



# ENGINEERED ARRESTING SYSTEMS CORPORATION

AEROSAFETY & TECHNOLOGY  
Emergency Arresting Systems

ZODIAC  
AEROSPACE



November 29, 2011

Key West International Airport  
3491 S. Roosevelt Blvd.  
Key West, FL 33040  
USA

Attention: Mr. Larry Flowers

Subject: Repair of small plane taxi incident (Sept 2011) and Citation 550 arrestment (Nov 2011) into EMAS bed

Reference: BEMA 458 A – 41 EMAS block repair (taxi incident) and BEMA 465 Citation arrestment into the EMAS bed on 9 (departure end)

Dear Larry:

Engineered Arresting Systems corporation (ESCO) is pleased to off a proposal to make the repairs to you're the EMAS bed located on RW 9 (departure end) caused by two separate aircraft incidents.

The first incident occurred on September 16<sup>th</sup>, 2011 by a small private plane. The plane taxed up onto the EMAS bed and turned around on the bed to exit the bed and get back onto the runway. A total of 85 EMAMAX blocks were damaged enough to require replacement.

The second incident occurred on November 3<sup>rd</sup>, 2011 when a Citation 550 was unable to stop by the end of the runway. This was a true arrestment by the EMAS system. A total of 212 EMASMAX blocks require replacement due to this arrestment.

The second incident, by the citation 550, further damaged 44 of the 85 total EMASMAX originally damaged by the taxi incident. Due to both events and there slight overlap of block damage cause the bed to need to have a total of 253 EMASMAX blocks replaced.

Since each incident is to be covered by a different insurance company we are keeping the pricing separate. Our pricing does reflect some cost savings (mobilization & demobilization costs, shipping costs, and ESCO personnel on site supervision costs) as we have priced both repairs based on making one trip down to EYW to fix all blocks.

**September 16<sup>th</sup> small plane taxi incident turn-key proposal to replace 41 EMASMAX blocks:**

- **Material & shipping** \$68,941
- **ESCO labor & travel** \$13,209
- **Subcontractor labor & equipment** \$46,250

**Total for taxi repair: \$128,400**

**November 3<sup>rd</sup> citation 550 arrestment turn-key proposal to replace 212 EMASMAX blocks:**

- **Material & shipping** \$344,778
- **ESCO labor & travel** \$32,122
- **Subcontractor labor & equipment** \$205,000

**Total for Citation arrestment: \$581,900**

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2239 High Hill Road, Logan Township, NJ 08085 – USA. Tel: +856 241 8620 – Fax: +856 241 8621 – www.zodiac aerospace.com

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**Total for both repair made during one visit: \$710,300**

**NOTE: ESCO will require seven working days from receipt of a purchase order or notice to proceed (NTP) to be on site and ready with all materials & labor.**

Thank you for the opportunity to make this proposal. Please do not hesitate to contact me if you have any questions or if I can be of any additional assistance in this matter.

Sincerely,

Trip Thomas C.M.  
Senior Technical Sales Specialist  
ESCO – EMAS Division  
Ph: (856) 241-8620  
Fax: (856) 241-8621  
Email: [trip.thomas@zodiacaerospace.com](mailto:trip.thomas@zodiacaerospace.com)

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## **Terms & Conditions:**

- This proposal is quoted firm-fixed price and valid for a period of thirty (30) days from proposal submittal date.
- Payment terms are Net 30 days. Late payments shall accrue interest at a rate of 1.0% per month or portion thereof.
- The Terms and Conditions stated herein shall supersede any provisions of a Key West International Airport issued purchase order.
- No sales, use, or other taxes are included in above price. Any such taxes, if applicable, must be paid by the airport directly to the taxing authority.
- Pricing does not include any bond fees.
- Removal of the existing blocks, all site labor to be supplied by Key West International Airport
- Installation Materials, Tools and Equipment, identified as Contractor Supplied as detailed in Statement of Work, to be supplied by Contractor.
- It is anticipated that this work can be accomplished in no more than 7 nights (56 hrs. @ 8 hrs. /night, 12:30 AM- 5:30 AM).
- The airport authority shall provide space at the airport for block storage and staging (to park trucks, stage blocks) at no cost to ESCO. Extended storage fees (TBD) could apply if installations are delayed from target installation dates (TBD-mutually agreed upon between ESCO and the airport authority).
- ESCO will provide a 1 year limited commercial warranty against defects in materials and workmanship, provided ESCO supervises the installation of the EMAS and the installation is completed in accordance with ESCO standards (as validated and accepted by ESCO representatives upon completion of the installation). A copy of the warranty is attached. ESCO will not accept ANY liability, indemnity, consequential or incidental damages or warranty other than as stated in the ESCO warranty. See the attached warranty for details.



**ENGINEERED ARRESTING SYSTEMS CORPORATION**

**ENGINEERED MATERIAL ARRESTING SYSTEM LIMITED WARRANTY**

**ENGINEERED ARRESTING SYSTEMS CORPORATION** (“ESCO”) warrants to the original purchaser (the “Owner”) of the ESCO Engineered Material Arresting System (“EMAS”) that, for a period of one year from the earlier of the date of acceptance, as evidenced by a final acceptance document signed by the Owner or 30 days from date ESCO notifies Owner that the EMAS is ready for acceptance, and subject to the limitations stated herein, the EMAS arrestor bed (excludes base surface preparation) conforms to the product specifications contained in the documents listed under section entitled Applicable Documents. This Warranty is expressly conditioned on the Owner’s satisfying all of the following requirements:

1. **MAINTENANCE:** ESCO requires that the Owner initiate and follow a preventative maintenance program in accordance with the ESCO Inspection, Maintenance and Repair Manual listed under the clause “Applicable Documents”.
2. **RIGHT OF INSPECTION:** The Owner shall provide ESCO with reasonable access to the EMAS after its installation for the purpose of conducting semi-annual inspections. Reasonable access shall include, without limitation, access during daylight hours to permit careful visual assessment of the condition of the EMAS and access to all records of maintenance carried out by the Owner.
3. **INSTALLATION:** The installer must have successfully completed a training session conducted by ESCO during the initial phase of the installation. Installation must be in strict compliance with ESCO’s specifications, and project drawings and submittals approved by ESCO. There must be no deviations from ESCO’s specifications or the approved project drawings and submittals, without the prior written approval of ESCO. During the entire installation process and upon completion of the installation, the work must be inspected and approved by a technical representative of ESCO as conforming with ESCO’s specifications and approved project drawings and submittals.
4. **NOTIFICATION:** If the Owner believes that it has a claim arising from the failure of the EMAS to conform with this Warranty, the Owner must notify ESCO of the claim, within ten (10) days after discovering the conditions giving rise to the claim, and in any case before the Warranty period has expired. All such notices shall be given by certified mail addressed to **Director of Quality Assurance, Attention: Warranty Claim** Engineered Arresting Systems Corporation, 2239 High Hill Road, Logan Township, NJ 08085, USA.

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Failure to adhere to any of the conditions stated above shall void this Warranty.

**WARRANTY REMEDY** If the Warranty set forth above is breached, ESCO will, at its sole option, either (1) correct the non-conformity at its own cost within a reasonable time after receiving notice of the breach, or (2) replace the non-conforming portion of the EMAS at its own cost within a reasonable time after receiving notice of the breach. The Owner shall give ESCO reasonable access to the EMAS that allows ESCO to perform its warranty obligations on its most cost-effective basis possible.

## **EXCLUSIONS**

ESCO shall not be liable for any damage to the EMAS or other property attributable to any of the following (or any combination thereof):

1. Standing water in and around the EMAS bed,
2. Vehicular traffic,
3. Aircraft traffic in contact with the EMAS bed,
4. Damage caused by snow removal equipment that does not meet ESCO specifications detailed under the clause "Applicable Documents",
5. Acts of nature, including, but not limited to, lightning, flood, winds in excess of 100 mph, earthquake, hurricane, tornado, hail storm, or impact of objects or other violent storm or casualty,
6. Damage caused by wild life indigenous to the installation location,
7. Repairs or alterations of the EMAS, unless performed by personnel trained and qualified by ESCO and in a manner meeting the ESCO specifications and procedures listed under the clause "Applicable Documents",
8. Excessive build up of debris in and around the EMAS bed,
9. Impact or contact with other objects, spilled liquids or immersion in liquids (including fuel dropped from over-flying aircraft),
10. Use of the EMAS for purposes other than those for which it is customarily used,
11. Improper maintenance, abuse or other neglect,
12. Exposure to chemicals other than de-icers and aircraft engine exhaust,
13. Jet Blast in excess of 100 mph, and
14. Damage or defect due to faulty or improper workmanship, including installation of the product that is not in accordance with ESCO's published specifications and installation recommendations in effect at the time of installation,
15. Damage to the EMAS arrestor bed related to or caused by the base surface not being constructed per the drawings and specifications. ESCO must check and accept the base surface prior to the start of EMAS arrestor bed installation,
16. Any subsequent failure of the base surface whether or not originally constructed per the drawings and specifications.

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## APPLICABLE DOCUMENTS

Project Installation Drawing No. \_\_\_\_\_

Item P-555 Rev \_\_\_\_\_ EMAS Bed Installation by Prime Contractor

EMAS Quality Control plan for EMAS installation at XXXX Airport, with associated Quality Control Instructions.

SM- \_\_\_\_\_, Inspection, Maintenance and Repair Manual

Contract number \_\_\_\_\_

## WARRANTY EXCLUSIVE/LIMITATION OF LIABILITY

**THE EXPRESS WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND NO OTHER WARRANTIES OF ANY KIND, WHETHER STATUTORY, ORAL, WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY. THE OWNER'S EXCLUSIVE REMEDIES AND ESCO'S ONLY OBLIGATIONS ARISING OUT OF OR IN CONNECTION WITH DEFECTS OR NON-CONFORMITIES IN THE EMAS, WHETHER BASED ON WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL BE THOSE STATED HEREIN. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY IN ANY CONTRACT DOCUMENT, ESCO'S TOTAL LIABILITY TO THE OWNER ARISING FROM OR RELATING TO DEFECTS OR NON-CONFORMITIES IN THE EMAS SHALL BE LIMITED TO THE ORIGINAL PURCHASE PRICE OF THE EMAS PAID TO ESCO. ESCO SHALL HAVE NO LIABILITY TO THE OWNER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. REGARDLESS OF ANY STATUTORY LIMITATION PERIODS, ESCO SHALL NOT BE LIABLE FOR ANY BREACH OF WARRANTY OF WHICH IT IS NOT NOTIFIED AS REQUIRED BEFORE THE WARRANTY PERIOD HAS EXPIRED.**

## NO WARRANTY MODIFICATIONS

This Warranty may not be modified except in a writing signed by ESCO's Executive Vice President. No representative, employee, or agent of ESCO, or any person, other than the Executive Vice President of ESCO, has the authority to assume for ESCO any additional liability or responsibility in connection with the EMAS or this Warranty.

To ensure registration of this Warranty, please return a signed copy to:

**Contract Administrator**  
**Engineered Arresting Systems Corporation**  
2239 High Hill Road  
Logan Township, NJ 08085  
Phone (856) 241-8620  
Fax (856) 241-8621

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Name (Please Print) of Authorized Airport Individual: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_