



Washington State  
**DEPARTMENT OF  
ENTERPRISE SERVICES**

**CONTRACT**

**No. 00324**

*FOR*

**IGNITER FLARES AND HIGHWAY SIGNAL DEVICES**

**STATEWIDE**

*For Use by Eligible Purchasers*

By and Between

**STATE OF WASHINGTON  
DEPARTMENT OF ENTERPRISE SERVICES**

and

**STANDARD FUSEE CORPORATION DBA ORION SAFETY PRODUCTS**

Dated January 1, 2025

**CONTRACT**  
**No. 00324**  
**FOR**  
**IGNITER FLARES AND HIGHWAY SIGNAL DEVICES**  
**STATEWIDE**

This Washington Statewide Contract (“Contract”) is made and entered into by and between the State of Washington acting by and through the Department of Enterprise Services, a Washington State governmental agency (“Enterprise Services”) and Standard Fusee Corporation dba Orion Safety Products, a Delaware Corporation (“Contractor”) and is dated and effective as of January 1, 2025.

**RECITALS**

- A. Pursuant to Legislative authorization, Enterprise Services, on behalf of the State of Washington, is authorized to develop, solicit, and establish enterprise procurement solutions, including contracts, for goods and/or services to support Washington state agencies. See RCW 39.26.050(1). The Washington State Legislature also has authorized Enterprise Services to make these contracts available, pursuant to an agreement in which Enterprise Services ensures full cost recovery, to other local or federal government agencies or entities, public benefit nonprofit organizations, and any tribes located in the State of Washington. See RCW 39.26.050(1) & (2).
- B. Pursuant to its statutory authority, Enterprise Services is establishing a Contract for Igniter Flares and Highway Signal Devices that is designed to enable eligible purchasers to procure specified igniting flares from the awarded Contractor in a cost-effective, efficient manner using the terms and conditions of the Contract. The Contract is limited to igniting flares and does not include reusable or LED flares.
- C. On behalf of the State of Washington, Enterprise Services, as part of a competitive governmental procurement, issued Competitive Solicitation No. 00324 dated October 28, 2024 for Igniter Flares and Highway Signal Devices.
- D. Enterprise Services evaluated all responses to the Competitive Solicitation and identified Contractor as the apparent successful bidder.
- E. Enterprise Services has determined that entering into this Contract will meet the identified needs and be in the best interest of the State of Washington.
- F. The purpose of this Contract is to enable eligible purchasers to purchase the Goods and/or Services as set forth herein.

**AGREEMENT**

**NOW THEREFORE**, in consideration of the mutual promises, covenants, and conditions set forth herein, the parties hereto hereby agree as follows:

- 1. TERM.** The term of this Contract is twenty-four (24) months, commencing January 1, 2025 and ending December 31, 2026; *Provided*, however, that if Contractor is not in default and if, by July 1, 2026, in Enterprise Services’ reasonable judgment, Contractor satisfactorily has met the performance-based

goals for contract extension, with mutual consent of Contractor, Enterprise Services shall extend the term of this Contract, by written amendment, for up to twenty-four (24) additional months. Such extension amendment shall be on the same terms and conditions as set forth in this Contract. To earn the performance-based Contract term extension, Contractor must achieve the following performance-based metrics:

PERFORMANCE METRIC	PERFORMANCE REQUIREMENT FOR CONTRACT EXTENSION
Insurance Endorsements:	Contractor timely provides to Enterprise Services at the designated address, without exception, annual insurance endorsements for the insurance coverages required by this Contract. See <b>Exhibit B – Insurance Requirements</b> at § 4.
Vendor Management Fee:	Contractor timely remits to Enterprise Service, with no less than a 75% on time rate over the contract term, the applicable Vendor Management Fee (VMF). <i>Note:</i> Contractor must pay the VMF within thirty (30) calendar days of invoice from Enterprise Services. If Contractor is delinquent in timely paying the VMF for three (3) or more quarters within the first nine (9) quarters of the Contract term, Contractor shall not be eligible for a performance-based extension.
Contract Sales Reports:	Contractor timely provides to Enterprise Services, with no less than a 75% on time rate over the contract term, the required Contract quarterly sales reports. <i>Note:</i> Contractor must provide the quarterly sales reports to Enterprise Services within thirty (30) calendar days of the quarter’s end. If Contractor is delinquent in providing the quarterly sales reports for three (3) or more quarters within the first nine (9) quarters of the Contract term, Contractor shall not be eligible for a performance-based extension.

**2. ELIGIBLE PURCHASERS.** This Contract may be utilized by any of the following types of entities (each an eligible “Purchaser”):

- 2.1. WASHINGTON STATE AGENCIES. All Washington state agencies, departments, offices, divisions, boards, and commissions.
- 2.2. WASHINGTON STATE INSTITUTIONS OF HIGHER EDUCATION. Any the following institutions of higher education (colleges) in Washington:
  - State universities – i.e., University of Washington & Washington State University;
  - Regional universities – i.e., Central Washington University, Eastern Washington University, & Western Washington University
  - Evergreen State College;
  - Community colleges; and
  - Technical colleges.

- 2.3. CONTRACT USAGE AGREEMENT PARTIES. Any of the following types of entities that have executed a Contract Usage Agreement with Enterprise Services:
- Political subdivisions (e.g., counties, cities, school districts, public utility districts) in the State of Washington;
  - Federal governmental agencies or entities;
  - Public-benefit nonprofit corporations (i.e., public benefit nonprofit corporations as defined in RCW 24.03A.245) who receive federal, state, or local funding); and
  - Federally recognized Indian Tribes located in the State of Washington.

**3. SCOPE: INCLUDED GOODS AND/OR SERVICES & PRICES.**

- 3.1. CONTRACT SCOPE. Pursuant to this Contract, Contractor is authorized to sell only those Goods set forth in ***Exhibit A – Included Goods/Services And Prices*** for the prices set forth in ***Exhibit A – Included Goods/Services And Prices***. Contractor shall not represent to any Purchaser under this Contract that Contractor has contractual authority to sell Goods beyond those set forth in ***Exhibit A – Included Goods/Services And Prices***.
- (a) Goods. For purposes of this Contract, “Goods” means all equipment, materials, supplies, ancillary parts, accessories, components and other items purchased by Purchaser pursuant to this Contract and as identified in the Purchase Order.
  - (b) Services. For purposes of this Contract, “Services” means all services of any nature ordered by Purchaser pursuant to this Contract and as identified in the Purchase Order.
  - (c) Specifications. Where applicable, specifications for Goods and/or Services are detailed in this Contract and the Purchase Order. Unless otherwise specified in the Purchase Order, all Goods and/or Services provided shall be new and unused of the latest model or design.
- 3.2. STATE’S ABILITY TO MODIFY SCOPE OF CONTRACT. Subject to mutual agreement between the parties, Enterprise Services reserves the right to modify the Goods and/or Services included in this Contract; *Provided*, however, that any such modification shall be effective only upon thirty (30) calendar days advance written notice; and *Provided further*, that any such modification must be within the scope of the Competitive Solicitation for this Contract.
- 3.3. ECONOMIC ADJUSTMENT. The Contract Prices set forth herein are firm and fixed for one year from the effective date of this Contract. Beginning January 1, 2026 and annual anniversary thereafter, Contractor may request an economic price adjustment (EPA). Requests for an EPA must be made in writing and emailed to the Enterprise Service’s Contract Administrator and be received by Enterprise Services between October 1st and October 31<sup>st</sup> of each year. Contractor’s EPA request cannot exceed the annual average percentage changes in the United States Department of Labor, Bureau of Labor and Statistics (BLS) Producer Price Indices (PPI) as set forth in the formula below. Once Contractor’s timely EPA request is received, Enterprise Services will analyze the PPI data to determine the appropriate EPA. Contract prices, as adjusted by an EPA shall be effective thereafter, beginning January 1st; *Provided*, however, that the parties must timely execute a contract amendment to incorporate such price adjustments. In the event Contractor fails to timely request a price adjustment, there

shall be no EPA allowed on the Contract for that the applicable period, and the following year the EPA shall not be retroactive nor cumulative to account for unrequested EPAs. Enterprise Services shall have the right to review PPI data annually and, if such PPI data reflects a substantial decrease in the annual average PPI, upon mutual consent of Contractor and Enterprise Services, both parties shall amend the Contract to decrease the Contract prices accordingly, and must timely execute a contract amendment to incorporate such price adjustments.

The economic price adjustment shall be calculated as follows:

$$\text{New Price} = \text{Old Price} + (\text{Old Price} \times ((\text{Current Period Index} - \text{Base Period Index}) / \text{Base Period Index}))$$

If an index becomes unavailable, Enterprise Services shall substitute a proxy index. If there is not a direct substitute, the next higher aggregate index available will be used.

The “Current Period Index” is the average of the most recent twelve months of BLS Index values, and the “Base Period Index” is the average of the twelve months of BLS Index values prior to the Current Period Index.

PPI values, including those that are preliminary at the time of the request, will be utilized in the analysis.

CATEGORY/COST ELEMENT	PPI NAME/DESCRIPTION	PPI CODE/INDEX	WEIGHTING PERCENTAGE
Labor	Washington State Minimum Wage	WA State Minimum Wage	25%
Delivery	General Freight Trucking, long distance, not seasonally adjusted	PCU484412-48412	25%
Explosive Manufacturing	PPI – Explosives Manufacturing, not seasonally adjusted	PCU3259203259920	50%

3.4. PRICE CEILING. Although Contractor may offer lower prices to Purchasers, during the term of this Contract, Contractor guarantees to provide the Goods and/or Services at no greater than the prices set forth in **Exhibit A – Included Goods/Services And Prices** (subject to economic or other adjustment as set forth herein).

3.5. CONTRACT INFORMATION. Enterprise Services shall maintain and provide to eligible Purchasers information regarding this Contract, including scope, pricing, and lowest responsive, responsible bidder designation. In addition, Enterprise Services identifies awarded contractors who qualify as Washington Small Businesses, Certified Veteran-Owned Businesses, or that, pursuant to the Contract provide Goods/Services that meet specified state procurement priorities as set forth in the Competitive Solicitation.

**4. CONTRACTOR REPRESENTATIONS AND WARRANTIES.** Contractor makes each of the following representations and warranties as of the effective date of this Contract and at the time any order is placed pursuant to this Contract. If, at the time of any such order, Contractor cannot make such

representations and warranties, Contractor shall not process any orders and shall, within three (3) business days notify Enterprise Services, in writing, of such breach.

- 4.1. QUALIFIED TO DO BUSINESS. Contractor represents and warrants that Contractor is (a) in good standing; (b) qualified to do business in the State of Washington; and (c) registered with the Washington State Department of Revenue and the Washington Secretary of State.
- 4.2. TAXES. Contractor represents and warrants that Contractor is current, in full compliance, and has paid all applicable taxes owed to the State of Washington.
- 4.3. LICENSES; CERTIFICATIONS; AUTHORIZATIONS; & APPROVALS. Contractor represents and warrants that Contractor possesses and shall keep current during the term of this Contract all required licenses, certifications, permits, authorizations, and approvals necessary for Contractor's proper performance of this Contract.
- 4.4. SUSPENSION & DEBARMENT. Contractor represents and warrants as previously certified in Contractor's Bidder's Certification, that neither Contractor nor its principals or affiliates presently are nor have ever been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in any governmental contract by any governmental department or agency within the United States.
- 4.5. CIVIL RIGHTS. Contractor represents and warrants that Contractor complies with all applicable requirements regarding civil rights. Such requirements prohibit discrimination against individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin.
- 4.6. WASHINGTON STATE Wage Theft Prevention. Contractor represents and warrants as previously certified in Contractor's Bidder's Certification, that during the term of this Contract and the three (3) year period immediately preceding the award of the Contract, Contractor has not been determined, by a final and binding citation and notice of assessment issued by the Washington Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction, to be in willful violation of any provision of Washington state wage laws set forth in RCW 49.46, 49.48, or 49.52.
- 4.7. WASHINGTON STATE WORKERS' RIGHTS (EXECUTIVE ORDER 18-03) (CERTIFIED). Contractor represents and warrants, as previously certified in Contractor's Bidder's Certification, that Contractor does NOT require its employees, as a condition of employment, to sign or agree to mandatory individual arbitration clauses or class or collective action waivers. Contractor further represents and warrants that, during the term of this Contract, Contractor shall not, as a condition of employment, require its employees to sign or agree to mandatory individual arbitration clauses or class or collective action waivers.
- 4.8. WASHINGTON STATE PAY EQUALITY FOR 'SIMILARLY EMPLOYED' INDIVIDUALS. Contractor represents and warrants, as previously certified in Contractor's Bidder's Certification, that, among Contractor's employees, 'similarly employed' individuals are compensated as equals. For purposes of this provision, employees are similarly employed if the individuals work for the same employer, the performance of the job requires comparable skill, effort, and responsibility, and the jobs are performed under similar working conditions. Job titles alone are not determinative of whether employees are similarly employed. Contractor may allow differentials in compensation for Contractor's workers based in good faith on any of the following: a seniority system; a merit system; a system that measures earnings by quantity

or quality of production; a bona fide job-related factor or factors; or a bona fide regional difference in compensation levels. A bona fide job-related factor or factors may include, but is not limited to, education, training, or experience that is: consistent with business necessity; not based on or derived from a gender-based differential; and accounts for the entire differential. A bona fide regional difference in compensation level must be consistent with business necessity; not based on or derived from a gender-based differential; and account for the entire differential. Notwithstanding any provision to the contrary, upon breach of warranty and Contractor's failure to provide satisfactory evidence of compliance within thirty (30) days, Enterprise Services may suspend or terminate this Contract and any Purchaser hereunder similarly may suspend or terminate its use of the Contract and/or any agreement entered into pursuant to this Contract.

- 4.9. PUBLIC CONTRACTS AND PROCUREMENT FRAUD. Contractor represents and warrants that, within the three (3) year period prior to this Contract, neither Contractor nor its principals or affiliates: (a) have been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, local, or tribal) contract or purchase order under a public contract; (b) have been in violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property; (c) have been indicted for or otherwise criminally or civilly charged by a government entity (federal, state, local, or tribal) with commission of any of the offense enumerated in subsection (b) of this provision; or (d) had one or more public contracts (federal, state, local, or tribal) terminated for cause or default.
- 4.10. PROCUREMENT ETHICS & PROHIBITION ON GIFTS. Contractor represents and warrants that Contractor complies fully with all applicable procurement ethics restrictions including, but not limited to, restrictions against Contractor providing gifts or anything of economic value, directly or indirectly, to Enterprise Services and Purchasers' employees.
- 4.11. WASHINGTON'S ELECTRONIC BUSINESS SOLUTION (WEBS). Contractor represents and warrants that Contractor is registered in Washington's Electronic Business Solution (WEBS), Washington's contract registration system and that, all of Contractor's information therein is current and accurate and that throughout the term of this Contract, Contractor shall maintain an accurate profile in WEBS.
- 4.12. WASHINGTON'S STATEWIDE PAYEE DESK. Contractor represents and warrants that Contractor is registered with Washington's Statewide Payee Desk, which registration is a condition to payment.
- 4.13. CONTRACT PROMOTION; ADVERTISING AND ENDORSEMENT. Contractor represents and warrants that Contractor shall use commercially reasonable efforts both to promote and market the use of this Contract with eligible Purchasers and to ensure that those entities that utilize this Contract are eligible Purchasers. Contractor understands and acknowledges that neither Enterprise Services nor Purchasers are endorsing Contractor's Goods and/or Services or suggesting that such Goods and/or Services are the best or only solution to their needs. Accordingly, Contractor further represents and warrants that Contractor shall make no reference to Enterprise Services, any Purchaser, or the State of Washington in any promotional material without the prior written consent of Enterprise Services.
- 4.14. CONTINGENT FEES. Contractor represents and warrants that no person or selling agent has been employed or retained to solicit or secure this Contract upon an agreement or understanding

for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established agents as defined in the Federal Acquisition Regulations.

- 4.15. FINANCIALLY SOLVENT. Contractor represents and warrants that Contractor has not commenced bankruptcy proceedings and that there are no judgment, liens, or encumbrances of any kind affecting title to any Goods and/or Services that are the subject of this Contract.
- 4.16. OPERATIONAL CAPABILITY. Contractor represents and warrants, as previously certified in Contractor's Bidder's Certification, that Contractor has the operational and financial capability to perform the Contract.
- 4.17. CONTRACT TRANSITION. Contractor represents and warrants that, in the event this Contract or a similar contract, is transitioned to another contractor (e.g., Contract expiration or termination), Contractor shall use commercially reasonable efforts to assist Enterprise Services (including the Purchasers hereunder) for a period of sixty (60) calendar days to effectuate a smooth transition to another contractor to minimize disruption of service and/or costs to the State of Washington and such Purchasers; *Provided*, however, that, if costs are incurred, Contractor shall be compensated for such costs consistent with the terms and conditions pertaining to this Contract for the sixty (60) day period immediately before such transition.

## 5. QUALITY; WARRANTY; REMEDIES.

- 5.1. GOODS WARRANTY. Contractor warrants that, for a period of twelve (12) months from the date when the Goods are put into use, or eighteen (18) months after delivery of the Goods, whichever is later ("Goods Warranty Period"), the Goods: (a) are free from defects in design, material, and workmanship; (b) are fit and safe for the intended purposes and appropriate for the specified application(s) (if any); (c) are consistent with recognized industry quality standards; (d) comply with the requirements, specifications, drawings, standards, and descriptions included in this Contract; and (e) are produced and delivered in full compliance with applicable law ("Goods Warranty"). Contractor further warrants that it has good and marketable title to the Goods and shall keep Purchaser's property free of liens. If Purchaser receives notice of a lien caused by Contractor, Purchaser may withhold any payment otherwise due Contractor until Contractor submits proof, in a form satisfactory to Purchaser, that all lienable claims have been fully paid or waived.
- 5.2. GOODS REMEDY. If Goods do not comply with the Goods Warranty or any defects develop during the Goods Warranty Period under normal use, at Purchaser's election, Contractor promptly shall remedy the defect by removing, repairing, correcting, or replacing, and/or reinstalling any defective Goods. Contractor's Goods Warranty support shall include, at Contractor's sole expense, all technical support, parts, materials and equipment, and labor, including freight and "in/out" costs required to address the defect. If, in Purchaser's judgment, repair or replacement is inadequate, or fails of its essential purpose, Contractor shall refund the full amount of any payments that have been made. The rights and remedies of the parties under this warranty are in addition to any other rights and remedies of the parties provided by law or equity, including, without limitation, actual damages, and, as applicable and awarded under the law, to a prevailing party, reasonable attorneys' fees and costs.
- 5.3. FAILURE TO REMEDY. If Contractor does not remedy a defect or nonconformity within ten (10) calendar days after receipt of written notice from Purchaser, or if an emergency exists



rendering it impossible or impractical for Purchaser to have Contractor provide a remedy, Purchaser may, without prejudice to any other rights or remedies available to it, make or cause to be made required modifications, adjustments, or repairs, or may replace Goods, Services, IT Goods, or IT Services, in which case Contractor shall reimburse Purchaser for its actual costs or, at Purchaser's option, Purchaser shall offset the costs incurred from amounts owing to Contractor.

**6. SAFETY; SECURITY; CONTRACTOR REQUIREMENTS WHILE ON PURCHASER'S PREMISES.** Contractor's failure to comply with any of the requirements in this Section shall be cause for termination.

- 6.1. REGULATORY REQUIREMENTS/SAFETY. Goods and/or Services supplied by Contractor shall meet all applicable health, safety, and other federal, state, local, and/or tribal regulatory requirements applicable to the Goods and/or Services.
- 6.2. MATERIAL SAFETY DATA SHEETS. As applicable, Contractor shall provide Purchaser with all appropriate current Material Safety Data Sheets ("MSDS") at the time of delivery of each shipment of Goods which requires such compliance and/or and for materials used by Contractor while performing Services pursuant to this Contract.
- 6.3. CLEAN-UP. If Contractor, its agents, employees, or subcontractors perform on-site Services, Contractor, at its cost, shall remove all excess materials, equipment, packaging, and garbage within the scope of its performance of Services and leave that portion of the premises in which the work was performed in a clean condition. Should Contractor fail to clean up a Site after completion of work, Purchaser shall have the right to remove the materials and set off the cost of clean up against amounts owed to Contractor.
- 6.4. ACCIDENT AND INJURY REPORTING. If Contractor, its agents, employees, or subcontractors are present at Purchaser's premises, Contractor promptly shall report in writing all injuries, accidents, property damage, near-miss incidents, or any claims regarding damages or injury involving Contractor, its agents, employees, or subcontractors occurring at such premises. Contractor agrees to cooperate and assist Purchaser in any investigation of incidents.
- 6.5. ON-SITE REQUIREMENTS. As applicable, while on Purchaser's premises or while interacting with Purchaser and/or Enterprise Services' personnel, Contractor, its agents, employees, or subcontractors shall comply, in all respects, with Purchaser's physical, fire, access, safety, health, and security requirements and not interfere with Purchaser's operations. Contractor represents and warrants that Contractor, its agents, employees, or subcontractors who access Purchaser's premises shall be adequately trained and at all times comply with Purchaser's requirements.

**7. SUBCONTRACTORS.**

- 7.1. CONTRACTOR RESPONSIBILITY. Notwithstanding any provision to the contrary, in the event Contractor elects to utilize subcontractors to perform this Contract, Contractor shall: (a) incorporate Contractor's responsibilities under this Contract into its subcontracts; (b) be fully responsible for the performance of any such subcontractors (regardless of tier) and ensure that subcontractors comply with each and every Contractor obligation set forth in this Contract; (c) be the sole point of contact for Enterprise Services and any Purchasers regarding

all contractual matters; (d) ensure that such subcontractors are registered in WEBS; and (e) defend, indemnify, and hold Enterprise Services and Purchasers harmless in case of negligence, other tortious fault, or intentional misconduct by any such subcontractors (regardless of tier). Prior to utilizing any subcontractor to perform this Contract, Contractor shall provide written notice to Enterprise Services' contract administrator. Such notice shall confirm that the subcontractor is registered in WEBS and provide the necessary information for Enterprise Services' contract administrator to include such subcontractor(s) in Washington's Purchasing Contract Management System (PCMS).

- 7.2. REPORTING. If Contractor is required to report to Purchaser and/or Enterprise Services, such report(s) shall include subcontractor data, by subcontractor, for any data that Contractor is required to report as well as a consolidated 'rollup' report combining Contractor and subcontractor data.
- 7.3. SUBCONTRACTOR REPRESENTATIONS AND CERTIFICATIONS. Any Contractor representations or certifications set forth in this Contract shall apply to subcontractors (at any tier) and Contractor shall not utilize any subcontractors (at any tier) who cannot provide such representations or certifications, excepting the certification to be registered with Washington's Statewide Payee Desk, unless Purchaser shall pay such subcontractor directly.

## **8. USING THE CONTRACT – PURCHASES.**

- 8.1. ORDERING REQUIREMENTS. Eligible Purchasers shall order Goods and/or Services from this Contract, consistent with the terms hereof and by using any ordering mechanism agreeable both to Contractor and Purchaser but including, at a minimum, a purchase order. When practicable, Contractor and Purchaser also shall use telephone orders, email orders, web-based orders, and similar procurement methods (collectively "Purchaser Order"). All Purchase Orders must reference the Contract number. The Purchaser's Purchase Order must, at the time of placement, specify any appointment requests and/or liftgate requests for delivery. Should the Purchaser refuse delivery due to these specified requirements, additional charges may be incurred. However, such additional charges shall not exceed the actual Freight/Delivery costs incurred by the Contractor. The terms of this Contract shall apply to any Purchase Order and, in the event of any conflict, the terms of this Contract shall prevail. Notwithstanding any provision to the contrary, in no event shall any 'click-agreement,' software or web-based application terms and conditions, or any other agreement modify the terms and conditions of this Contract.
- (a) MINIMUM ORDER REQUIREMENTS. Contractor requires a 30 case minimum per delivery location; for orders that do not meet a minimum requirement Contractor may charge Freight/Delivery Costs as a separate line item on the invoice.
  - (b) CONTRACTOR ORDER ACKNOWLEDGEMENT. Contractor shall acknowledge orders within three (3) business days.
  - (c) CONTRACTOR ORDER CONFIRMATION. Contractor shall confirm upon order: Purchase Order Number; Purchaser's delivery location/address, and any special instructions which may include, however is not limited to, appointment requests for delivery and/or liftgate requests specified at the time of order placement.
- 8.2. DELIVERY REQUIREMENTS. Contractor must ensure that the Goods and/or Services are delivered or provided as required by this Contract, the Purchase Order used by Purchaser, and as

otherwise mutually agreed in writing between Purchaser and Contractor. The following apply to all deliveries:

- (a) Contractor shall make all deliveries to the applicable delivery location specified in the Purchase Order. Such deliveries shall occur during Purchaser's normal work hours and within the time period mutually agreed in writing between Purchaser and Contractor.
- (b) Contractor shall ship all Goods and/or Services purchased pursuant to this Contract, freight charges prepaid by Contractor, FOB Purchaser's specified destination with all transportation and handling charges included for Purchaser's Orders of 30 cases or greater per delivery location. For Purchaser's Orders of less than 30 cases per delivery location, freight charges may be added to the invoice as a separate line item. *See Section 9, Invoicing & Payment.* Contractor shall bear all risk of loss, damage, or destruction of the Goods and/or Services ordered hereunder that occurs prior to delivery, except loss or damage attributable to Purchaser's fault or negligence. If Purchaser requests additional services that may be available from Contractor or from the Contractor's Vendor, is applicable, insert any approved/authorized fees from **Exhibit A – Included Goods/Services and Prices**. Any such fees associated with such requested services may be added as a separate line item on the Purchaser's Invoice.
- (c) All packing lists, packages, instruction manuals, correspondence, shipping notices, shipping containers, and other written materials associated with this Contract shall be identified by the Contract number set forth on the cover of this Contract and the applicable Purchaser's Purchase Order number. Packing lists shall be enclosed with each shipment and clearly identify all contents and any backorders.

8.3. RECEIPT AND INSPECTION OF GOODS AND/OR SERVICES. Goods and/or Services purchased under this Contract are subject to Purchaser's reasonable inspection, testing, and approval at Purchaser's destination. Purchaser reserves the right to reject and refuse acceptance of Goods and/or Services that are not in accordance with this Contract and Purchaser's Purchase Order. If there are any apparent defects in the Goods and/or Services at the time of delivery, Purchaser promptly shall notify Contractor. At Purchaser's option, and without limiting any other rights, Purchaser may require Contractor to repair or replace, at Contractor's expense, any or all of the damaged Goods and/or Services or, at Purchaser's option, Purchaser may note any such damage on the receiving report, decline acceptance, and deduct the cost of rejected Goods and/or Services from final payment. Payment for any Goods and/or Services under such Purchase Order shall not be deemed acceptance.

8.4. ON SITE REQUIREMENTS. While on Purchaser's premises, Contractor, its agents, employees, or subcontractors shall comply, in all respects, with Purchaser's physical, fire, access, or other security requirements.

- (a) CUSTOMER SERVICE. Contractor shall be available via email or phone, Monday through Friday 8:00 am – 5:00 pm PST. Customer service may include, billing and invoicing, or other general questions. Contractor shall respond to customer inquiries within forty-eight (48) hours. Order acknowledgment. Contractor must acknowledge the order within one business day from the time of the receipt of the order.

- (b) Shipping and Delivery. Providing Purchasers with regular and timely status updates in event of a delay in order fulfillment.

## 9. INVOICING & PAYMENT.

- 9.1. CONTRACTOR INVOICE. Contractor shall submit properly itemized invoices to Purchaser's designated invoicing contact for Goods and/or Services delivered under this Contract. Such invoices shall itemize the following:
- (a) Contract No. 00324;
  - (b) Contractor name, address, telephone number, and email address for billing issues (i.e., Contractor Customer Service Representative);
  - (c) Contractor's Federal Tax Identification Number;
  - (d) Date(s) of delivery;
  - (e) Applicable Goods and/or Services;
  - (f) Invoice amount; and
  - (g) Payment terms, including any available prompt payment discounts;
  - (h) APPLICABLE Additional Fees (Liftgate and/or Appointment Requests, etc.), Fees from **Exhibit A – Included Goods/Services and Prices**;
  - (i) Freight/Delivery Costs: If a Purchaser's order does not meet the minimum 30 case per delivery location, the Contractor may add Freight/Delivery Costs as a separate line item to the invoice.

Contractor's invoices for payment shall reflect accurate Contract prices. Invoices shall not be processed for payment until receipt of a complete invoice as specified herein.

- 9.2. PAYMENT. Payment is the sole responsibility of, and shall be made by, the Purchaser. Purchaser's obligation to pay invoices is subject to receipt of a timely and accurate invoice and conforming Goods and/or Services. Unless Contractor has provided a prompt payment discount set forth in **Exhibit A – Included Goods/Services and Prices**, Purchaser's payment is due within thirty (30) calendar days of invoice. Purchaser retains the right of setoff for any amount due or owing to Purchaser. Purchaser may make payments electronically (e.g., ACH payments). Contractor shall provide information necessary to facilitate electronic payments. If Purchaser fails to make timely payment(s), Contractor may invoice Purchaser in the amount of one percent (1%) per month on the amount overdue or a minimum of \$1. Payment shall not be considered late if a check or warrant is mailed within the time specified.
- 9.3. OVERPAYMENTS. Contractor promptly shall refund to Purchaser the full amount of any erroneous payment or overpayment. Such refunds shall occur within thirty (30) calendar days of written notice to Contractor; *Provided*, however, that Purchaser shall have the right to elect to have either direct payments or written credit memos issued. If Contractor fails to make timely refunds of overpayment(s) (either directly or by credit memo), Contractor shall pay Purchaser interest at the rate of one percent (1%) per month on the amount overdue thirty (30) calendar days after notice to Contractor.
- 9.4. ADVANCE PAYMENT PROHIBITED. Except as authorized by law, Contractor shall not request or receive advance payment for any Goods and/or Services furnished by Contractor pursuant to this Contract.

- 9.5. NO ADDITIONAL CHARGES. Unless otherwise specified herein, Contractor shall not include or impose any additional charges including, but not limited to, charges for shipping, handling, insurance, or payment processing.
- 9.6. TAXES/FEES. Contractor promptly shall pay all applicable taxes on its operations and activities pertaining to this Contract. Failure to do so shall constitute breach of this Contract. Unless otherwise agreed, Purchaser shall pay applicable sales tax imposed by the State of Washington on purchased Goods and/or Services. Contractor's invoices shall separately state (a) taxable and non-taxable charges and (b) sales/use tax due by jurisdiction. In regard to federal excise taxes, Contractor shall include federal excise taxes only if, after thirty (30) calendar days written notice to Purchaser, Purchaser has not provided Contractor with a valid exemption certificate from such federal excise taxes.

**10. CONTRACT MANAGEMENT.**

- 10.1. CONTRACT ADMINISTRATION & NOTICES. Except for legal notices, the parties hereby designate the following contract administrators as the respective single points of contact for purposes of this Contract. Enterprise Services' contract administrator shall provide Contract oversight. Contractor's contract administrator shall be Contractor's principal contact for business activities under this Contract. The parties may change contract administrators by written notice as set forth below.

Any notices required or desired shall be in writing and sent by U.S. mail, postage prepaid, or sent via email, and shall be sent to the respective addressee at the respective address or email address set forth below or to such other address or email address as the parties may specify in writing:

<p><b>Enterprise Services</b>          Attn: Carmen Hill          Washington Dept. of Enterprise Services          PO Box 41411          Olympia, WA 98504-1411          Tel: (360) 407-8219          Email: <a href="mailto:DESContractsTeamCedar@des.wa.gov">DESContractsTeamCedar@des.wa.gov</a></p>	<p><b>Contractor</b>          Attn: _Orion Safety Products          Ken Harrison          28320 St. Michaels Road          Easton, MD 21601          Tel: (410) 822-0318          Email: <a href="mailto:kenny@orionsignals.com">kenny@orionsignals.com</a></p>
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Notices shall be deemed effective upon the earlier of receipt, if mailed, or, if emailed, upon transmission to the designated email address of said addressee.

- 10.2. CONTRACTOR CUSTOMER SERVICE REPRESENTATIVE. Contractor shall designate a customer service representative (and inform Enterprise Services of the same) who shall be responsible for addressing Purchaser issues pertaining to this Contract.
- 10.3. LEGAL NOTICES. Any legal notices required or desired shall be in writing and sent by U.S. mail, postage prepaid, or sent via email, and shall be sent to the respective addressee at the respective address or email address set forth below or to such other address or email address as the parties may specify in writing:

<b>Enterprise Services</b>	<b>Contractor</b>
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Attn: Legal Services Manager  
Washington Dept. of Enterprise Services  
PO Box 41411  
Olympia, WA 98504-1411  
Email: [greg.tolbert@des.wa.gov](mailto:greg.tolbert@des.wa.gov)

Attn: \_Orion Safety Products  
Ken Harrison  
28320 St. Michaels Road  
Easton, MD 21601  
Email: [kenny@orionsignals.com](mailto:kenny@orionsignals.com)

Notices shall be deemed effective upon the earlier of receipt if mailed, or, if emailed, upon transmission to the designated email address of said addressee.

**11. CONTRACTOR SALES REPORTING; VENDOR MANAGEMENT FEE; & CONTRACTOR REPORTS.**

11.1. CONTRACT SALES REPORTING. Contractor shall report total Contract sales quarterly to Enterprise Services, as set forth below.

- (a) Contract Sales Reporting System. Contractor shall report quarterly Contract sales in Enterprise Services' Contract Sales Reporting System. Enterprise Services shall provide Contractor with a login password and a vendor number. The password and vendor number shall be provided to the Sales Reporting Representative(s) listed on Contractor's Bidder Profile.
- (b) Data. Each sales report must identify every authorized Purchaser by name as it is known to Enterprise Services and its total combined sales amount invoiced during the reporting period (i.e., sales of an entire agency or political subdivision, not its individual subsections). The "Miscellaneous" option may be used only with prior approval by Enterprise Services. Upon request, Contractor shall provide contact information for all authorized Purchasers specified herein during the term of the Contract. If there are no Contract sales during the reporting period, Contractor must report zero sales.
- (c) Due dates for Contract Sales Reporting. Quarterly Contract Sales Reports must be submitted electronically by the following deadlines for all Contract sales invoiced during the applicable calendar quarter:

QUARTER	FOR SALES MADE IN CALENDAR QUARTER	CONTRACT SALES REPORT	
		DUE BY	PAST DUE
1	January 1 – March 31	April 30	May 1
2	April 1 – June 30	July 31	August 1
3	July 1 – September 30	October 31	November 1
4	October 1 – December 31	January 31	February 1

11.2. VENDOR MANAGEMENT FEE. Contractor shall pay to Enterprise Services a vendor management fee ("VMF") of 1.25 percent on the purchase price for all Contract sales (the purchase price is the total invoice price less applicable sales tax).

- (a) The sum owed by Contractor to Enterprise Services as a result of the VMF is calculated as follows:

$$\text{Amount owed to Enterprise Services} = \text{Total Contract sales invoiced (not including sales tax)} \times .0125.$$

- (b) The VMF must be rolled into Contractor's current pricing. The VMF must not be shown as a separate line item on any invoice unless specifically requested and approved by Enterprise Services.
- (c) Enterprise Services shall invoice Contractor quarterly based on Contract sales reported by Contractor. Contractor is not to remit payment until Contractor receives an invoice from Enterprise Services. Payments must be received within thirty (30) calendar days of the invoice issue date from Enterprise Services. Contractor's VMF payment to Enterprise Services must reference the invoice number.
- (d) Contractor's failure to report accurate total net Contract sales, to submit a timely Contract sales report, or to remit timely payment of the VMF to Enterprise Services, shall be cause for Enterprise Services, at its discretion, to suspend Contractor or terminate this Contract or exercise remedies provided by law. Without limiting any other available remedies, the parties agree that Contractor's failure to remit to Enterprise Services timely payment of the VMF shall obligate Contractor to pay to Enterprise Services, to offset the administrative and transaction costs incurred by the State to identify, process, and collect such sums, the sum of \$200.00 or twenty-five percent (25%) of the outstanding amount, whichever is greater, or the maximum allowed by law, if less.
- (e) Enterprise Services reserves the right, upon thirty (30) calendar days advance written notice, to increase, reduce, or eliminate the VMF for subsequent purchases, and reserves the right to renegotiate Contract pricing with Contractor when any subsequent adjustment of the VMF might justify a change in pricing.

11.3. ANNUAL CONTRACT SALES REPORT. Contractor shall provide to Enterprise Services a detailed annual Contract sales report. Such report shall include, at a minimum, the following:

- The Goods and/or Services sold (including, as applicable, item number or other identifier);
- Per unit quantities sold;
- Items and volumes purchased by Purchaser;
- Shipment/delivery locations by Purchaser; and
- Contract price.

This report must be provided in an electronic format that can be read by Microsoft (MS) Excel. Such report is due within thirty (30) calendar days of the annual anniversary of the effective date of this Contract.

## 12. RECORDS RETENTION & AUDITS.

- 12.1. RECORDS RETENTION. Contractor shall maintain books, records, documents, and other evidence pertaining to this Contract and orders placed by Purchasers under it to the extent and in such detail as shall adequately reflect contract performance and administration of purchases, payments, taxes, and fees. Contractor shall retain such records for a period of six (6) years following expiration or termination of this Contract or final payment for any order placed by a Purchaser against this Contract, whichever is later; *Provided*, however, that if any litigation,

claim, or audit is commenced prior to the expiration of this period, such period shall extend until all such litigation, claims, or audits have been resolved.

- 12.2. **AUDIT.** Enterprise Services reserves the right to audit, or have a designated third-party audit, applicable records to ensure that Contractor properly has invoiced Purchasers and that Contractor has paid all applicable vendor management fees to Enterprise Services. Accordingly, Contractor shall permit Enterprise Services, any Purchaser, and any other duly authorized agent of a governmental agency, to audit, inspect, examine, copy and/or transcribe Contractor's books, documents, papers and records directly pertinent to this Contract or Purchase Orders placed by a Purchaser under this Contract for the purpose of making audits, examinations, excerpts, and transcriptions. This right shall survive for a period of six (6) years following expiration or termination of this Contract or final payment for any order placed by a Purchaser against this Contract, whichever is later; *Provided*, however, that if any litigation, claim, or audit is commenced prior to the expiration of this period, such period shall extend until all such litigation, claims, or audits have been resolved.
- 12.3. **OVERPAYMENT OF PURCHASES OR UNDERPAYMENT OF FEES.** Without limiting any other remedy available to any Purchaser, Contractor shall (a) reimburse Purchasers for any overpayments inconsistent with the terms of this Contract or Purchase Orders placed thereunder, at a rate of 125% of any such overpayments, found as a result of the examination of Contractor's records; and (b) reimburse Enterprise Services for any underpayment of vendor management fees, at a rate of 125% of such fees found as a result of the examination of Contractor's records (e.g., if Contractor underpays the Vendor Management Fee by \$500, Contractor would be required to pay to Enterprise Services  $\$500 \times 1.25 = \$625$ ); *Provided*, however, that, in the event Contractor timely discovers and corrects any Purchaser overpayment or Contractor underpayment of vendor management fees and does so prior to the initiation of any audit, Contractor shall be entitled to reimburse Purchaser or pay to Enterprise Services the actual amount of such Purchaser overpayment or such underpayment of vendor management fees.

### 13. INSURANCE.

- 13.1. **REQUIRED INSURANCE.** Contractor, at its expense, shall maintain in full force and effect the insurance coverages set forth in ***Exhibit B – Insurance Requirements***. All costs for insurance, including any payments of deductible amounts, shall be considered incidental to and included in the prices for Goods and/or Services and no additional payment shall be made to Contractor.
- 13.2. **WORKERS COMPENSATION.** Contractor shall comply with applicable workers compensation statutes and regulations (e.g., RCW Title 51, Industrial Insurance). If Contractor fails to provide industrial insurance coverage or fails to pay premiums or penalties on behalf of its employees as may be required by law, Enterprise Services may terminate this Contract. This provision does not waive any of the Washington State Department of Labor and Industries (L&I) rights to collect from Contractor. If Contractor performs Services on Purchaser's behalf in the State of Washington, and only to the extent of claims against Contractor by Purchaser under the Indemnity obligations in this Contract, Contractor expressly waives any immunity it may be granted under the Washington State Industrial Insurance Act, Title 51 RCW. Contractor's indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable to or for any third party under workers' compensation acts, disability benefit acts, or other employee benefit acts.



The parties expressly acknowledge and certify that the waiver of immunity under Title 51 RCW was mutually negotiated and agreed upon.

#### **14. CLAIMS.**

- 14.1. **ASSUMPTION OF RISKS; CLAIMS BETWEEN THE PARTIES.** Contractor assumes sole responsibility and all risks of personal injury or property damage to itself and its employees and agents in connection with its operations under this Contract. Enterprise Services has made no representations regarding any factor affecting Contractor's risks. Contractor shall pay for all damage to any Purchaser's property resulting directly or indirectly from Contractor's acts or omissions under this Contract.
- 14.2. **THIRD-PARTY CLAIMS; GENERAL INDEMNITY.** To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold Enterprise Services and any Purchaser and their employees and agents harmless from and against all claims, demands, judgments, assessments, damages, penalties, fines, costs, liabilities, or losses including, without limitation, sums paid in settlement of claims, attorneys' fees, consultant fees, and expert fees (collectively "Claims") to the extent arising out of Contractor's or its successors', agents', or subcontractors' negligence, other tortious fault, or intentional misconduct under this Contract. The parties agree that if there are any limitations of Contractor's liability, including a limitation of liability clause for anyone for whom the Contractor is responsible, such limitations of liability shall not apply to injuries to persons (including death), damages to property, data breach, and/or intellectual property infringement. Contractor shall take all steps needed to keep Purchaser's property free of liens arising from Contractor's activities, and promptly obtain or bond the release of any such liens that may be filed.
- 14.3. **INTELLECTUAL PROPERTY INDEMNITY.** To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold Enterprise Services and any Purchaser and their employees and agents harmless from against any and all Claims resulting from allegations of infringement of any patents, copyrights, trade secret, or similar intellectual property rights covering the Goods and/or Services provided, or the use of the Goods and/or Services under this Contract. If Purchaser's use of Goods and/or Services provided by Contractor is enjoined based on an intellectual property infringement Claim, Contractor shall, at its own expense, either procure for Purchaser the right to continue using the Goods and/or Services or, after consulting with Purchaser and obtaining Purchaser's consent, replace or modify the Goods and/or Services with substantially similar and functionally equivalent non-infringing Goods and/or Services.

- 15. DISPUTE RESOLUTION.** The parties shall cooperate to resolve any dispute pertaining to this Contract efficiently, as timely as practicable, and at the lowest possible level with authority to resolve such dispute. If, however, a dispute persists and cannot be resolved, it may be escalated within each organization. In such situation, upon notice by either party, each party, within five (5) business days shall reduce its description of the dispute to writing and deliver it to the other party. The receiving party then shall have three (3) business days to review and respond in writing. In the event that the parties cannot then agree on a resolution of the dispute, the parties shall schedule a conference between the respective senior managers of each organization to attempt to resolve the dispute. In the event the parties cannot agree, either party may resort to court to resolve the dispute.

## 16. TERMINATION; EXPIRATION; SUSPENSION; & REMEDIES.

- 16.1. TERMINATION. This Contract may be terminated: (a) upon the mutual written agreement of the parties; (b) by the non-breaching party where the breach is not cured within thirty (30) calendar days after written notice of breach is delivered to the breaching party, unless a different time for cure is otherwise stated in this Contract; and (c) as otherwise expressly provided for in this Contract. This Contract shall terminate automatically and without further action if a party becomes insolvent or is placed in receivership, reorganization, liquidation, or bankruptcy. In addition to any other available remedies, the non-breaching party may terminate this Contract as provided in subsection (b) above without further liability by written notice to the breaching party. A termination for breach shall not affect rights or obligations accrued or owed before the effective date of the termination notice.
- 16.2. TERMINATION FOR NONAPPROPRIATION OR REDUCTION OF FUNDS OR CHANGES IN LAW. Enterprise Services may suspend or terminate this Contract and Purchasers may suspend or terminate applicable Purchase Orders, in whole or in part, at the sole discretion of Enterprise Services or, as applicable, Purchaser, if Enterprise Services or, as applicable, Purchaser reasonably determines that: (a) a change in Federal or State legislation or applicable laws materially affects the ability of either party to perform under the terms of this Contract or applicable Purchase Order; or (b) that a change in available funds affects Purchaser's ability to pay under the applicable Purchase Order. A change of available funds as used in this section includes, but is not limited to a change in Federal or State funding, whether as a result of a legislative act or by order of the President or the Governor. If a written notice is delivered under this provision, Purchaser shall reimburse Contractor for Goods properly ordered and/or Services properly performed until the effective date of said notice. Except as stated in this provision, in the event of termination for nonappropriation or reduction of funds or changes in law, Purchaser shall have no obligation or liability to Contractor.
- 16.3. TERMINATION FOR PUBLIC CONVENIENCE. Enterprise Services, for public convenience, may terminate this Contract; *Provided*, however, that such termination for public convenience must, in Enterprise Services' judgment, be in the best interest of the State of Washington; and *Provided further*, that such termination for public convenience shall only be effective upon sixty (60) calendar days prior written notice; and *Provided further*, that such termination for public convenience shall not relieve any Purchaser from payment for Goods/Services already ordered as of the effective date of such notice. Except as stated in this provision, in the event of such termination for public convenience, neither Enterprise Services nor any Purchaser shall have any obligation or liability to Contractor.
- 16.4. PURCHASER OBLIGATIONS – EXPIRATION. Upon expiration of this Contract, Purchaser shall accept and take delivery of all outstanding and not yet fulfilled Purchase Orders and pay Contractor the price as set out in the Contract. Notwithstanding any provision to the contrary, in no event shall a Purchaser's Purchase Order pursuant to this Contract that is executed prior to expiration of this Contract allow for Contractor to provide Goods and/or Services more than twelve (12) months beyond the expiration date of the Contract.
- 16.5. CONTRACTOR OBLIGATIONS – EXPIRATION OR TERMINATION. Upon expiration or termination of this Contract, Contractor shall: (a) continue to fulfill its warranty obligations with respect to any Goods and/or Services sold hereunder and all provisions of the Contract that, by their nature, would continue beyond the expiration, termination, or cancellation of the Contract shall so continue and survive; and (b) promptly return to Purchaser all keys, badges, and other

materials supplied by Purchaser for the performance of any Purchase Order entered into pursuant to this Contract.

- 16.6. **DEFAULT.** Any of the following events shall constitute cause for Enterprise Services to declare Contractor in default of this Contract:
- (a) Contractor fails to perform or comply with any of the terms or conditions of this Contract;
  - (b) Contractor fails to timely report quarterly contract sales;
  - (c) Contractor fails to timely pay the vendor management fees when due;
  - (d) Contractor fails to maintain the insurance coverages specified herein or timely provide to Enterprise Services the Certificate of Insurance and updates thereto specified herein; or
  - (e) Contractor breaches any representation or warranty provided herein.
- 16.7. **SUSPENSION & TERMINATION FOR DEFAULT.** Enterprise Services may suspend Contractor's operations under this Contract immediately by written cure notice of any default. Suspension shall continue until the default is remedied to Enterprise Services' reasonable satisfaction; *Provided*, however, that, if after thirty (30) calendar days from such a suspension notice, Contractor remains in default, Enterprise Services may terminate Contractor's rights under this Contract. All of Contractor's obligations to Enterprise Services and Purchasers survive termination of Contractor's rights under this Contract, until such obligations have been fulfilled.
- 16.8. **REMEDIES FOR DEFAULT.**
- (a) Enterprise Services' rights to suspend and terminate Contractor's rights under this Contract are in addition to all other available remedies.
  - (b) In the event of termination for default, Enterprise Services may exercise any remedy provided by law including, without limitation, the right to procure for all Purchasers replacement Goods and/or Services. In such event, Contractor shall be liable to Enterprise Services for damages as authorized by law including, but not limited to, any price difference between the Contract price and the replacement or cover price as well as any administrative and/or transaction costs directly related to such replacement procurement – e.g., the cost of the competitive procurement.
- 16.9. **LIMITATION ON DAMAGES.** Notwithstanding any provision to the contrary, the parties agree that in no event shall any party or Purchaser be liable to the other for exemplary or punitive damages; *Provided*, however, that nothing contained in this Section shall in any way exclude or limit: (a) a party's liability for all damages arising out of that party's intentional acts or omissions; (b) the operation of any Goods or Services warranty provided in this Contract; or (c) damages subject to the Intellectual Property Indemnity section of this Contract. Any limitation of either party's obligations under this Contract, by delivery slips or other documentation is void.
- 16.10. **SUSPENSION/TERMINATION PROCEDURE.** Regardless of basis, in the event of suspension or termination (in full or in part), the parties shall cooperate to ensure an orderly and efficient suspension or termination. Accordingly, Contractor shall deliver to Purchasers all Goods and/or Services that are complete (or with approval from Enterprise Services, substantially

complete) and Purchasers shall inspect, accept, and pay for the same in accordance with this Contract and the applicable Purchase Order. Unless directed by Enterprise Services to the contrary, Contractor shall not process any orders after notice of suspension or termination inconsistent therewith.

**17. PURCHASE ORDER TERMINATION.** Purchaser Orders between Eligible Purchasers and Contractor may be terminated as follows:

- (a) Upon the mutual written agreement of the parties to the Purchase Order;
- (b) By the non-breaching party where the breach of the Purchase Order is not cured within thirty (30) calendar days after written notice of breach is delivered to the breaching party, unless a different time for cure is otherwise stated in the applicable Purchase Order; or
- (c) As otherwise expressly provided for in the applicable Purchase Order.

Purchase Orders shall terminate automatically and without further action if a party becomes insolvent or is placed in receivership, reorganization, liquidation, or bankruptcy. In addition to any other available remedies, the non-breaching party may terminate the Purchase Order as provided in subsection (b) above without further liability by written notice to the breaching party. A termination for breach shall not affect rights or obligations accrued or owed before the effective date of the termination notice.

**18. PUBLIC INFORMATION & PUBLIC RECORDS DISCLOSURE REQUESTS.**

- 18.1. WASHINGTON'S PUBLIC RECORDS ACT. Unless statutorily exempt from public disclosure, this Contract and all related records are subject to public disclosure as required by Washington's Public Records Act, RCW 42.56.
- 18.2. CONTRACTOR OBLIGATION. Contractor shall identify and mark the precise portion(s) of the relevant page(s) of any records provided to Enterprise Services that Contractor believes are statutorily exempt from disclosure and identify the precise statutory basis for exemption from disclosure. In addition, if, in Contractor's judgment, certain portions of such records are not statutorily exempt from disclosure but are sensitive because particular portions of Contractor's records (NOT including pricing) include highly confidential, proprietary, or trade secret information (or the equivalent) that Contractor protects through the regular use of confidentiality or similar agreements and routine enforcements through court enforcement actions, Contractor shall identify and mark the precise portion(s) of the relevant page(s) of any records that include such sensitive information.
- 18.3. ENTERPRISE SERVICES' OBLIGATION. In the event that Enterprise Services receives a public records disclosure request pertaining to records that Contractor has submitted and marked either as (a) statutorily exempt from disclosure; or (b) sensitive, Enterprise Services, prior to disclosure, shall do the following: Enterprise Services' Public Records Officer shall review any records marked by Contractor as statutorily exempt from disclosure. In those situations, where the designation comports with the stated statutory exemption from disclosure, Enterprise Services shall redact or withhold the record(s) as appropriate. For records marked 'sensitive' or for records where Enterprise Services determines that no statutory exemption to disclosure applies or is unable to determine whether the stated statutory exemption to disclosure properly applies, Enterprise Services shall notify Contractor, at the address provided in the Contract, of the public records disclosure request and identify the date that

Enterprise Services intends to release the record(s) (including records marked 'sensitive' or exempt from disclosure) to the requester unless Contractor, at Contractor's sole expense, timely obtains a court order enjoining Enterprise Services from such disclosure. In the event Contractor fails to timely file a motion for a court order enjoining such disclosure, Enterprise Services shall release the requested record(s) on the date specified. Contractor's failure properly to identify exempted or sensitive information or timely respond after notice of request for public disclosure has been given shall be deemed a waiver by Contractor of any claim that such records are exempt or protected from public disclosure.

## **19. GENERAL PROVISIONS.**

- 19.1. **TIME IS OF THE ESSENCE.** Time is of the essence for each and every provision of this Contract.
- 19.2. **COMPLIANCE WITH LAW.** Contractor shall comply with all applicable law. Contractor shall obtain all necessary permits and approvals and give all stipulations, certifications, and representations that may be required for it to perform this Contract.
- 19.3. **NONDISCRIMINATION.**
  - (a) **Nondiscrimination Requirement.** During the term of this Contract, Contractor, including any subcontractor, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, Contractor, including any subcontractor, shall give written notice of this nondiscrimination requirement to any labor organizations with which Contractor, or subcontractor, has a collective bargaining or other agreement.
  - (b) **Obligation to Cooperate.** Contractor, including any subcontractor, shall cooperate and comply with any Washington state agency investigation regarding any allegation that Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).
  - (c) **Default.** Notwithstanding any provision to the contrary, Enterprise Services may suspend Contractor, including any subcontractor, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until Enterprise Services receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), Enterprise Services may terminate this Contract in whole or in part, and Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.
  - (d) **Remedies for Breach.** Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, Contractor, subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between this Contract and the replacement or cover contract and all administrative

costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. Enterprise Services and/or Purchasers shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Enterprise Services and/or Purchasers for default under this provision.

- 19.4. ENTIRE AGREEMENT. This Contract constitutes the entire agreement and understanding of the parties with respect to the subject matter and supersedes all prior negotiations, representations, and understandings between them. There are no representations or understandings of any kind not set forth herein.
- 19.5. AMENDMENT OR MODIFICATION. Except as set forth herein, this Contract may not be amended or modified except in writing and signed by a duly authorized representative of each party.
- 19.6. AUTHORITY. Each party to this Contract, and each individual signing on behalf of each party, hereby represents and warrants to the other that it has full power and authority to enter into this Contract and that its execution, delivery, and performance of this Contract has been fully authorized and approved, and that no further approvals or consents are required to bind such party.
- 19.7. NO AGENCY. The parties agree that no agency, partnership, or joint venture of any kind shall be or is intended to be created by or under this Contract. Neither party is an agent of the other party nor authorized to obligate it.
- 19.8. INDEPENDENT CONTRACTOR. The parties intend that an independent contractor relationship is created by this Contract. Contractor and its employees or agents performing under this Contract are not employees or agents of Enterprise Services. Contractor shall not have authorization, express or implied, to bind Enterprise Services to any agreement, liability, or understanding, except as expressly set forth herein. Contractor and its employees and agents are not entitled to unemployment insurance or worker's compensation benefits through Enterprise Services or the State of Washington and Enterprise Services and the State of Washington shall not pay for or otherwise provide such coverage for Contractor and its employees and agents.
- 19.9. ASSIGNMENT. Contractor may not assign its rights under this Contract without Enterprise Services' prior written consent and Enterprise Services may consider any attempted assignment without such consent to be void; *Provided*, however, that, if Contractor (a) provides written notice to Enterprise Services within thirty (30) calendar days of such event and (b) timely executes Enterprise Services' Assignment, Assumption, and Consent Agreement, Contractor may assign its rights under this Contract in full to any parent, subsidiary, or affiliate of Contractor that controls or is controlled by or under common control with Contractor, is merged or consolidated with Contractor, or purchases a majority or controlling interest in the ownership or assets of Contractor. Unless otherwise agreed, Contractor guarantees prompt performance of all obligations under this Contract notwithstanding any prior assignment of its rights.
- 19.10. BINDING EFFECT; SUCCESSORS & ASSIGNS. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 19.11. ASSIGNMENT OF ANTITRUST RIGHTS REGARDING PURCHASED GOODS AND/OR SERVICES. Contractor irrevocably assigns to Enterprise Services, on behalf of the State of Washington, any claim for

relief or cause of action which Contractor now has or which may accrue to Contractor in the future by reason of any violation of state or federal antitrust laws in connection with any Goods and/or Services provided in Washington for the purpose of carrying out Contractor's obligations under this Contract, including, at Enterprise Services' option, the right to control any such litigation on such claim for relief or cause of action.

- 19.12. FEDERAL FUNDS. To the extent that any Purchaser uses federal funds to purchase Goods and/or Services pursuant to this Contract, such Purchaser shall specify, with its Purchase Order, any applicable requirement or certification that must be satisfied by Contractor at the time the Purchase Order is placed or upon delivery of such Goods and/or Services to Purchaser.
- 19.13. SEVERABILITY. If any provision of this Contract is held to be invalid or unenforceable, such provision shall not affect or invalidate the remainder of this Contract, and to this end the provisions of this Contract are declared to be severable. If such invalidity becomes known or apparent to the parties, the parties agree to negotiate promptly in good faith in an attempt to amend such provision as nearly as possible to be consistent with the intent of this Contract.
- 19.14. WAIVER. Failure of either party to insist upon the strict performance of any of the terms and conditions hereof, or failure to exercise any rights or remedies provided herein or by law, or to notify the other party in the event of breach, shall not release the other party of any of its obligations under this Contract, nor shall any purported oral modification or rescission of this Contract by either party operate as a waiver of any of the terms hereof. No waiver by either party of any breach, default, or violation of any term, warranty, representation, contract, covenant, right, condition, or provision hereof shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, contract, covenant, right, condition, or provision.
- 19.15. SURVIVAL. All representations, warranties, covenants, agreements, and indemnities set forth in or otherwise made pursuant to this Contract shall survive and remain in effect following the expiration or termination of this Contract, *Provided*, however, that nothing herein is intended to extend the survival beyond any applicable statute of limitations periods.
- 19.16. GOVERNING LAW. The validity, construction, performance, and enforcement of this Contract shall be governed by and construed in accordance with the laws of the State of Washington, without regard to any choice of law principles that would provide for the application of the laws of another jurisdiction.
- 19.17. JURISDICTION & VENUE. In the event that any action is brought to enforce any provision of this Contract, the parties agree to exclusive jurisdiction in Thurston County Superior Court for the State of Washington and agree that in any such action venue shall lie exclusively at Olympia, Washington.
- 19.18. ATTORNEYS' FEES. In the event of litigation or other action brought to enforce this Contract, each party shall bear its own attorneys' fees and costs.
- 19.19. FAIR CONSTRUCTION & INTERPRETATION. The provisions of this Contract shall be construed as a whole according to their common meaning and not strictly for or against any party and consistent with the provisions contained herein in order to achieve the objectives and purposes of this Contract. Each party hereto and its counsel has reviewed and revised this Contract and agrees that the normal rules of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be construed in the interpretation of

this Contract. Each term and provision of this Contract to be performed by either party shall be construed to be both a covenant and a condition.

- 19.20. FURTHER ASSURANCES. In addition to the actions specifically mentioned in this Contract, the parties shall each do whatever may reasonably be necessary to accomplish the transactions contemplated in this Contract including, without limitation, executing any additional documents reasonably necessary to effectuate the provisions and purposes of this Contract.
- 19.21. EXHIBITS. All exhibits referred to herein are deemed to be incorporated in this Contract in their entirety.
- 19.22. CAPTIONS & HEADINGS. The captions and headings in this Contract are for convenience only and are not intended to, and shall not be construed to, limit, enlarge, or affect the scope or intent of this Contract nor the meaning of any provisions hereof.
- 19.23. ELECTRONIC SIGNATURES. An electronic signature or electronic record of this Contract or any other ancillary agreement shall be deemed to have the same legal effect as delivery of an original executed copy of this Contract or such other ancillary agreement for all purposes.
- 19.24. COUNTERPARTS. This Contract may be executed in any number of counterparts, each of which shall be deemed an original and all of which counterparts together shall constitute the same instrument which may be sufficiently evidenced by one counterpart. Execution of this Contract at different times and places by the parties shall not affect the validity thereof so long as all the parties hereto execute a counterpart of this Contract.

EXECUTED as of the date and year first above written.

STATE OF WASHINGTON  
Department of Enterprise Services

Standard Fusee Corp. DBA  
ORION SAFETY PRODUCTS,  
a Delaware Corporation

By: Jaime Bacon  
Signature

By: E. Kenneth Harrison  
Signature

Jamie Bacon  
Type Name


E. Kenneth Harrison  
Type Name

Its: Enterprise Contract Specialist  
Title

Its: Contract Manager  
Title



INCLUDED GOODS/SERVICES AND PRICES

Item	Description	Case Quantity	UoM	Price	Bulk/ Volume discount %	Specs
0715	Without Spike Base, 15 Minutes, Individually packaged, Standard Fusee, 1/2 Gross	72	Case	\$86.75	3% at 72 case per order	 00324_Specifications and Safety Instruction:
0720	Without Spike Base, 20 Minutes, Individually packaged, Standard Fusee, 1/4 Gross	36	Case	\$50.13	3% at 120 case per order	
0730	Without Spike Base, 30 Minutes, Individually packaged, Standard Fusee, 1/4 Gross	36	Case	\$68.22	3% at 98 case per order	
1240	With Wire Stand, 20 Minutes, Individually packaged, Standard Fusee, 1/4 Gross	36	Case	\$55.01	3% at 120 case per order	
9340	With Wire Stand, 30 Minutes, Individually packaged, Standard Fusee, 1/4 Gross	36	Case	\$75.04	3% at 98 case per order	
0005	Auto Ignition Flare, 5 Minutes, Standard Fusee	144	Case	\$161.54	3% at 72 case per order	
0010	Auto Ignition Flare, 10 Minutes, Standard Fusee	144	Case	\$184.87	3% at 72 case per order	
0015	Auto Ignition Flare, 15 Minutes, Standard Fusee. User must follow the embedded safety instructions.	72	Case	\$105.84	3% at 72 case per order	 00324_Specifications and Safety Instruction:
0020	Auto Ignition Flare, 20 Minutes, Standard Fusee) User must follow the embedded safety instructions.	72	Case	\$118.77	3% at 72 case per order	
0030	Auto Ignition Flare, 30 Minutes, Standard Fusee. User must follow the embedded safety instructions.	36	Case	\$83.23	3% at 98 case per order	
9800	MICA – ignition chambers #9800. User must follow the embedded safety instructions.	1 EACH	EACH	\$166.86	N/A	
<p><b>NOTE: 30 CASE MINIMUM ORDER FOR FREE FREIGHT. FREE FREIGHT IS DOCK TO DOCK DELIVERY ONLY. ANY ORDERS UNDER 30 CASES MAY HAVE FREIGHT CHARGES ADDED TO INVOICE</b></p>						
Item	Description & Special Instructions to Purchasers	UoM	Price			
APPOINTMENT REQUESTS	Additional Fee: Appointment Requested on Delivery Must be requested at time of order. If refusal occurs due to not requested however required, additional charges may be charged.	EACH	\$32.00			
LIFTGATE	Additional Fee: Liftgate Request on Delivery Must be requested at time of order. If refusal occurs due to not requested however required, additional charges may be charged.	EACH	\$129.00			

**Automatic Ignition Fusees (5, 10, 15, 20 & 30 Minute Fusees)****And****Manual Automatic Ignition Chamber (MICA)****1. SCOPE**

This specification defines the requirement for the procurement by the State of Washington of (i) 5, 10, 15, 20, and 30 minute automatic ignition fusees/flares (Signal Flares) used as an emergency highway warning device for the purpose of diverting traffic on highways and informing moving vehicle traffic to stay out of hazardous traffic areas; and (ii) the manual automatic ignition chamber (MICA), which is affixed to a deployment tube designed and constructed by the State of Washington, or affiliates of the State of Washington such as Washington Department of Transportation (DOT), to deploy the Signal Flares. Signal Flares are primarily used by DOT, and may also be used by other State and Municipal agencies.

**2. STANDARDS REFERENCED**

Underwriter Laboratories Highway Emergency Signals, [UL 912 for Fusees](#). While Signal Flares are not specifically referenced in UL 912, all product specifications and testing required by UL 912 shall apply to the Signal Flares except that the specialized cap used to ignite Signal Flares and unique deployment of Signal Flares renders certain sections of UL 912 non-applicable, including the following:

- Section 24.1. There is no “ignition by friction”.
- Section 25.1. The cap used on Signal Flares has different dimensions and functionality than the one on a regular flare/fusee.
- Section 25.2. The cap on Signal Flares is not intended to be removed nor does it form “a device for lighting the ignition composition by friction”. There is no “scratch surface” on a cap for Signal Flares.
- Section 25.3. The wire protruding through the cap on a Signal Flare directly contacts the ignition composition.
- Section 28.1. There is no “effort necessary to effect ignition” with a Signal Flare since ignition is achieved by electrical current heating the ignition wire protruding through the cap.
- Section 28.2. UL does not test the efficacy of the cap nor the MICA. There is no “striking” of the Signal Flare.
- Section 35.1. Signal Flares are not ignited in the same manner as manually ignited flares. As such, there is no need to state: “ALWAYS POINT FUSEE AWAY FROM FACE AND BODY WHILE IGNITING AND AFTERWARDS”. However, this language is not disqualifying and may be found on some Signal Flares due to requirements in other states.

**3. REQUIREMENTS**

Signal Flares are dropped from a slow moving DOT vehicle (DOT deployment guidelines shall specify the rate of speed of the deployment vehicle) onto pavement to mark hazardous traffic areas along the highway for the purpose of controlling and informing traffic to stay out of hazardous traffic areas. After the Signal Flare is manually pushed through the MICA, the Signal Flare must fall freely through the vertical drop tube and remain burning as it hits the deflector and rolls underneath the slow moving DOT vehicle. The ignited Signal Flare should roll toward

the center of the traveled way and away from the vehicle's tires. This creates a trail of burning Signal Flares marking the boundaries for hazardous traffic areas. The Signal Flare must be capable of burning on dry and wet road surfaces and burn for the minimum time set forth in Table 32.2 of UL 912. It is expressly understood that it is the sole responsibility of DOT and any other State or Municipal agencies that utilize Signal Flares or the MICA to ensure that the Signal Flares drop freely through the MICA and the vertical drop tube and then onto the road surface in the manner dictated by the deployment requirements created and enforced by the State of Washington, DOT, and any State or Municipal agencies.

The MICA is manufactured to the design specification attached hereto as Exhibit 3.0. DOT is solely responsible for the design and construction of the apparatus that incorporates the MICA and deploys the Signal Flares. This apparatus typically involves a drop tube, a deflector to guide the placement of the Signal Flare on the road surface, and the supports to hold the apparatus in place. Specifically, the MICA is connected to a vertically mounted drop tube securely mounted to a DOT vehicle. The Signal Flare shall ignite when it is pushed through the MICA that is connected to the vehicle's 12-volt battery. This connection provides electrical current to a pair of conductive bars mounted within the inner wall of the MICA.

The flexible plastic wings attached to the Signal Flare cap are designed to cushion the impact of the Signal Flare with the road surface and to help bring the Signal Flare to rest on the roadway. The plastic wings burn away within approximately 45 seconds of ignition and are not a long-term anti-roll feature. Excessive speed by the vehicle deploying the Signal Flares will prevent the plastic wings from functioning as intended and the State of Washington and any State or Municipal agencies that utilize the MICA and Signal Flares, such as DOT, are solely responsible for developing deployment requirements that include speed and safe use limitations for Signal Flare deployment as well as the restrictions for use referenced in Section 5.0 of this Specification.

**3.1 Configuration:** The Signal Flares shall conform to all requirements specified below.

- (a) The base of the Signal Flare shall be closed by means of a disc or plug. Any additional outer plastic wrapping for waterproofing, which must be removed before the Signal Flare can be ignited, is not acceptable.
- (b) The head of the Signal Flare shall be fully covered and protected with a tightly fitting cap with flexible wings and a secured wire extending symmetrical through the cap for ignition. The diameter of the cap shall be less than 1¼ inches. The entire rim of the Signal Flare head shall be free from ignition compound. The Signal Flare cap shall be configured to direct the hot ignition gases and flames downwards while minimizing any back-flame, which could pose a hazard to the user. The Signal Flare and cap shall be designed so that when the Signal Flare is ignited and dropped from a stationary height of 7 feet, it shall burn for the specified time as marked.

**3.2 Materials:** All materials used in the manufacture of the Signal Flare shall be new and suitable for the use intended. Signal Flares shall not contain any Potassium Perchlorate.

**3.3 Workmanship:** The workmanship shall be the highest grade throughout in accordance with the best standard practice for the type of product. The Signal Flare shall be free from defects that will affect safety, appearance, or serviceability.

- 3.4 Special Markings / Requirements:** In addition to markings required by UL 912, if applicable, each Signal Flare shall be marked with the date (month and year) of manufacture and, at a minimum, the following language:

CAUTION: PRODUCES HOT FLAME

Keep out of reach of children

For outdoor use only

Drop Fusee with igniter cap downward into MICA tube.

Make sure igniter cap wire contacts copper contacts of the MICA tube.

Insure lighted Fusee falls free and clear of the tube and vehicle.

#### **4. PREPARATION FOR DELIVERY**

##### **4.1 Packaging:**

Signal Flares shall be prepared for shipment by common carrier in accordance with Federal Department of Transportation (Federal DOT) Regulations and shall be packaged in water resistant cartons of sufficient strength to permit reshipment without further reinforcement using industry packaging. The shipping carton shall meet Federal DOT Regulations and shall be stamped with the "Certificate of Box Maker".

The cartons shall be stacked on pallets such that the Federal DOT hazardous material classification label can be viewed from all four (4) sides. All cartons on a single pallet must contain the same product, i.e. same item code number.

##### **4.2 Marking**

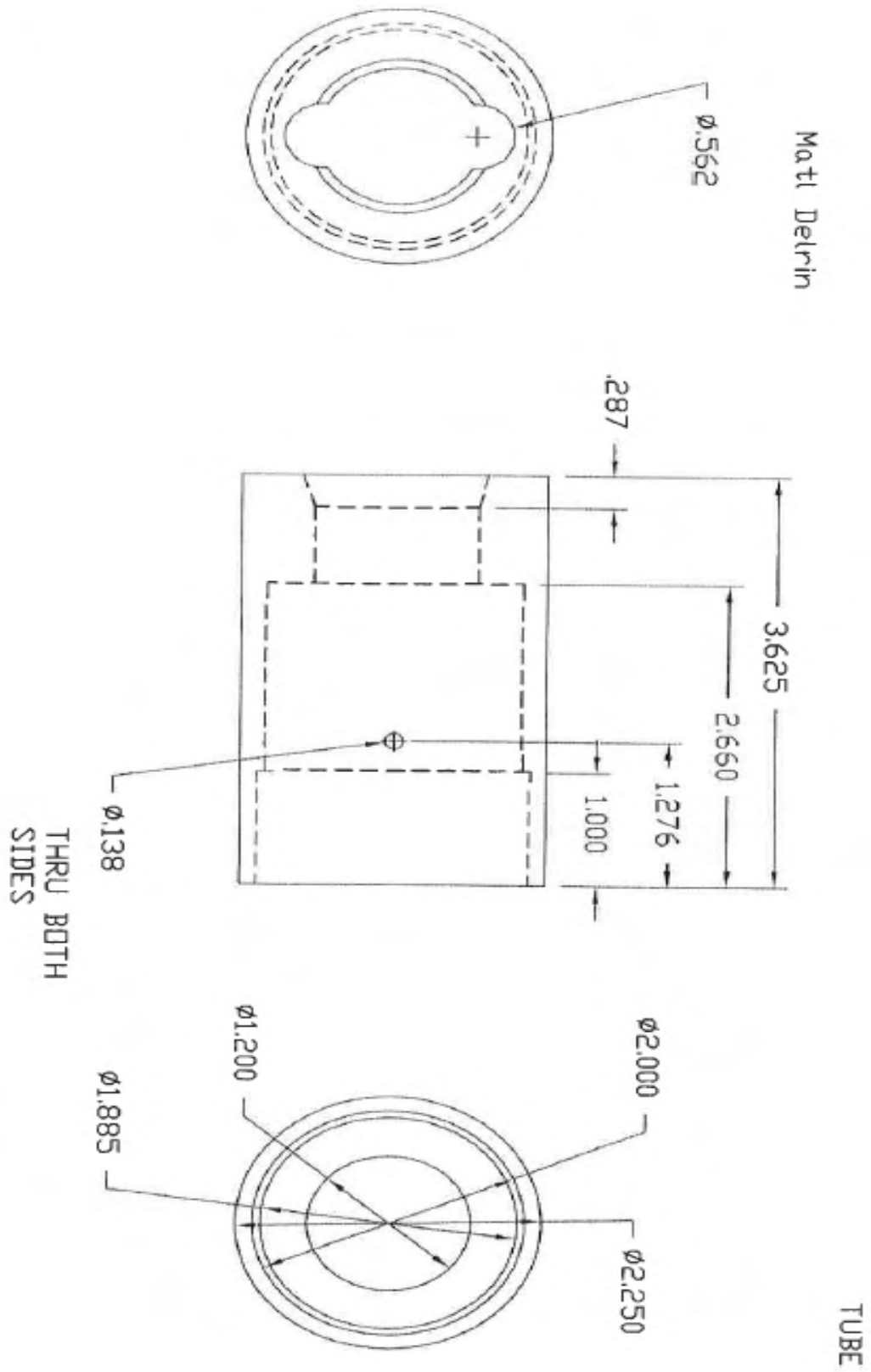
Each carton shall be marked with the date the lot was manufactured, commodity, quantity, size (duration, minutes), and the manufacturer's name or brand name and shall be easily visible from all four (4) sides.

#### **5 ACKNOWLEDGEMENTS AND AGREEMENTS**

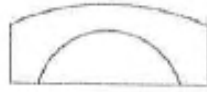
The State of Washington, and any State or Municipal agencies such as DOT that purchase Signal Flares or MICAs under the State contract, acknowledge the following and agree to develop, document, and enforce safe use requirements for deploying and utilizing Signal Flares. Such safe use requirements shall incorporate the following acknowledgements:

- The supplier of the Signal Flares and MICAs is only responsible for the quality of these products as set forth in this Specification. The State of Washington, including any State or Municipal agencies such as DOT that purchase Signal Flares or MICAs under the State contract, are responsible for safe use, deployment, and adherence to deployment requirements promulgated by such party. The supplier has no involvement, responsibility, or liability related to the development or enforcement of such requirements.
- Signal Flares produce an extremely hot flame and should only be deployed outdoors on pavement or other hard surfaces with curbs or other separation from combustible materials.
- Use of Signal Flares is prohibited near spilled fuel, fumes or combustible materials (e.g., leaves, grass, wood, refuse).

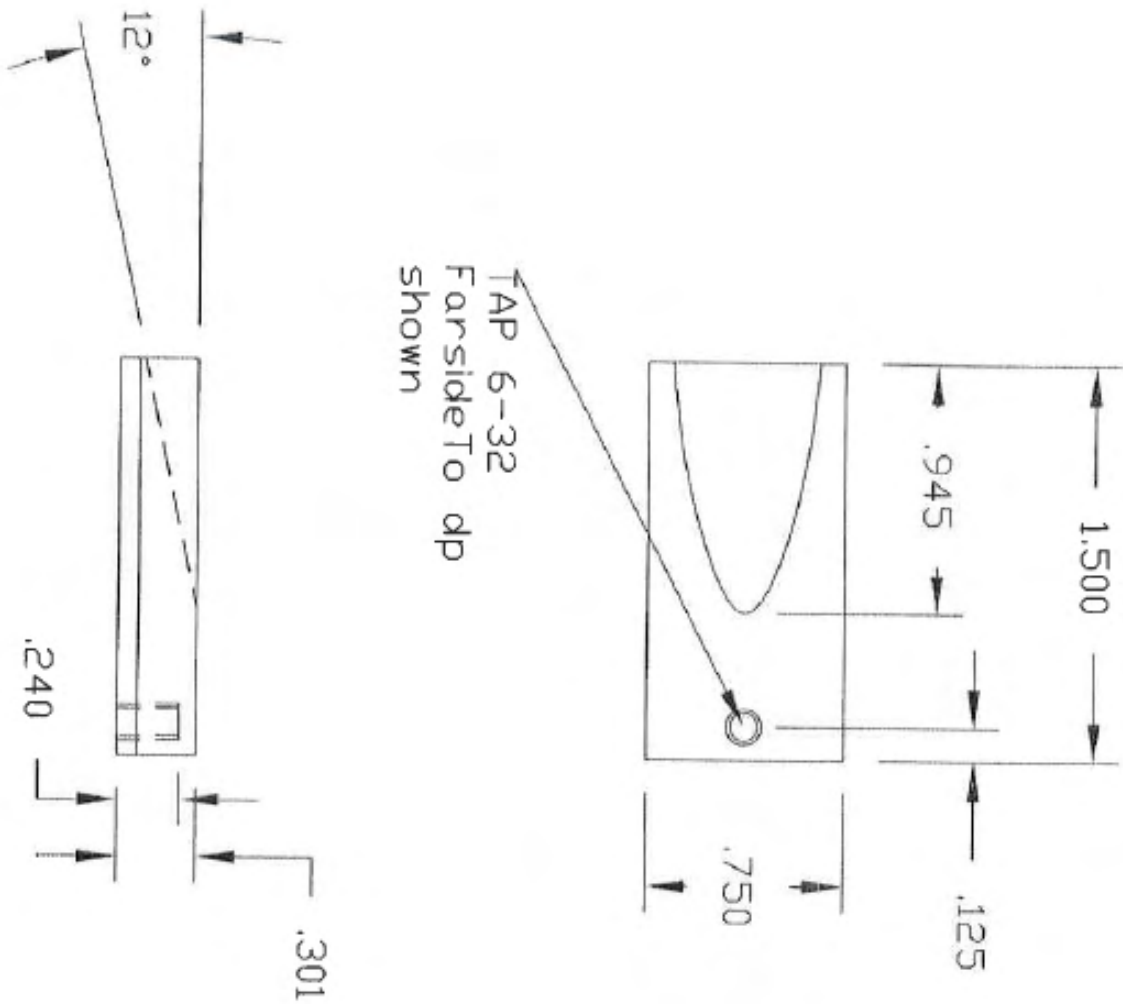
- Special care must be used if deploying Signal Flares in dry and/or high wind environments, and, in certain circumstances to be prescribed by DOT, Signal Flares should not be used if there is risk of wildfire.
- Signal Flares may emit sparks or molten ash that can start a fire if such sparks or ash contact combustible materials.
- Signal Flares that have been deployed require supervision until the burn process is complete to assure safety of roadway and the environment.
- Signal Flares, if contacted by moving vehicles such as following traffic, can travel significant distances and will ignite combustible materials if they contact combustible materials. Careful deployment and supervision is required.
- Signal Flares should be deployed at a slow rate of speed to assure that the Signal Flares are properly placed on the roadway and to assure that such flares come to rest where intended by the DOT crew deploying such flares.
- Signal Flares shall never be deployed manually and may only be deployed using the MICA and the deployment apparatus designed, installed, and approved by DOT.



Material 360  
Brass



CONTACT



## INSURANCE REQUIREMENTS

1. **INSURANCE OBLIGATION.** During the term of this Contract, Contractor shall possess and maintain in full force and effect, at Contractor's sole expense, the following insurance coverages:
  - a. **COMMERCIAL GENERAL LIABILITY INSURANCE.** Commercial general liability insurance (and, if necessary, commercial umbrella liability insurance) covering bodily injury, property damage, products/completed operations, personal injury, and advertising injury liability on an 'occurrence form' that shall be no less comprehensive and no more restrictive than the coverage provided by Insurance Services Office (ISO) under the most recent version of form CG 00 01 in the amount of not less than \$2,000,000 per occurrence and \$4,000,000 general aggregate. This coverage shall include blanket contractual liability coverage. This coverage shall include a cross-liability clause or separation of insured condition.
  - b. **WORKERS' COMPENSATION INSURANCE.** Contractor shall comply with applicable Workers' Compensation or Industrial Accident insurance providing benefits as required by law.
  - c. **EMPLOYERS' LIABILITY (STOP GAP) INSURANCE.** Employers' liability insurance (and, if necessary, commercial umbrella liability insurance) with limits not less than \$1,000,000 each accident for bodily injury by accident, \$1,000,000 each employee for bodily injury by disease, and \$1,000,000 bodily injury by disease policy limit.
  - d. **COMMERCIAL AUTOMOBILE LIABILITY INSURANCE (only required if Contractor is using a vehicle to deliver goods or provide services to Purchaser premises).** Commercial automobile liability insurance covering the ownership, maintenance, and/or use of all owned/leased, non-owned, and hired vehicles used in the performance of the Contract, with limits of not less than \$1,000,000 per accident, combined single limit for bodily injury and property damage liability. Coverage shall be provided on Insurance Services Office (ISO) form number CA 0001 or an equivalent. The required limits can be satisfied by any combination of primary, umbrella, or excess policy.

The insurance coverage limits set forth above may be satisfied by any combination of primary, umbrella, or excess policy. The insurance coverage limits are the minimum. Contractor's insurance coverage shall be no less than the minimum amounts specified. Coverage in the amounts of these minimum limits, however, shall not be construed to relieve Contractor from liability in excess of such limits. Contractor waives all rights against the State of Washington for the recovery of damages to the extent such damages are covered by any insurance required herein.

2. **INSURANCE CARRIER RATING.** Coverages provided by Contractor must be underwritten by an insurance company deemed acceptable to the State of Washington's Office of Risk Management. Insurance coverage shall be provided by companies authorized to do business within the State of Washington and rated A- Class VII or better in the most recently published edition of Best's Insurance Rating. Enterprise Services reserves the right to reject all or any insurance carrier(s) with an unacceptable financial rating.
3. **ADDITIONAL INSURED.** When specified as a required insurance coverage (see § 1 – Insurance Obligation, above) Commercial General Liability, Commercial Automobile Liability, and Pollution Liability Insurance shall include the State of Washington and all authorized Purchasers (and their



agents, officers, and employees) as Additional Insureds evidenced by copy of the Additional Insured Endorsement attached to the Certificate of Insurance on such insurance policies.

4. **CERTIFICATE OF INSURANCE.** Prior to execution of the Contract, Contractor shall furnish to Enterprise Services, as evidence of the insurance coverage required by this Contract, a certificate of insurance satisfactory to Enterprise Services that insurance, in the above-stated kinds and minimum amounts, has been secured. In addition, no less than ten (10) calendar days prior to coverage expiration, Contractor shall furnish to Enterprise Services an updated or renewed certificate of insurance, satisfactory to Enterprise Services, that insurance, in the above-stated kinds and minimum amounts, has been secured. Failure to maintain or provide proof of insurance, as required, shall result in Contractor suspension and/or contract termination. **All policies and certificates of insurance shall include the Contract number stated on the cover of this Contract.** All certificates of Insurance and any related insurance documents shall be sent via email to Enterprise Services at the email address as set forth below:

Email: [DESContractsTeamCedar@des.wa.gov](mailto:DESContractsTeamCedar@des.wa.gov)

Note: The Email Subject line must state:

**COI – Contract No. 00324 – Igniter Flares and Highway Signal Devices**

Washington Dept. of Enterprise Services

PO Box 41411

Olympia, WA 98504-1411

5. **PRIMARY COVERAGE.** Contractor's insurance shall apply as primary and shall not seek contribution from any insurance or self-insurance maintained by, or provided to, the additional insureds listed above including, at a minimum, the State of Washington and/or any Purchaser. All insurance or self-insurance of the State of Washington and/or Purchasers shall be excess of any insurance provided by Contractor or subcontractors.
6. **SUBCONTRACTORS.** Contractor shall include all subcontractors as insureds under all required insurance policies. Alternatively, prior to utilizing any subcontractor, Contractor shall cause any such subcontractor to provide insurance that complies with all applicable requirements of the insurance set forth herein and shall furnish separate Certificates of Insurance and endorsements for each subcontractor to Enterprise Services. Each subcontractor must comply fully with all insurance requirements stated herein. Failure of any subcontractor to comply with insurance requirements does not limit Contractor's liability or responsibility.
7. **WAIVER OF SUBROGATION.** Contractor waives all rights of subrogation against the State of Washington and any Purchaser for the recovery of damages to the extent such damages are or would be covered by the insurance specified herein.
8. **NOTICE OF CHANGE OR CANCELLATION.** There shall be no cancellation, material change, exhaustion of aggregate limits, or intent not to renew insurance coverage, either in whole or in part, without at least sixty (60) calendar days prior written Legal Notice by Contractor to Enterprise Services. Failure to provide such notice, as required, shall constitute default by Contractor. Any such written notice shall include the Contract number stated on the cover of this Contract.
9. **EXTENDED REPORTING PERIOD.** If any required insurance coverage is on a claims-made basis (rather than occurrence), Contractor shall maintain such coverage for a period of no less than three (3) years following expiration or termination of the Contract.

\* \* \* END OF INSURANCE REQUIREMENTS \* \* \*



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UL 912

**STANDARD FOR SAFETY**

Highway Emergency Signals

UL Standard for Safety for Highway Emergency Signals, UL 912

Sixth Edition, Dated November 26, 1997

### **Summary of Topics**

***This revision of UL 912 includes the addition of requirements for flares containing no potassium perchlorate.***

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

The new and revised are substantially in accordance with Proposal(s) on this subject dated September 20, 2013.

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The requirements in this Standard are now in effect, except for those paragraphs, sections, tables, figures, and/or other elements of the Standard having future effective dates as indicated in the note following the affected item. The prior text for requirements that have been revised and that have a future effective date are located after the Standard, and are preceded by a "SUPERSEDED REQUIREMENTS" notice.

**NOVEMBER 26, 1997**  
(Title Page Reprinted: November 5, 2013)

1

**UL 912**

**Standard for Highway Emergency Signals**

First Edition – September, 1938  
Second Edition – September, 1940  
Third Edition – June, 1973  
Fourth Edition – July, 1979  
Fifth Edition – February, 1993

**Sixth Edition**

**November 26, 1997**

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <http://csds.ul.com>.

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## INTRODUCTION

### 1 Scope

1.1 These requirements cover highway emergency signals intended to be carried on commercial automotive vehicles and to be used as emergency traffic warning signals in the event of enforced parking of the vehicle on a highway.

1.2 These requirements cover three types of warning signals: Liquid-Burning Flares, Red Electric Warning Lanterns, and Fusees.

1.3 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this standard, and that involves a risk of fire or of electric shock or injury to persons shall be evaluated using appropriate additional component and end-product requirements to maintain the level of safety as originally anticipated by the intent of this standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this standard does not comply with this standard. Revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this standard.

1.3 revised July 18, 2000

### 2 General

2.1 Except as indicated in 2.2, a component of a product covered by this standard shall comply with the requirements for that component.

2.1 revised July 18, 2000

2.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

2.2 revised July 18, 2000

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.3 revised July 18, 2000

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.4 revised July 18, 2000

## LIQUID-BURNING FLARES

### CONSTRUCTION

#### 3 General

3.1 These devices shall be provided in sets of three contained in a metal rack or box which can be securely mounted on the motor vehicle.

3.2 If a value for measurement as given in these requirements is followed by an equivalent value in other units, the first stated value is the requirement.

#### 4 Fuel

4.1 Flares shall be designed for use with liquid fuel having a classification not greater than that of kerosene in accordance with the requirements in the Standard for Tests for Comparative Flammability of Liquids, UL 340.

#### 5 Fuel Containers

5.1 Fuel containers and liquid-confining parts shall be made of material having a melting point (solidus temperature) of not less than 950°F (510°C) and affording resistance to corrosion equivalent to that of sheet steel having a thickness of not less than 0.026 inch (0.66 mm).

#### 6 Burner Hoods

6.1 The burner shall be provided with a hood which can be secured to the body over the burner against a gasket which will prevent leakage of fuel while the device is not in use.

#### 7 Stability

7.1 The design shall be such that the device will right itself when tilted so that the bottom forms an angle of 45 degrees with the horizontal.

### PERFORMANCE

#### 8 Vibration and Shock Test

8.1 Three sample flares, in the metal rack or metal box provided and mounted as in service, shall not show evidence of structural failure or leakage in the body, or at a joint, while and after being subjected to 1 hour of vertical displacement of an amplitude of 1/8 inch (3.2 mm) at a frequency of 12 – 13 cycles per second (Hz).

8.2 For this test, amplitude is defined as the maximum displacement of sinusoidal motion from position of rest or one-half of the total vibration table displacement.

#### 9 Rain Test

9.1 The flares used for these tests shall be filled with kerosene to the level recommended in the manufacturer's instructions and shall have the wicks adjusted as recommended by the manufacturer.

9.2 After a preheating period of 5 minutes in still air, a sample flare, lighted and mounted in its normal operating position on a table rotating at 4 revolutions per minute (rpm) and in a wind of approximately 2 miles per hour (3.2 km/h), shall be subjected to a water spray from an adjustable, solid-cone nozzle<sup>a</sup> (such as the ordinary garden hose spray nozzle) set so that the nozzle outlet is 8 – 12 feet (2.4 – 3.6 m) horizontally from the sample and 1 – 3 feet (0.3 – 0.9 m) vertically above the sample, with the nozzle axis pointing upward at an angle of approximately 45 degrees from the horizontal and with the water striking the sample at an angle of approximately 45 degrees from the horizontal in a downward direction.

<sup>a</sup>Solid cone spray nozzles operating at 5 – 7-1/2 psi (34 – 52 kPa) give a spray consisting of relatively large drops when set so that the center of the stream at the flare shows 0.10 inch (2.5 mm) per minute precipitation. At higher pressures, the drops are smaller. These conditions are comparable to actual rain.

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CONSENT OF THE MANUFACTURER

9.3 Under these conditions and with a water pressure of 5 – 7-1/2 psi (34 – 52 kPa) at the nozzle, the rate of precipitation at the location of the sample is to be adjusted to 0.10 inch (2.5 mm) per minute. The sample is to be introduced gradually into the spray and after being placed in the test location shall continue to operate under these conditions for 15 minutes. This test is to be made on each of the three flares constituting a set. Two out of the three flares shall pass the test.

9.4 With the rate of rotation and the wind condition the same as specified in 9.2 and 9.3, the water pressure shall then be increased to a value of 10 – 12 psi (70 – 83 kPa) and the sample moved farther from the nozzle, if necessary, to a location giving a precipitation of 0.03 inch (0.8 mm) per minute, striking the sample at approximately 45 degrees from the horizontal. Under these conditions, the sample shall continue to operate for 30 minutes. This test shall be made on each of the three flares constituting a set. Two out of the three flares shall pass the test.

9.5 With the rate of rotation and the wind condition the same as described in 9.2 and 9.3, the water pressure shall be further increased to a value of 18 – 20 psi (124 – 138 kPa) and the sample moved farther from the nozzle, if necessary, to a location giving a precipitation of 0.01 inch (0.3 mm) per minute, striking the sample at approximately 45 degrees from the horizontal. Under these conditions, the sample shall continue to operate for 45 minutes. This test shall be made on each of the three flares constituting a set. Two out of the three flares shall pass the test.

## 10 Wind Test

10.1 The flares used for these tests shall be filled with kerosene to the level recommended by the manufacturer and shall have the wicks adjusted in accordance with the manufacturer's instructions.

10.2 A flare shall be lighted and allowed to burn in still air for a preheating period of 5 minutes. It shall then be placed suddenly in an air stream of 40 mph (64 km/h) and withdrawn. After rotating through approximately 45 degrees, it shall again be placed in the air stream and withdrawn. It shall be rotated again through an additional 45 degrees, approximately, and placed in the air stream and withdrawn a third time. If the flame is extinguished during any one of these three operations, the sample shall have failed to pass the test. The test shall then be repeated on each of the other two samples constituting a set. Two out of the three samples shall pass the test.

10.3 A flare, lighted and mounted in its normal operating position, rotating about its vertical axis at 4 rpm, shall be subjected to a horizontal current of air having a velocity the equivalent wind at 40 mph (64 km/h). This test shall continue for 15 minutes, and the flare shall remain lighted throughout the entire 15-minute period.

10.4 Upon completion of the above test, while lighted and rotated as specified above, the flare is to be subjected to a horizontal current of air having a velocity of 5 mph (8 km/h). The total uninterrupted burning time, including the first 15 minutes at 40 mph (64 km/h), shall be at least 12 hours.

10.5 The flare shall be capable of burning in "still" air following the foregoing tests.

## 11 Photometric Test

11.1 A sample flare, when subjected to a wind velocity of 5 mph (8 km/h) and 40 mph (64 km/h), respectively, shall produce a minimum of 0.10 candlepower (1.1 lx) in a horizontal direction.



## INSTRUCTIONS AND MARKING

### 12 Instructions for Use

12.1 The manufacturer shall furnish printed instructions as to wick adjustment, maximum filling level, and method of installation.

### 13 Marking

13.1 Each device shall be marked with the following:

- a) The manufacturer's or private labeler's name or identifying symbol and
- b) The model, size, or style designation.

13.2 If a manufacturer produces liquid-burning flares at more than one factory, each device shall have a distinctive marking to identify it as the product of a particular factory.

## ELECTRIC LANTERNS

### CONSTRUCTION

#### 14 General

14.1 These devices shall be provided in sets of three contained in a metal rack or box which can be securely mounted on the motor vehicle.

#### 15 Color

15.1 The device shall provide a red light which may be flashing or steady burning.

15.2 The red lens provided for the foregoing purpose is considered to be a lens, the color of which under service conditions, employing a light source having the quality of International Commission on Illumination Illuminant A (incandescent lamp at 2,848°K), has a value of  $y$  not greater than 0.335, and a value of  $z$  not greater than 0.002,  $y$  and  $z$  being trichromatic coefficients derived on the basis of the 1931 ICI Standard Observer and Co-ordinate System. See the Standard Practice for Computing the Colors of Objects by Using the CIE System, ASTM E308-96.

15.3 A red lens shall not be acceptable if it is paler or yellower than the light-limit standard glasses when the two are illuminated by incandescent-lamp light.

### PERFORMANCE

#### 16 Test Sequence

16.1 The vibration and shock, rain, dust, and reliability and life tests shall be made on the same sample in that order.

#### 17 Vibration and Shock Test

17.1 Three sample lanterns, in the metal box or rack provided and mounted as in service, shall not show evidence of structural failure, material physical weakness, loosening, or rupture of parts, after being subjected to 1 hour of vertical displacement of an amplitude of 1/16 inch (1.6 mm) at a frequency of 12 – 13 Hz.

17.2 Failure of the bulb shall not be considered as failure of the unit.

17.3 For this test, amplitude is defined as the maximum displacement of sinusoidal motion from position of rest or one-half of the total vibration table displacement.

## 18 Rain Test

18.1 A sample lantern, mounted in its normal operating position, and the container in its normal service position with drain holes open, shall be subjected to a precipitation of 0.1 inch (2.5 mm) of water per minute, delivered at an angle of 45 degrees from a nozzle with a solid-cone spray. During this test, the lamp shall revolve about its vertical axis at a rate of 4 rpm. This test shall be continued for 12 hours.

18.2 The lantern and container shall then be examined. An accumulation of more than 0.0169 ounce (1/2 cm<sup>3</sup>) of water inside the lantern shall constitute a failure.

## 19 Dust Test

19.1 A sample unit shall be mounted in its normal operating position, at least 6 inches (152 mm) from the wall, in a box measuring 3 feet (0.9 m) in all directions, containing 10 pounds (4.5 kg) of finely powdered Portland cement in accordance with the Standard Specification for Portland Cement, ASTM C150-96. At intervals of 15 minutes, this dust is to be agitated by compressed air or fan blower by projecting blasts of air for a 2-second period in a downward direction into the dust in such a way that the dust is completely and uniformly diffused throughout the entire cube. The dust is then allowed to settle. This test shall be continued for 5 hours.

19.2 After the dust test, the exterior surface shall be cleaned, and if the maximum candlepower is within 10 percent of the maximum as compared with the condition after the unit is cleaned inside and out, it shall be considered adequately dust-tight.

## 20 Reliability and Life Tests

20.1 In the case of red electric warning lanterns which can be turned on or off at will, a sample unit shall be set up in complete form and operated for 1,000 cycles, using the operating unit or switch submitted with the device as a part thereof. This test shall be made at a rate not to exceed 50 times per minute. In the case of flashing units, the rate shall be slow enough to permit the unit to flash at least twice for each operation of the switch.

20.2 When this test is completed, the operating unit shall not show any evidence of physical weakness, excessive wear, or high resistance.

20.3 The lantern is to be turned on for a period of 12 hours. During this test, the "on" period for the flasher, if one is provided, shall be long enough at all times to permit the filament to come up to full brightness. The rate of flashing during the test shall not be more than 150 cycles per minute.

20.4 The device shall be operated in the manner intended and shall provide red light of at least the intensity prescribed below at the end of the 12 hour test, as provided in 20.3.

## 21 Photometric Tests

21.1 The lamps shall meet the following photometric requirements.

21.2 Directly to the front and rear of the lantern, on a horizontal line through the light source parallel to the road, the light shall have an intensity of at least 0.50 candlepower (5.4 lx).



21.3 In all directions within 10 degrees of this line there shall be at least 0.30 candlepower (3.2 lx).

21.4 In all directions within 30 degrees of this line there shall be at least 0.10 candlepower (1.1 lx).

21.5 The intensity shall not exceed 25 candlepower (268 lx) in any direction.

## 22 Low-Temperature Test

22.1 The device shall operate as intended at a temperature of minus 10°F (minus 23.3°C).

## MARKING

### 23 General

23.1 Each device shall be marked with the following:

- a) The manufacturer's or private labeler's identifying symbol;
- b) The model, size, or style designation;
- c) The shelf life of the battery; and
- d) A warning to replace the battery after the expiration of the manufacturer's date.

23.2 If a manufacturer produces electric lanterns at more than one factory, each lantern shall have a distinctive marking to identify it as the product of a particular factory.

## FUSEES

### CONSTRUCTION

### 24 General

24.1 A fusee shall consist of material containing flare composition and an integral means for effecting ignition by friction. The assembly shall be in the tubular form.

24.2 A fusee shall be identifiable by its standard burning time. The standard burning time shall be given in minutes and be one of the following:

- 5 minutes
- 10 minutes
- 15 minutes
- 20 minutes
- 30 minutes

24.2 revised November 5, 2013

24.3 A fusee shall burn with a red flame. The tube shall be colored red to indicate its burning color.

24.4 A fusee having a nominal burning time of 5 minutes shall not exceed a 9-inch (229-mm) overall length and a 1-1/8-inch (29-mm) diameter exclusive of a handle. A fusee having a nominal burning time of 10 minutes shall not exceed a 14-inch (356-mm) overall length and a 1-1/8-inch (29-mm) diameter.

**25 Heads and Caps**

25.1 The head of a fusee shall be protected by a removable cap not less than 1-3/4 inches (44.5 mm) long. The head composition shall not completely cover the end of the fusee and shall be protected from moisture by a waterproof coating. The entire rim of the head shall be free from ignition compound.

25.2 The cap shall be constructed so that after detachment it forms a device for lighting the ignition composition by friction. The ignition composition and the scratch surface shall be protected against accidental exposure and ignition.

25.3 The cap shall be constructed to prevent the inner surface of the cap from contacting the head. The cap shall be fastened to the body of the fusee to prevent unintentional detachment.

25.4 A cap and its fastenings shall not cover or obscure any of the marking requirements included in Marking, General, Section 35.

**26 Chemical Compositions**

26.1 A flare color composition containing sulphur shall not contain any amount of a chlorate in excess of 0.5 percent.

26.2 A fusee containing any amount of chlorate shall not contain ammonium salts.

26.3 A fusee deemed not to have potassium perchlorate contained therein shall not contain potassium perchlorate as an additive in either the fuse composition or the ignition composition.

26.3 added November 5, 2013

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## PERFORMANCE

### 27 Strength Test

27.1 A complete fusee shall withstand without breaking or rupture a weight of 80 pounds (352 N) applied at the center of a 6-inch (152-mm) horizontal span of the fusee, or a weight of 120 pounds (528 N) so applied over a 4-inch (102-mm) horizontal span, for a period of 5 minutes.

27.2 In conducting the test the fusee is to be horizontally supported by two flat bearing surfaces 1/4 inch (6.4 mm) wide with the clear distance between the supports maintained as specified in 27.1. The appropriate load is to be applied at the center of the span using a wire loop bearing on the center of a 1 inch (25 mm) wide half-ring section of rigid metallic tubing having an inside diameter of 1-1/4 inches (32 mm).

27.3 The 4-inch (102-mm) span is to only be used for testing those fusees having a length incapable of accommodating the 6-inch (152-mm) span.

### 28 Striking Test

28.1 The ignition or head composition of a fusee shall withstand the application of the effort necessary to effect ignition without breaking or becoming detached in whole or in significant part from the fusee.

28.2 At least two fusees of each size or rating are to be exposed to the test for striking.

### 29 Water Immersion Test

29.1 The ignition compound, as provided on a fusee, shall withstand immersion in water at a temperature of 70°F (21.1°C) for a period of 10 minutes without impairing the efficiency of accomplishing full and prompt ignition in the usual manner.

29.2 This test is to be performed using at least one sample of each size fusee both with the cap in place and removed. The body of the test sample is to be immersed horizontally so that the upper portion is maintained at a depth of 2 inches (51 mm) below the water surface. At the end of the submergence period, excess water shall be removed from the striking surface of any cap used, and in all cases from the ignition mix, by wiping or other means.

**30 Submerged Burning Test**

30.1 A fusee shall be capable of continued burning following normal ignition and then complete submergence in water for a period for 1 minute.

30.2 At least five samples of each size and style of fusee are to be subjected to this test. Not more than 20 percent of the samples of each style and size are to be extinguished during the period of submergence. It is not required that a sample continue to burn following removal from the water.

30.3 Ignition of each sample is to be effected in the prescribed manner and the fusee allowed to burn for 10 seconds in air. The sample is then to be slowly submerged in water in a vertical position with the head down and held in this position for a period of 1 minute. During this period the head is to be submerged at least 4 inches (102 mm) below the water surface. The water bath is to be at 70°F (21.1°C) at the start of each test.

**31 Inclined Burning Test**

31.1 A fusee burning in the normal ignition end up position shall not "chimney" in such a manner as to materially obscure the flame when tilted to an angle of 20 degrees from the vertical.

31.2 One sample of each size and style of fusee is to be subjected to this test. The "chimney" effect is not to materially obscure the flame throughout the normal burning time.

**32 Burning Time Test**

32.1 A fusee containing the chemical potassium perchlorate, burning in the position described in 31.1, and in the horizontal position, shall burn effectively within the limits in Table 32.1.

32.1 revised November 5, 2013

**Table 32.1**  
**Burning times with potassium perchlorate**

Table 32.1 revised November 5, 2013

Marked, minutes	Minimum, minutes	Maximum, minutes
5	5	6.5
10	10	13.0
15	15	18.0
20	20	23.0
30	30	33.0

32.1.1 A fusee containing no chemical potassium perchlorate, burning in the position described in 31.1, and in the horizontal position, shall burn effectively within the limits in Table 32.2.

32.1.1 added November 5, 2013

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**Table 32.2**  
**Burning times, no chemical potassium perchlorate**

Table 32.2 added November 5, 2013

Marked, minutes	Minimum, minutes	Maximum, minutes
5	5	8.5
10	10	13.0
15	15	18.0
20	19	23.0
30	27	33.0

32.2 The burning time is to be calculated immediately upon ignition of the fusee.

32.3 At least two samples of each size and type of fusee are to be subjected to burning in both the upright (tilted 20 degrees), and the horizontal positions. All samples tested shall have burning times falling within the specified limits shown in Table 32.1 or Table 32.2.

32.3 revised November 5, 2013

### 33 Ignition Temperature Test

33.1 The ignition temperature of the igniter composition and the flare color composition shall be not less than 350°F (177°C).

33.2 The apparatus employed is to consist essentially of a combustion chamber surrounded by a molten alloy bath heated by a special electric furnace having low resistance rod-type heating elements and thermostatic control. The combustion chamber is to consist of a heat resistant glass or quartz flask of conical form with flat bottom 4.5 inches (11.4 cm) in height, 2.4 inches (6.0 cm) in diameter at the bottom, and 1.1 inches (2.8 cm) in diameter at the top. It is to be about 5.41 ounces (160 ml) capacity, having a ratio of surface area to volume of about 1:1. The temperature of the bath is to be measured by means of a calibrated thermocouple provided with a quartz tube for protection of the hot junction. The thermocouple is to be held in the alloy bath so that its hot junction is about level with the bottom of the combustion chamber and 1/4 inch (6.4 mm) from the side of the chamber.

33.3 Small amounts of the material taken from at least two sample fusees are to be dropped into the flask at intervals of 9°F (5°C) and it is to be observed whether or not ignition is obtained. A little additional air may be introduced into the flask by means of a rubber bulb and a bent-glass delivery tube. After each trial, the gases, vapors, and residue are to be completely removed by the aid of a slow stream of air. The lowest temperature at which ignition occurs (without application of flame), which results in flaming or glowing combustion within 2 minutes, is to be taken as the ignition temperature.

### 34 Heating Test

34.1 The moistened compositions of a fusee shall withstand 72 consecutive hours of exposure to a temperature of 212°F (100°C) without occurrence of spontaneous ignition.

34.2 The apparatus for the heating test is to consist essentially of a vertical cylindrical test chamber, 7 inches (178 mm) in height and 4 inches (102 mm) in diameter, surrounded at the side and bottom by a water bath heated by an electric hot plate. The test chamber is to be provided with a cover having two air vent tubes and an opening for introduction of a thermocouple. The sample is to be contained within the test chamber by a cylinder of wire gauze, 6 inches (152 mm) in height and 1-1/2 inches (38 mm) in diameter. This cylinder is to be concentric with the axis of the test chamber, providing an annular space through air of 1-1/4 inches (32 mm) between the cylinder and the wall of the chamber.

34.3 In conducting the test, a 4.2-ounce (120-gram) portion of the combustible mixture of the fusee is to be moistened with 0.169 ounce (5 ml) of distilled water and placed in the containing cylinder within the test chamber. A thermocouple connected to a recording potentiometer is to be inserted in the test sample so as to measure the temperature at the approximate center of the mass. The cover is then to be placed on the test chamber, and the water bath surrounding the chamber is to be maintained at boiling 212°F (100°C) for a period of 72 hours.

34.4 A rise in the temperature of the sample above the temperature of the ambient water bath under the conditions of the test is to be taken as an indication of spontaneous heating of the material.

#### 34A Potassium Perchlorate Chemical Test

34A added November 5, 2013

34A.1 A violet precipitate produced by the reaction will indicate the presence of perchlorate.

34A.2 The apparatus employed is to consist of two 250 ml beakers or similarly sized clean glass containers, a glass or stainless steel stir rod or spatula, a funnel, and a piece of filter paper of the proper size to fit the funnel. A 0.3% by weight solution of methylene blue in water will be prepared as the indicating reagent.

34A.3 A small amount of material (roughly 5 grams) from at least two sample fusees is to be placed into one of the glass containers. This material will be mixed with 100 milliliters of distilled/deionized water by stirring with a clean glass rod or stainless steel spatula. After stirring, the contents of the first beaker will be filtered through the funnel containing the filter paper into the second glass container. Five drops of the 0.3% methylene blue solution will be added to the solution in the second glass container. Mix the contents of the second glass container by swirling.

