



# AGENDA – welcome thanks for coming

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12:25pm AGM

**All non GGSSA members please leave.**

- Acceptance of minutes from previous AGM
- Directors Report
- Financial Report
- Call for expressions of interest in Chair of Technical committee
- Election of Directors:

12:45pm

Safety Share presentations – Mike Enright and open for members to discuss.

1:55 pm Closing comments – Mike Enright (Chairman)

1:00pm Close of meeting.



## Directors report – Annual safety report overview

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**Annual safety report** covered 1<sup>st</sup> July 2018 to June 30<sup>th</sup> 2019.

Twelve members reporting.

Australia 8

Canada 1

Europe 1


South America 2

Number of incidents	
Mobilisation	15
Surveying	52
Grand Total	67

Happy to try engage other companies if anyone has any suggestions.....

## Directors report – Annual safety report overview

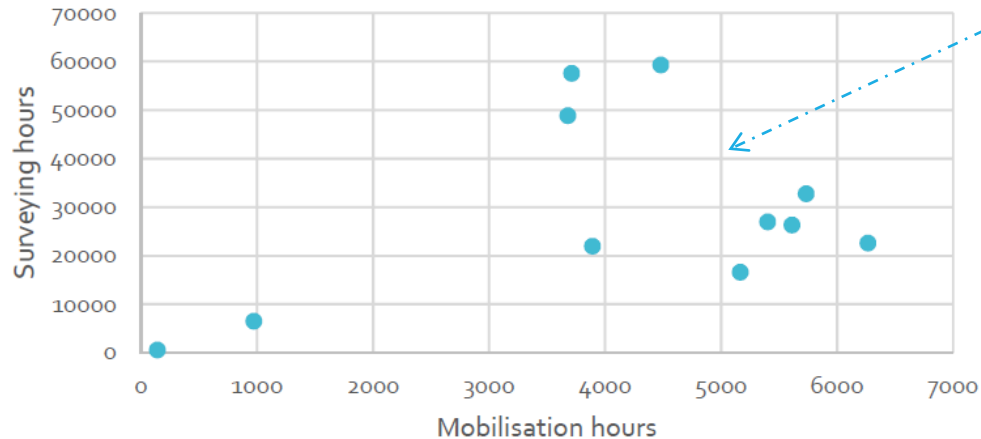
### *Nature of injury*

Number of incidents 	Mobilisation	Surveying	Grand Total
<b>Incidents</b>	15	52	67
Fracture		2	2
Sprain or strain		6	6
Laceration		3	3
Bruising	3	2	5
Crushing		1	1
Burn			
Poisoning		2	2
Electric shock			
Dehydration injury		2	2
Mental stress			
Count of Other injury		7	7

## Directors report – Annual safety report overview

Twenty-six persons were injured. One did not require treatment and the rest were treated by first aid or by a primary care service. **None were admitted to hospital.**

Distribution of mobilisation and surveying hours  
by company July 2018- Jun 2019



Rates of injury were similar for mobilisation and surveying phases.

Number of cases	Mobilisation	Surveying	Total
No Treatment		1	1
First aid		10	10
Doctor or emergency department outpatient treatment	3	14	17
Admission to hospital>24hours			
Other treatment		2	2
<b>Rates per 100,000 hours</b>			
No Treatment	0.0	0.2	0.2
First aid	0.0	2.4	2.1
Doctor or emergency department outpatient treatment	4.9	3.3	3.5
Admission to hospital>24hours	0.0	0.0	0.0
Other treatment	0.0	0.5	0.4



# Directors report

## Annual safety report “factors”

What could have been serious?

What are the human factors?

	Mobilisation	Surveying	Total
<b>Contributing environmental factors</b>			
Mechanical failure	4	10	14
Exposure to natural elements		22	22
Motor vehicle or road surface	4	9	13
Chemicals			
Lifting equipment		2	2
High voltage equipment		3	3
Laser equipment			
Other Contributing factors	6	12	18
<b>Mechanism factors</b>			
Fall on level <1m	1	9	10
Fall from height >1m		2	2
Hitting object with body	2	8	10
Being hit by object		2	2
Mechanical cutting crushing puncturing		5	5
Vehicle loss of control	4	9	13
Exposure to heat or hot object	1	5	6
Natural radiation e.g. sunburn)			
Non-ionising radiation			
Ionising radiation			
Fire or flame		1	1
Dehydration		1	1
Electrical shock		3	3
Chemical poisoning			
Envenomation			
Other Mechanism of injury	3	9	12
<b>Human factors</b>			
Failure to adhere to SOP	4	11	15
Procedural deficiency		3	3
Misjudgement of risk	4	25	29
Strength exceeded			
Fatigue	1	5	6
Loss of control of vehicle	3	9	12
Other-Human system factors	3	3	6



# Directors report

## Annual safety report overview

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**There were 13 incidents involving light vehicles, nine with snowmobiles and three with ATVs. One hundred and seven lost hours were accumulated.**

While carrying out normal quad bike operations on a moving loop survey an operator has run over a stick which has protruded through some rubber guarding on the quad bike and has caused a penetration injury to his left lower leg.

The worker crashed with the chain which was laying over the cottage road while he was driving the ATV. The chain hit the worker to the hands and the chest. The worker also hit his back with ATV's back rest at the same time. The visor of the helmet broke down. The chain was between two metal stakes, about 0.5 meter above the ground. ATV speed was 30-40 km/h. Weather was sunny  
The worker didn't notice the chain. No  
very bad injuries- pain in hands and back. The doctor gave a one week sick.

***The development of a code of practice for use of these vehicles when used for surveying***

- \* may raise awareness of the level of potential risk of injury,
- \* document training needed and explore the fitting of protection on the ends of handlebars to avoid severe hand injuries
- \* and modification to provide connection points for survey lines.



# Directors report

## Annual safety report overview

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Other risks identified were:

- Water or wet gloves in proximity of survey lines reducing insulation should a line be powered up
- Snagging of line or probe creating entrapment hazard.
- Entrapment of hands and fingers in and around line spools
- Possible eye injuries from a whipping end of a line
- Possibility of serious injury if a line being towed into place entraps a limb of a worker
- Possible lack of properly designed tow points on vehicles used for towing lines

It appears timely to develop a safety share around the handling of survey lines, the design of spooling equipment and the management of snagged lines.

# Directors report

## Annual safety report resulting share

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Tyre Pressure Monitor Caps Indicators



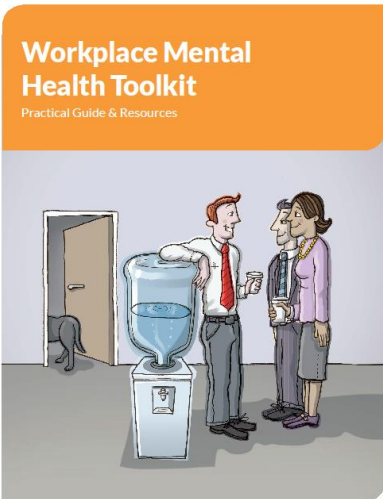




# Directors report – Mental Health

## Australia

Black- dog institute mental health toolkit



<https://www.headsup.org.au/hom>

## South Africa

[www.sadag.org](http://www.sadag.org)

+27 (0) 80 0567567

## North America hotline

<https://www.samhsa.gov/find-help/national-helpline>



## Directors report

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Challenging year ... everyone is very busy including myself.

Struggling to get traction and deliver to members.

We have funds but limited people with time and/or willingness

Need to consider how we achieve more for members.

How and who do we engage more?

We really need a technical committee Chairman.



# Review of survey conclusions

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Priorities identified are:

Audit Template

Touch and Step potential

Additional High Voltage

Operator Training

Transmitter Cable Connectors

Engineering Controls

Items not considered priorities:

Cable Colouring

Slips and Trips



# Financials



GROUND GEOPHYSICAL SURVEY SAFETY ASSOCIATION LIMITED

ABN 96 164 523 773

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

	2019 \$	2018 \$
<b>INCOME</b>		
Membership fees	16,300	33,795
Sponsorship income	-	3,000
	<u>16,300</u>	<u>36,795</u>
<b>OTHER INCOME</b>		
Interest received	205	200
	<u>16,505</u>	<u>36,995</u>
<b>EXPENSES</b>		
Accountancy fees	200	2,300
Administration fees	5,714	10,356
Bank charges	231	392
Contract work	350	-
Filing fees	194	47
Insurance	1,623	1,648
Postage	32	-
Printing & Stationery	368	125
Statistics	2,898	8,360
Website costs	299	2,237
	<u>11,909</u>	<u>25,465</u>
<b>NET PROFIT</b>	<u>4,596</u>	<u>11,530</u>

### 3 Cash and Cash Equivalents

	2019 \$	2018 \$
Cash at Bank - Cheque account	17,639	12,345
Cash at Bank - Reserve account	45,629	45,433
Cash at Bank - Paypal	1,153	2,726
	<u>64,421</u>	<u>60,504</u>

### 4 Intangible Assets

	2019 \$	2018 \$
Formation expenses	778	778
	<u>778</u>	<u>778</u>

### 5 Trade and Other Payables

	2019 \$	2018 \$
<b>Current</b>		
GST payable	1,198	1,877
	<u>1,198</u>	<u>1,877</u>

### 6 Retained Earnings

	2019 \$	2018 \$
Retained earnings at the beginning of the financial year	59,515	47,985
Net profit attributable to members of the company	4,596	11,530
Retained earnings at the end of the financial year	<u>64,111</u>	<u>59,515</u>



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Call for expressions of interest in Chair of Technical committee

Election of Directors:

Mike Enright (Rio Tinto) Chairman

Greg Cant (Ashanti Gold), Secretary/Treasurer

Andrew Duncan (Electromagnetic Imaging Technology P/L)

Trent Retallick (Gap Geophysics Aust. P/L) Executive

Glenn Chubak (Dias Geophysical) Executive Director



## Safety Share:

**Activity:** IP Survey

**Location:** Nth QLD, Australia

**Date:** November 2018

**Actual Consequence:** Very Minor Burn - dry skin (No first aid required)

**Risk Potential:** Significant

### What happened:

Whilst undertaking conventional 2D Pole Dipole survey using a “roll along” method, the Receiver Operator has directed the Field Assistant to install auxiliary electrode in order to generate more signal for recording clarity.

The field assistant has communicated with the Transmitter Operator correctly as per procedure with double confirmation. Despite the positive communications, there has been a momentary lapse in concentration by the field assistant proceeding to attempt connection of the auxiliary electrode whilst power was still on. This has resulted in a minor shock to the field assistant.

### Immediate actions:

The FA asked for the transmitter to be turned off. It was then that FA informed all that he had received a very minor shock. All work ceased for medical examination, incident reporting and investigation. FA driven to Hospital for examination. Medical staff cleared FA as fit & healthy to return to work under supervision. No first aid was required

### Preliminary causes

Inexperienced Field Assistant

The field assistant has been directed to perform a task that deviates from the regular process and safe operating procedures

Procedure not followed – The field assistant had access to HV Insulated Gloves (HVPPE) but has disregarded the use of. This control would have prevented shock due to contact with live conductor.

‘Pill Box’ insulated guarding not used correctly

Lapse in concentration by both RO & FA whilst undertaking a high risk task

Error in judgement – RO continuing to record on low current whilst FA was working on auxiliary current electrode

Injection of suitable current/signal is never guaranteed with standard methods. Procedures require more expansive coverage of obscure tasks and operations allowing flexibility to change installation safely if & when required.



## Immediate learnings/applications

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### Safety Share:

**Activity:** IP Survey

**Location:** Nth QLD, Australia

**Date:** November 2018

**Actual Consequence:** Very Minor Burn - dry skin (No first aid required)

**Risk Potential:** Significant

All personnel must understand roles & responsibilities prior to starting work. This includes revision and refreshers of procedures and risk assessments.

Greater supervision and training for inexperienced operators.

Small Flaws in equipment & installation method of electrodes. Engineered controls need to be reviewed regularly & consistently allowing for developments and improvements.

Voltage warning device to be engineered and used on current electrode installations

Small deviation from standard processes and procedures have the potential to significantly impact crews ability to operate safely

Injection of suitable current/signal is never guaranteed with standard methods. Procedures require more expansive coverage of obscure tasks and operations allowing flexibility to change installation safely if & when required.





## HSEC Share Summary/Recommendation:

### Electrode 'Live' Warning Device

After reviewing engineered controls in place for preventing contact with live conductors, the original 'pill box' has been identified as a device requiring further improvement and development. Electrical engineer has been engaged to design and manufacture a safe electrode connection device with live current warning controls and alarms to be attached to mobile electrodes for all future IP surveys.

The connector block is passive and connects up to 3 wires from the electrodes to the TxR output.



**"Pill Box" enclosure**  
Original engineered guarding  
control for electrode live  
conductors.



Prototype 1

Prototype 2

**The green LED flashes when it is safe, the Red LED flashes and Alarm sounds when it is live.**

There is a 10 second timeout/delay between seeing the last Volts or Current (live), to when it switches back to Green.

The flashing Blue Light is the Bluetooth.

It sends out the status and measures the Voltage and Current figures sending them out via Bluetooth link so you can monitor the transmitter state remotely.

Idea is that you can have one of these anywhere in the field - one at the transmitter, one at the far pit - or maybe one where the cables cross a road.





Any comments from members?

Meeting closed