

### **Scott A. Graeff, President and CEO**

Needham Conference January 15, 2020

#### **Safe Harbor**

#### Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

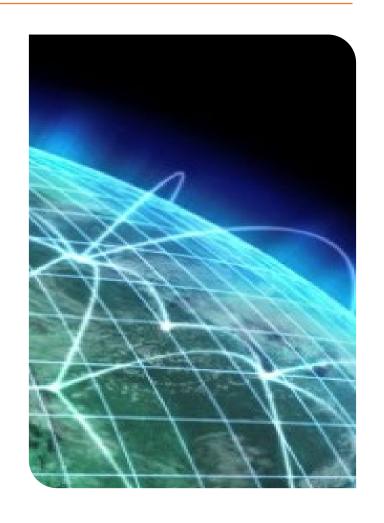
This presentation includes information that constitutes "forward-looking statements" made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. These statements include the company's expectations regarding the company's future financial performance and the potential demand for its products, the company's growth potential, its balance sheet and capitalization, its valuation, its leadership team, its technological advantages, and market trends. Management cautions the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of the company may differ materially from the future results, performance, and/or achievements expressed or implied by these forward-looking statements as a result of a number of factors. These factors include, without limitation, failure of demand for the company's products and services to meet expectations, failure of target markets to grow and expand, technological and strategic challenges, market valuation of the company and those risks and uncertainties set forth in the company's periodic reports and other filings with the Securities and Exchange Commission ("SEC"). Such filings are available on the SEC's website at www.sec.gov and on the company's website at <a href="https://www.lunainc.com">www.lunainc.com</a>. The statements made in this presentation are based on information available to Luna as of the date of this presentation and Luna undertakes no obligation to update any of the forward-looking statements after the date of this presentation, except as required by law.

#### **Adjusted Financial Measures**

In addition to U.S. GAAP financial information, this presentation includes Adjusted EBITDA, a non-GAAP financial measure. This non-GAAP financial measure is in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. A reconciliation of Adjusted EBITDA to Net Income is included in the appendix to this presentation.

# Luna is a global company providing innovative products and solutions using proprietary fiber optic technologies

| Incorporated       | 1990  |  |  |  |  |  |  |
|--------------------|---|--|--|--|--|--|--|
| IPO                | 2006 (NASDAQ: LUNA)   |  |  |  |  |  |  |
| Reporting segments | <ul><li>Technology Development</li><li>Products &amp; Licensing</li></ul> |  |  |  |  |  |  |
| Revenue            | FY18 Actual \$42.9M<br>FY19 Guidance* \$69 - \$70M                        |  |  |  |  |  |  |
| AEBITDA            | FY18 Actual \$3.0M<br>FY19 Guidance <sup>*</sup> \$8.2M - \$8.6M          |  |  |  |  |  |  |
| HDQ                | Roanoke, VA   |  |  |  |  |  |  |
| Employees          | 260+, including leading engineers, scientists, innovators                 |  |  |  |  |  |  |

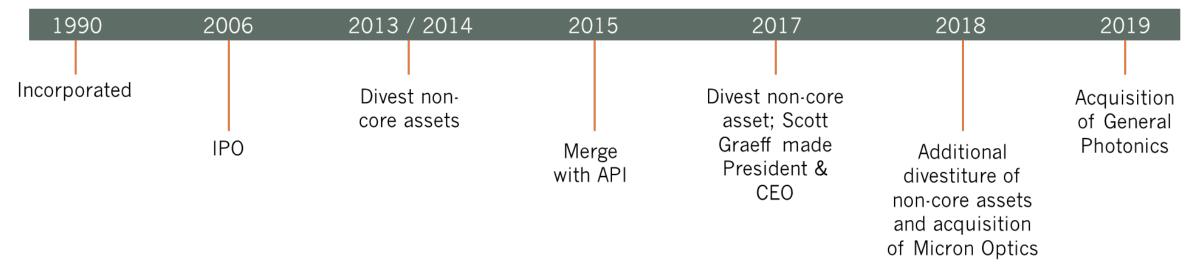


<sup>\*</sup> Guidance provided in 11/5/19 earnings release and call. For informational purposes only. This does not constitute an update or reaffirmation.

## Luna has a clear vision and established history

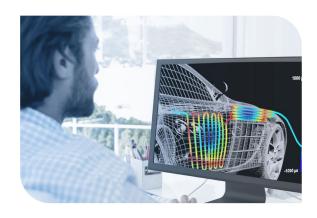
**Vision** Enabling the Future with Fiber.

### **History**



# Accelerating our technology is bringing new and innovative products to market

### **Lightwave Division**



## Structural & Material Test and Process Control

High-definition distributed sensing and high-precision gauging not available using conventional measurement technologies



## **Communications Test & Measurement**

Design and manufacture, highperformance fiber optic test instruments for communications market

#### **Luna Labs**

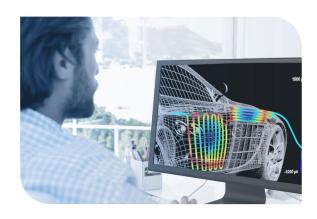


#### **Contract Research**

Cutting-edge, disruptive technologies enabled by highly leverageable, third-party funded research

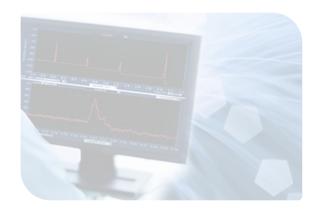
#### Structural & Material Test and Process Control Products

### **Lightwave Division**



## Structural & Material Test and Process Control

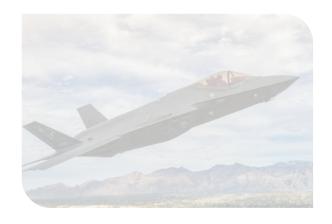
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# **Communications Test & Measurement**

Design and manufacture, highperformance fiber optic test instruments for communications market

#### **Luna Labs**



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## **ODISI Series (Optical Distributed Sensing Interrogator)**



Full scale structural test of Boeing 787
ODiSI used to measure strain distribution in composite materials

- High-Definition Fiber Optic Sensing
  - Measuring strain and temperature in composites and other advanced materials
  - Focus on aerospace and automotive

## **Hyperion Platform**



Bridge in Hawaii, part of the Honolulu Metro Rail system – outfitted with 3 Hyperion systems connected to 153 sensors for structural monitoring

- High-Speed, Long Range FBG Sensing
  - Measuring strain, temperature, acceleration, displacement and pressure
  - Focus on structural health and security
    - Buildings, tunnels, bridges
    - Perimeter security
- Exclusive license agreement with Meggitt PLC for supply of fiber optic components and technology for aircraft fire and overheat detection equipment

## **Terahertz Technology**



THz technology is used to ensure consistent layer thickness in high volume production of plastic food packaging

- Process control, inspection and nondestructive testing
  - Advanced technology to perform unique measurements unavailable from existing instrumentation
  - Unique measurement of composites and coatings with easy to use handheld tools
  - Focus on manufacturing environments and hand-held version used in final inspection
    - Lockheed Martin
    - Plastic packaging

#### **Communications Test & Measurement Products**

### **Lightwave Division**



## Structural & Material Test and Process Control

High-definition distributed sensing and high-precision gauging not available using conventional measurement technologies



# **Communications Test & Measurement**

Design and manufacture, highperformance fiber optic test instruments for communications market

#### Luna Labs



#### **Contract Research**

Cutting-edge, disruptive technologies enabled by highly leverageable, thirdparty funded research

## **OVA Platform (Optical Vector Analyzer)**



999Mbs 5G wireless signal 20x faster than 4G. OVA enables the high-speed fiber network behind this.

- Optical component development and manufacturing
  - Silicon photonics is creating demands for advanced test solutions
  - Reduces time and cost associated with the development of high-speed optical components
  - Focus on enabling the carriers to move to 5G networks

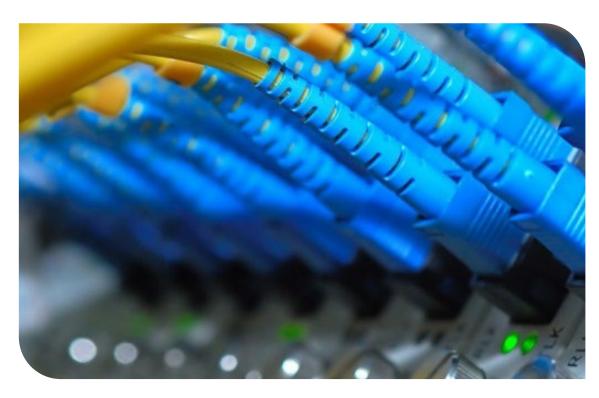
## **OBR Platform (Optical Backscatter Reflectometer)**



Data Centers enable 'cloud computing' – the OBR helps diagnose fiber networks to ensure uptime.

- Fiber and short network test
  - Bandwidth demands continue to drive double-digit connectivity growth
  - Delivers unprecedented visibility into short-haul networks
  - Focus on enabling the carriers to move to 5G networks
  - Emerging market for on-board aircraft communications

## General Photonics instruments, modules and components



Modern high-speed networks require precise measurement and control

- Optical measurement & control technologies
  - Enhancing optical systems and network through the precision control of light
  - Additional polarization products that are used in the data communication environment
  - Tremendous synergy with existing customers

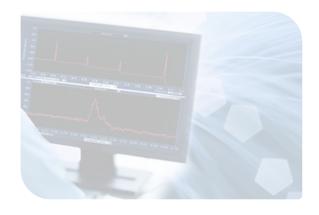
#### **Contract Research Products**

#### **Lightwave Division**



## Structural & Material Test and Process Control

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# **Communications Test & Measurement**

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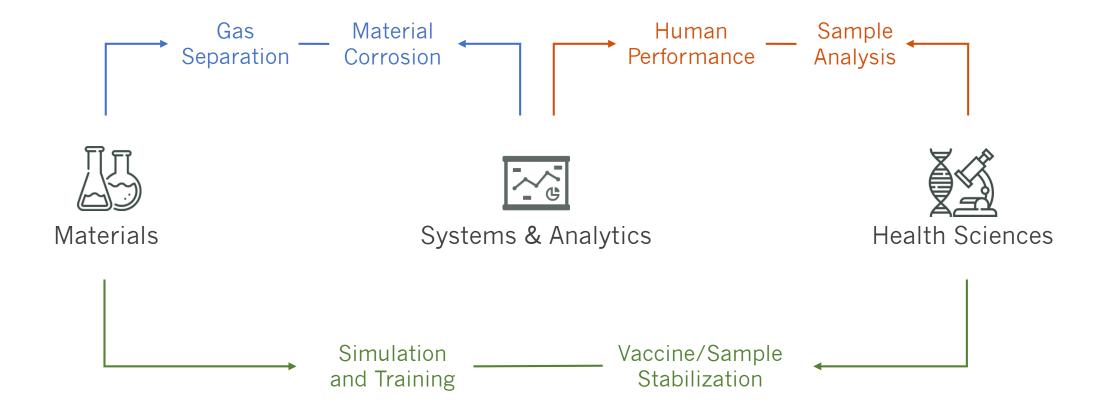
#### **Luna Labs**



#### **Contract Research**

Cutting-edge, disruptive technologies enabled by highly leverageable, third-party funded research

### **Luna Labs**



## **Update on Acquisitions Integration**

- Rapid integration
  - Merged complementary products into integrated customer solutions
  - Migrated sales teams to common rewards systems
- Working as a single integrated company

#### **Micron Optics**

- Integration nearly complete; sales force training complete
- Continued positive feedback from customers regarding product offerings

#### **General Photonics**

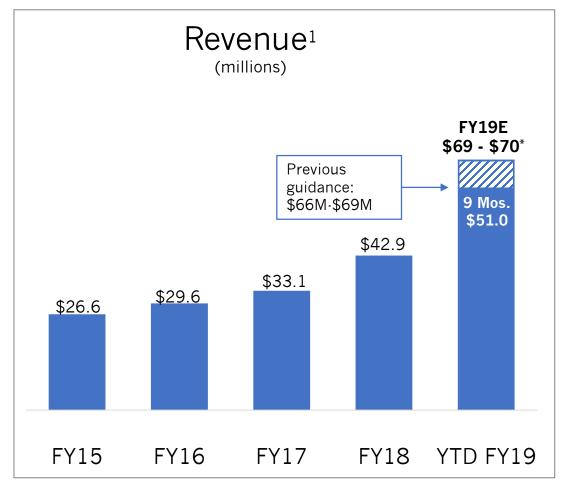
- Integration proceeding smoothly; no significant "hiccups" to date
  - Sales force education completed
  - Customer feedback is positive regarding product offerings
  - Complementary, additive product lines already contributing to growth

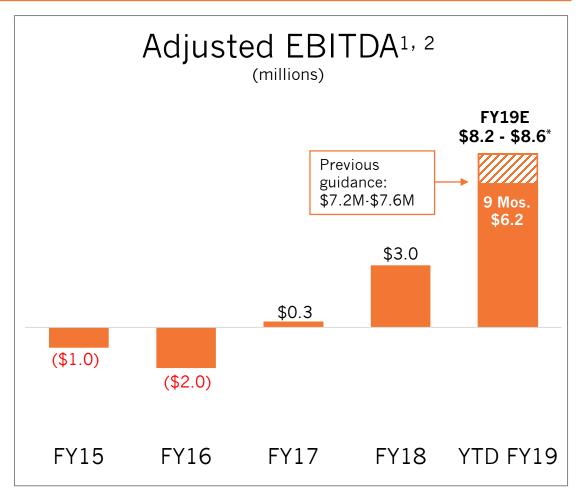
## **Other Key Accomplishments**

- Announced new CFO, Gene Nestro, a senior global finance executive with broad and deep experience in companies of all sizes
- June 2019, signed an exclusive license agreement with Meggitt PLC for supply of fiber optic components and technology for aircraft fire and overheat detection equipment
- Initiated and fully executed \$2 million stock buyback program
- Simplified capital structure:
  - Converted 1.3 million shares of Series A convertible preferred stock owned by Carilion Clinic into common stock – 1 for 1
  - Ceased accrual of preferred dividends as of September 30
  - End result: single class of stock (common) and no preferred dividends
- Put in place a new \$10 million revolving credit facility
- Added new board member, Mary Beth Vitale, bringing both cybersecurity expertise and diversity to the Luna board

# Financial Overview

## **Strong Financial Results**





<sup>\*</sup> Guidance provided in 11/5/19 earnings release and call. For informational purposes only. This does not constitute an update or reaffirmation.

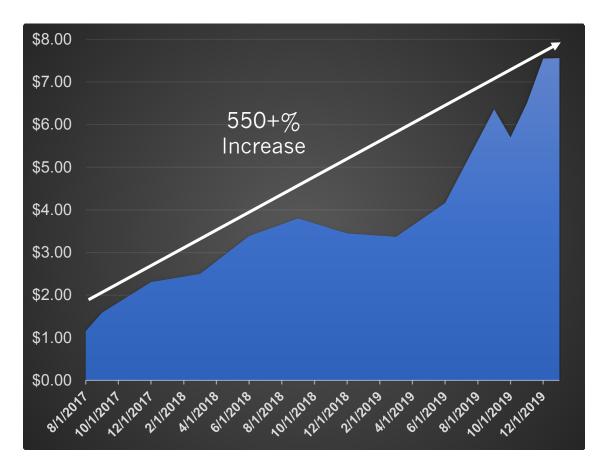
<sup>&</sup>lt;sup>1</sup> Based on management's estimates as of November 5, 2019 of the impact from the divestiture of Optoelectronics. Includes the acquisitions of Micron Optics and General Photonics.

<sup>&</sup>lt;sup>2</sup>Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix to this presentation.

## A Flexible Balance Sheet and Strong Cash Position

- Balance sheet on September 30, 2019:
  - \$82.9M in total assets
    - \$21.4M in cash and cash equivalents
    - \$39.2M in working capital
- Continued focus on working capital and reinvestment in business in order to generate long-term sustainable growth

## **NASDAQ: LUNA stock performance**



- Executed strategy; refocus on core, fiber-optic based technologies
- Eighth consecutive quarter of year-over-year, double-digit revenue growth from continuing operations
- Return to profitability
- Good steward of capital
- Increase key OEMs

## Why Invest in Luna?

- Proprietary, measurement technology, offering unprecedented combination of resolution, accuracy and speed
- Customers in attractive markets: Aerospace,
   Automotive, Communications, Energy and Defense
- Positioned to take advantage of trends such as vehicle light-weighting and increasing demands on data centers and broadband capacity
- Adequately capitalized to fund growth
- Long-tenured, experienced executive team / board
- Corporate culture of innovation and integrity
- Compelling value: currently trading at an attractive multiple



# Questions?

# Appendix

## Reconciliation of Net Income to Adjusted EBITDA

|   | Three Months Ended September 30, |           |          |           |    | Nine Months Ended September 30, |          |            |  |  |
|---|----------------------------------|-----------|----------|-----------|----|---------------------------------|----------|------------|--|--|
|   |                                  | 2019      |          | 2018      |    | 2019                            | 2018     |            |  |  |
|   |                                  | (una      | audited) |           |    | (unat                           | nudited) |            |  |  |
| Net income  | \$                               | 1,230,252 | \$       | 8,848,402 | \$ | 3,196,422                       | \$       | 10,064,405 |  |  |
| Less income from discontinued operations, net of income tax |                                  |           |          | 7,555,626 |    |                                 |          | 8,704,246  |  |  |
| Net income from continuing operations                       |                                  | 1,230,252 |          | 1,292,776 |    | 3,196,422                       |          | 1,360,159  |  |  |
| Interest expense  |                                  | 2,032     |          | 28,029    |    | 14,806                          |          | 103,208    |  |  |
| Investment income   |                                  | (72,728)  |          | (171,896) |    | (324,139)                       |          | (350,976)  |  |  |
| Tax expense/(benefit)                                       |                                  | 324,723   |          | (559,093) |    | (1,293,051)                     |          | (674,329)  |  |  |
| Depreciation and amortization                               |                                  | 668,985   |          | 212,054   |    | 1,834,594                       |          | 723,650    |  |  |
| EBITDA  |                                  | 2,153,264 |          | 801,870   |    | 3,428,632                       |          | 1,161,712  |  |  |
| Share-based compensation                                    |                                  | 419,553   |          | 133,432   |    | 1,140,202                       |          | 345,582    |  |  |
| Non-recurring charges (1)                                   |                                  | _         |          | _         |    | 941,716                         |          | _          |  |  |
| Amortization of inventory step-up                           |                                  | 310,612   |          | _         |    | 724,760                         |          |            |  |  |
| Adjusted EBITDA   | \$                               | 2,883,429 | \$       | 935,302   | \$ | 6,235,310                       | \$       | 1,507,294  |  |  |

<sup>(1)</sup> Non-recurring charges consist of transaction-related expenses incurred during the nine months ended September 30, 2019, related to the acquisition of General Photonics.

## Reconciliation of Net Income to Adjusted EBITDA: Full Fiscal Year

|                                | Year Ended December 31, |               |               |  |  |  |  |  |
|--------------------------------|-------------------------|---------------|---------------|--|--|--|--|--|
|                                | 2016                    | 2017          | 2018          |  |  |  |  |  |
|                                |                         | (unaudited)   |               |  |  |  |  |  |
| Net income                     | \$ (2,369,492)          | \$ 14,614,905 | \$ 11,004,241 |  |  |  |  |  |
| Less Income from disc ops      | 1,538,624               | 15,865,720    | 9,766,431     |  |  |  |  |  |
| Net income from continuing ops | (3,908,116)             | (1,250,815)   | 1,237,810     |  |  |  |  |  |
| Interest expense               | 316,975                 | 217,352       | 124,344       |  |  |  |  |  |
| Investment income              | -                       | -             | (549,580)     |  |  |  |  |  |
| Tax provision                  | (135,567)               | (1,148,579)   | 47,818        |  |  |  |  |  |
| Depreciation and amortization  | 905,956                 | 1,136,729     | 908,347       |  |  |  |  |  |
| EBITDA                         | (2,820,752)             | (1,045,313)   | 1,768,739     |  |  |  |  |  |
| Share based compensation       | 860,215                 | 715,094       | 527,189       |  |  |  |  |  |
| Non-recurring charges (1)      | -                       | 595,992       | 751,102       |  |  |  |  |  |
| Adjusted EBITDA                | \$ (1,960,537)          | \$ 265,773    | \$ 3,047,030  |  |  |  |  |  |

<sup>(1)</sup> Non-recurring charges include the following: 2017) CEO separation costs and other share-based compensation; and 2018) Transaction-related expenses associated with the acquisition of Micron Optics, Inc.

# Pro-forma Luna Financials, Adjusted for the sale of Optoelectronics and the Acquisitions of Micron Optics and General Photonics

|   | (in thousands) Three Months Ended <sup>1</sup> |        |                                |        |                             |        |               |        |                    |             |
|---|--|--------|--------------------------------|--------|-----------------------------|--------|---------------|--------|--------------------|-------------|
|   | September 30, 2018                             |        | December 31, 2018 <sup>2</sup> |        | March 31, 2019 <sup>3</sup> |        | June 30, 2019 |        | Septebmer 30, 2019 |             |
| Revenues:                                 |  |        |                                |        |                             |        |               |        |                    |             |
| Products and licensing                    | \$   | 10,787 | \$                             | 11,345 | \$                          | 10,221 | \$            | 11,373 | \$                 | 11,926      |
| Technology development                    | Ψ  | 5,316  | Ψ                              | 5,548  | φ                           | 6,641  | Ψ             | 6,441  | ψ                  | 6,495       |
| Total revenues                            | -  |        |                                |        |                             | 16,862 |               |        |                    | 18,421      |
| rotal revenues                            | -  | 16,103 |                                | 16,893 |                             | 10,002 |               | 17,814 |                    | 10,421      |
| Cost of revenues:                         |  | -<br>- |                                | -      |                             | -<br>- |               |        |                    |             |
| Products and licensing                    |  | 4,204  |                                | 4,002  |                             | 3,836  |               | 4,578  |                    | 4,562       |
| Technology development                    |  | 3,919  |                                | 4,268  |                             | 4,816  |               | 4,484  |                    | 4,574       |
| Total cost of revenues                    | -  | 8,123  |                                | 8,270  |                             | 8,652  |               | 9,062  |                    | 9,136       |
|   | -  |        |                                |        |                             | -      |               |        |                    |             |
| Gross Profit                              |  | 7,980  |                                | 8,623  |                             | 8,210  |               | 8,752  |                    | 9,285       |
| G. 1033 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | -  | -      |                                | -      |                             | -      |               |        |                    |             |
| Operating expense:                        |  | -      |                                | -      |                             | _      |               |        |                    |             |
| Selling, general and administrative       |  | 5,488  |                                | 6,394  |                             | 7,165  |               | 6,003  |                    | 5,754       |
| Research, development and engineering     |  | 1,535  |                                | 1,894  |                             | 1,708  |               | 1,735  |                    | 2,047       |
| Total operating expense                   |  | 7,023  |                                | 8,288  |                             | 8,873  |               | 7,738  |                    | 7,801       |
| ,   |  | -      |                                | -      |                             |        |               | · /··  |                    | , , , , , , |
| Operating income/(loss)                   | \$   | 957    | \$                             | 335    | \$                          | (663)  | \$            | 1,014  | \$                 | 1,484       |

<sup>&</sup>lt;sup>1</sup> Unaudited pro forma financials assumes the Optoelectronics business was sold and the Micron Optics and General Photonics businesses were acquired on January 1, 2018.

<sup>&</sup>lt;sup>2</sup> Includes \$751,000 of costs associated with the acquisition of Micron Optics.

<sup>&</sup>lt;sup>3</sup> Includes \$898,000 of costs associated with the acquisition of General Photonics.