

Copyright © 2015
Richard B. Gasaway
Gasaway Consulting Group, LLC
All Rights Reserved.

No part of this document may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the author.

The contents of Fifty Ways to Kill A First Responder and Mental Management of Emergencies are the intellectual property of
Richard B. Gasaway, Ph.D.

Gasaway Consulting Group, LLC
P.O. Box 13542
St. Paul, MN 55113-0542
Phone: 651-331-8518

If you are interested in hosting a program, please contact Dr. Gasaway at
www.RichGasaway.com or

SITUATIONAL **A**WARENESS **M**ATTERS!

Situational Awareness For EMS Professionals

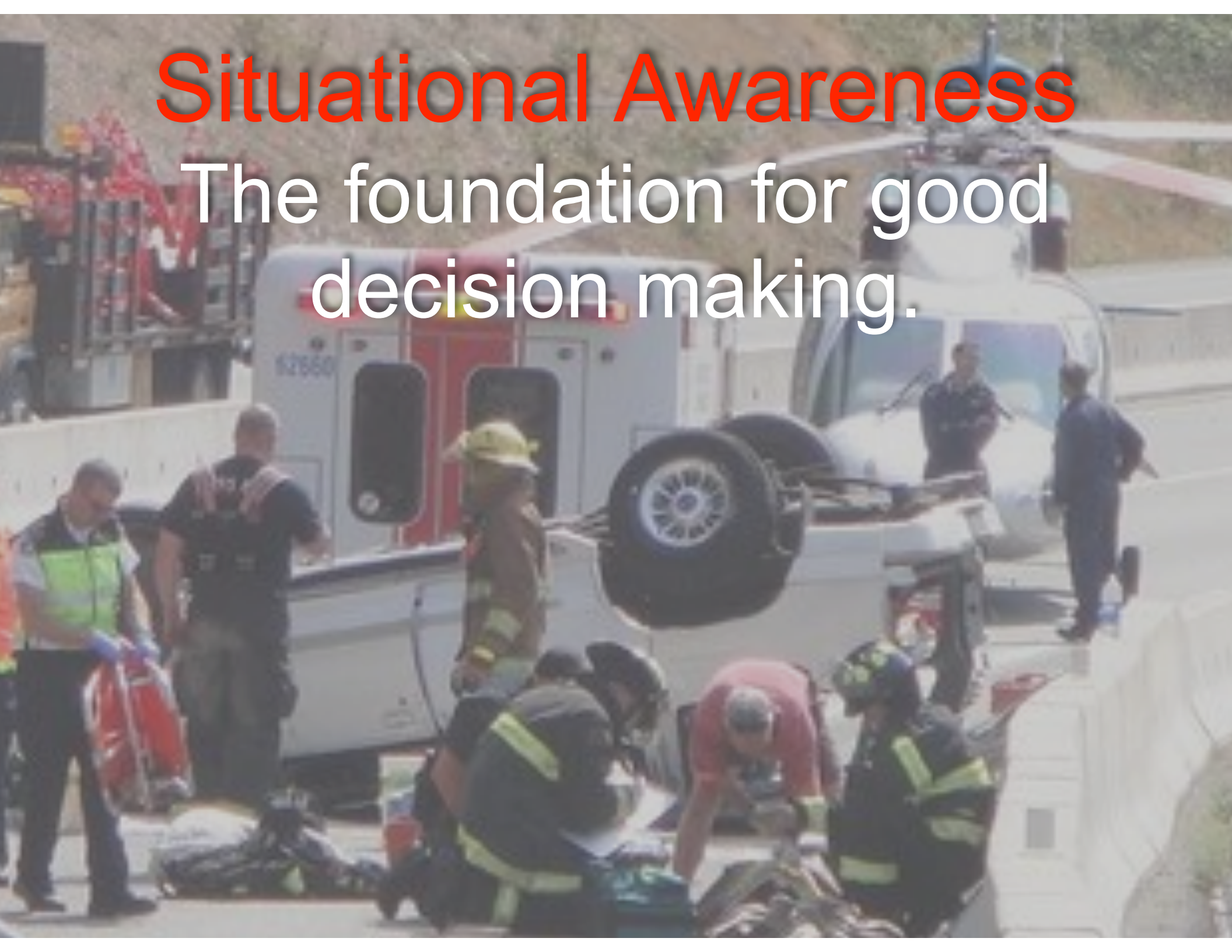


**Dr. Richard B. Gasaway, EMT-P
Fire Chief (ret.)
St. Paul, Minnesota**

Why is
situational awareness
so important?

Situational Awareness

The foundation for good decision making.



It's logical...

**The better you
understand a situation.**

**The better your
decision making will be.**

You can have **TERRIBLE**
situational awareness.

And still make a
GREAT decision.

We call that...

Lucky



Let's program out
some of the luck...

And replace it with a
skillset that can improve
your decision making.

Situational awareness

Your ability to **PERCEIVE**

AND UNDERSTAND

What is happening
around you...

while being mindful of how time is passing.

And then

Being able to accurately
PREDICT future events...

In time to avoid
bad outcomes.

HANDOUT

AT&T Wi-Fi

7:28 PM

100%

New Message

Cancel

To: | 228-28 .



Hello! Please reply with your email address in order to receive today's handout.



samatters



q

w

e

r

t

y

u

i

o

p

a

s

d

f

g

h

j

k

l

Let's build a house.



Perception

Using your senses to capture information...
(clues and cues) about the current situation.

- I pay attention...
- I keep my head on a swivel...
- I look up, down, and all around...
- I actively listen...
- I complete a size-up...





Visual

Audible

Smell

Taste

Sensation





Understanding

Making sense out of what you:
See, hear, feel, taste & smell

Comprehension

Moment of clarity





Ask yourself
some questions.

“What does this mean?”





“Is this what I expected?”





It seems so easy...

See... and understand.

Hear... and understand.

Situational Awareness Barriers

Anything that blocks or interrupts:

Perception

Understanding

Prediction



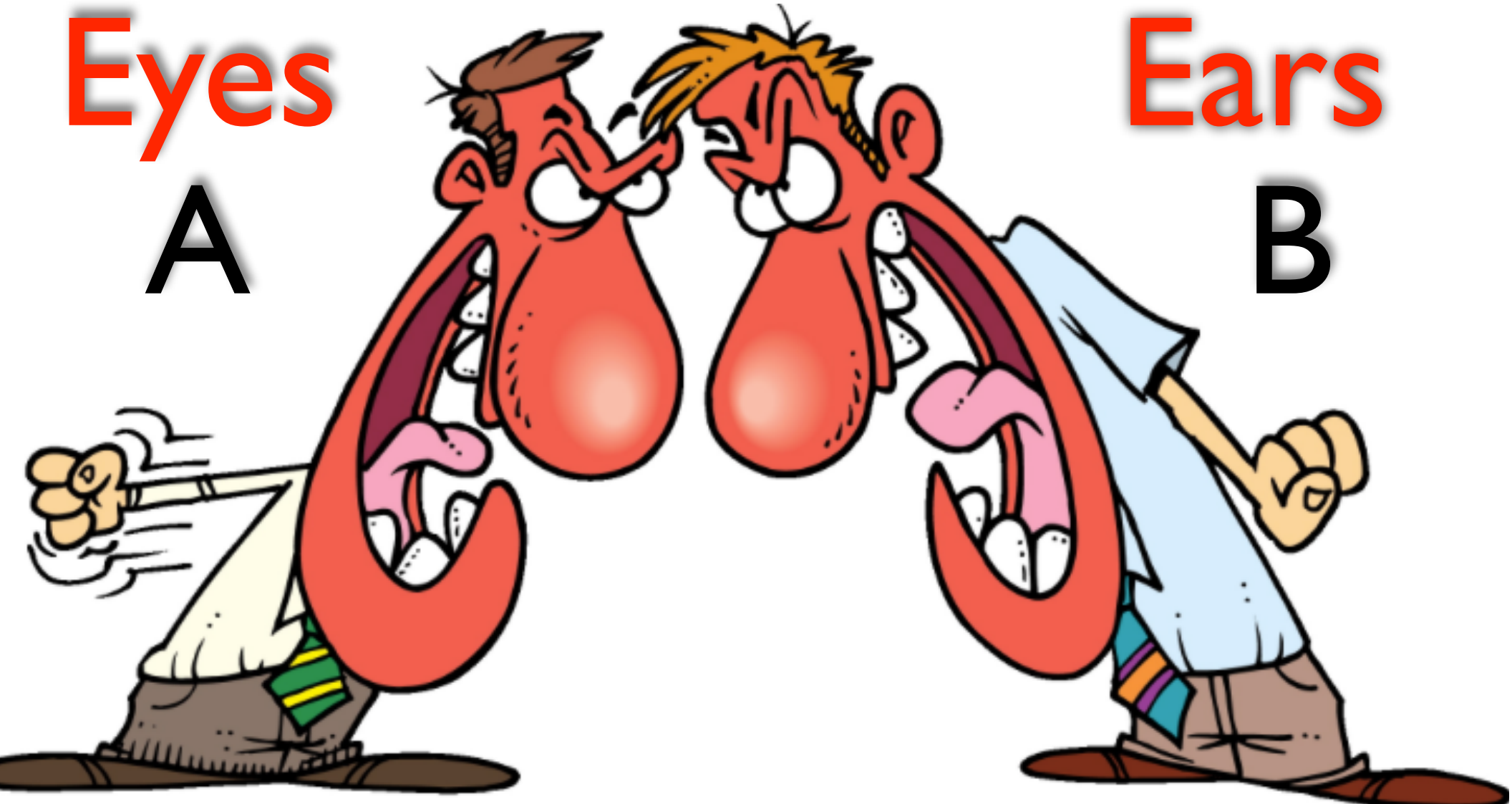
Sensory Conflict

Eyes

A

Ears

B



What happens when the puzzle pieces don't fit together?



It causes confusion in the brain.





Your brain does not like
confusion when you are in
a high-risk environment.



Confusion makes you more
vulnerable for injury
(and bad decisions).



Your attention shifts inward,
trying to resolve
the mental confusion.

Mind Drift



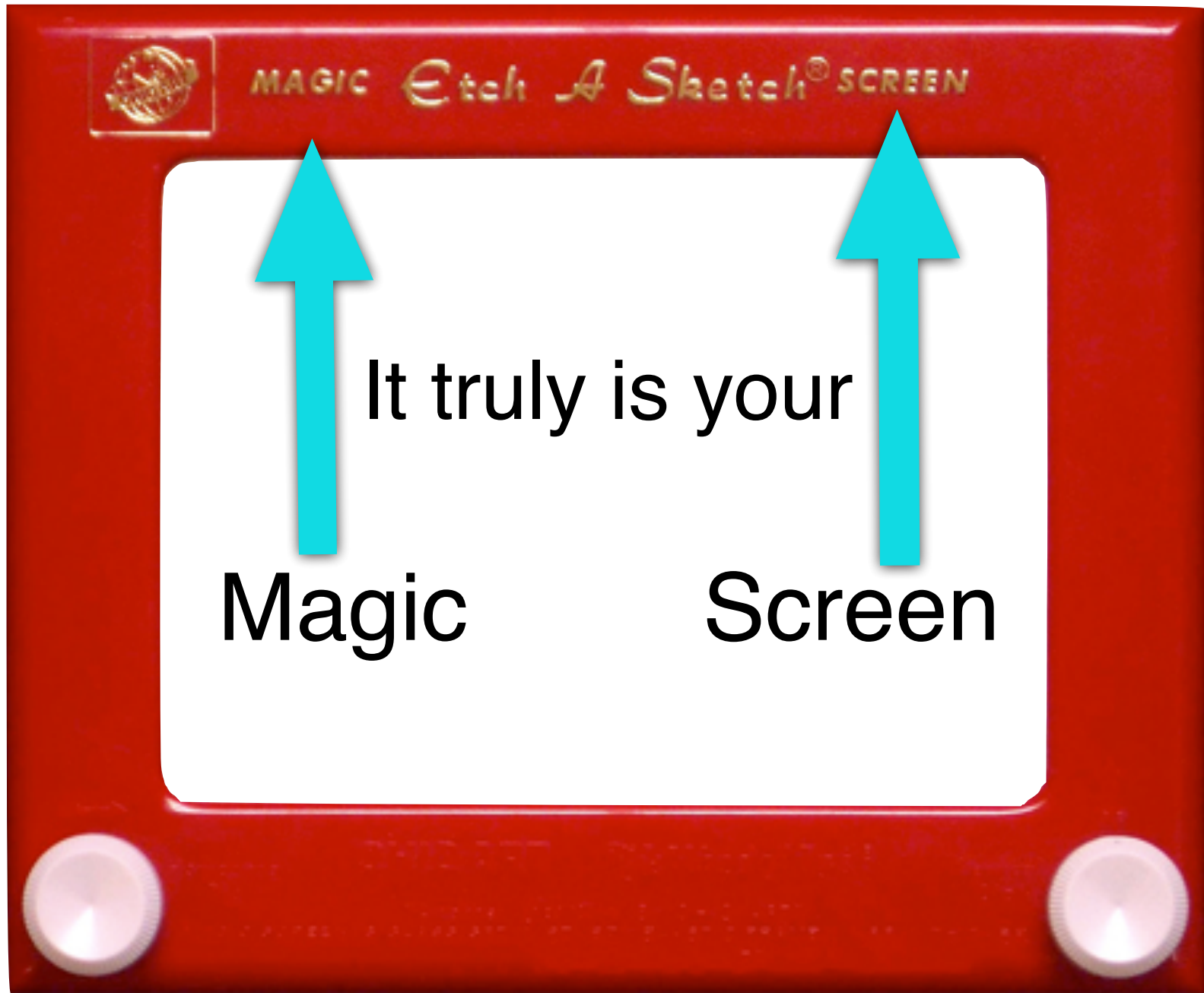
Robotic Action



Acting
without
thinking.

Where in your brain does your
puzzle of understanding
get assembled?





Magic

Screen



Memory Recall



Long Term Memory





Fact

The capacity of long-term memory:

10x all the information
on the Internet.



Fact

You can only consciously access:

About 5% of your long-term
memory data base.

Memory Recall



Can trigger the 6th sense.

Intuition

Knowing...

Without knowing...

How you
know.



How do you know...

If you don't know...

How you
know?



Hair stands up on the
back of your neck.

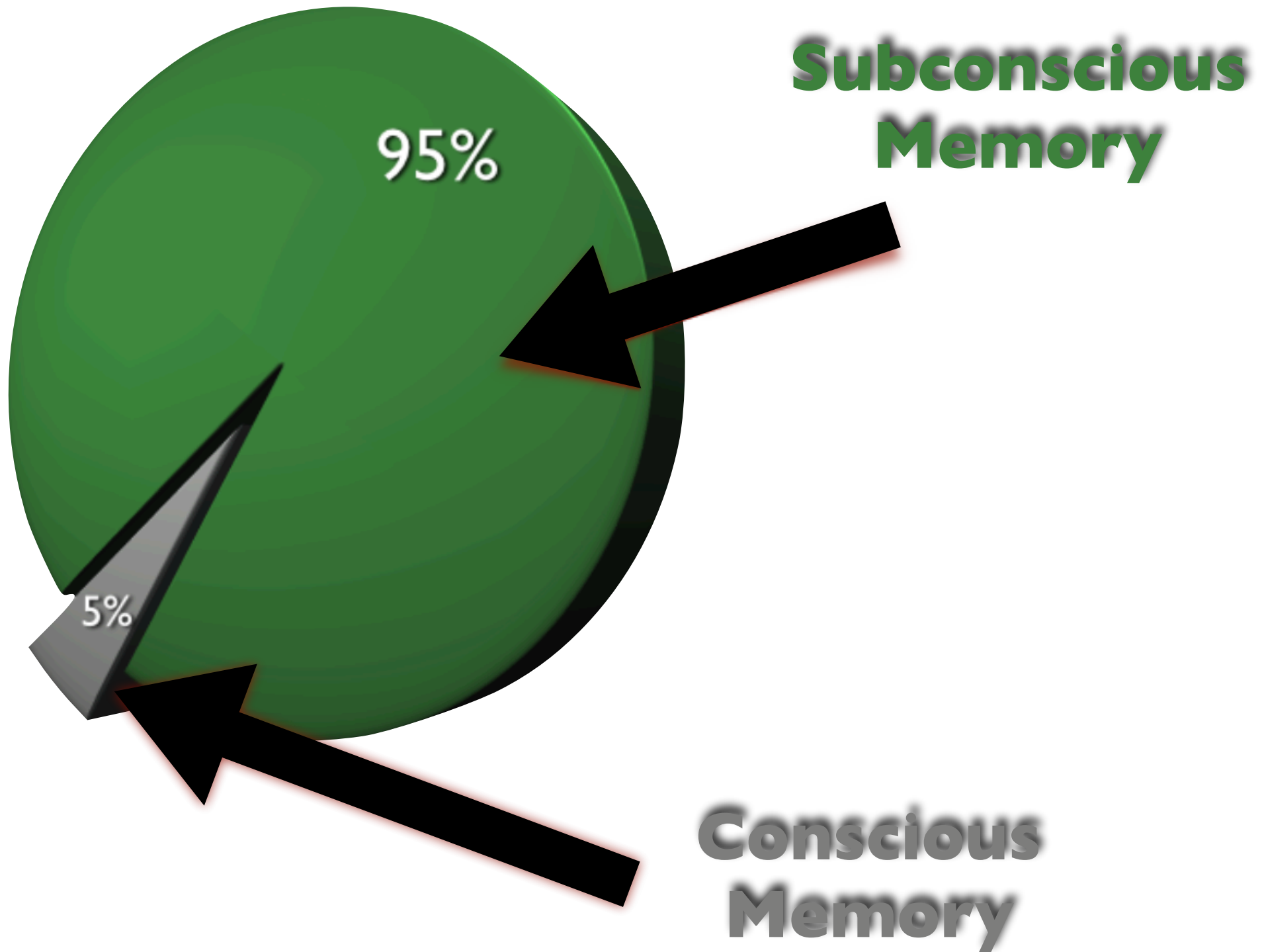
Your internal voice
talks to you.

Gut Feeling



Your Red Flag Warning System

Intuition





Prediction

A woman with curly hair is wearing a headband made of many gold coins and small gold stars. She is looking directly at the camera with a serious, intense expression. Her hands are raised in front of her, with fingers spread, as if she is performing a magic trick or making a prediction. The background is dark, and the lighting is focused on her face and hands.

**Anticipating future events
before they happen.**

Prediction

A woman with curly hair is wearing a headband made of many gold coins and small gold stars. She is looking intensely at a crystal ball that she is holding with both hands. The background is dark, and the lighting is focused on her face and the crystal ball.

Begin... with the end in mind.



Target

Goal

Objective

Benchmark

Situational Awareness Barriers

Distractions

Interruptions

A fortune teller with a headband of gold coins and star-shaped eye coverings holds a crystal ball. The background is dark, and the crystal ball is a bright white circle in the center.

Prediction

What will happen...

If...

I don't do anything?



This question forces you to think about future events.

Prediction

A woman with curly hair is wearing a headband made of many gold coins. She has gold star-shaped covers over her eyes. She is holding a crystal ball with both hands, looking into it with a focused expression. The background is dark.

How long is it going to
take for an undesirable
outcome to occur?



Window of Opportunity

An open window with a white frame and multiple panes. The window is open, revealing a bright blue sky with scattered white clouds. The text "Civilian Survivability" is centered over the view of the sky.

**Civilian
Survivability**

Once the window closes...



Window of Opportunity

An open window with a white frame and multiple panes. The window is open, revealing a bright blue sky with scattered white clouds. The text "Responder Survivability" is overlaid on the view through the window.

**Responder
Survivability**

Once the window closes...



Prediction

A fortune teller with a headband made of gold coins, looking down at a crystal ball held between their hands. The background is dark, and the crystal ball is illuminated from below.

Every event unfolds at a certain pace (speed).


Keep track of the passage of time.

The ability to perceive AND
understand what is happening in
your environment

(while being mindful of how time is passing)

and then, in turn, be able to
accurately predict future events...
in time to avoid bad outcomes.

Tracking time means...



**Tracking how
fast the
windows
are closing.**

A close-up photograph of a person with curly hair wearing a headband made of many gold coins. They are looking intensely at a glowing white crystal ball held between their hands. The background is dark, and the person is wearing a dark, patterned garment. The text 'Prediction' is overlaid in red at the top, and 'Setting Expectations' is overlaid in white in the center.

Prediction

Setting Expectations

Prediction

A close-up photograph of a person with curly hair, wearing a headband made of many gold coins and a row of gold stars across their forehead. They are looking intensely into a glowing white crystal ball. Their hands are positioned around the crystal ball, with fingers spread. The background is dark, and the person is wearing a dark, patterned garment.

Can we change the outcome?

Don't get in the way of
outcomes you cannot change.

If you do...

You will become a
victim of the outcome.

Prediction

A close-up photograph of a person with curly hair, wearing a headband adorned with numerous gold coins and small gold stars. They are looking intensely into a glowing white crystal ball. Their hands are positioned around the crystal ball, with fingers spread. The background is dark, and the overall lighting is dramatic, highlighting the person's face and the crystal ball.

Are the conditions right?

Are the conditions are
right for an aggressive action?

If not...
be conservative.

Be SMART aggressive.

Prediction

A close-up photograph of a person, likely a fortune teller, with their hands positioned over a glowing crystal ball. The person has a headband adorned with numerous gold coins and small stars. They are wearing a dark, textured garment. The background is dark, and the crystal ball is the central focus, emitting a bright white light.

Do I have the
right resources?

Are all members equal?

Knowledge

Skills

Abilities

Fitness

Stamina

If they are not...

Then don't hold
the same expectations
as if they are.

Seven situational awarenesses

1. Personal Awareness
2. Team Awareness
3. Resource Awareness
4. Pre-arrival Awareness
5. Scene Awareness
6. Patient Awareness
7. Shared Awareness

Prediction

A close-up photograph of a person with curly hair wearing a headband made of many gold coins. They are looking intensely at a glowing white crystal ball held between their hands. The background is dark, and the lighting is dramatic, highlighting the person's face and the crystal ball.

**Can we operate faster than
conditions are changing?**

Can we operate faster than...

An open window with a white frame and multiple panes. The window is open, revealing a bright blue sky with scattered white clouds. The text "the windows are closing?" is superimposed on the view of the sky.

**the windows
are closing?**



MAGIC Etch A Sketch® SCREEN

Imagination





MAGIC Etch A Sketch® SCREEN



Your Mind's Eye

Situational Awareness Barriers

Anything that impacts your:

Perception

Understanding

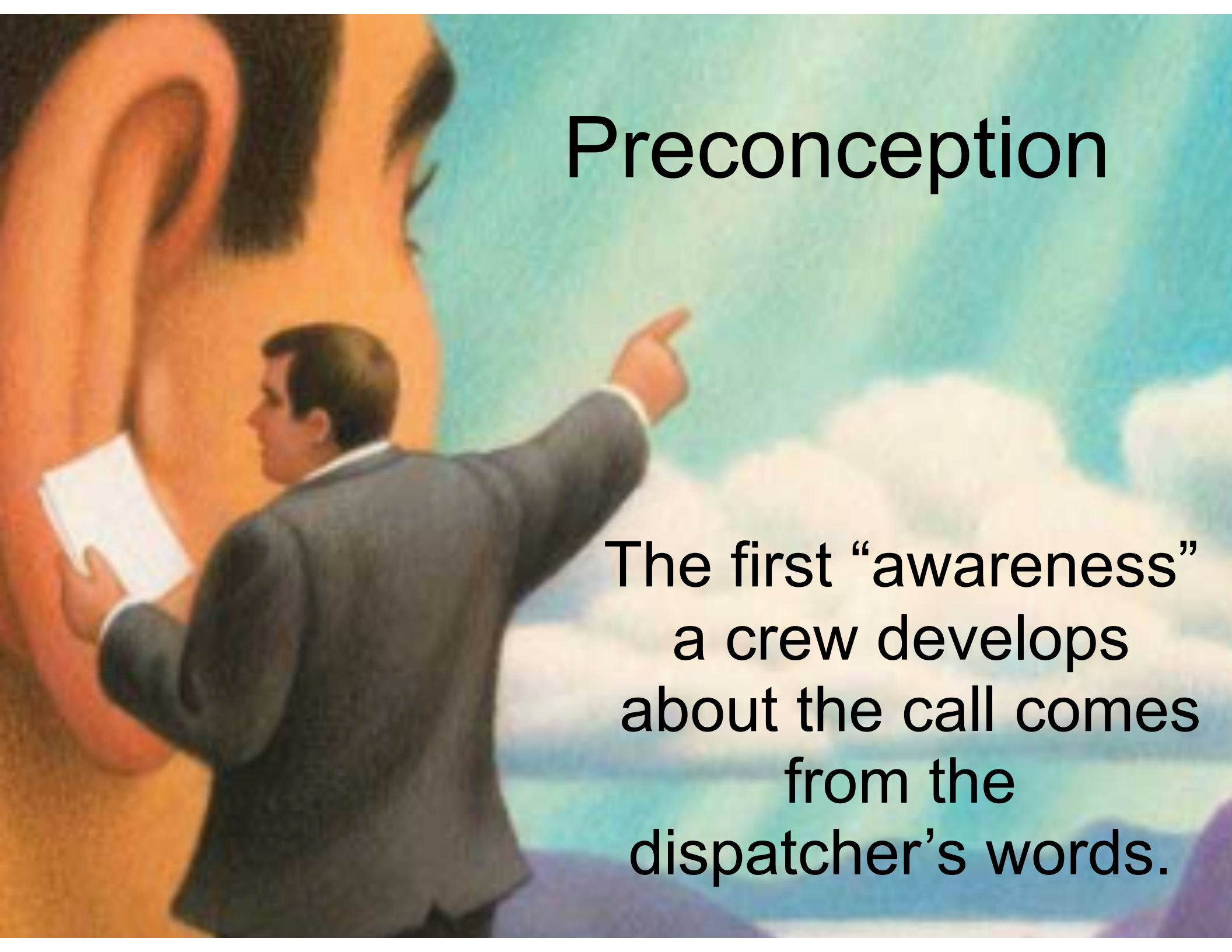
Prediction

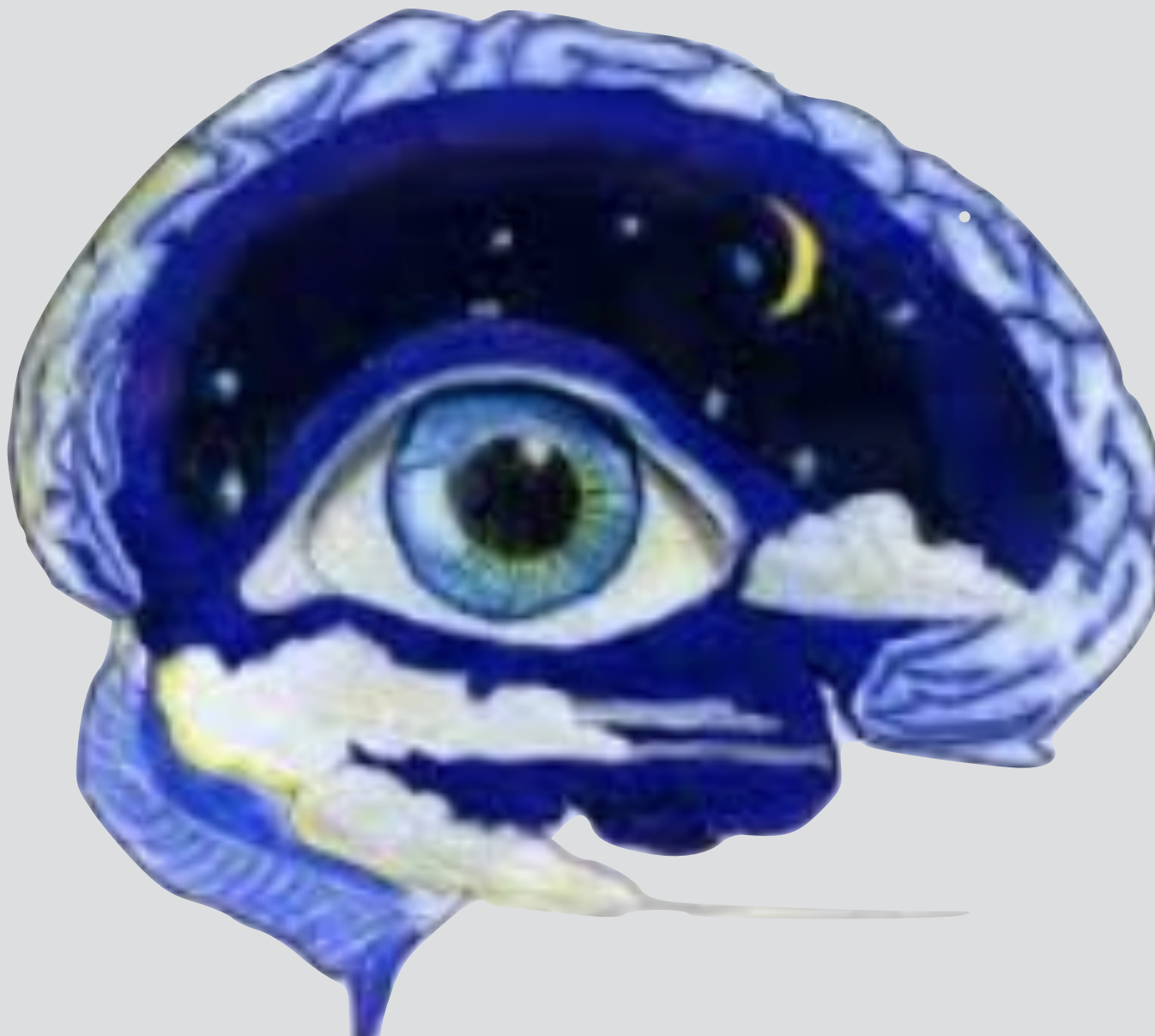


There are over 100 barriers that can impact your situational awareness.

Preconception

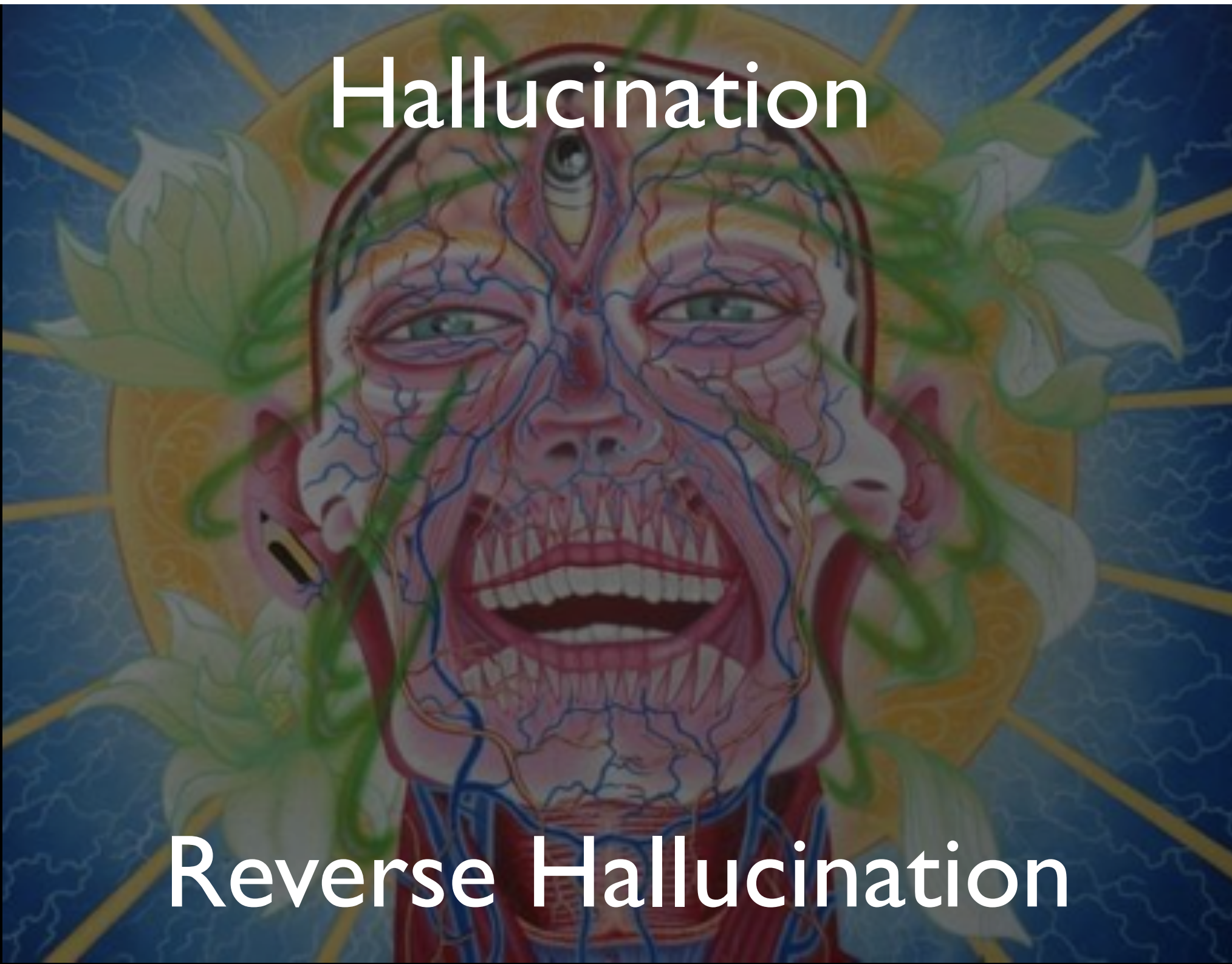
The first “awareness”
a crew develops
about the call comes
from the
dispatcher’s words.





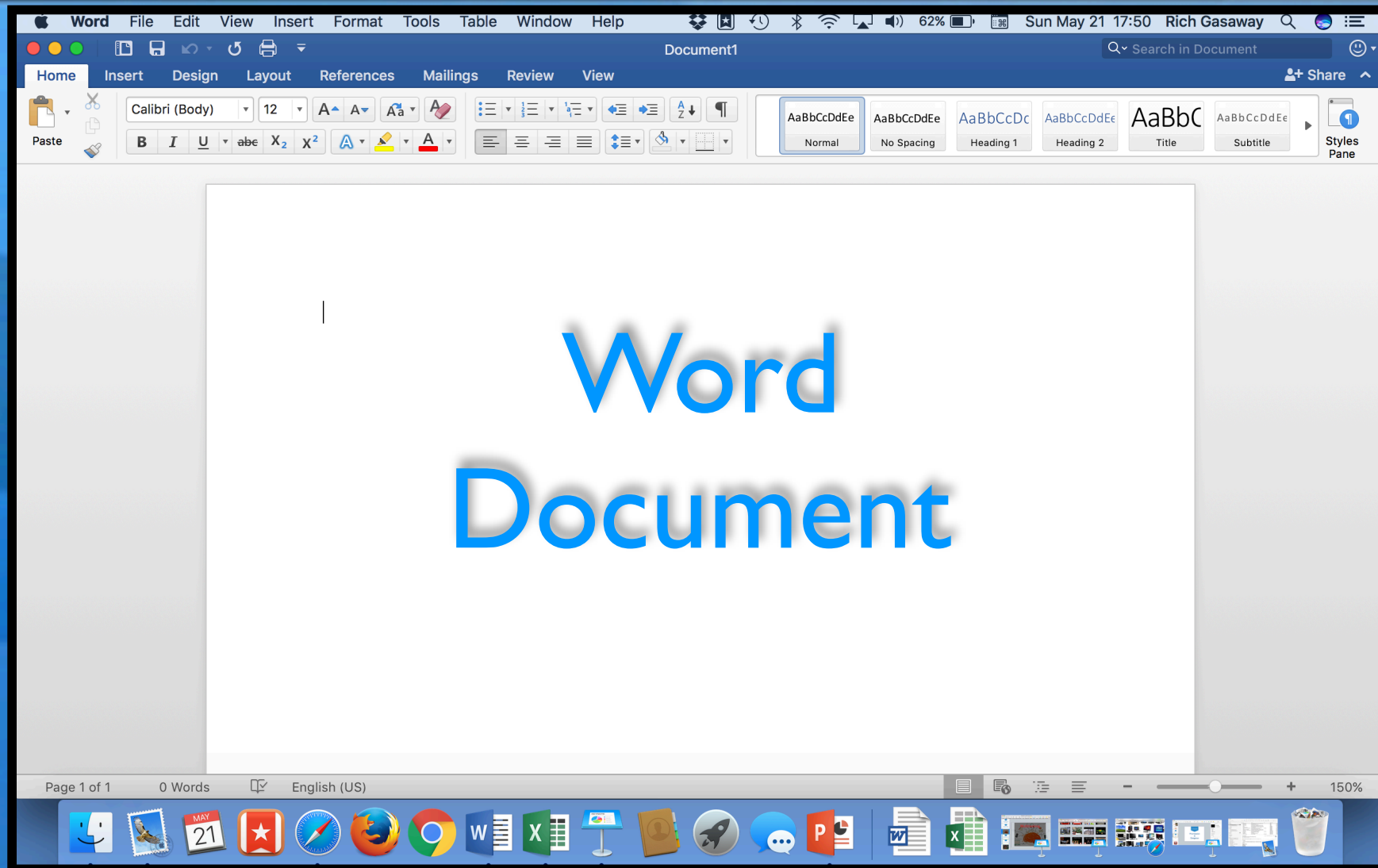
Hallucination

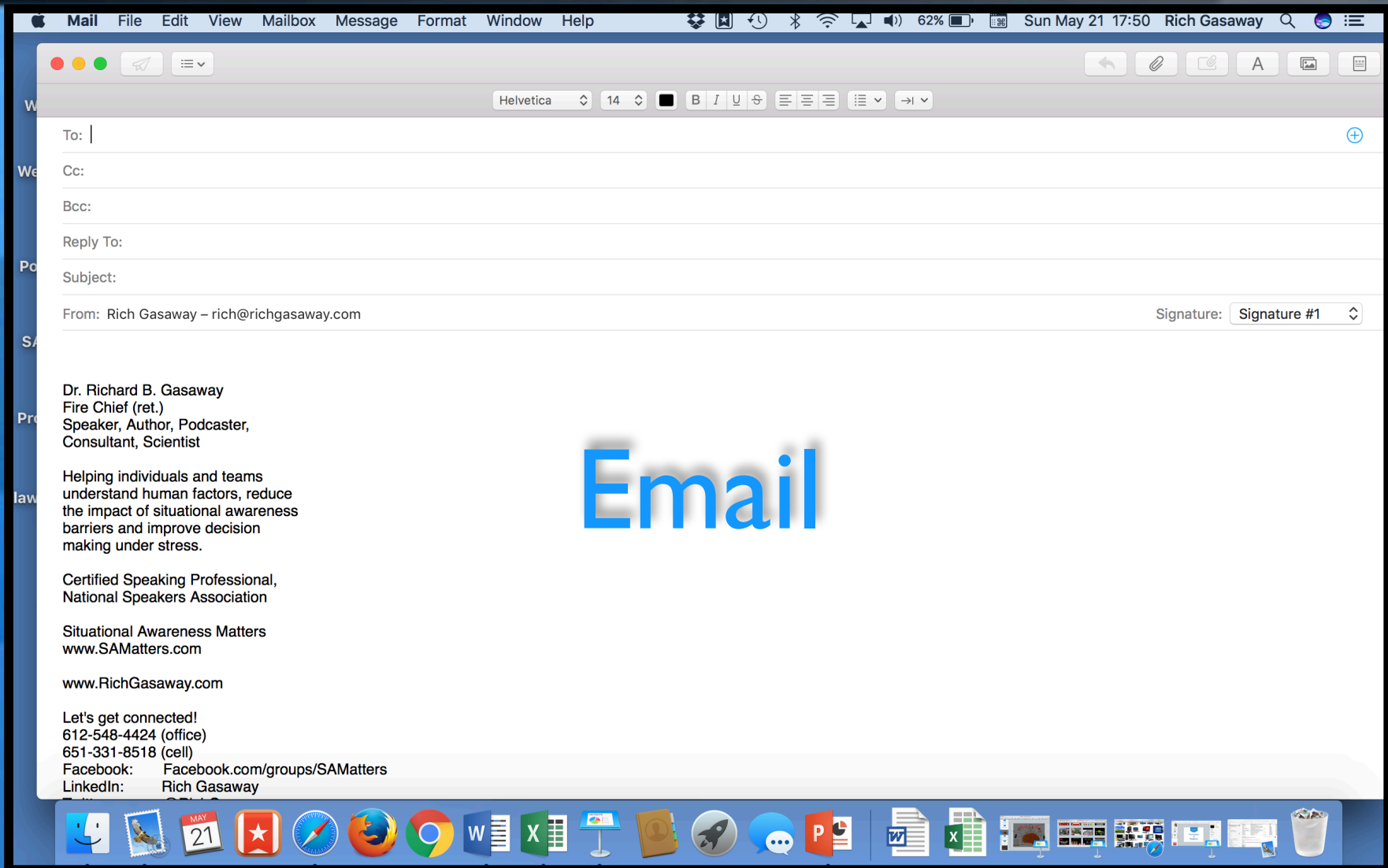
Reverse Hallucination



Multitasking







Email

Dr. Richard B. Gasaway
Fire Chief (ret.)
Speaker, Author, Podcaster,
Consultant, Scientist

Helping individuals and teams
understand human factors, reduce
the impact of situational awareness
barriers and improve decision
making under stress.

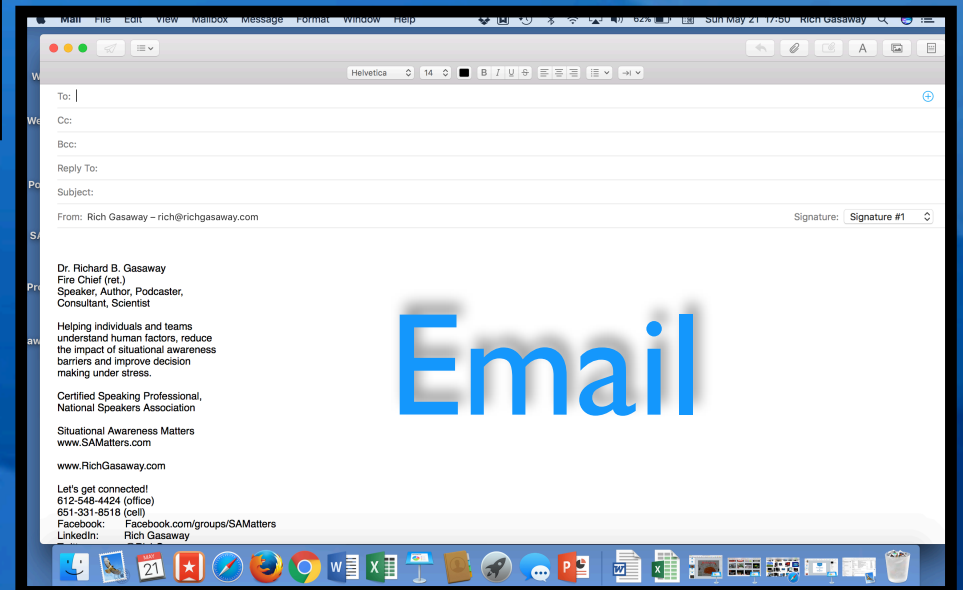
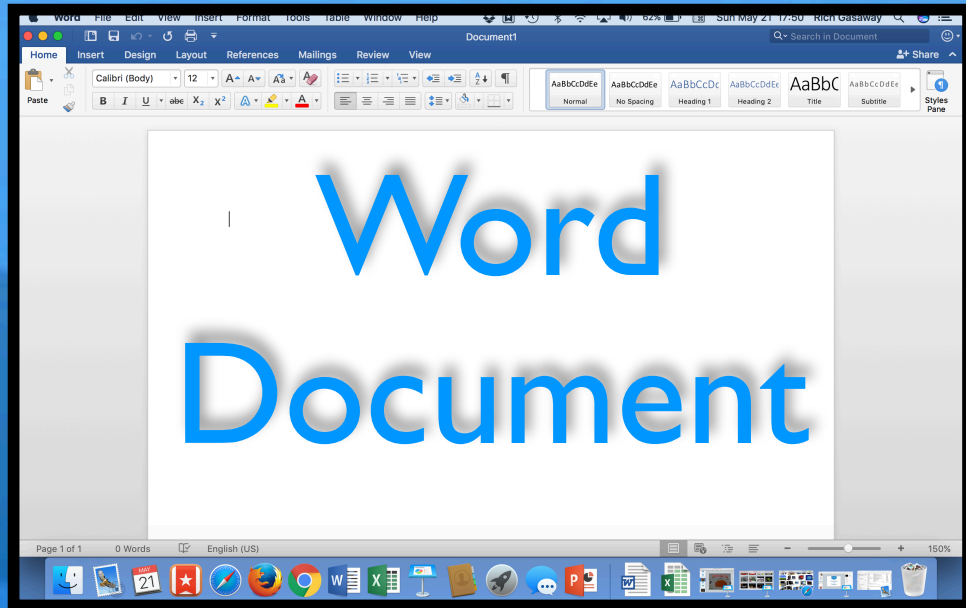
Certified Speaking Professional,
National Speakers Association

Situational Awareness Matters
www.SAMatters.com

www.RichGasaway.com

Let's get connected!
612-548-4424 (office)
651-331-8518 (cell)

Facebook: [Facebook.com/groups/SAMatters](https://www.facebook.com/groups/SAMatters)
LinkedIn: Rich Gasaway





Shifting attention...

Can cause confusion
and cause you
to lose information.

Short-Term Memory Overload





The capacity of
short-term memory is:

5-7 pieces of
unrelated information.

Focus...



On the short list of important information.

Use memory aids



Worksheet Checklist

Time Distortion



Time gets away from you.

Under stress...



Your mental clock
struggles to keep
track of time.

Time Distortion



You may think that only
5 minutes have passed.

But in reality
20 minutes may have passed.

Confabulation

What does it mean?



It means your
brain is lying
to you.

In the absence
of facts...



You can assume.

Your brain is really good at
making up its own reality.

Be alert...



For differing
perceptions of reality.

Task Fixation





Task fixation is
very common on
jobs that require
hand-eye coordination.



Maintain a
big-picture
awareness.



Assign someone to
watch the big-picture.

Mission Myopia

The commitment to
the mission without
considering the
risk involved.

Mission Myopia

Putting accomplishment
of the mission ahead of
your personal safety.

Urgency



What causes a sense of urgency?

The faster conditions
are changing...

The more likely you are to
feel a sense of urgency to
do something quickly.

Consequences of urgency:



- Increased stress.
- May cause you to take shortcuts.
- May cause you to think:
“There is not time to waste.”

Avoid...



Shortcutting your best practices.

Mental Rehearsal



Visualize yourself in
high-risk scenarios
(before they happen).



Ask yourself:
What would I do if...?

Over Confidence



What causes
over confidence?



Doing things...

That are NOT best practices...

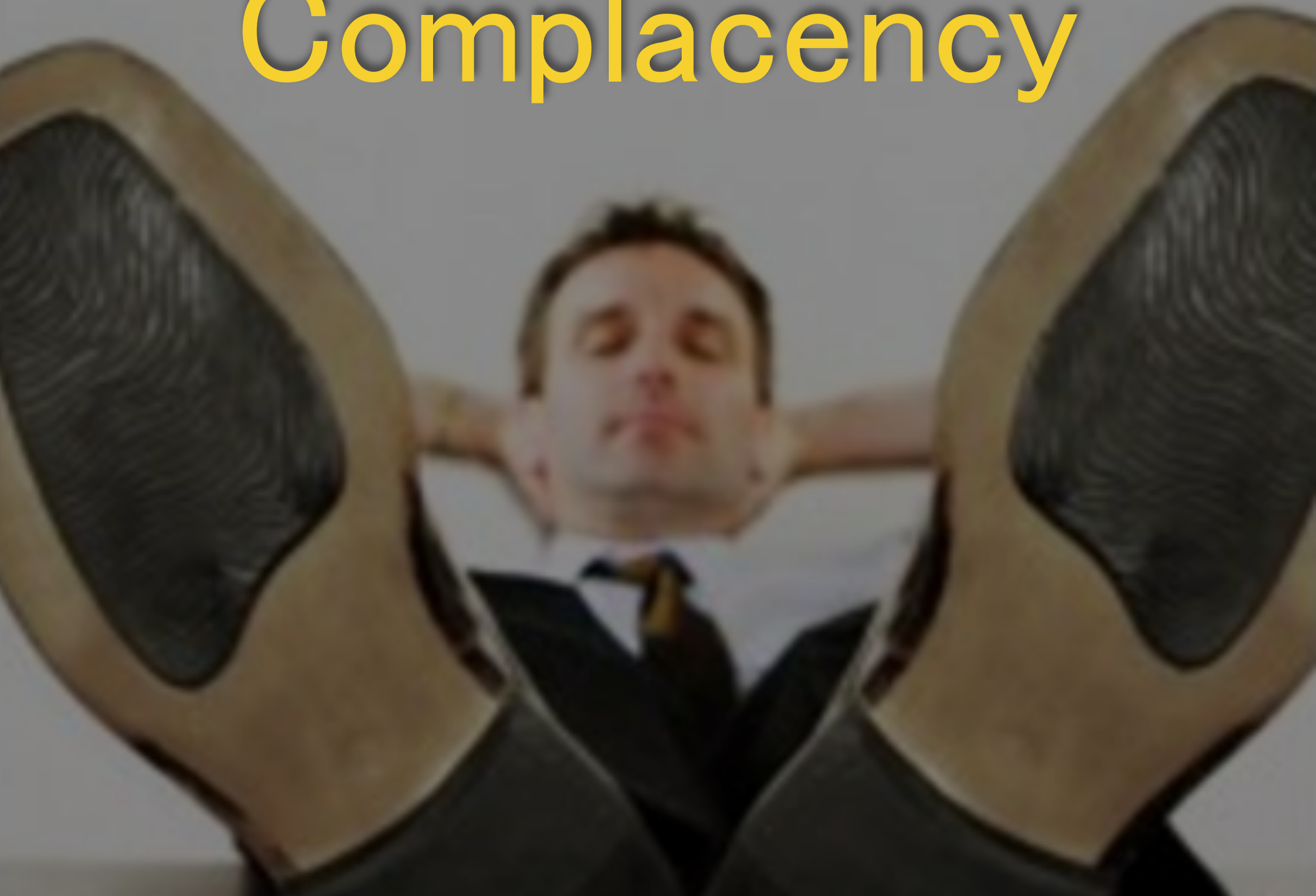
And being rewarded...

With successful outcomes.



Crew members who lack
experience...
may take more risks.

Complacency



Complacent Mindset

When you become
complacent...

You let your
guard down.

When your
guard is down...



**Tips &
Tricks**

You may
not
see,
hear,
or smell
danger.





Highly experienced
crew members
may become
desensitized to risk.



Remain Vigilant,
especially when the
scene seems to be
calming down.

Learn...



From near-miss and
casualty events.

Standardization of Deviance

What does it mean?

Standard = Normal

Deviance = Undesirable
behavior

The undesirable behavior
becomes the norm.



What do people
fear most?



Public
Speaking



CONSIDER

What do people fear about public speaking?

Being wrong

Consequence

Ridicule

Embarrassment

Judgment

Responders may fear
speaking up...

even though they've
been told it's ok to do.



CONSIDER

Don't just say: "Speak up!"

Teach: What to say.

Teach: How to say it.

And practice speaking up!

Pride

A feeling of deep pleasure or satisfaction derived from a job well-done.





**Put your personal safety
ahead of patient care...**

**may not feel
like a job well-done.**

Auditory Exclusion

means you're

going deaf.

How?

Loud noises

Tunneled hearing

Too much radio traffic

Sterile Communications

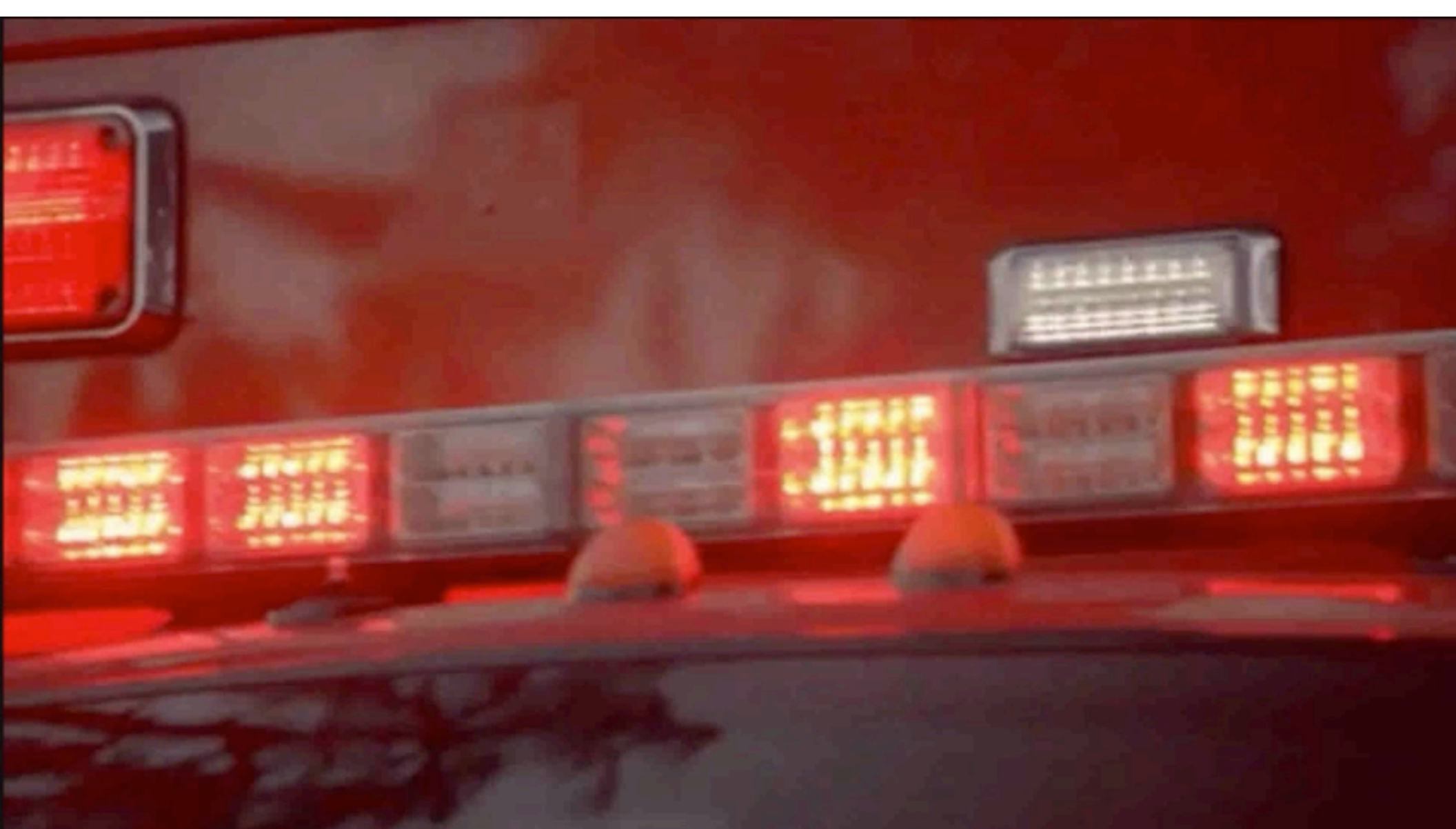


What does it mean?

Limit all communications
to issues related to
the emergency.

Motion Induced Blindness





Never assume flashing lights
make you visible.

Situational Awareness

Exercise

SAMatters.COM

SITUATIONAL **A**WARENESS **M**ATTERS!

Dr. Richard B. Gasaway

SAMatters.com

Rich@RichGasaway.com

612-548-4424



**Helping you see the bad things coming...
in time to avoid bad outcomes.**