agrees, if this bid is accepted within \_\_\_\_\_ calendar days (60 calendar days unless a different period is inserted by the bidder) from the date for receipt of bids, to furnish the specified items at the price set opposite each item, delivered at the designated point(s), in exact accordance with specifications.

Notice: Failure to provide a 60 day bid acceptance period may result in expiration of your bid prior to award.

**COMPANY SUBMITTING BID**

**PERSON AUTHORIZED TO BID**

Company \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Title \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Signature \_\_\_\_\_

GPO Contractor Code (if known) \_\_\_\_\_

Date \_\_\_\_\_

Telephone Number (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Facsimile Number (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Contracting Officer Review \_\_\_\_\_ Date \_\_\_\_\_ Certifier \_\_\_\_\_ Date \_\_\_\_\_  
(Initials) (Initials)