ALLIED MINDS

H1 2017 results
London, 17 August 2017
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Agenda

- Update
- Financial results
- Portfolio
- Investment proposition
- Q&A

Jill Smith
Joe Pignato
Jill Smith / Simon Davidson
Jill Smith
All
Drive shareholder growth

- **Strategic priorities:**
  - Accelerate path to commercialisation/monetisation at Top 6 Companies
  - Grow investment platform by increasing number of high quality new investments

- **Restructuring**
  - Discontinued companies without clear path to commercialization/monetization
  - Reallocated financial/management capital to most promising companies/pipeline

- **More disciplined investment model**
  - Enhanced governance and accountability
  - Strategic validation early and often
  - Thematic investing

- **Focused portfolio**
  - 6 highly promising companies with potential for multiple monetisation events
  - Investment platform including corporate partnerships, early stage companies
  - Cash available to fund both
<table>
<thead>
<tr>
<th>Theme</th>
<th>Delivered</th>
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<tbody>
<tr>
<td>Governance and accountability:</td>
<td>• BridgeSat, STT</td>
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<tr>
<td>• Experienced CEOs</td>
<td>• HawkEye 360, all subsidiaries</td>
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<tr>
<td>• Strengthen sub Boards / Advisory Boards</td>
<td>• 2017 MBOs</td>
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<tr>
<td>• Clearer accountability for delivery</td>
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<tr>
<td>Strategic validation</td>
<td>• HE360 – Razor’s Edge/Defence market leader</td>
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<tr>
<td>• Strategics and independent financial</td>
<td>• BridgeSat – Space angels</td>
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<tr>
<td>investors - where validation / de-</td>
<td>• Signature Medical – Bose/RIoT</td>
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<td>risking</td>
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<tr>
<td>Thematic investing</td>
<td>• Simon Davidson / In-Q-Tel</td>
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<tr>
<td>• Leverage expertise, investments</td>
<td>• Space 2.0: Hawkeye 360 and BridgeSat</td>
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<td>• Multiple shots on goal</td>
<td>• Virginia Tech, MITRE</td>
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<tr>
<td>• Institutions aligned to these themes</td>
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## Selected financial highlights

<table>
<thead>
<tr>
<th>For the six months ended:</th>
<th>30 June 2017</th>
<th>30 June 2016</th>
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<tbody>
<tr>
<td>Revenue</td>
<td>$2.0</td>
<td>$1.3</td>
</tr>
<tr>
<td>Net loss</td>
<td>$58.2</td>
<td>$52.2</td>
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<tr>
<td>Investment in portfolio</td>
<td>$22.4</td>
<td>$31.8</td>
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<table>
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<tr>
<th>As of:</th>
<th>30 June 2017</th>
<th>31 December 2016</th>
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<tbody>
<tr>
<td>Cash and deposits – group</td>
<td>$177.0</td>
<td>$226.1</td>
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<tr>
<td>Cash and deposits – parent</td>
<td>$113.3</td>
<td>$136.7</td>
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<tr>
<th></th>
<th>30 June 2017</th>
<th>24 April 2017</th>
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<tbody>
<tr>
<td>GSOAV</td>
<td>$415.8</td>
<td>$416.2</td>
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<tr>
<td>GSOAV – top 6 companies</td>
<td>$371.6</td>
<td>$358.1</td>
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Federated Wireless

**Business model**

- **Problem solved**: densification of mobile, wireless networks through shared access to 150MHz of 3.5GHz (CBRS) spectrum owned by U.S. Navy
- MNO, MSO, consumer, enterprise and IoT markets
- Shared economy model for increasingly scarce spectrum, delivered via cloud-based software
- Comprises Spectrum Access System (SAS) and unique Environmental Sensing Capability (ESC) to detect activity and dynamically reallocate

**Market size / growth rate**

- 150MHz is equivalent to quantum of freehold spectrum owned by each of the 4 large U.S MNOs
- Other bands and international opportunities expected to follow
- FW is “toll-booth” at centre of ecosystem

**2017 MBOs**

- Complete Series B fund-raise
- Receive formal FCC SAS and ESC certification
- Launch spectrum access commercial product

**2017 progress to date**

- Announced partnerships with Nokia and Ericsson: two key ecosystem OEMs who supply the 3.5 GHz radios
- Announced partnership with Lemko to deliver private LTE services
- Participation in > 40 trials to date
- Live demonstrations of Spectrum Controller product (SAS and ESC) at CBRS Alliance meetings
Spin Transfer Technologies

Business model

- **Problem solved:** Next generation MRAM computer memory offering fast write speed, low power, non-volatility and virtually unlimited endurance
- Replacing embedded SRAM, standalone persistent memory and DRAM in a wide range of applications
- STT has unique differentiators that improve speed and performance
  - Error Cache and PSC

Market size / growth rate

- Available MRAM market is $60 Bn worldwide
- Initially targeting segments valued at combined $20 Bn

2017 MBOs

- Advance technology to demonstrate differentiators
- Secure strategic development / investing partner
- Complete Series B fund-raise

2017 progress to date

- Test chip sampled to customers
- R&D Fab running with fast cycle time and 28nm feature sizes
- Small, stable pillar sizes successfully demonstrated
SciFluor

Business model

**Problem solved:** Developing best in class patented compounds using strategic incorporation of fluorine delivering improved potency, selectivity, rates of absorption and metabolic stability in many cases.

- **SF0166** – topical eye droplet to treat both wet-AMD & DME, replacing drugs delivered via regular injections into eyeball (in Phase I/II currently)
- **SF0034** – fluorinated derivative of retigabine to treat various CNS diseases, including epilepsy.
- Pipeline of other compounds in development.

Market size / growth rate

- AMD/DME markets exceed $6 Bn, growing with ageing population, with topical treatment offering clear patient benefits, and significant cost savings.
- Epilepsy market exceeds $5 Bn.

2017 MBOs

- **SF0166**: complete Phase I/II trials in DME (AMD in 2018).
- **SF0034**: file Phase I IND and complete SAD study enrollment.(1)

2017 progress to date

- **SF0166**: Enrolment of the DME and Wet-AMD trials completed. Readouts expected 2017 for DME and late 2017/early 2018 for Wet-AMD.
- **SF0034**: Initiated testing in healthy volunteers. NB: Retigabine, a non-fluorinated analog of SF0034 owned by another company, withdrawn from the market in June 2017 due to safety concerns.
- Additional fluorinated compounds under development.

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(1) Note: language altered vs 2016 Annual Report to provide clarification.
Precision Biopsy

**Business model**
- **Problem solved**: Real-time prostate tissue classification using optical technology
- ClariCore™ delivers targeted biopsy sampling, eliminating waste / anxiety from pathology of random cores
- Also developing Focal Therapy system for localized treatment of prostate tumours (potentially eliminates need for prostatectomies in certain cases)

**Market size / growth rate**
- Total U.S. market $7 Bn, of which $1 Bn in pathology costs for random prostate cores
- Potential 90% reduction
- Technology is equally applicable to other organs, eg kidney and breast

**2017 MBOs**
- Complete Cohort A; initiate Cohort B
- Progress ClariCore™ CE Mark and FDA approval

**2017 progress to date**
- Cohort A study complete (203 patients; 8 sites)
- Cohort A database complete and algorithm submitted for FDA verification
- Protocol for Cohort B trial discussed with the FDA; handpieces and consoles for use in the trials are under manufacture. Cohort B clinical trial is the pivotal trial to achieve FDA approval for commercialization in the US
- Development of Precision Biopsy’s 3D mapping system, potentially unlocking focal therapies, remains on track
HawkEye 360

**Business model**

- **Problem solved:** Global detection and mapping/analytics of Radio Frequency (RF) signals, with multiple commercial, government markets including:
  - Marine domain awareness
  - Spectrum analytics / interference avoidance
  - Reconnaissance
- Delivered via LEO satellite clusters, supported by ground network using proprietary data processing technology to create customized analytics

**Market size / growth rate**

- Participate in multi-billion dollar markets (government, commercial)
- First target market: Maritime Domain Awareness
  - Satellite –based maritime surveillance solutions market, estimated to have annual value of $1.75 Bn, growing to $.2 Bn by 2020

**2017 MBOs**

- Prepare for 2018 Pathfinder launch
- Initiate contract for development of next commercial satellite clusters

**2017 progress to date**

- Second closing of Series A fund-raise led by Razor’s Edge Ventures
- Pathfinder launch scheduled for Q1 ‘18
- Entered revenue contracts with multiple commercial and govt entities to provide demo’s of capabilities
- Progressed work on design of clusters to follow the Pathfinder
- Collaboration with Kratos
- Airborne testing of EPIRB
BridgeSat

Business model

- **Problem solved**: Optical communications network meeting accelerating demand for high-bandwidth, frequent, cost-effective satellite download capabilities driven by the need to transfer ever increasing volumes of data currently unmet by RF

- Commercial Space participant, enabler: miniaturization of satellite tech lowers costs and drives proliferation of LEO satellites and apps

**Market size / growth rate**

- Addressable global optical downlink market est @ $1.5 Bn annually (of $10.3 Bn satellite network market)

- LEO data downlink forecast to grow @ 125% annually

**2017 MBOs**

- Complete Series A fund-raise
- Acquire launch customers
- Demonstrate operation of first ground station

**2017 progress to date**

- $6 million Series A, inc. Space Angels
- CEO appointment: Barry Matsumori
- Agreement with Swedish Space Corporation: 3 ground sites
- Agreement with York Space Systems to include optical downlink technology on York satellites delivering the Harbinger Mission for the US Army
- Broad progress across 3 facets of model: space terminal; ground station and network
Allied Minds investment proposition

- Pre-eminent US IP commercialisation origination platform
  - U.S. the largest R&D market in world
  - Federal labs, universities and corporate partnerships

- Competitive advantages across investment life-cycle
  - Access to defining early stage and more advanced technologies
  - Access to capital for life of business
  - Strong operating discipline, PI partner – subsidiary structure

- Strong investment model
  - Disciplined capital allocation
  - Accountability / governance – clear MBOs, CEOs accountable for delivery
  - Funding – broader/earlier syndication: validation and acceleration
  - Focus – thematic investing, aligned to relevant research institutions

- Well-capitalized to support accelerated growth
  - Top 6 businesses have potential for multiple monetisations within cash runway
  - Strengthening origination platform, including corporate partnerships