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# 6<sup>TH</sup> CSIR CONFERENCE

Accessing Global Aerospace Supply Chains from  
South Africa

Jay Isaac  
Saab Grintek Defence



# SAAB GRINTEK DEFENCE: A PLACE IN OUR **HISTORY**



**1937**

Saab  
founded



**2000**

Celsius  
acquired



**2006**

Ericsson Microwave  
Systems acquired



**2012**

HITT  
acquired

**1646**

Bofors  
founded



**1990**

Saab Automobile  
independent company



**2005**

Grintek  
acquired



**2011**

Sensis Corp.  
acquired



**2014**

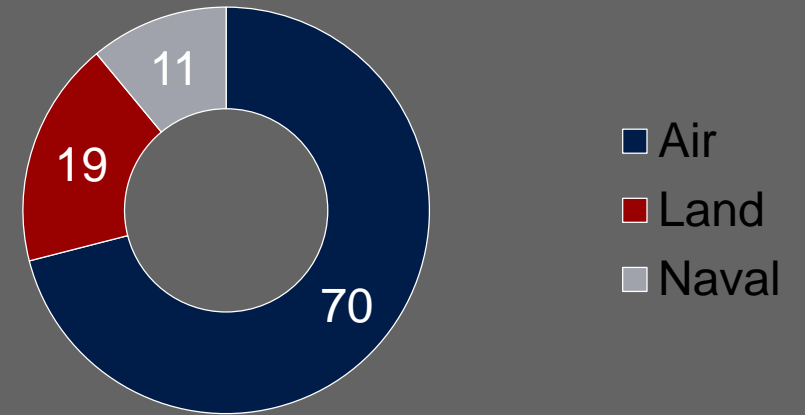
Saab Kockums  
acquired



# AN **OVERVIEW** OF SAAB GRINTEK DEFENCE



2016 - SALES  
**1300**  
MZAR  
Order Intake 2Bn ZAR



**770**  
EMPLOYEES

**> 30**  
CUSTOMERS COUNTRIES



# SGD INFRASTRUCTURE

- **Employees: 770**
- **Facilities:**
- **Centurion**
  - EW
  - LSI
  - ISS
  - C2TS
  - D&D
  - Supply Chain & Production
- **Cape Town**
  - Naval EW
  - SSC Naval
  - Production

## South Africa



Pretoria  
Centurion



Cape Town

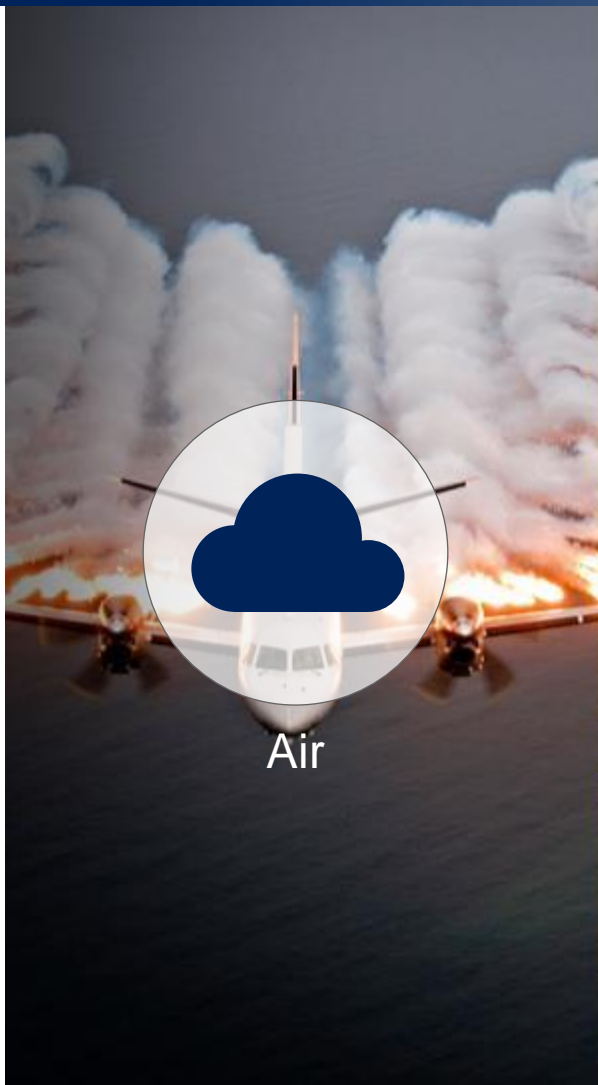
# SAAB GRINTEK DEFENCE

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- Products distributed to 30 countries
- Export represents about 80% of the company's total turnover
- Local team researching, developing, producing, exporting, maintaining and upgrading world-standard products and technologies
- The first to offer a fully integrated self-protection suite
- We export to developed and developing countries - flexible to fit all environments
- Won best SA export company 2013, 2014 and 2016
- Level 2 BBBEE Contributor, 25% Black ownership



# WE SUPPLY AND SUPPORT **ALL DOMAINS**



Air



Land



Sea



Civil Security



# PRODUCT AREAS WITHIN SGD

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## Electronic Warfare/ESM

- Air
- Land
- Naval



## AVIONICS

Acquisition and Communications Systems



## LSI

Lead Systems Integration



## C2&TS

Command and Control, Training and Simulation

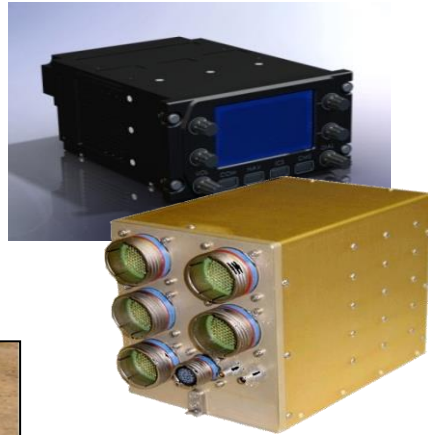
# SAAB GRINTEK DEFENCE

*SUPPLIER OF WORLD LEADING PRODUCTS AND SERVICES*

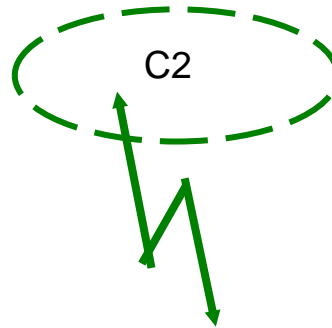
## EW



## Avionics Systems



## C2 & TS



## Lead Systems Integration

### ATM



### Security Solutions



### Support Solutions



Mainly Export Market

Local/Regional Market – SA and SSA



# ELECTRONIC WARFARE

- Saab and SGD have a long history in Electronic Warfare
- SGD specializes in self-protection and ESM/ELINT systems
- Self-protection products
  - Integrated Defensive Aids Suite (IDAS)
  - Civilian Aircraft Missile Protection System (CAMPS)
  - Land Electronic Defensive System (LEDS)
  - Naval Laser Warner (NLW)
- ESM/ELINT products
  - U/SME (submarine and surface ships)
  - Electronic Surveillance Payload (ESP)
- Centre of Excellence for the Design and Manufacture of Antennas, RF and Microwave components for Saab worldwide
- All products are developed and produced in South Africa



# AVIONICS - ACQUISITION AND COMMUNICATION SYSTEMS

- Solutions
  - Communication management systems configurable via software and modular hardware (Civil certified)
  - Mission recorder, data transfer and mass storage products supported by ground evaluation systems
  - Data concentrators, monitoring modules and data acquisition units with capability of implementing health and usage algorithms in ground support software
- Products are developed and produced in South Africa
- Deployed on fixed and rotary-wing platforms worldwide
  - Installed base
  - CMS ~ 100 platforms
    - Recorders ~400
    - Monitoring ~600



# SGD LEAD SYSTEMS INTEGRATION

- Integrated Logistic Support / System Engineering Support
- Field Facilities
- Maintenance Repair and Overhaul (MRO)
- Vehicle Electronics – Including Vehicle Modification/Integration  
FCC - Fire Control Computer)
- Air Traffic Management (ATM), Maritime Traffic Management (MTM), Command, Navigation, Surveillance(CNS)
- Civil Security – Communications and System Solutions
- Chemical, Biological, Radiological and Nuclear (CBRN)
- Signature Management





# COMMAND & CONTROL (C2) AND TRAINING SYSTEMS

- Surveillance Command and Air Defence
  - Air Picture Display System
  - Ground Command and Control System
  - Intelligent Database Support System
  - Web Based Monitoring Control and Systems for Airports
- Designed to Fit Command and Control Solutions for Landward, Naval, Joint and Security Sectors
  - Situational Awareness
  - Planning & Orders Management
  - Mission Execution Support
  - Integrated GIS
- Design to Fit Simulation Solutions for all Training Requirements
  - Expertise and Field Support for Live, Virtual and Constructive Simulation
  - World Class affordable Constructive Simulation



**BattleTek**

# THE SAAB GRINTEK DEFENCE EXPORT STORY

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Saab Grintek Defence has won the DTI  
Exporter of the Year award in  
2013/2014/2016

How did they do it?

“By supplying Innovative and cost-effective products and services into the global market”



# HOW DOES SGD INNOVATE?

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- Invest 10% of revenues into self-funded R&D
- Further supplemented by customer funded development
- SGD's Intrepid Programme
  - In-house Innovation Programme that encourages engineers to propose ideas for Innovative Products
  - Awards engineers “free-time” to develop and test their ideas/concepts until they can be formally handed over to R&D for further development





# HOW DOES SGD INNOVATE? (CONT)

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- Make use of the DTI tax rebate programme for R&D
  - can claim 1.5x cost of R&D as a cost
  - 50% tax savings on R&D cost
- Make use of the DTI Manufacturing Competitiveness Enhancement Programme (MCEP)
  - Non-taxable grant calculated as a percentage of Manufacturing Value Add (MVA)
  - Sliding scale of 10%-25% of MVA

# HOW DO WE LEVERAGE OUR SUPPLY CHAIN INTO GLOBAL MARKETS?

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- Channels – B2B (OEMs) and B2G (Defence Acquisition)
- Strong Alliances with OEM (platform) suppliers and System Integrators
- Strong relationships with OEM's and end-customers (ask for our product)
- Use of our Global brand (Saab) to form Strategic alliances with global players (e.g. HAL, BAe, Leonardo...)
- Product focus rather than project focus
- Quality products on time and at the right price
- Comply with in-country Offset requirements

# SGD'S COMPETITIVE ADVANTAGE

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- High performance products at competitive prices
- Quality, efficiency and continuous improvement programmes
- Highly skilled work force
- Large installed base with multiple generations of fielded systems





# SGD'S COMPETITIVE ADVANTAGE

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- Meet Global Quality Standards
  - ISO9001
  - Part 145 Approved Maintenance Organization by the European Aviation Safety Agency (EASA)
  - Quality Management System, easily integrated into customer organization
- Integrated Supply Chain
  - Qualified and approved supplier base
  - >30% outsourcing to BBBEE SMME's
  - ESD Programme (15 suppliers in on-site incubator programme)
- Leverage weak currency (ZAR)

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# CUSTOMER FOCUSSED ORGANISATION

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- World class products in niche areas
- On time delivery at the correct quality standards
- Continuous improvement programmes to improve quality and organisational efficiency
- Global Marketing and Sales and Business Development Organisation
- Establish Reference Platforms and Build Track Record
- Meet Offset Requirements specific to country
  - Maintenance and Production Transfer of Technology whilst safeguarding Intellectual Property
  - Other non-project specific Offset





# CHALLENGES

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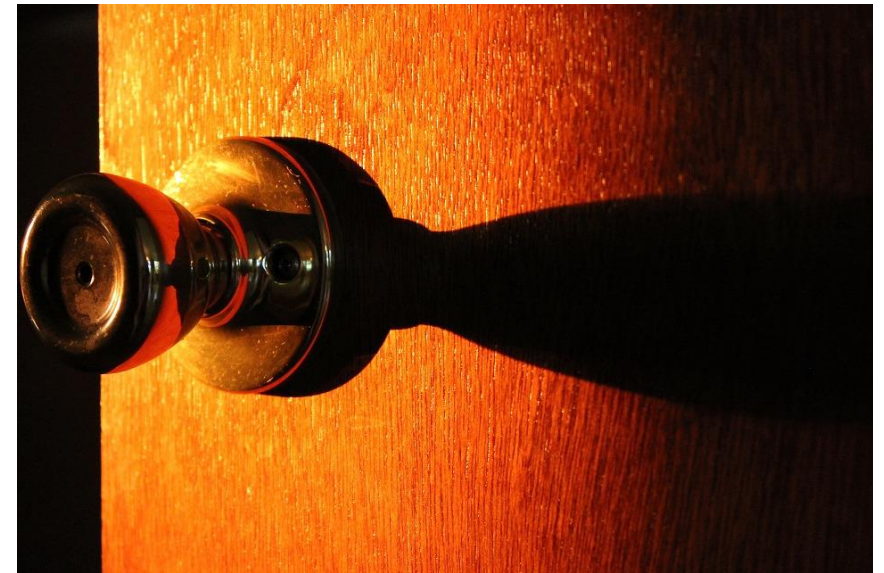
- Export control turn-around time
- Insufficient incentives for exporters
- Ownership Issue in BBBEE Scorecard
  - MNC's are reluctant to relinquish majority shareholding
  - board veto rights
  - loss of control over IP
- Need to improve co-operation with government, private sector and institutions (triple helix)
- NIP and DIP
  - Qualifying Projects and Beneficiaries



# OPPORTUNITIES

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- Partnerships between Industry, Institutions and Governments to Industrialize Intellectual Property and create marketable products
- G2G business facilitated by SA Government Departments
- South Africa is non-aligned - ability to export where other countries may not be able to
- Target largely untapped markets in Africa, South America, India, Middle East



# CONCLUSION

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- Opportunities exist for South African companies beyond local markets
- Innovation is a key factor for success
- Products and/or services must meet global quality standards and be the best in class
- Customer relationships must be created and maintained
- SMME's must create value-adding partnerships to launch their products and services into the global market

