

...AND IN BREAKING NEWS, A VOLCANO HAS ERUPTED IN THE PAPUA NEW GUINEA HIGHLANDS OVERNIGHT.



BREAKING NEWS

THE AUSTRALIAN GOVERNMENT HAS ANNOUNCED THAT IT WILL BE PROVIDING HUMANITARIAN SUPPORT TO THE GOVERNMENT OF PNG THROUGH A JOINT OPERATION OF THE AUSTRALIAN DEFENCE FORCE NAMED OPERATION APOLLO...

A FEW DAYS LATER, THE HMAS ADELAIDE IS ANCHORED OFF THE PNG COAST AND IS COMMENCING PREPARATIONS FOR AN AMPHIBIOUS LANDING USING ROBOTIC GROUND VEHICLES (RGV)...



SOMEWHERE INSIDE THE HMAS ADELAIDE, THE RGV OPERATORS (RGVO) ARE WORKING THROUGH THEIR SIMULATED MISSION REHEARSALS USING THEIR AUGMENTED REALITY (AR) ROBOTIC MANAGEMENT AND CONFIGURATION SYSTEMS (RCMS)...

ROUGH TRIP...

YEAH, I'M FEELING IT.

HOW'RE YOUR TESTS GOING?

GOOD, NEARLY THERE.

EXCITED FOR YOUR FIRST DAY?

PRETTY STOKED TO GET MY FIRST GIG, THAT'S FOR SURE.

YOU'LL BE FINE, IT'S A PIECE OF CAKE. THE 'BIG DOGS' LITERALLY DRIVE THEMSELVES.

SEE YOU AT 24:00?

YOU BET, GOOD LUCK!

SIDE BAR 1

LATER THAT DAY WHILE THE RGVO'S ARE RESTING, PACKETS OF HX77 HEAVY VEHILCES LOADED WITH HUMANITARIAN AID ARE BEING TRANSPORTED TO SHORE BY NAVY LANDING CRAFT...



THE 'BIG DOGS' ARRIVE ON THE BEACH!



- VROOOOM!!!

USING HUMAN OPERATORS IN THE LEAD VEHICLE OF EACH TROOP, THE REMAINING RGVs ARE AUTONOMOUSLY TETHERED OR 'PLATOONED' TO THE LEAD VEHICLE AND QUICKLY FORM A PACKET.



WITH THE PACKET SAFELY OFF THE BEACH AND ON THE MOVE, THE NEXT MAJOR OBSTACLE WILL BE NAVIGATING THE BUSY STREETS OF PORT MORESBY...



...THE HUMAN OPERATORS PERFORM THEIR CHECKS.

*LIMA 1-1, ALPHA 1-1,
SITREP?*





*ALPHA 1-1, BRAVO 1-1,
LOOKING GOOD, OVER.*



*ALPHA 1-1, CHARLIE 1-1,
NO PROBLEMS HERE, OVER.*



*LIMA 1-1, ALPHA 1-1,
ACKNOWLEDGED...*



*...THE LATEST IS THAT THE LOCAL POLICE AND AFP
HAVE CLEARED THE WAY FOR US, BUT KEEP AN EYE OUT
AS THERE'S STILL A LOT OF ACTIVITY AHEAD, OUT.*

THE PACKET PLUNGES INTO THE URBAN ENVIRONMENT...



...AND OUT THE OTHER SIDE!



AFTER CLEARING THE DENSELY POPULATED AREAS OF PNG, THE PACKET ARRIVES AT THE RALLY POINT...



*LIMA 1-1, ALPHA 1-1, WAIT OUT FOR RGVO TO COME
ONLINE, OUT.*



ABOUT FIFTEEN MINUTES LATER, AT 18:00, CPL VENKATESH STARTS HER SHIFT...

LIMA 1-1, ROMEO 1-1, HOW COPY?.

ROMEO 1-1, LIMA 1-1, RECEIVING LOUD AND CLEAR. READY TO PROCEED, OVER?

LIMA 1-1, GOOD TO HEAR. LET ME KNOW IF I CAN BE OF ANY ASSISTANCE FROM HERE, OVER?

ROGER ROMEO 1-1, LIMA 1-1 OUT.





MAJOR THOMPSON, REQUESTING PERMISSION TO TAKE CONTROL OF THE RGVS FROM LMA 1-1

GOOD EVENING CPL VENKATESH. WHAT ARE THE CURRENT OPERATING CONDITIONS?

SIR, WE ARE OPERATING IN A MINIMAL COMMS AUGMENTED TELE-OP (MCATS) ENVIRONMENT DUE TO INTERFERENCE FROM THE ERUPTION.

UNDERSTOOD. DO YOU HAVE THE RELEVANT LIDAR DATA TO SUPPORT MCATS OPERATIONS?

YES SIR.

OK CPL VENKATESH, YOU ARE APPROVED TO TAKE CONTROL OF THE RGVS ASSOCIATED WITH LIMA 1-1, OUT.

LIMA 1-1, ROMEO 1-1, YOU ARE CLEARED TO MOVE TOWARDS THE OBJECTIVE. I WILL SUPERVISE THE REMAINING RGVS, OVER?

COPY THAT ROMEO 1-1, LIMA 1-1 OUT.



EARLIER IN THE WEEK, THE 20TH SURVEILLANCE AND TARGET ACQUISITION REGIMENT, ROYAL AUSTRALIAN ARTILLERY, 3D MAPPED THE LIKELY ACCESS ROUTES USING DRONE BASED LIDAR SCANNERS...



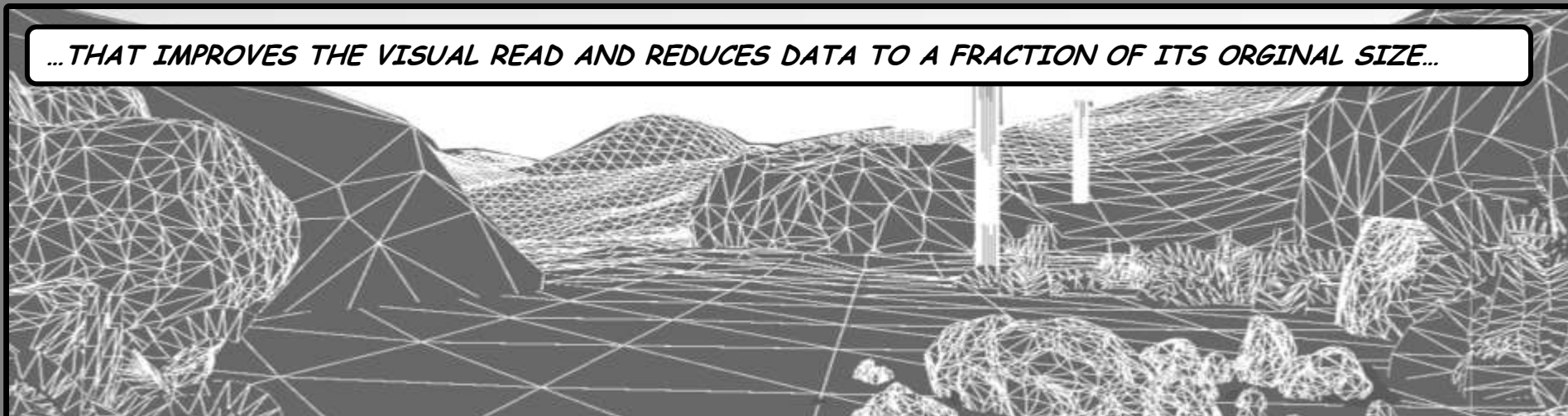
THE LIDAR DATA IS TYPICALLY DIFFICULT TO READ AND FAR TOO LARGE TO TRANSMIT...



SO THE DATA IS OPTIMISED USING A SERIES OF AUTOMATED PROCESSES...



... THAT IMPROVES THE VISUAL READ AND REDUCES DATA TO A FRACTION OF ITS ORIGINAL SIZE...



...WHERE IT IS MADE AVAILABLE IN COMBINATION WITH GPS DATA AND SENSOR DATA FROM THE 'BIG DOGS' TO PROVIDE AN OPERATIONAL PICTURE OF THE ENVIRONMENT TO THE RGVOS!

Obstruction Detected!

Calculating Object Parameters.....
Object Likelihood:
Fallen Tree 98% Certainty.

AHHH OK YEP, I SEE IT...

...BETTER WAIT OUT HERE AND MAKE SURE IT IS WHAT IT THINKS IT IS...

SIDE BAR 2

TEN MINUTES LATER...

No motion detected.

OK, LET'S LAY DOWN SOME BREADCRUMBS...

You are alert.

UM... THANKS?

Sending data

DONE!

THE RGVs RECEIVE THE BREADCRUMB DATA FROM THE R6VO AND COMMENCE THEIR NAVIGATION...





FIVE MINUTES LATER...

Calculating Object Parameters.....
Object Likelihood:
Fallen Tree 98% Certainty.

Navigation
complete.

DONE AND DONE!

SIDE BAR 3

AT 23:50, CPL HUDSON ARRIVES TO BEGIN HIS SHIFT...

HI SERA, HOW'D YOU GO?

EASY AS, ONLY ONE STOPPAGE. READY TO HAND OVER?

SURE AM, LET ME JUST GET STRAPPED IN HERE...

LIMA 2-1 IS A FULLY AUTONOMOUS PACKET AND IS WAITING OUT AT THE RALLY POINT, SO THIS IS ALL YOU...

...DID YOU GET MUCH SLEEP?

NAH, JUST DRIFTED IN AND OUT, BIT TOO KEEN TO GET AMONGST IT I GUESS...

YEAH I CAN RELATE. GOOD LUCK, I'M GOING TO HIT THE HAY.

ALRIGHTY, LET'S DO THIS...

SIDE BAR 4

MEANWHILE AT THE RALLY POINT...



*GOOD MORNING MA'AM,
CPL HUDSON REPORTING*

*GOOD MORNING CORPORAL, LIMA
2-1 IS ASSIGNED AND WAITING
OUT, NOTE WE ARE CURRENTLY
OPERATING IN MCATS.*

YES MA'AM, THANK YOU MA'AM.

THE MISSION HAS PROGRESSED WITHOUT INCIDENT, UNTIL 02:45...

Wake up
Corporal
Hudson.

*DAMMIT! WELL THAT'S GOING ON THE
PERMANENT RECORD... AWESOME.*

You are not
alert.

*YEAH THANKS FOR THAT. CAN'T
WAIT TO HEAR ALL ABOUT IT
TOMORROW FROM THE SERGEANT.*

Obstruction
detected.

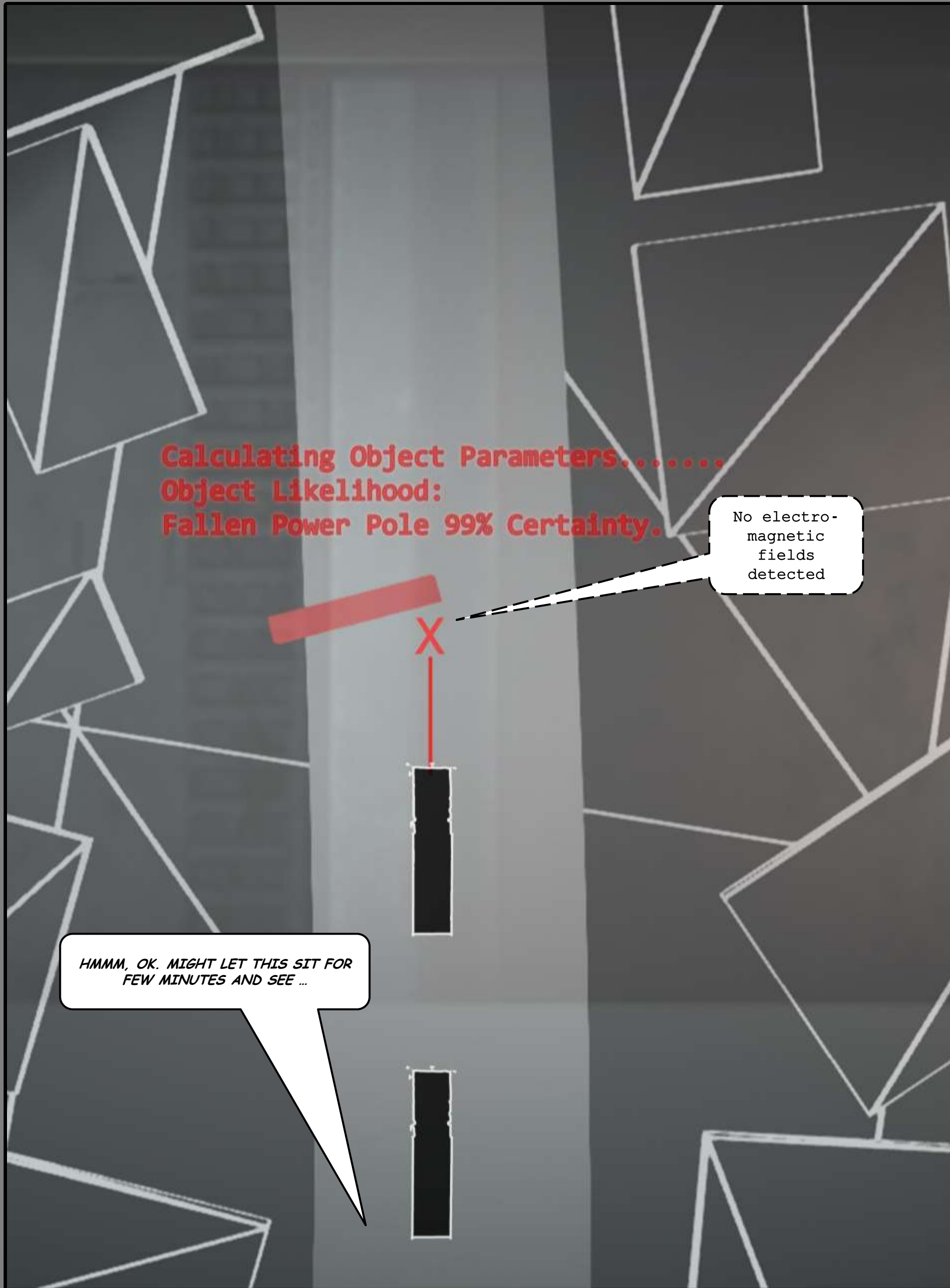
BEEP! BEEP!

*FINALLY! SOME ACTION,
LET'S TAKE A LOOK...*

Calculating Object Parameters.....
Object Likelihood:
Fallen Power Pole 99% Certainty.

No electro-
magnetic
fields
detected

HMMM, OK. MIGHT LET THIS SIT FOR
FEW MINUTES AND SEE ...



SIDE BAR 5