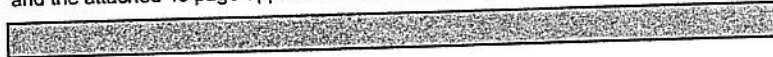


DSP-05 050468030

**APPROVE**License Number:  
050468030Date Issued:  
08/07/2013Months Valid:  
48

License is hereby granted to the applicant for the commodity described in the attached application to be permanently exported from the United States. This license may be revoked, suspended, or amended by the Secretary of State without prior notice whenever the Secretary deems such action advisable.

The United States Government position on this case consists of this 1 page decision memo and the attached 18 page application. Both must be present for the USG position to be valid.



DSP-05 050468030

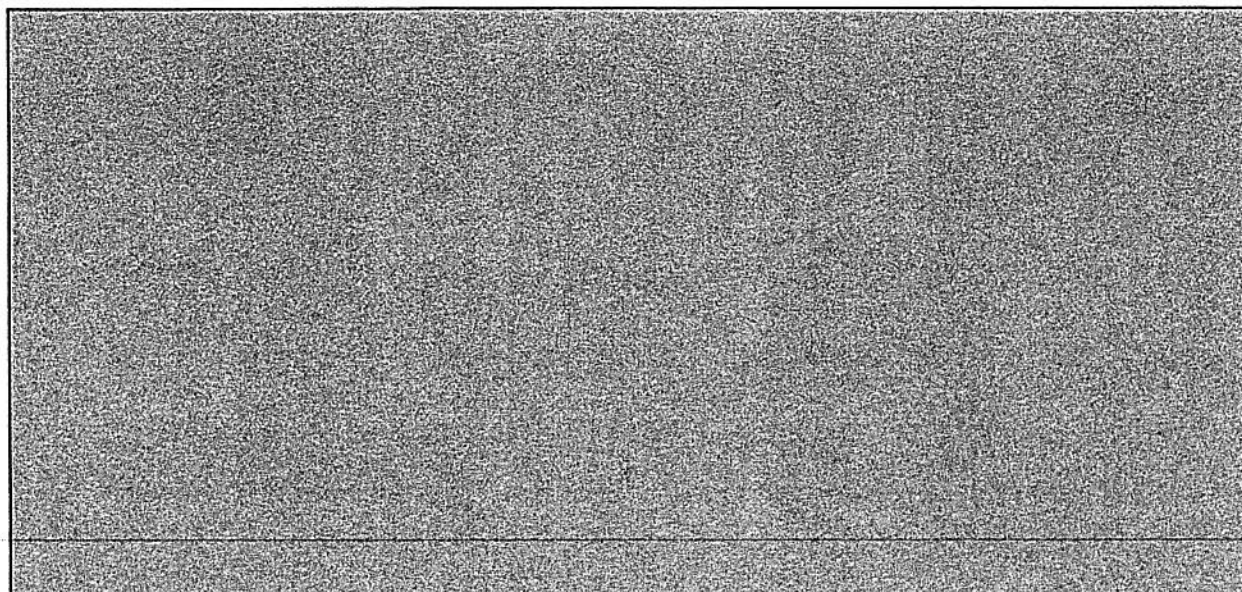
UNITED STATES OF AMERICA DEPARTMENT OF STATE			
APPLICATION FOR PERMANENT EXPORT OF UNCLASSIFIED DEFENSE ARTICLES, RELATED TECHNICAL DATA, AND DEFENSE SERVICES			
1. Date Prepared	2. DDTC Registration Code	3. Country of Ultimate Destination	4. Probable Port of Exit from U.S.
07/24/2013	<input type="text"/>	BELGIUM, NETHERLANDS (THE)	Memphis
<b>5. Applicant</b> Applicant Type: Exporter Avnet Inc. Attention: Philip Zerbe 2211 S. 47th Street Phoenix, AZ 85034-6403 480-643-2000 ext.			
<b>6. U.S. Government Personnel (not PM/DDTC) Familiar with Commodity</b>			
<b>7. Applicant Contact for Additional Information</b> Philip Zerbe 480-643-6672 ext.			
<b>8. Description of Transaction</b> A. This application represents ONLY a completely new shipment			
B. This Application has related license # ___ was licensed to the country in Block 3 of the first page under license # ___ was licensed to other countries under license # ___ was returned without action under voided license # ___ was denied to the country in Block 3 of the first page under voided license #			
C. This Application is in reference to agreement #			
D. If the commodity is being financed under <input checked="" type="checkbox"/> Not Applicable ___ Foreign Military Sale ___ Foreign Military Financing ___ Grant Aid Program			

E. This application is related to a disclosure filed with Defense Trade Controls Compliance <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes				
Item	9. Quantity	10. Commodity	11. USML Category	12. \$ Value
1	Quantity: 216 Unit Type: Number	Rad-hard Integrated Circuits; Texas Instruments Part Number ADC128S102WGRQV FP-16 (5962R0722701VZA: Microcircuits, Digital-Linear, CMOS, 8 Channel, 50 KSPS to 1 MSPS, 12 Bit Analog to Digital Converter, Monolithic Silicon Defense Article Type: Hardware	XV(e) Is a DSP-83 attached? No	
3	Quantity: 46 Unit Type: Number	Rad-hard Integrated Circuits; Texas Instruments Part Number ADC128S102WGMPPR; Microcircuits, Digital-Linear, CMOS, 8 Channel, 50 KSPS to 1 MSPS, 12 Bit Analog to Digital Converter, Monolithic Silicon Defense Article Type: Hardware	XV(e) Is a DSP-83 attached? No	
<b>13. Total Value</b>				
<b>14. Foreign End-User</b>				
<div style="border: 1px solid black; padding: 5px;">           ESA- European Space Agency - ESA            Keplerlaan 1            2200 AZ Noordwijk NL         </div> <div style="border: 1px solid black; height: 40px; width: 100%; margin-top: 5px;"></div>				
<b>15. Manufacturer of Commodity</b>				
Texas Instruments 12500 TI Blvd Dallas, TX 75243 US				
<b>16. Foreign Consignee</b>				
ALTER TECHNOLOGY-TUV NORD S.A.U. C/ Tomas Alba Edison, 4 - PCT Cartuja 93 41092 Sevilla SP				
<b>17. Source of Commodity</b>				
Avnet Inc. 2211 S. 47th Street				

Phoenix, AZ 85034-6403 US

**18. Foreign Intermediate Consignee**

ALTER TECHNOLOGY TUV NORD S.A.U  
C/ Tomas Alba Edison 4, PCT Cartuja 93  
41092 Sevilla SP  
Purchaser and Test House; integration



ESTEC  
Keplerlaan 1, 2200  
AG Noordwijk NL  
Electro Magnetic (EMC) Tests (possible), vacuum test, receiver of assembled spacecraft, testing of spacecraft  
  
Astrium UK  
Gunnels Wood Road, Stevenage  
Hertfordshire SG 1 2AS UK  
Integration on the Spacecraft

DHL Global Forwarding (UK) Ltd  
Danzas House, Kestrel Way, Hayes  
Middlesex, UB3 1HJ UK  
possible freight forwarder

IABG  
EinsteinstraBe 20  
85521 Ottobrunn GM  
Magnetic, Environmental tests  
  
Centre Spatial Guyanais  
PO Box 726  
97387 Kourour Cedex FG  
Possible Launcher

## UPS

Parcela B-4 Poligono San Nicolas 41500 Alcala de Guadaira  
Sevilla SP  
possible freight forwarder

## TNT

Avda. de Bruselas, 6 Alcobendas  
28108 Madrid SP  
possible freight forwarder

## FEDEX

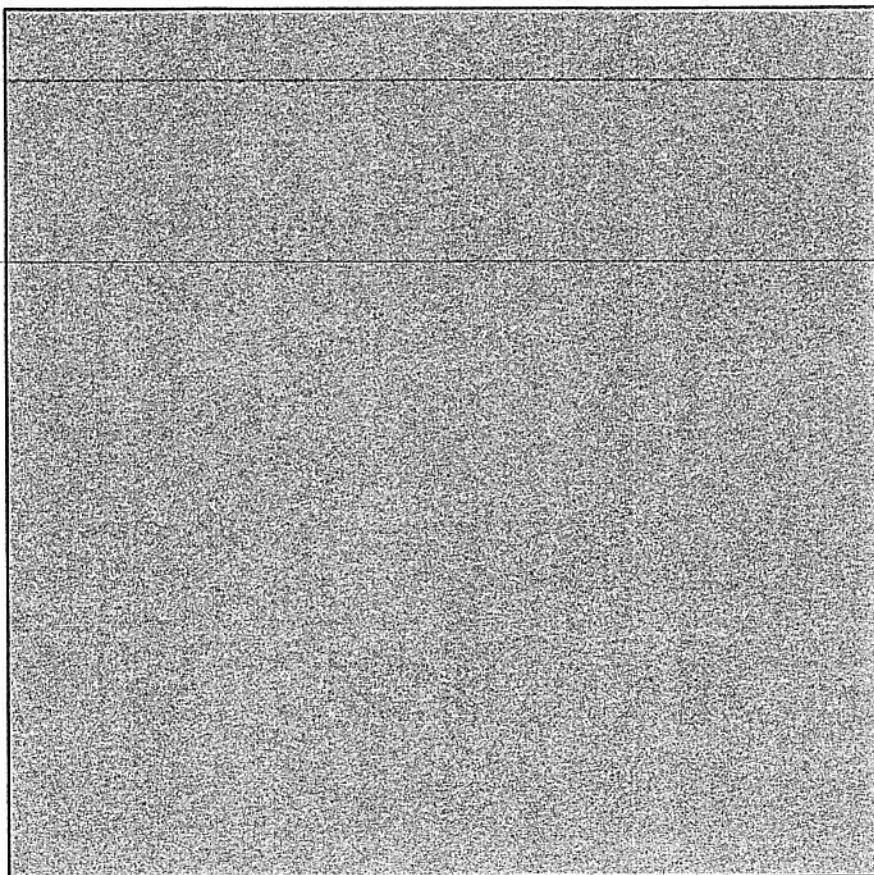
Centro de Carga Aerea Madrid  
28042 Madrid SP  
possible freight forwarder

## DHL

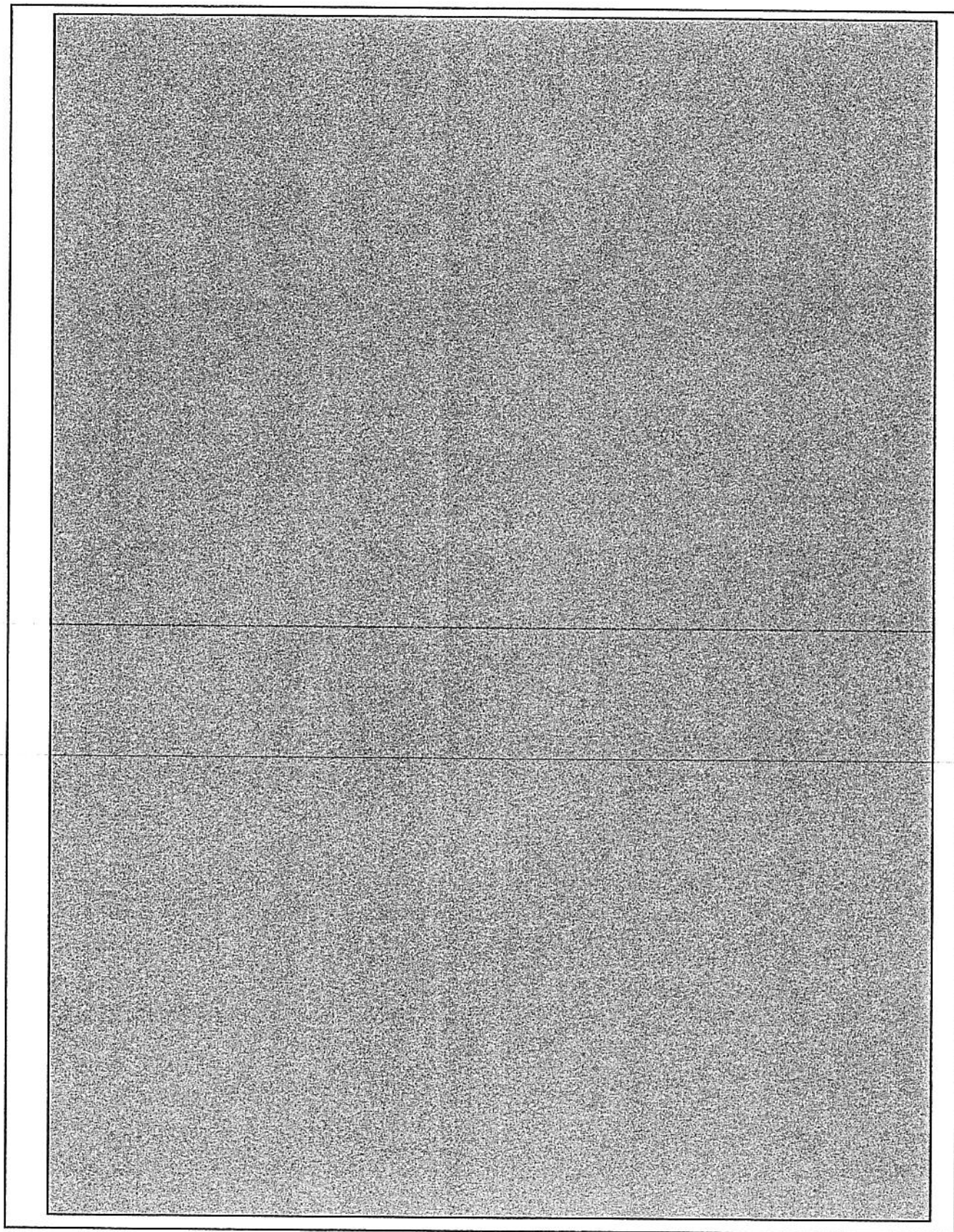
C/ Rumania 4, Coslada Madrid  
Madrid SP  
possible freight forwarder

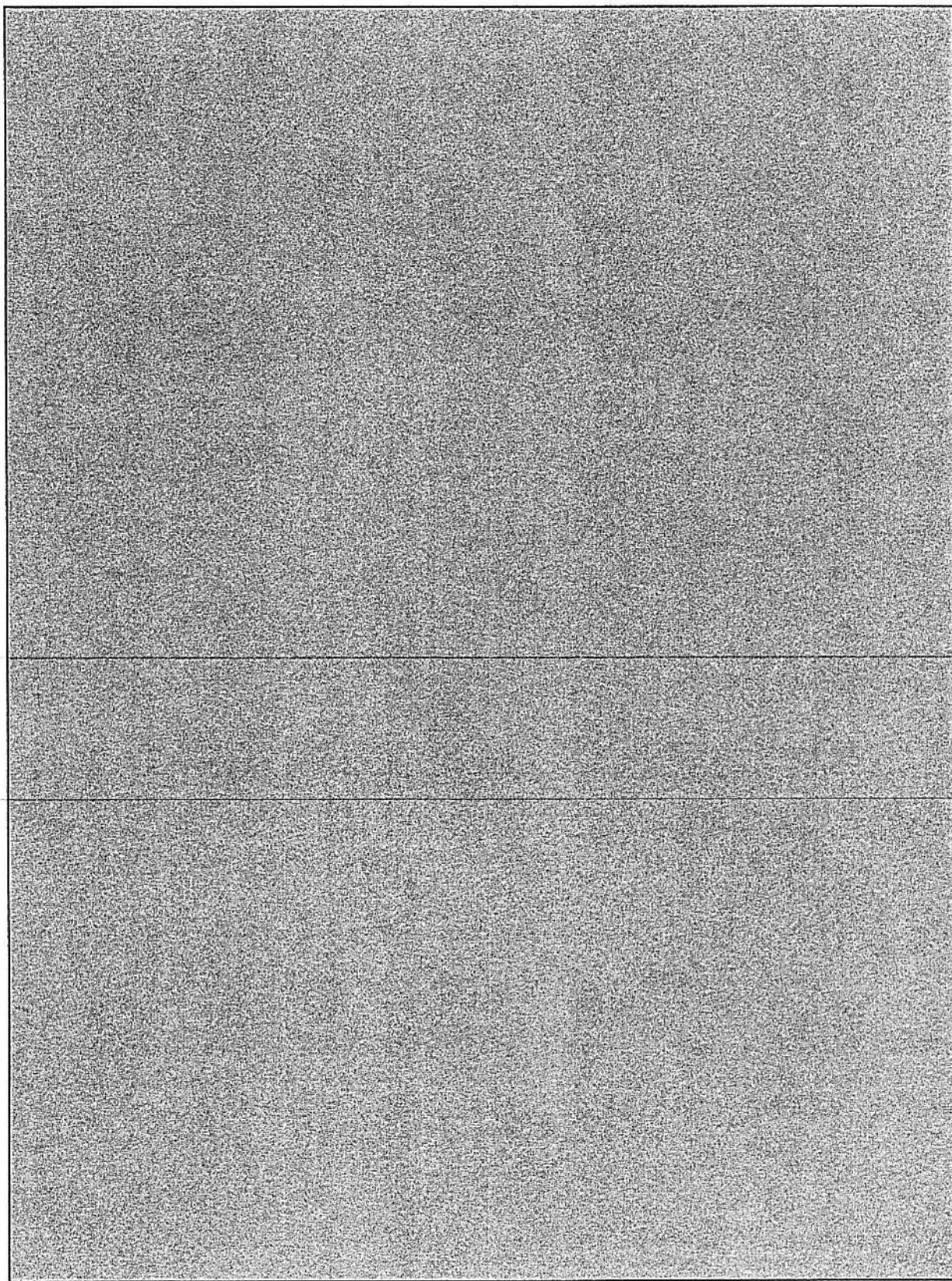
## TRANSNATUR

C/ Luxemburgo, 1 Centro de Transportes Coslada Madrid  
Madrid SP  
possible freight forwarder

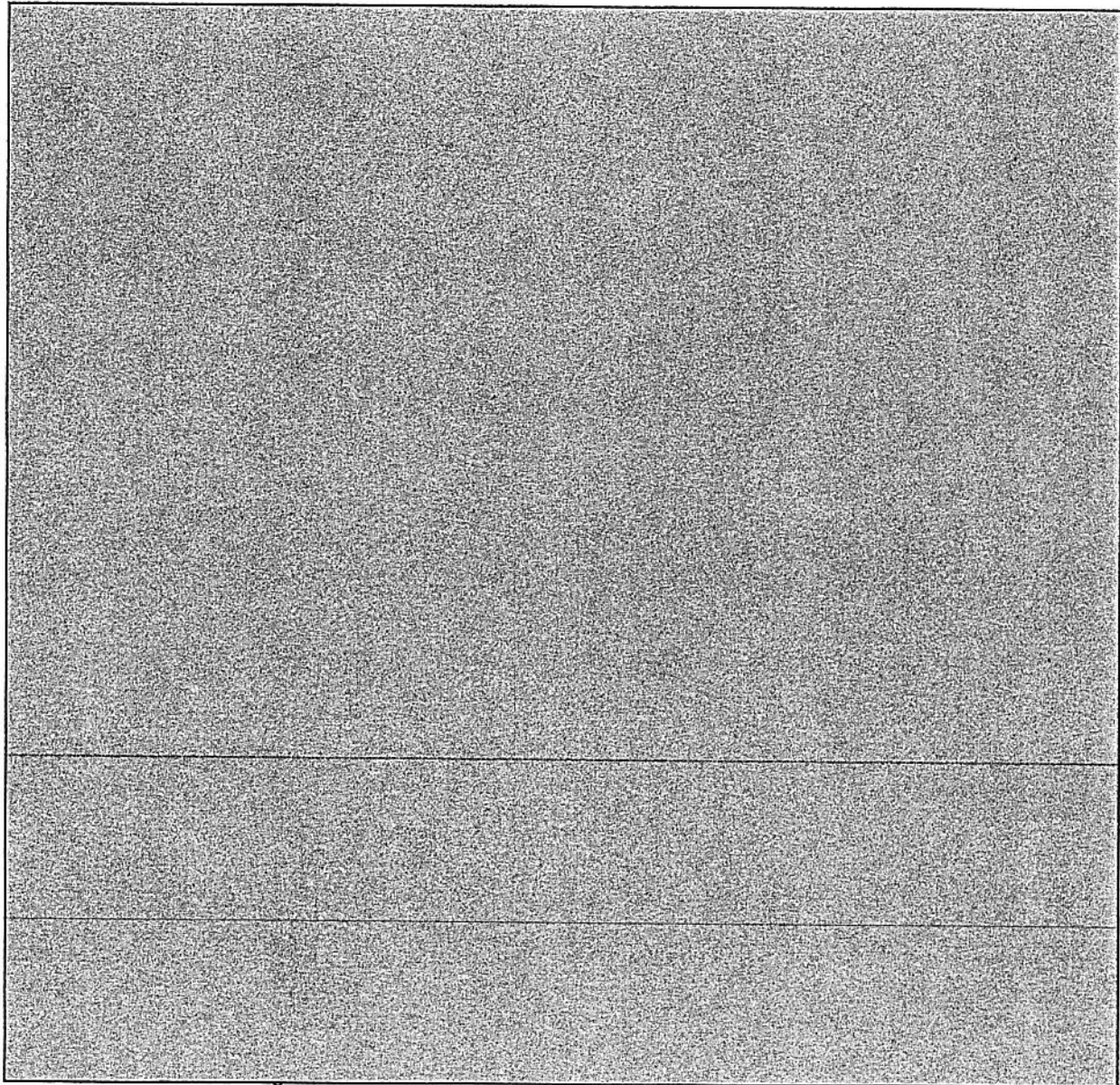












Institut Für Experimentelle und Angewandte Physik; The ExtraTerrestrial Physics group  
 Christian Albrechts University -IEAP/ET CAU Leibnizstrasse 19  
 24118 Kiel GM  
 Integration into Energetic Particle Detector (EPD)

Kayser Threde GmbH  
 Wolfratshauser Straße 48  
 81379 München GM  
 Population of printed circuit boards

RUAG Space AB  
 Solhusgatan 11  
 SE-412 76 Göteborg SW



Population of printed circuit boards

HIMAC

4-9-1 Anagawa, Inage Ward, Chiba,

Chiba Prefecture JA

Calibration facilities

PHYSIKALISCH TECHNISCHE BUNDESANSTALT – PTB

Bundesallee 100

38116 Braunschweig GM

Calibration facilities

RUAG Space AB

Solhusgatan 11

SE-412 76 Göteborg SW

Environmental Tests

ZARM Technik Fallturm-Betriebsgesellschaft mbH

Fallturm-Betriebsgesellschaft mbH /c/o Universität Bremen

28359 Bremen GM

Environmental Tests

Iberespacio

Magallanes, 3, 4a planta

28015 Madrid SP

Environmental Tests

Universidad de Alcalá

Ctra. Madrid-Barcelona

28871 Alcalá de Henares SP

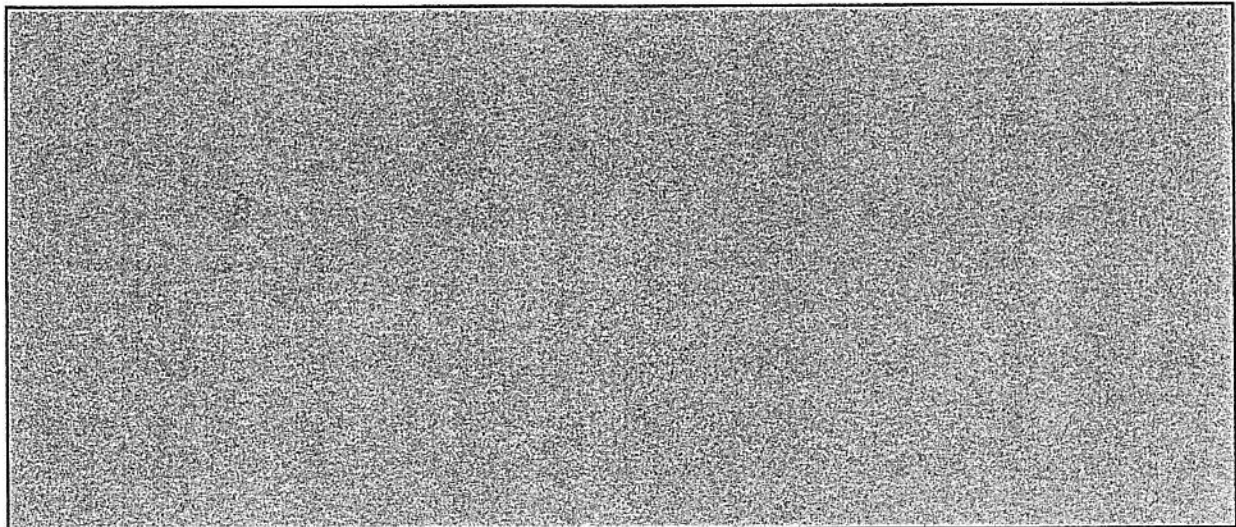
Energetic Particle Detector (EPD) consortium PI institution

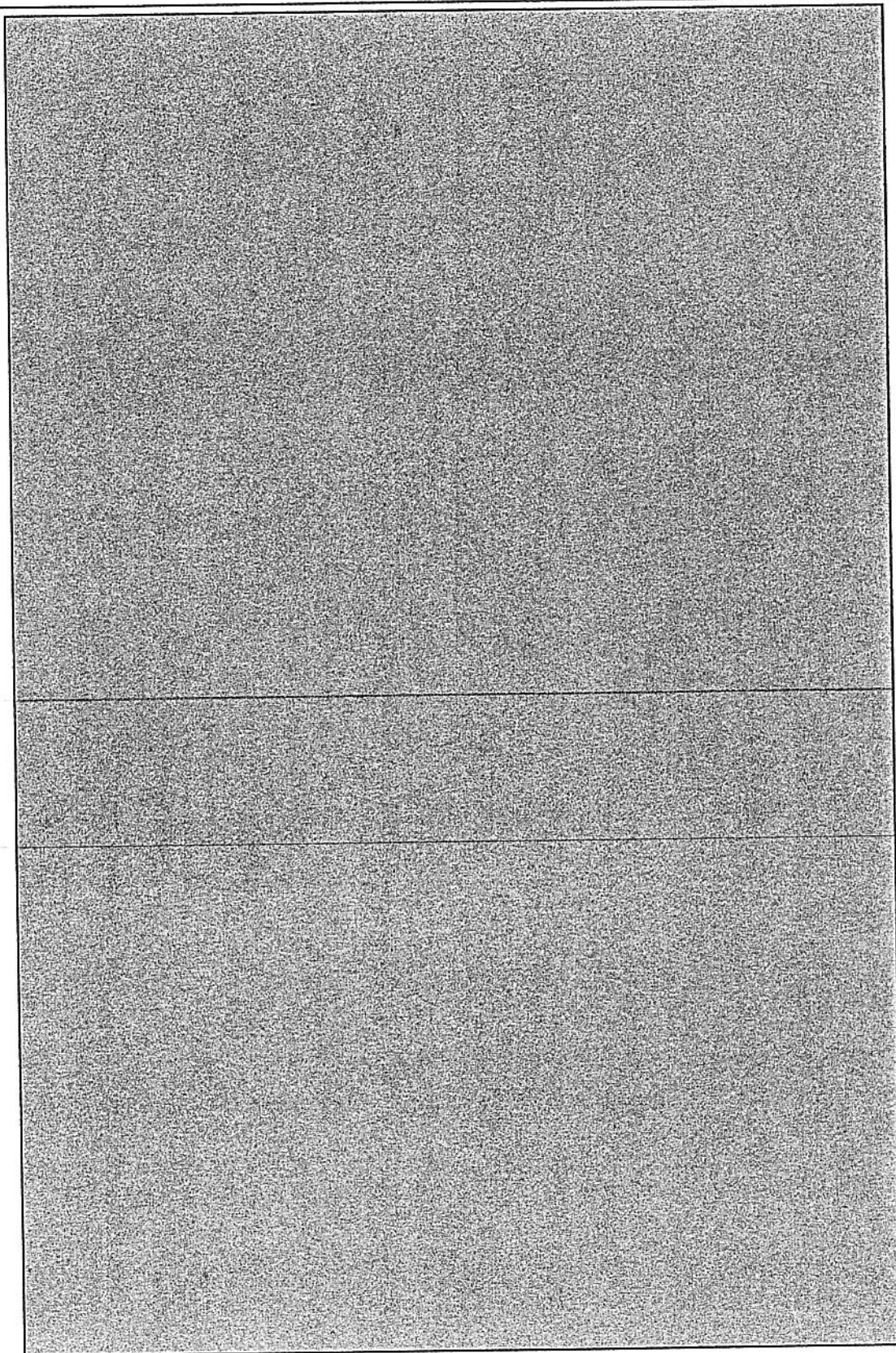
INTA – Instituto Nacional de Técnica Aeroespacial

Ctra. Ajalvir km. 4

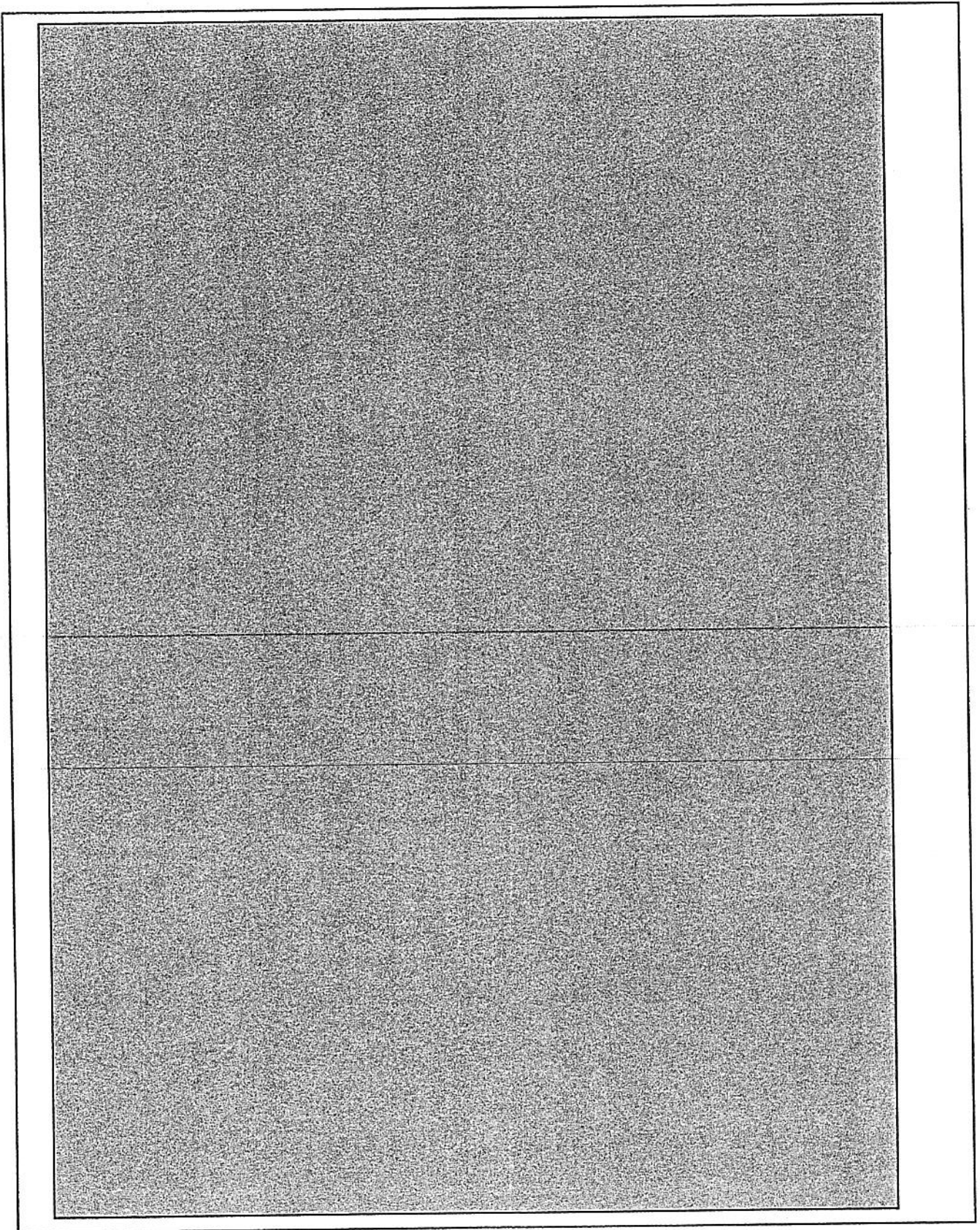
28850 Torrejón de Ardoz SP

Suite level tests and integration

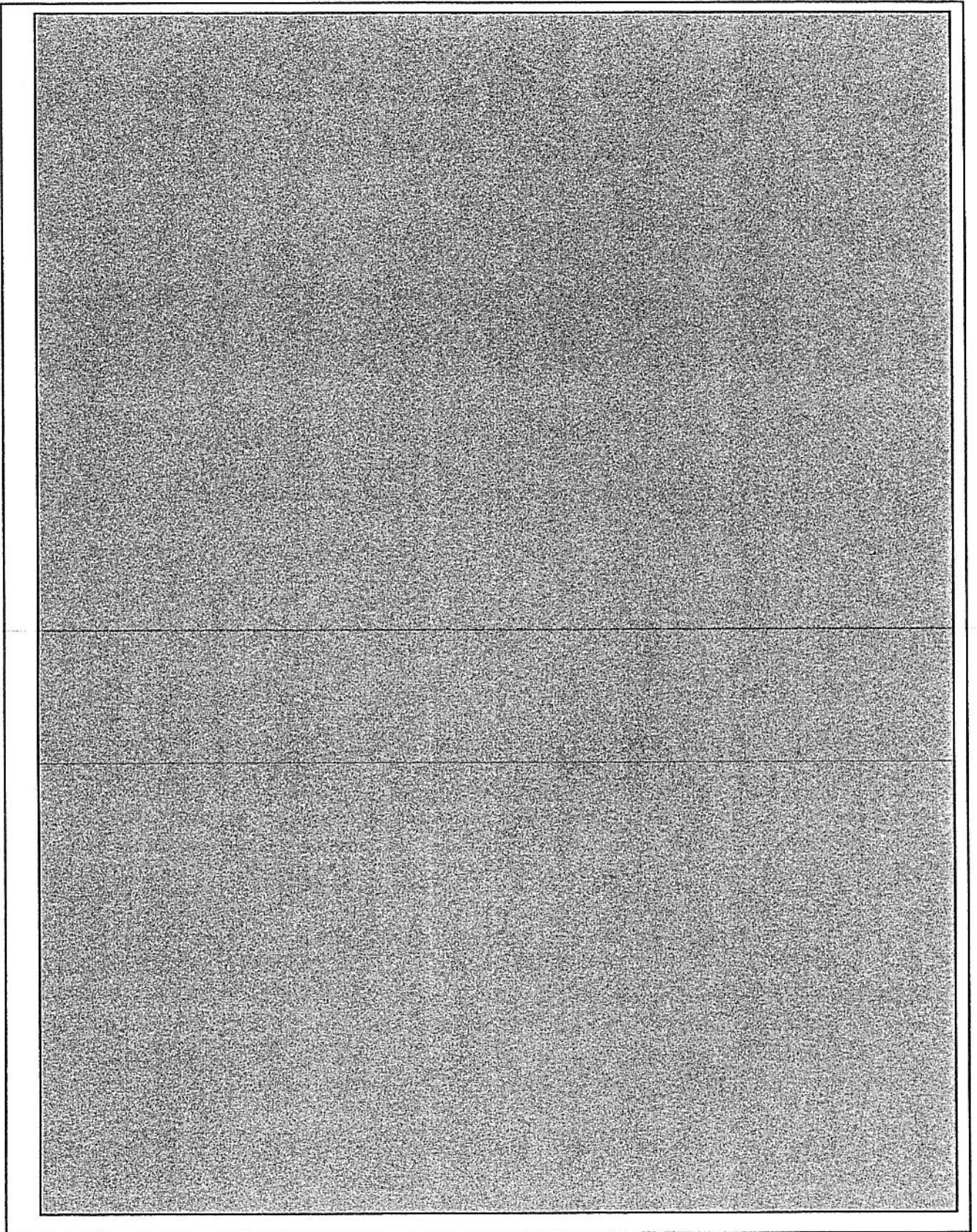


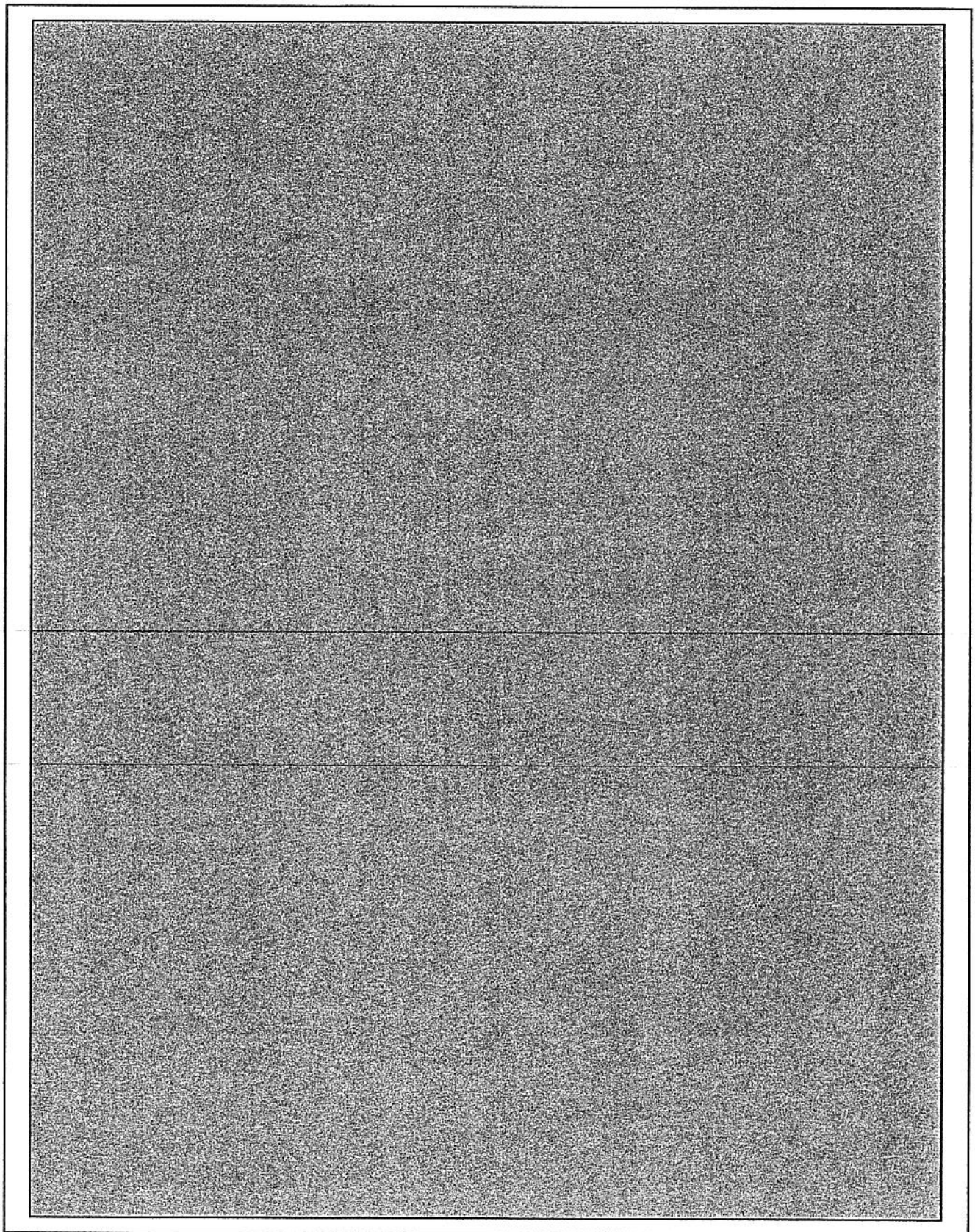




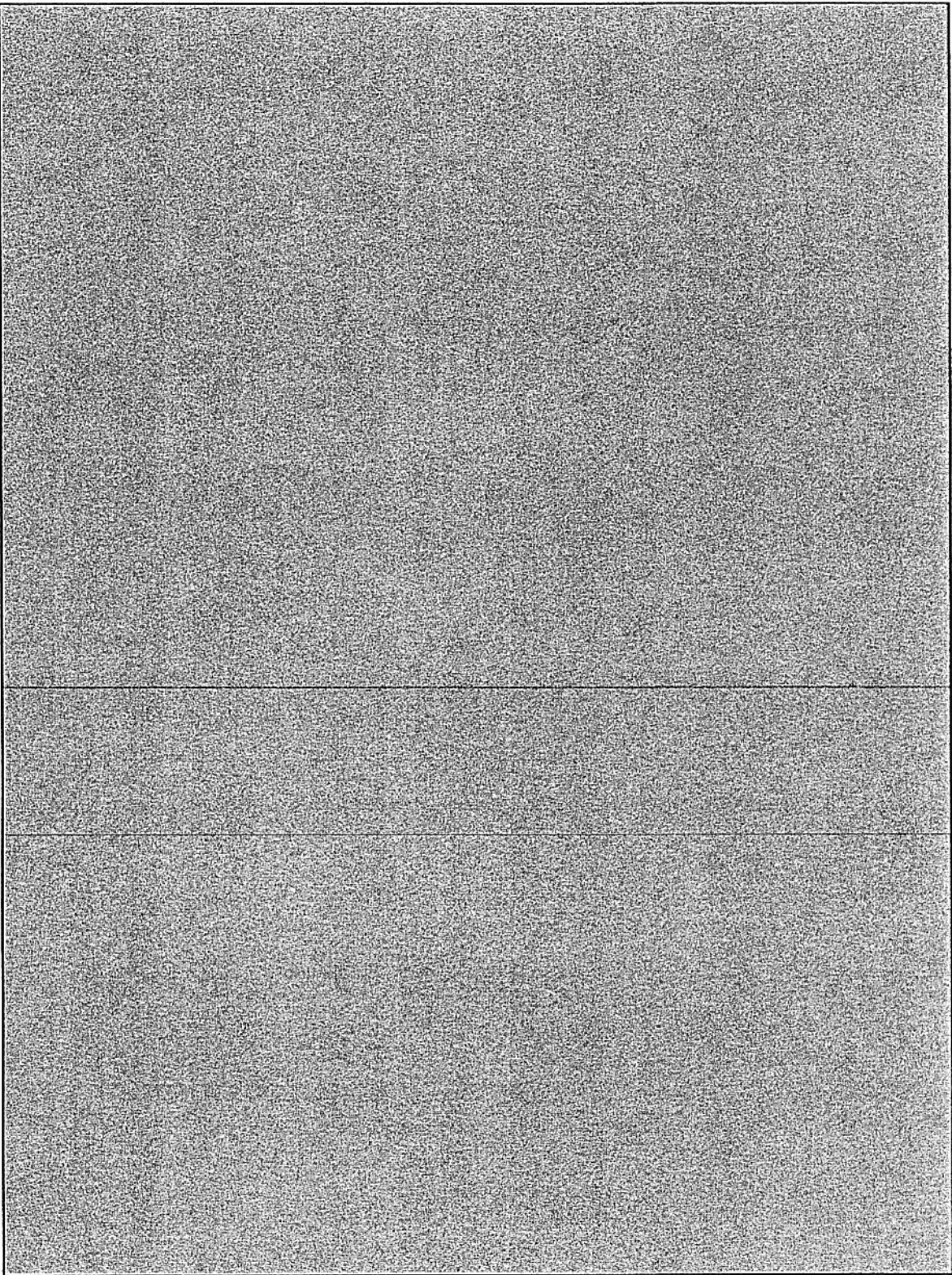






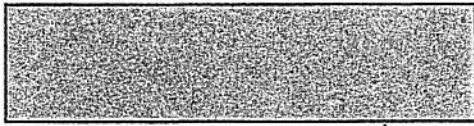






19. U.S. Seller



**20. Specific Purpose**

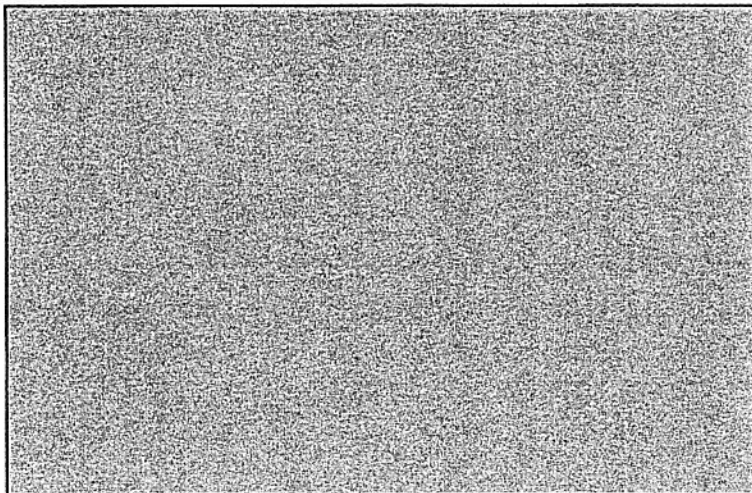
- ☐ Off-Shore procurement
- ☐ Brokering (22 CFR 129)
- ☐ Request for Prior Approval (22 CFR 126.8)
- ☒ Other

This application is for three types of radiation-hardened integrated circuits that are to be used for eight different instruments built for the European Space Agency's Solar Orbiter Mission Cosmic Vision Program. A description of the Solar Orbiter Mission is followed by a description of each of the instruments is provided on the attached "Supplementary Explanation of Transaction – Description of Mission, Programs for DSP-5 Application"

**21. U.S. Consignor/Freight Forwarder**

Fed Ex  
942-South Shady Grove Road  
Memphis, TN 78238

Kennedy Space Centre  
SR 405 Kennedy Space Center  
Cape Canaveral, FL 32899

**22. Applicant's Statement**

I, Philip B Zerbe, an empowered official (22 CFR 120.25) or an official of a foreign government entity in the U.S.,

hereby apply for a license to complete the transaction described above; warrant the truth of all statements made herein; and acknowledge, understand and will comply with the provisions of 22 CFR 120-130, and any conditions and limitations imposed.

I am authorized by the applicant to certify the following in compliance with 22 CFR 126.13:

(1) Neither the applicant, its chief executive officer, president, vice presidents, other senior officers or officials (e.g., comptroller, treasurer, general counsel) nor any member of its board of directors is:

(a) the subject of an indictment for or has been convicted of violating any of the U.S. criminal statutes enumerated in 22 CFR 120.27 since the effective date of the Arms Export Control Act, Public Law 94-329, 90 Stat. 729 (June 30, 1976); or

(b) ineligible to contract with, or to receive a license or other approval to import defense articles or defense services from, or to receive an export license or other approval from any agency of the U.S. Government;

(2) To the best of the applicant's knowledge, no party to the export as defined in 22 CFR 126.7(e) has been convicted of violating any of the U.S. criminal statutes enumerated in 22 CFR 120.27 since the effective date of the Arms Export Control Act, Public Law 94-329, 90 Stat. 729 (June 30, 1976); or is ineligible to contract with, or to receive a license or other approval to import defense articles or defense services from, or to receive an export license or other approval from any agency of the U.S. Government; and

#### 22 CFR 126.13 Certification

- ☒ a. I am authorized by the applicant to certify that the applicant and all the parties to the transaction can meet in full the conditions of 22 CFR 126.13 as listed above.
- ☐ b. I am authorized by the applicant to certify to 22 CFR 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR 126.13 as listed above. A request for an exception to policy, as described in 22 CFR 127.11 of the ITAR, is attached.
- ☐ c. I am authorized by the applicant to certify to 22 CFR 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR 126.13 as listed above. However that party has met the conditions imposed by the Directorate of Defense Trade Controls in order to resume standard submission of applications, not requiring an exception to policy as described in 22 CFR 127.11 of the ITAR.
- ☐ d. I am not authorized by the applicant to certify the conditions of 22 CFR 126.13. The applicant and all the parties to the transaction can meet in full the conditions of 22 CFR 126.13 as listed above. Please see the attached letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR 126.13.
- ☐ e. I am not authorized by the applicant to certify the conditions of 22 CFR 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR 126.13 as listed above. A request for an exception to policy, as described in 22 CFR 127.11 of the ITAR, and a letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR 126.13 are attached.
- ☐ f. I am not authorized by the applicant to certify to 22 CFR 126.13. The applicant or one of the parties of the transaction cannot meet one or more of the conditions of 22 CFR 126.13 as listed above. However that party has met the conditions imposed by the Directorate of Defense Trade Controls in order to resume standard submission of applications, not requiring an exception to policy as described in 22 CFR 127.11 of the ITAR. Please see the attached letter from an official that is authorized by the applicant to certify to the conditions of 22 CFR 126.13.

**Compliance with 22 CFR 130**

- ☐ This transaction does not meet the requirements of 22 CFR 130.2.
- ☒ This transaction meets the requirements of 22 CFR 130.2. The applicant or its vendors have not paid, nor offered, nor agreed to pay, in respect of any sale for which a license or approval is requested, political contributions, fees or commissions in amounts as specified in 22 CFR 130.9(a).
- ☐ The applicant or its vendors have paid, or offered, or agreed to pay, in respect of any sale for which a license or approval is requested, political contributions, fees or commissions in amounts as specified in 22 CFR 130.9(a). Information required under 22 CFR 130.10 is attached.
- ☐ I am not authorized by the applicant to certify the conditions of 22 CFR 130.9(a). Please see the attached letter for such certification.

**CONDITIONS OF ISSUANCE**

1. This license is issued under the conditions cited in 22 CFR 120-130, including the conditions and limitations as applicable, that:
  - A. It shall not be construed as implying U.S. Government approval or commitment to authorize future exports of any defense article (hardware or technical data) on the U.S. Munitions List (USML), or a U.S. Government commitment with regard to any proposed manufacturing license, technical assistance or distribution agreement that may result from a license or other approval.
  - B. If a license is issued for technical data only, it does not authorize the export of any hardware; if a license is issued for hardware only, it does not authorize the export of any technical data, unless specifically authorized by an exemption.
  - C. The issuance of this license does not release the applicant, or anyone acting on their behalf, from complying with other requirements of U.S. law and regulations.
  - D. This transaction may be subject to end-use monitoring by the United States Government.
2. The prior written approval of the Department of State, Directorate of Defense Trade Controls, must be obtained before USML defense articles exported from the U.S. using a license or other approval, to include an ITAR exemption, may be resold, transferred, diverted, transshipped, re-exported to, or used in any country, or by any end user or for any end use, other than that described on the license or other approval.

**DISPOSITION OF LICENSE**

The final disposition of this license shall be in accordance with 22 CFR 123.22(c).

**ENDORSEMENT**

Indicate below which COMMODITY is BEING EXPORTED and maintain a CONTINUING BALANCE of the remaining value:

SHIPMENT DATE	QUANTITY	COMMODITY	SHIPMENT VALUE	XTN/ITN	INITIALS	PORT OF EXIT/ENTRY
TOTAL AUTHORIZED VALUE:						



<p><b>REMAINING BALANCE:</b></p> <p><i>NOTE: Continuation of additional shipments must be authenticated by use of continuation sheets in the U.S. Customs handbook.</i></p>						