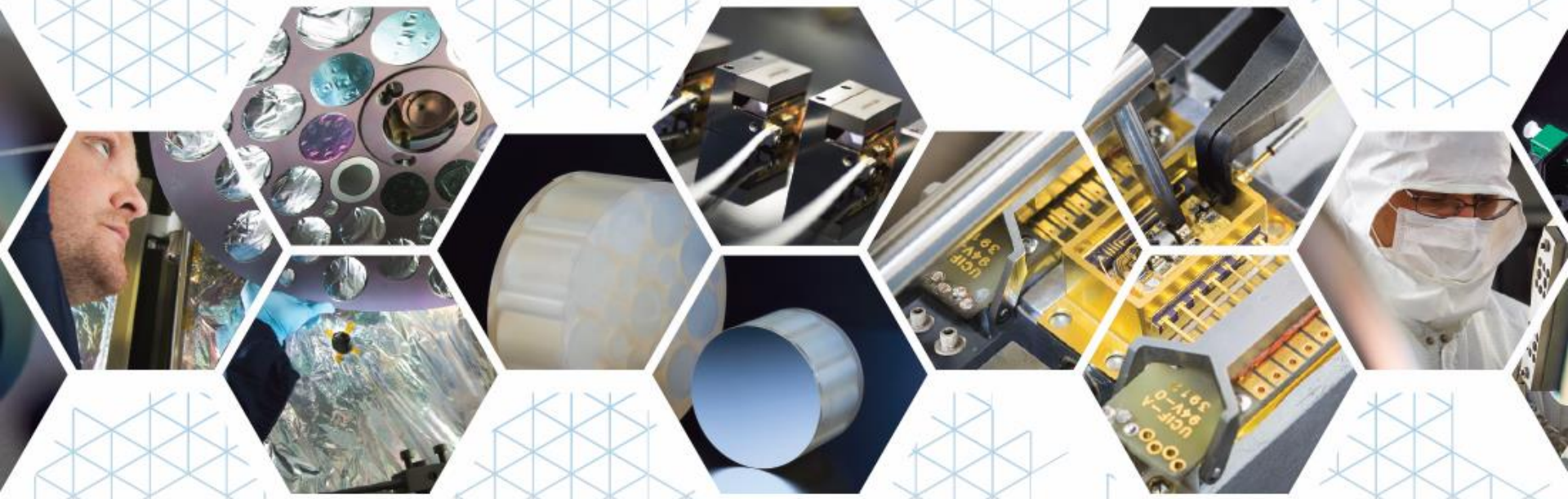

INTERIM RESULTS

HALF YEAR ENDED 31 MARCH 2018

CEO: Mark Webster / **CFO:** Andrew Boteler

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

Highlights

Operational & Financial Highlights

- Strong revenue growth driven by microelectronic manufacturing and A&D sectors.
- Revenue growth of 6.6% compared with the same period last year. Excluding the impact of foreign exchange, an increase of 14.0% over last year. Excluding foreign exchange and acquisitions, an increase of 7.7%.
- Demand for high reliability fibre couplers in H1 lower than last year, though expected to come back in H2.
- Record order book of £84.7 million, as at 31 March 2018, an increase of 27.1% compared with the same period last year. Excluding the impact of foreign exchange, an increase of 36.4%.
- In order to take advantage of the strong order book, in particular at our Ilminster site, we have continued to invest in upgrading equipment, hiring and training new operators and improving manufacturing processes.
- Adjusted PBT growth of 12.7%, compared to same period last year.
- Interim dividend increased by 13.5% to 4.2p (2017 :3.7p).

"Overall market conditions remain good. We have a record half year order book and full year trading continues to be in line with management's expectations"

Mark Webster, CEO

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Financial Overview

Income Statement

Half Year Ended 31 March	2018 £'000	2017 £'000
Revenue	**55,608**	**52,153**
Gross profit	**21,722**	**20,209**
Operating expenses	**(14,574)**	**(13,874)**
Adjusted operating profit	**7,148**	**6,335**
Adjusted operating profit %	**12.9%**	**12.1%**
Acquired intangible assets amortisation and exceptional items	**(1,456)**	**(1,435)**
Operating profit	**5,692**	**4,900**
Net finance costs	**(444)**	**(197)**
Profit before tax	**5,248**	**4,703**
Tax expense	**(668)**	**(1,261)**
Profit for the period	**4,580**	**3,442**
Basic earnings per share	**18.6p**	**14.1p**
Adjusted profit before tax	**7,009**	**6,218**
Adjusted basic earnings per share	**21.5p**	**18.7p**

Key points:

- Revenue growth of 6.6% compared with the same period last year.
- Excluding the impact of foreign exchange revenue increased by 14.0%.
- G&H is substantially "naturally hedged", primarily due to our large US Dollar cost base, therefore the foreign exchange headwind is mainly seen on the revenue line.
- Gross margin increased to 39.1%, compared with 38.7% in the same period last year.
- Investment in people, working capital and infrastructure to drive further growth and take advantage of the record order book.
- Invested £4.1 million (H1 2017 £4.5 million) in R&D. This represents 7.4% of revenue.
- Adjusted profit before tax increased by 12.7%, compared with the same period last year.
- Adjusted effective tax rate was 24.2% (2017: 26.8%).

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Financial Overview

Cash Flow

Half Year Ended 31 March	2018 £'000	2017 £'000
Cash flow from operating activities before tax	1,151	7,871
Income tax paid	(1,646)	(802)
Cash flow from operating activities after tax	**(495)**	**7,069**
Cash flow from investing activities		
Purchase of property, plant and equipment & intangibles	(3,661)	(3,890)
Acquisition of subsidiaries, net of cash acquired	(4,414)	(5,549)
Interest received	7	18
	(8,068)	**(9,421)**
Cash flow from financing activities		
Movement in borrowings	(3)	6,045
Proceeds from issuance of share capital	-	-
Interest paid	(111)	(109)
Dividends paid to ordinary shareholders	(1,608)	(1,383)
	(1,722)	**4,553**
Net increase in cash and cash equivalents	**(10,285)**	**2,201**
Cash and cash equivalents	**16,053**	**25,686**

Key points:

- Cash flow from operations before tax of £1.2 million, compared with £7.9 million last year.
- £7.6 million invested in working capital to take advantage of record order book.
- £2.7 million investment in Property, Plant & Equipment, targeted largely at equipment to increase capacity.
- First instalment of the StingRay acquisition earn-out of $6.0 million in cash from existing debt facilities was paid in February.
- The Company's net cash position remains robust at £5.0 million, down from £7.8 million at the same point last year.
- Interim dividend increased 13.5% to 4.2p (2017: 3.7p).

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Financial Overview

Balance Sheet

As at 31 March		2018 £'000	2017 £'000
Non-current assets	Tangible assets	34,445	34,935
	Intangible assets	38,926	44,418
	Other	1,502	2,785
		74,873	**82,138**
Current assets	Inventories	23,968	21,025
	Trade & other receivables	27,329	21,852
	Cash & cash equivalents	16,053	25,686
		67,350	**68,563**
Current liabilities	Trade & other creditors	(21,747)	(20,547)
	Borrowings	(6)	(3)
	Other	(5,140)	(1,397)
		(26,893)	**(21,947)**
Non current liabilities	Borrowings	(11,002)	(17,913)
	Other	(4,438)	(14,388)
		(15,440)	**(32,301)**
Net assets		**99,890**	**96,453**

Key points:

- Strong balance sheet maintained.
- £2.7 million invested in property, plant & equipment.
- £0.4 million of R&D costs capitalised.
- Deliberate inventory build in our major high growth sites, together with strategic inventory built in Torquay site in preparation for H2 ramp in high reliability components.
- Increase in Receivables driven by volume, shipment profile and a single large individual debtor outstanding at the period end, which has now been settled.
- The movement in borrowings reflects the repayment of a portion last year. G&H expects to renegotiate its banking facilities before the end of the current financial year.

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Market analysis - Results by segment

	Industrial	Aerospace & Defence	Life Sciences	Scientific Research	Corporate	Group
Revenue						
2018	**£30.5m**	**£18.1m**	**£5.0m**	**£2.0m**	**-**	**£55.6m**
2017	£31.3m	£14.6m	£4.8m	£1.5m	-	£52.2m
Change	(£0.8m)	£3.5m	£0.2m	£0.5m	-	**£3.4m**
%	*(2.5%)*	*24.0%*	*4.2%*	*33.3%*	-	***6.6%***
Adjusted operating profit						
2018	**£4.4m**	**£2.1m**	**£0.3m**	**£0.2m**	**£0.1m**	**£7.1m**
2017	£5.3m	£1.1m	£0.3m	£0.0m	(£0.4m)	£6.3m
Change	(£0.9m)	£1.0m	(£0.0m)	£0.2m	£0.5m	**£0.8m**
%	*(17.0%)*	*90.9%*	*0.0%*			***12.7%***

- Industrials – Revenue growth in microelectronic manufacturing was offset by lower demand for high reliability fibre optic components. Investment made in people, equipment and processes.
- Aerospace & Defence – Excluding the impact of acquisitions, the sector grew by 5.5%, c£2.7 million of growth delivered through acquisitions.
- Life Sciences – Investment in life sciences business development and R&D.

"We have an active policy of building a diverse and balanced business by establishing a 'critical mass' in life sciences and further strengthening our position in A&D, through investing in a mix of R&D and acquisitions." **Mark Webster CEO**

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Technology, Products & Markets

Markets & Applications

Industrial

Revenue	
2018	**£30.5m**
2017	£31.3m
Change	(£0.8m)
%	*(2.5%)*

Adjusted operating profit	
2018	**£4.4m**
2017	£5.3m
Change	(£0.9m)
%	*(17.0%)*

Markets

Microelectronics & light manufacturing

- Continued strong demand for critical components used in precision lasers for microelectronic manufacturing.
- Investment made to build capacity.

Fibre optic sensing

Telecommunications

- Underlying medium term demand for hi reliability fibre couplers used in undersea cables, driven by Silicon Valley companies laying their own networks.
- Lower demand in H1 than last year due to delays in customer contracts. Demand expected to come back in H2.

Metrology

Applications

- Fibre lasers
- Solid state lasers
- Other laser sources
- Semi-conductor equipment
- Inspection equipment

- Perimeter sensing
- Laser scanners
- Wind turbines

- Undersea amplifiers
- Specialist networks
- 40G & 100G Modulation systems

- Laser interferometers

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Technology, Products & Markets

Markets & Applications

Aerospace & Defence

Revenue	
2018	**£18.1m**
2017	£14.6m
Change	£3.5m
%	*24.0%*

Adjusted operating profit	
2018	**£2.1m**
2017	£1.1m
Change	£1.0m
%	*90.9%*

Markets

Target designation & range finding

- Market position greatly enhanced by the acquisition of StingRay and Kent Periscopes.
- StingRay's opto- mechanical design capability can be leveraged across the group, in particular in our UAV and IR business areas.

Navigation systems

- An increasingly competitive market place for G&H. Price pressure being counteracted with cost reduction measures.

Space Photonics

- Increasingly G&H recognised as a global leader in space satellite communications.
- Increasing commercial traction with the winning of further contracts.

Countermeasures

Applications

- Aircraft platforms
- Missile systems
- Land based military platforms
- UAVs

- Ring laser gyroscopes
- Fibre gyroscopes

- Telco satellites
- GPS satellites
- Research satellites
- Space navigation

- Infra-red countermeasures
- RF countermeasures

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Technology, Products & Markets

Markets & Applications

Life sciences

Revenue	
2018	**£5.0m**
2017	£4.8m
Change	£0.2m
%	*4.2%*

Adjusted operating profit	
2018	**£0.3m**
2017	£0.3m
Change	£0.0m
%	*0.0%*

Markets

Optical Coherence Tomography

- Increased investment in a broader portfolio of OCT products, with new customers, for a range of new applications beyond the traditional strength in Ophthalmology.

Laser Surgery

- Good current growth, with strong future potential.

Microscopy

Applications

- Ophthalmic imaging
- Cardiovascular
- Oesophageal imaging

- Prostate surgery
- Ophthalmic surgery
- Cosmetic surgery
- Tattoo removal

- Confocal microscopes

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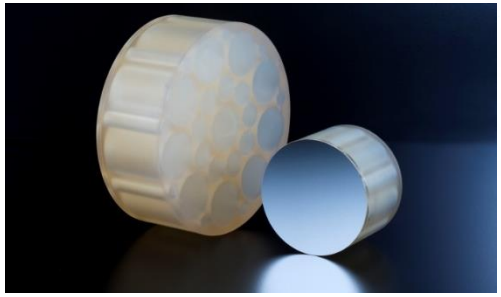
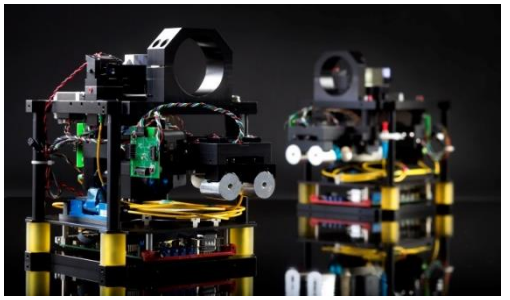
Our Strategy
Remains consistent

Diversify

Exploit high-growth opportunities for photonics technology
across multiple sectors to provide balance and reduce cyclicality.

- Aim to establish critical mass in life sciences and further strengthen our position in A&D
- Exploit near / medium term opportunities in:
  - Precision lasers and laser systems
  - High precision inspection equipment
  - Space satellite communications
  - Opto-mechanical systems for UAVs
  - Optical systems for armoured vehicles
  - Optical sensing in harsh environments
  - OCT medical diagnostics
  - Laser surgery





Move up the value chain

- Generate growth by adding value
- Leverage excellence in components to become a solutions provider
- Transitioning from component supplier to critical partner

Optics + electronics + software + mechanics = *added value*

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Performance Improvement Plan - Progress

- **Operational excellence** – During FY 2018 we have established a more scalable manufacturing organisation, which we believe will more readily be able to accommodate anticipated growth rates. Our manufacturing sites have been organised into three manufacturing centres. They are based on our areas of technical expertise, namely Acousto Optic / Electro Optic, Precision Optics and Fibre Optics. We have already seen benefits as we upgrade capacity and performance at the Acousto Optic / Electro Optic manufacturing sites.

- During FY 2019 a further manufacturing centre will be added, namely Systems. It will consist of two sites from our recent acquisitions, Kent Periscopes and StingRay, both are focused on design, engineering and assembly of sub systems and systems.

- **Business Development** – We will continue to expand our business development group, beyond A&D, into life sciences and microelectronics.

- **Targeted R&D approach –** By focusing on fewer higher return projects we have been able to introduce a record 25 new products, compared to 18 in the same period last year. Revenue generated from new products in H1 was £6.7 million, compared to £4.9 million in the same period last year.

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Summary & Outlook

- Full year trading remains in line with our expectations.
- Record half year order book, which has strengthened since 31 March 2018.
- Continued to invest in people, equipment and processes to enable us to take advantage of the positive market environment and drive further growth.
- The introduction of a new manufacturing organisation has enabled us to more readily upgrade capacity and performance to meet current demand and provides a more scalable platform to meet future growth expectations.
- R&D investment is creating a strong pipeline for launch in FY 2018 and beyond. 25 new products were launched and £6.7 million of revenue from new products generated in H1 FY 2018.
- G&H remains committed to the twin pillars of our strategy, namely diversification and moving up the value chain.
- We have an active policy of established a ‘critical mass’ in life sciences and further strengthening our position in A&D, through a mix of acquisitions and R&D. A&D now represents 32.6% of our business, compared to 28.0% in H1 FY 2017.
- Sub- systems and systems now represent 22.4%, compared to 20.8% in H1 FY 2017.
- Well positioned to make strategic acquisitions as and when the right opportunities become available, supported by a strong balance sheet and net cash.

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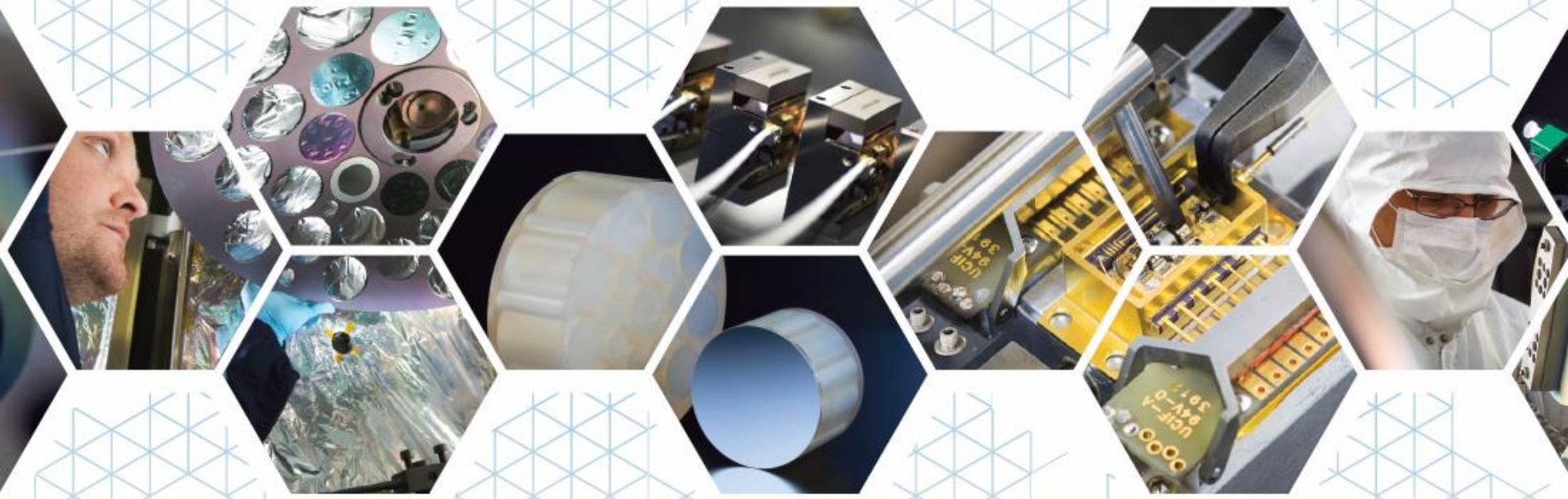

Appendices

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

About us

Gooch & Housego is a photonics technology business headquartered in Ilminster, Somerset, UK with operations in the USA and Europe.

A world leader in its field, the company researches, designs, engineers and manufactures advanced photonic systems, components and instrumentation for applications in the aerospace & defence, industrial, life sciences and scientific research sectors.

World leading design, development and manufacturing expertise is offered across a broad range of complementary technologies: acousto-optics, crystal optics, electro-optics, fibre optics and precision optics.

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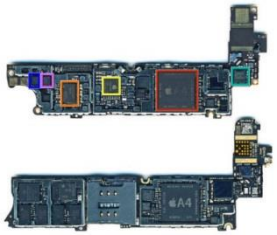
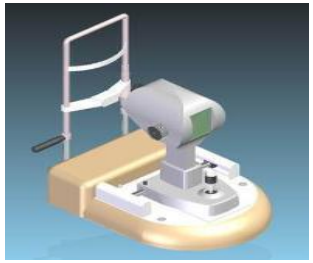
G&H photonics – part of our everyday lives

You probably use G&H photonics every time you use the internet or make a transatlantic phone call

Your smartphone or tablet was manufactured and tested using G&H photonic components: -

- Lasers containing G&H acousto- and electro-optics are used in virtually every step in the manufacturing process
- Lithography systems containing G&H precision optics and acousto-optics are used in semiconductor and PCB manufacture
- Wafers, masks and boards are inspected with laser scanners incorporating G&H acousto-optics
- Displays are measured using G&H instruments





When you travel on holiday or business the airliner you are flying in will be guided by a ring laser gyroscope that probably incorporates G&H optical components

When you use a sat nav in your car you are relying on GPS satellites that incorporate G&H lasers and fibre-optic components

When you have your eyes tested you will be examined with instruments made possible by G&H fibre-optic modules and precision optical components

If you have laser surgery it is likely that G&H photonics are an integral part of the surgical system

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New Products & Capabilities introduced in 2018

Key: New products introduced in H1 FY2017	Technology	Precision Optics	Acousto/Electro Optics	Fibre Optics	Systems & Instrumentation
Markets					
Aerospace & Defence			1	2	7
Industrial			8	3	
Life Sciences			2	1	1
Scientific Research					

"G&H sees continued investment in R&D for all areas of our business as fundamental to the organic growth of the company. In 2018 we have had 25 new product releases so far."

Mark Webster - CEO

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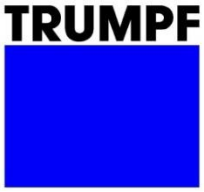
Key Customers