
The Human Body and Driving

Introduction

My name is Liam Greaney and I'm an ADI from Portsmouth and very proud to be a member of the Governing Committee of The ADINJC.

At the NJC we take the effect that the body has on driving very seriously and have a dedicated team dealing with that.

Check out our Health and Wellbeing page on the website.



What we will cover today

We are going to look at three topics today

- **The Human Brain**
In particular three brain theory. .
- **Our physicality And Awareness**
But also how the Korean War has given us some tools to use this effectively
- **The Eye And How It Sees**
Movement, colour and shape. Rods and cones. The orbital cavity and how we can use that.

Three Brain Theory.

We have three brains:

- **Reptile brain that deals with our body**
- **Mammal brain that controls our emotions**
- **Human brain that shapes how we think**

Reptile Brain

This has three basic reactions:

- Flight
- Fight
- Freeze



It deals with threats!

Our Mammal Brain

- It's our emotional side
- It likes familiarity
- It wants to be comfortable



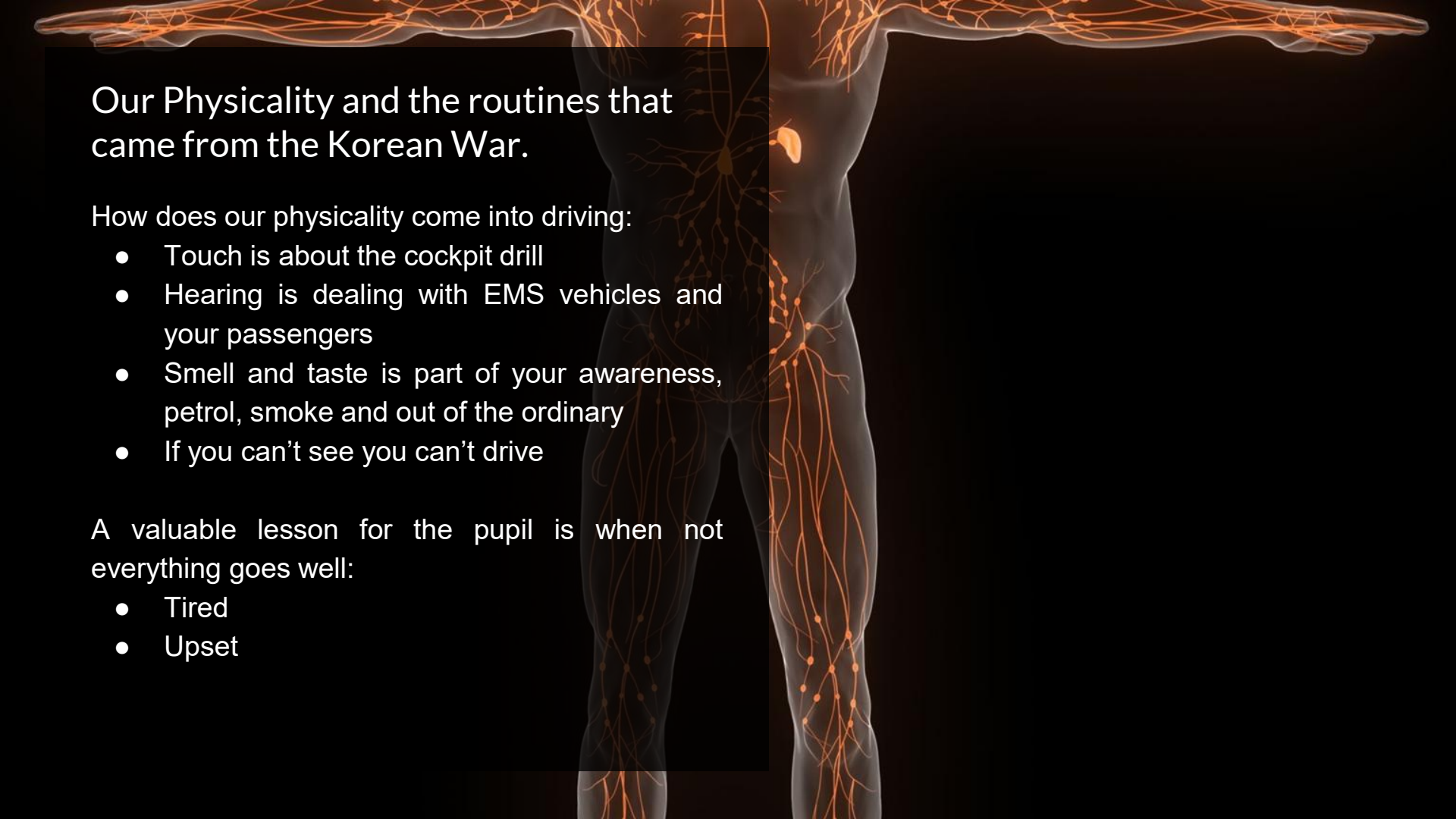
It deals with people

Our Human Brain

- It's understanding
- Our directing mind
- Fear lives in the dark



It's our thinking brain



Our Physicality and the routines that came from the Korean War.

How does our physicality come into driving:

- Touch is about the cockpit drill
- Hearing is dealing with EMS vehicles and your passengers
- Smell and taste is part of your awareness, petrol, smoke and out of the ordinary
- If you can't see you can't drive

A valuable lesson for the pupil is when not everything goes well:

- Tired
- Upset

The Korean War.

Col. Jeff Cooper and situational awareness

To do this he came out with a colour coded system:

- Code White - unaware and unprepared
- Code Yellow - relaxed and alert
- Code Orange - identified hazard
- Code Red - dealing with hazard

And Code Black:

- Flight
- Fight
- Freeze



A composite image showing two people driving in a car. On the left, a young man with dark hair is looking towards the camera. On the right, a man with short hair is looking forward. A semi-transparent dark box is overlaid on the left side of the image, containing text and a bulleted list.

Be coded as it deals with risk:

- **Code Yellow - normal driving**
- **Code Orange - seeing hazards**
- **Code Red - dealing with hazards**

The Korean War.

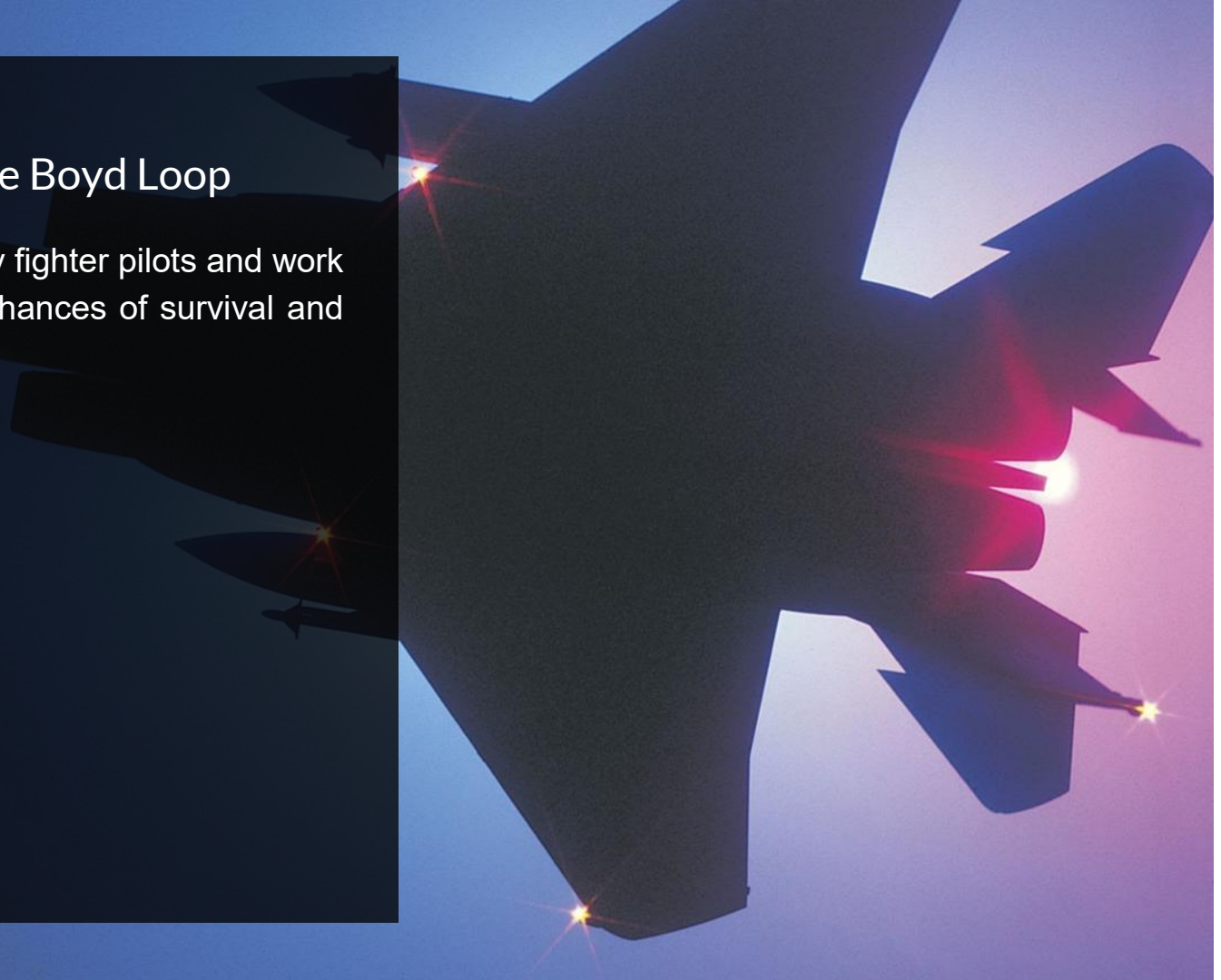
Col. John Boyd and the Boyd Loop

What Boyd did was to study fighter pilots and work out how to increase their chances of survival and he came out with:

- Observe
- Orient
- Decide
- Act

For us this became:

- Look
- Assess
- Decide
- Act



The Human Eye

It notices in the following order:

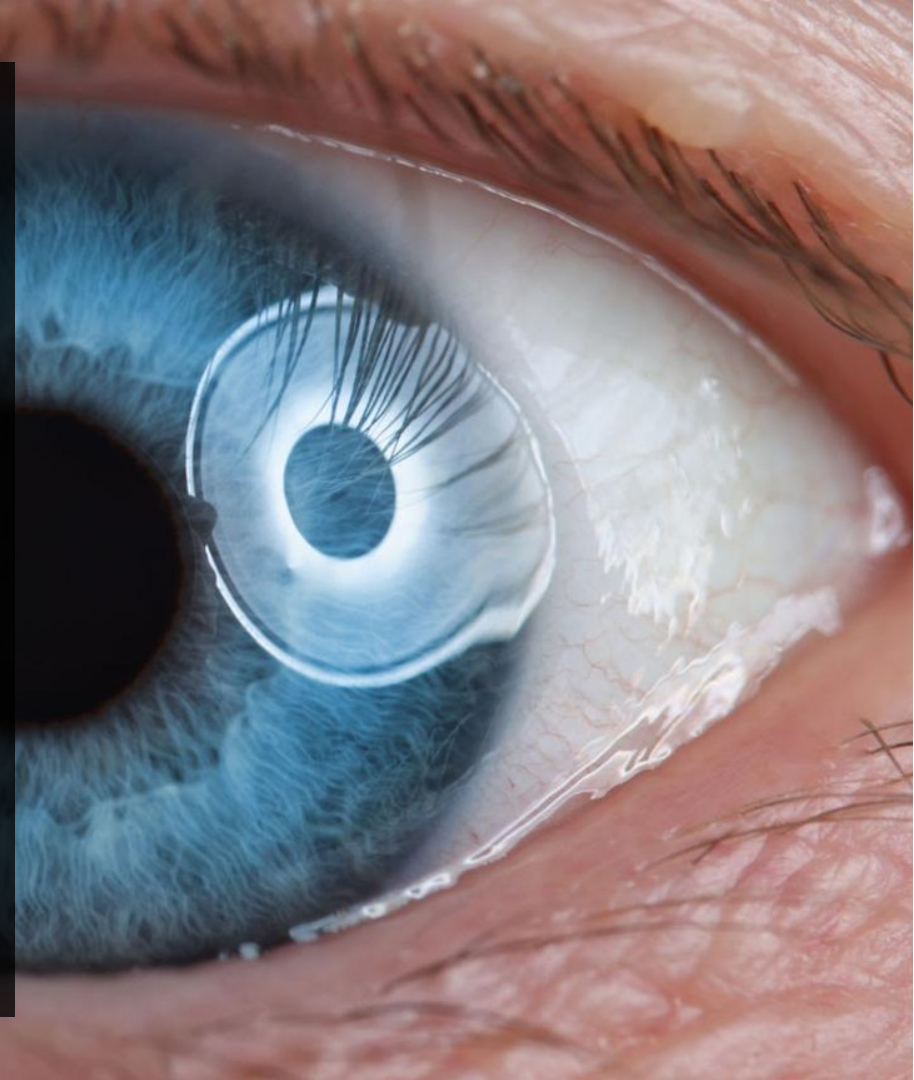
- Movement
- Colour
- Shape

The Orbital Cavity

Rods and Cones

Saccades

We Are Prey Animals



The Human Body and Driving Conclusion:

Three brains

- Reptile-body and fear
- Mammal-emotion and familiarly
- Human-thinking and rational

The body, awareness and how the Korean War gave us some routines to deal with our three brains

Both ourselves and our pupils should be coded up

The brilliance of the human eye and the miracle that is our eyesight
