CHC SAFETY & QUALITY SUMMIT 2010
MARCH 22-24, 2010, VANCOUVER, B.C. CANADA

The Fit for Work Indicator – A New Safety Tool

With Renee Dupont &
Gordon Dupont
System Safety Services

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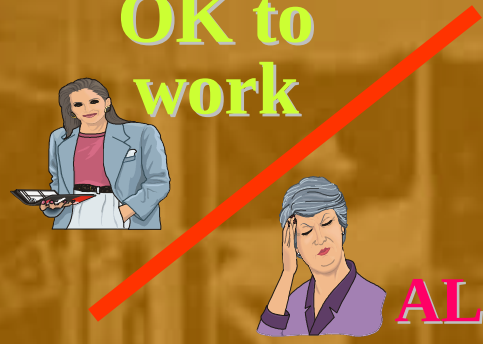
Fit For Work Indicator - A New Safety Tool For Our Industry



CHC Safety & Quality Summit 2010

March 23, 2010 Vancouver, BC

Presented by
Gordon Dupont
Renee Dupont

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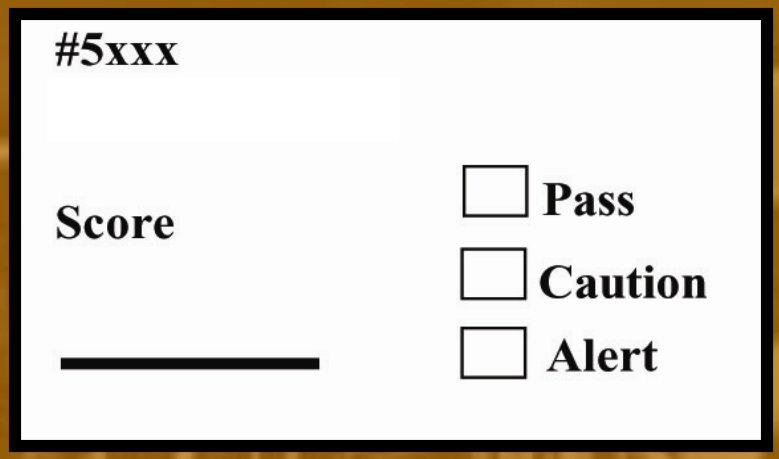
Welcome To The "Fit For Work Indicator" Presentation/Workshop

- Does everyone have a card like this one?



- We would like everyone to enter the number in the top left corner into the terminal and do the following

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- **Using the oversized trackball**

- **Try to keep the moving "jitter-cursor" in the center of the target**

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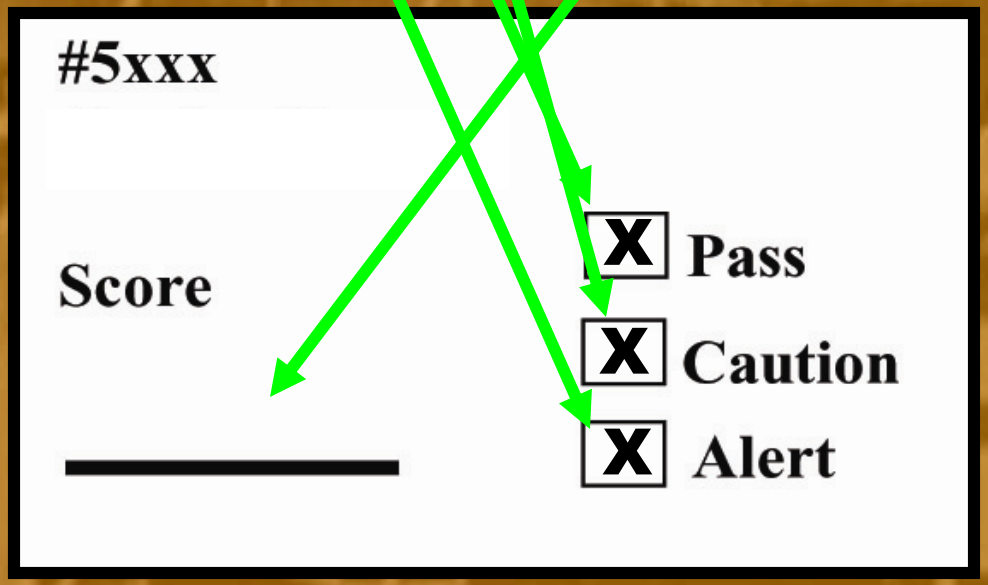
- ✓ Record your score on your card
- ✓ Record if: Pass
  Caution
  Alert



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We know:

Over 80% of our accidents are due to Human Error

These Human Errors are not made on purpose

Many of these errors are made by some of the best and most conscious employees

Thus something must have interfered with that "person's" performance and/or judgment in order for the error to occur

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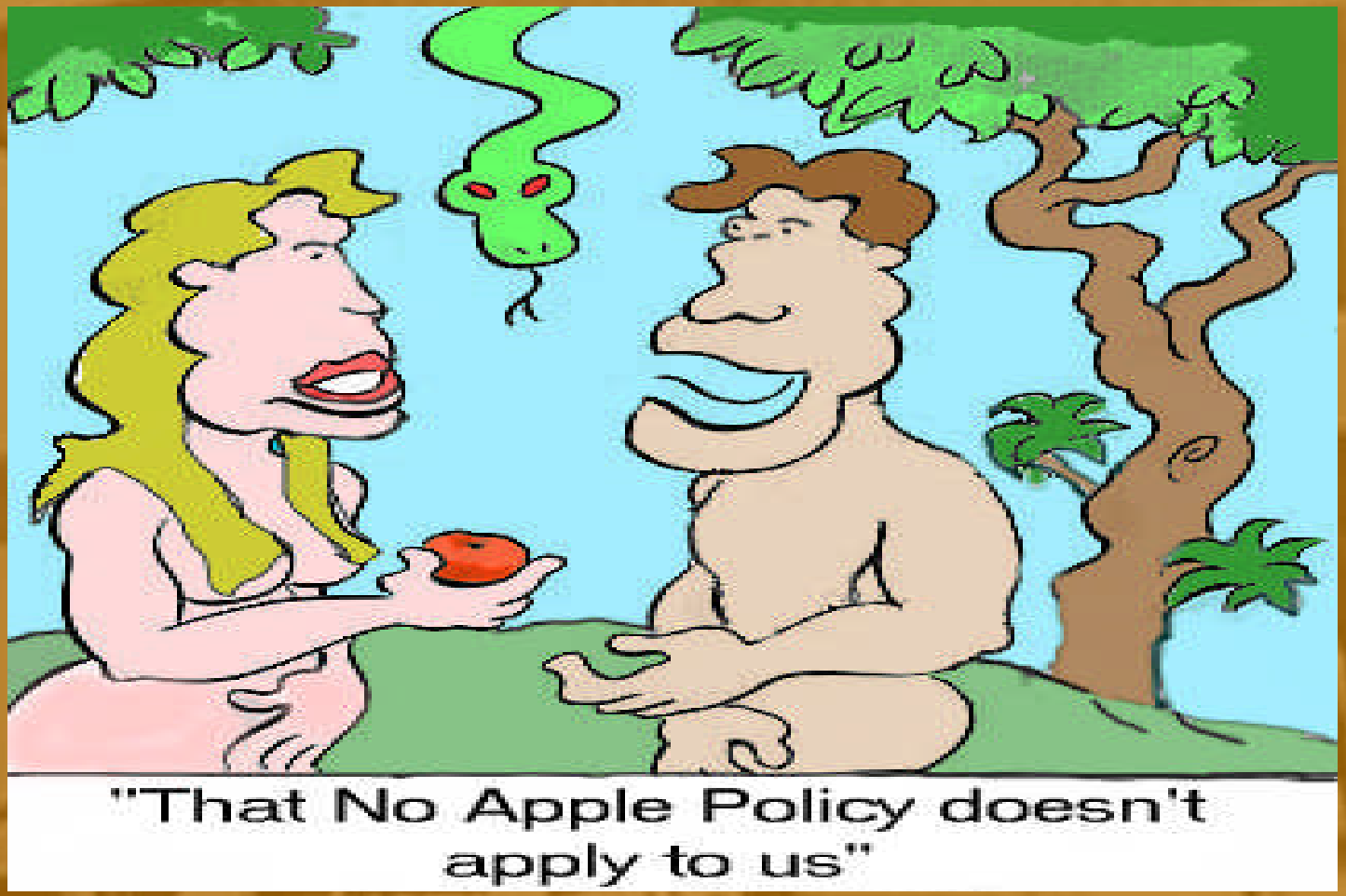
Objectives of the Fit For Work Indicator

- Help increase Safety awareness
- Encourage companies to develop effective supportive health education as part of their Safety Management System
- Provide an effective employee performance assessment system
- Provide immediate results to employees and supervisors
- Use personal profiles not community or industry standards
- If impairment is recognised, ensure that supervisors respond according to agreed Safety policies
- Provide a positive indication of the need for further evaluation

We Humans Have Been Making Errors For a Very long Time



And, Sadly, Will Continue To Do So For a Very Long Time

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Some errors cause us to go off the rails

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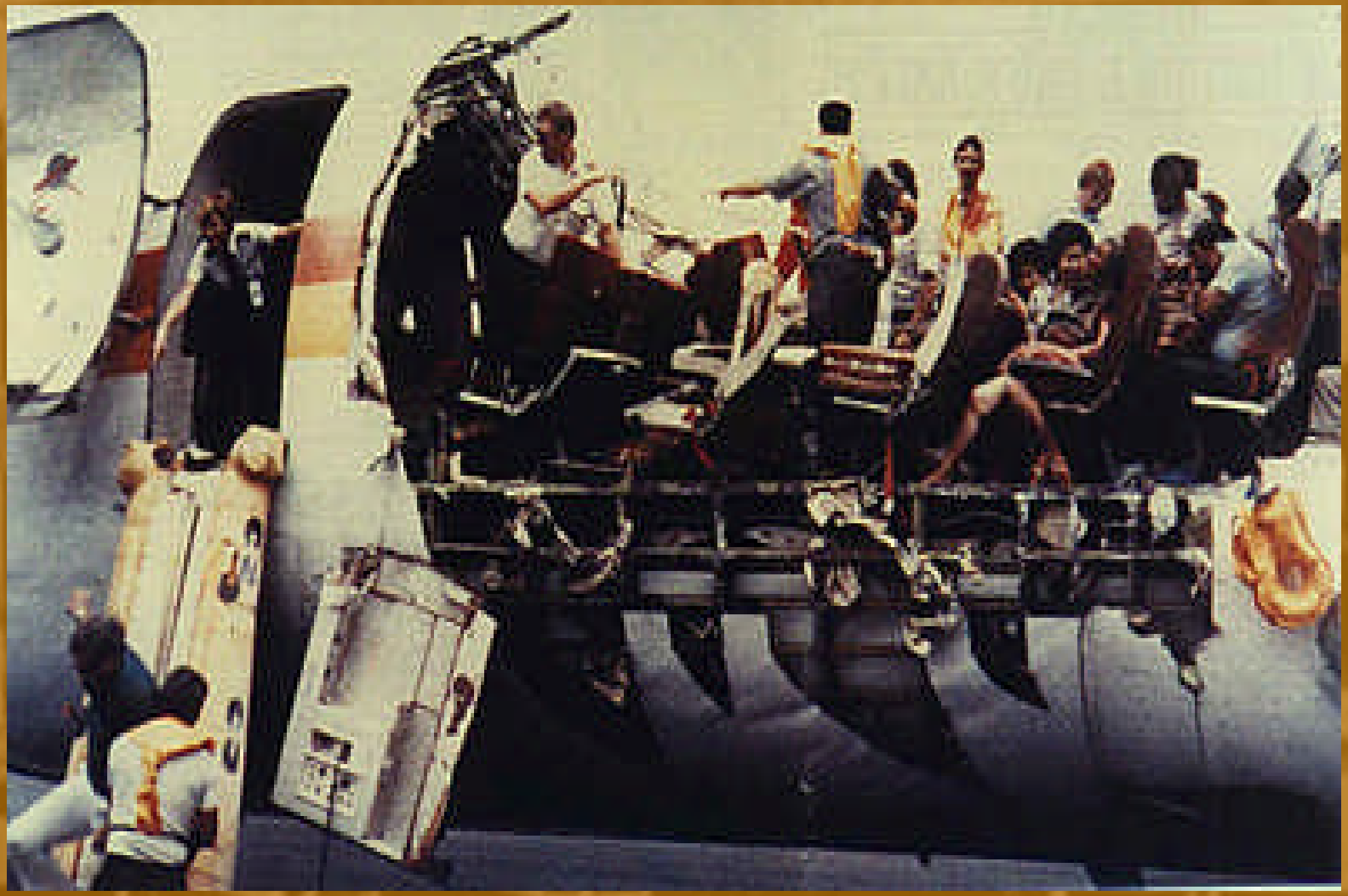
Others produce "Aerial Convertibles"



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But "Accidents" can be avoided and lives saved

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Because in most cases, "Accidents" are "Avoidable Incidents"

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Safety is a shared responsibility

Employers are legally required to exercise a "duty of care" for their employees and their customers;

Employees are responsible to report to their workplace fit for work.

But Are They?

It is YOUR Duty To Know

Usual types of fit-for-duty tests

Type of test	Tests for	Frequency
Breathalyzer	**Alcohol**	**Random**
Urinalysis	**Drugs**	**Irregular, due to cost**
Performance	**Impairment**	**Daily**

The Fit For Work indicator provides an impairment assessment system to assess each employee's performance before every work shift

Behavioural Performance Assessment Options:

Reaction

Visual Detection

Recognition

Deduction

FFW Tracking

Auditory Reaction

Logic

Paired Association

Decision Making

Divided Attention

Recall

Calculations

The Fit For Work indicator uses all four of these elements to deliver a performance assessment in just under a minute

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Reasons for impairment may be that their performance is impaired by one or more of the following

I'M SAFE =

I' - Illness

M - Medication

S - Stress

A - Alcohol

F - Fatigue

E - Eating

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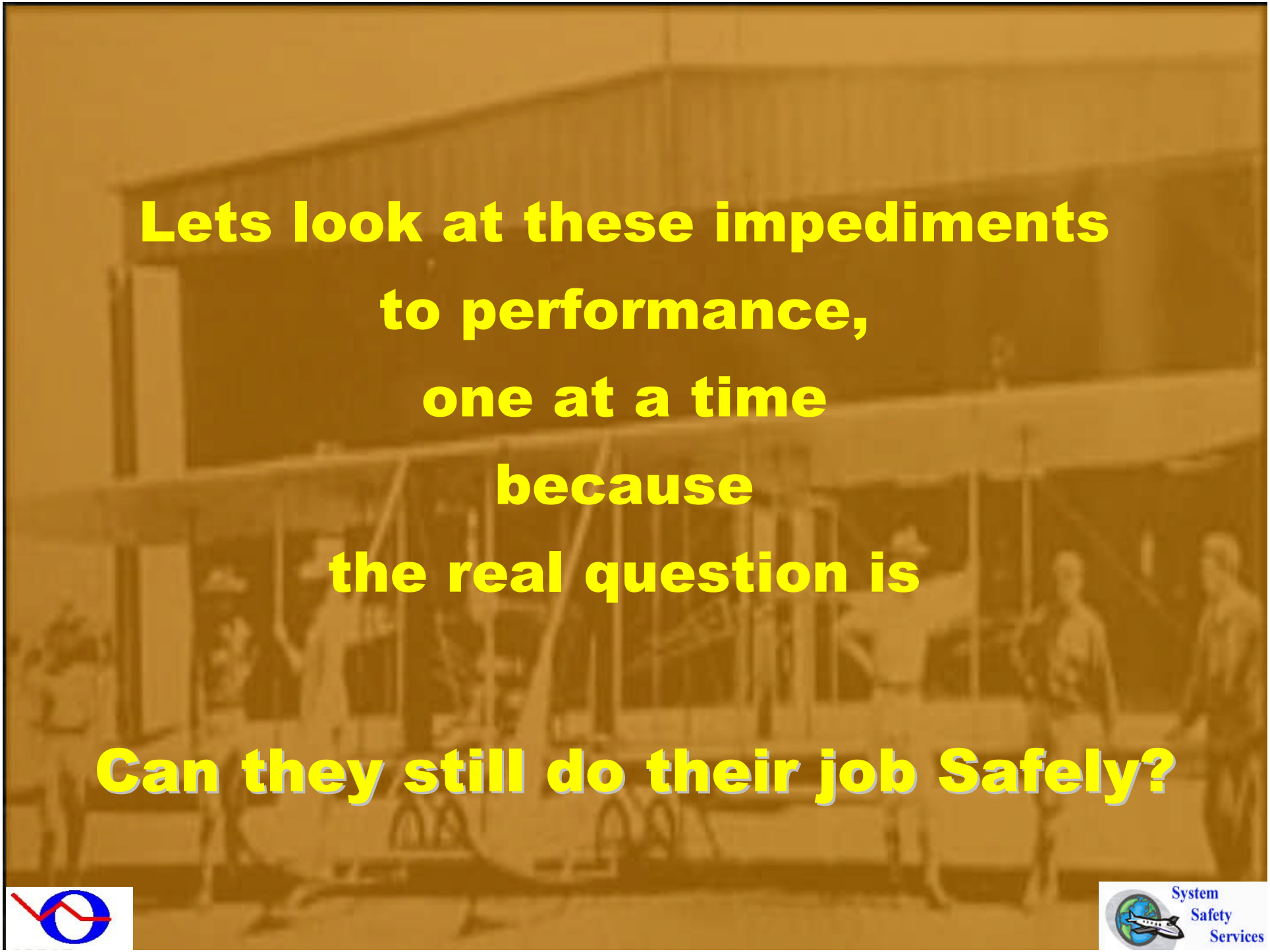
Lets look at these impediments
to performance,
one at a time
because
the real question is
Can they still do their job Safely?

I = Illness

- When ill, we all know that our ability to work is reduced and we will often stay home
- But some (YOU?) will still struggle to work for a variety of reasons; but

Can they still do their job Safely?

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M = Medication

Medication is any drug taken and may be:

- **Over the counter drugs that may cause drowsiness or other side effects**
- **Prescription medication with possible side effects**
- **Illegal drugs such as marijuana, cocaine, heroin, or others**

The effects of some drugs can remain long after they have been taken

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M = Medication

Medication is any drug taken and may be:

- **Over the counter drugs that may cause drowsiness or other side effects**
- **Prescription medication with possible side effects**
- **Illegal drugs such as marijuana, cocaine, heroin, or others**
- **All can impede your alertness, reaction time and performance, but**

Can they still do their job Safely?

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S = Stress

- Stress can come from any number of sources
- The most common sources are:
  - Home – relationship or financial
  - Work – Friction between self and boss or within the crew
  - Personal – Stress can occur whenever there is change (Positive or Negative) in your life
- Excess stress makes it difficult to concentrate on the job but

Can they still do their job Safely?

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A = Alcohol

- The socially acceptable drug of choice
- Excess amounts can lead to tragedy
- What constitutes an excessive amount will vary from person to person
- YOU can have 0.0 BAC (Blood Alcohol Content) and still be suffering from alcohol poisoning (Hangover) and/or alcohol related dehydration; but

Can they still do their job Safely?

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However, be aware that:

Drug and alcohol tests can detect traces of drugs and alcohol, but may not detect impairment because:

- **THC metabolites (marijuana) can last for weeks, long after impairment has gone;**

Alcohol poisoning and dehydration (Hangover) can impair people long after blood alcohol reduces below the legal limit or a company prescribed limit

The Fit For Work indicator performance assessments identify impairment, *whatever the cause.*

F = Fatigue

- Is the number one cause of human error
- Is a problem we have only recently begun to pay attention to
- Can be caused by a number of reasons, the most common being lack of sleep
- As you become fatigued, YOU begin to develop a "don't care" attitude
- For every hour of sleep debt one has, YOU can subtract 1 to $1^{1/2}$% off your IQ. (Dr. Van Horne)

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Just a Few Statistics

- Fatigue kills more people on the highways than drunk drivers
- But its hard to determine the level of fatigue when the driver (or employee) is dead
- Drunk driving fatalities are steadily dropping but fatigue fatalities are raising
- You are 5 times more likely to be involved in a car accident after a night shift than a day shift of equal hours

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Just a Few More Statistics

- 42 to 47% of truck driving accidents are due to Fatigue
- 60% of accidents occur between 10 pm and 6 am even though there is 75% less vehicles on the road
- The majority of serious aviation maintenance errors have occurred on the midnight shift
- Thus it is very important for you to know:

Can they still do their job Safely?

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E = Eating

- ✓ Lack of food leads to low blood sugar levels
- ✓ The wrong foods can lead to high blood sugar
- ✓ Lack of water leads to dehydration.
- ✓ Any of the three will lead YOU to lose mental alertness and feel fatigued
- ✓ YOU can be quite dehydrated (5% +) and not feel thirsty
- ✓ Drinking the wrong fluids can increase dehydration, but

Can they still do their job Safely?

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Many factors can impair an employee's ability to work Safely

The challenge is to be able to recognize their impairment before it is a risk to their and others Safety

The Fit For Work indicator will help YOU recognize when our employees may not be at peak performance in the workplace

That is an employer's "Duty of Care"

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Identifying possible impairment is only step one

The more difficult tasks are:

- Trying to identify the possible cause(s) of that impairment
- Selecting appropriate actions in the best interest of the impaired employee, other employees and the organization
- Determining what support to the employee may be necessary
- Determining what changes may be necessary to corporate policies and procedures

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The Fit For Work Indicator (FFW) Provides PERFORMANCE DATA

The performance data reports tell:

- **When was the assessments**
- **What was the results**
- **Who failed** (and who passed)
- **Where they are in the organization**

"Why is it so?"

"Why?" the person failed is for the organization to determine

The Fit For Work (FFW) Indicator

- ✓ Is simple
- ✓ Takes less then a minute a day to do
- ✓ Is non-intrusive
- ✓ Is based on each persons own performance history
- ✓ Will help a company to detect and assist an employee with problems before they get out of hand
- ✓ Will assist you in analyzing:

Can they do their job Safely?

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Here is how it is done

The test requires the participant to maintain a moving **+** in the middle of a circle for a specified period of time. **(About 40 seconds)**

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The FFW Assessment Terminal

- Custom designed and built
- Secure
- Robust
- Wall or desk mounted
- ISO 9001:2000 certified

Based on the test results:

YOU will be assessed as:

A

Proceed to work

B

Proceed to work – WITH CARE

C

Report to Supervisor

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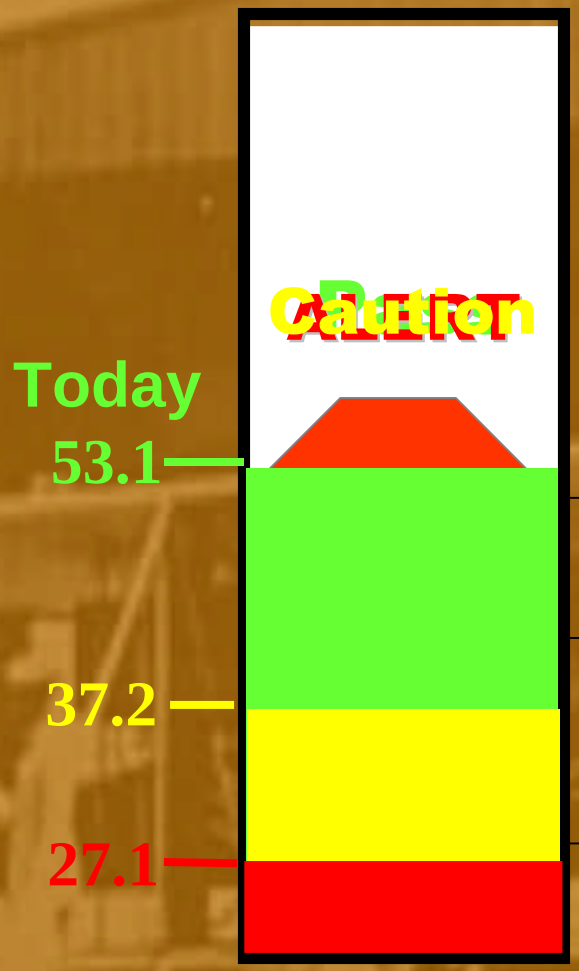
Results Display



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Personal Assessment Level (PAL)

PAL is a normalised score and therefore cannot be used as a pre-selection tool.

PAL		
80	>80.0	Suspiciously high assessment
70	Pass 40 to 80	Good result - within profile
60		
50		
40	Caution	Proceed to work - with caution
30	Alert	Probability of impairment
20	<20.0	Probability of serious impairment

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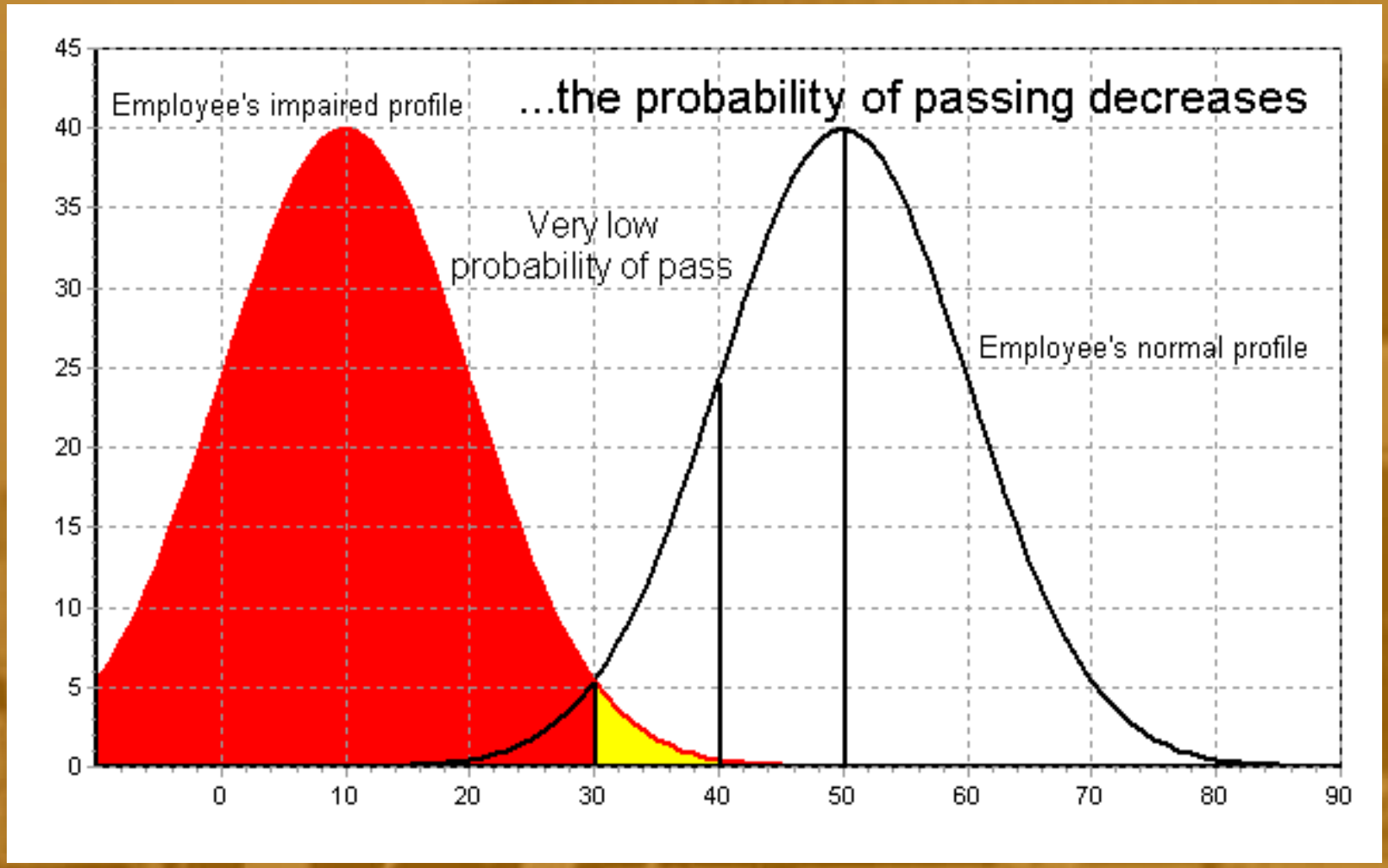
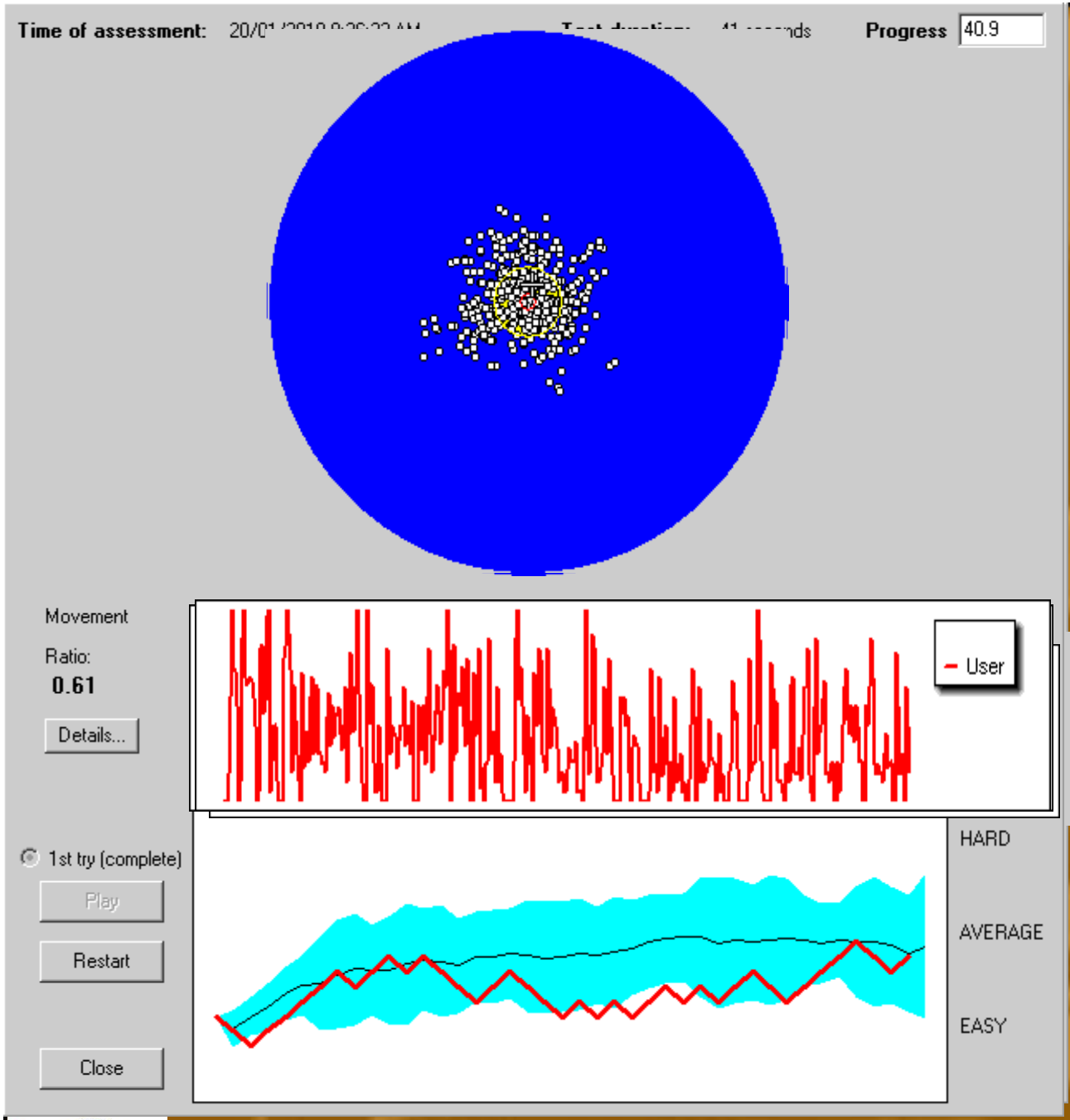
Increasing probability of ALERT



What occurs as an employee's performance becomes increasingly impaired



FFW

Assessment Review

- Assessment scatter
- Cursor movement

Assessment jitter

Trackball movement

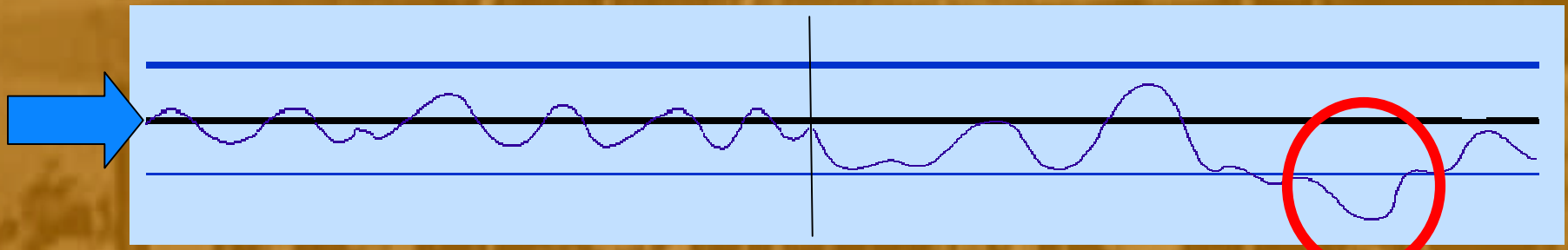
- **Performance profile**

Profile outline

This assessment

The Assessment

- Each person develops a personal profile (PAL)
- The average of these is like the centre line on a road



OK

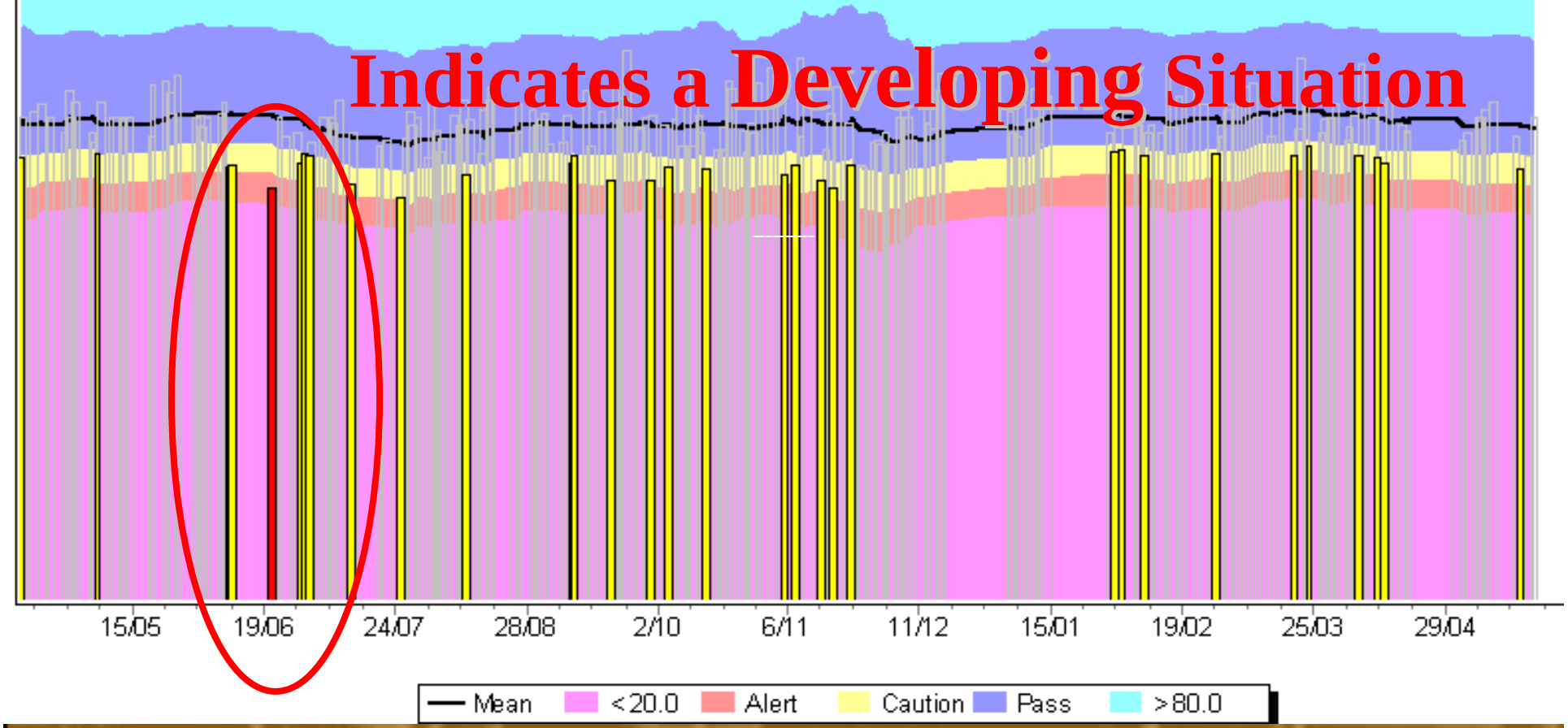
IMPAIRMENT RISK

Consistency Report

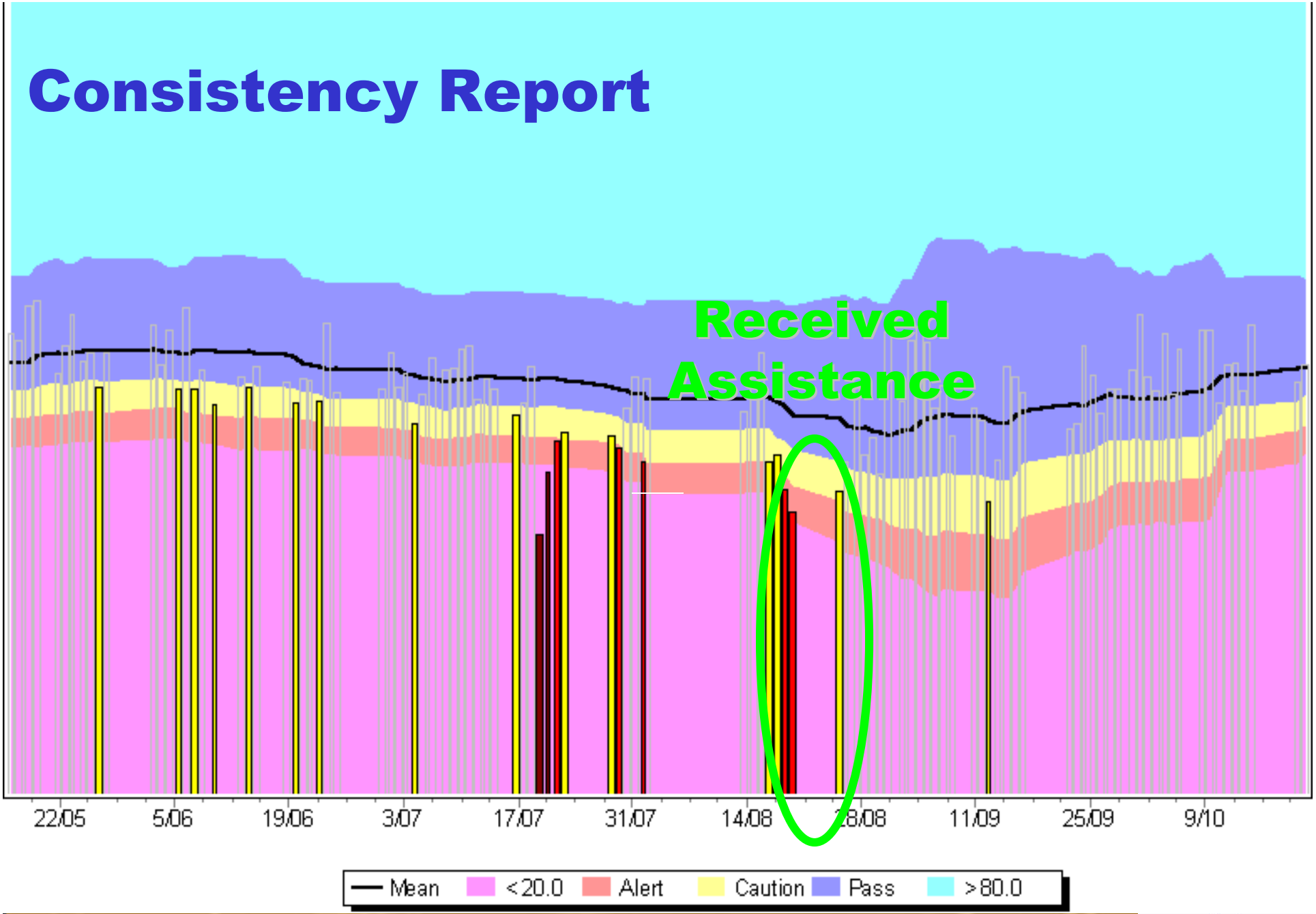
How often does he/she run off the road? Once

But look at the "caution - proceed with care" warnings 31 in one year

Indicates a Developing Situation



Consistency Report



Current Types of Events Reported

- **Alert**
  Alert events. Failing to perform to the normal profile

- **No-show**

  Employee has failed to assess at the scheduled time

  Not on site? Running late? On site but failed to assess?

- **Unscheduled**
  Employee has completed an assessment outside the scheduled time, or is not rostered at this time
  Early? Late? Casual?

- **All Events must be actioned by a Supervisor**

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Supervisor Responsibilities:

- Must comply with agreed policy
- Must exercise their “duty of care”
- Must be based on the employee’s assessment details and history
- And actions may include, for example:

1. Discuss likely causes with employee
2. Refer for medical assessment
3. Allow employee to work
4. Assign to alternate duties
5. Refuse permission to work

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Suggested Supervisor Actions

Action	Applies to Event types:		
	Alert	No-show	Unscheduled
Compassionate leave	x		
Counseled	x	x	x
Referred back to referrer	x	x	
Referred for BAC test	x		x
Referred for breath-analysis	x		x
Referred for counselling	x	x	x
Referred for urinalysis	x		x
Referred up to next level	x	x	x
Sick leave	x		x
Suspended	x	x	x
Terminated	x	x	x
Unpaid leave	x		x
Verified call-back			x
Verified extra shift			x
Verified over-time			x

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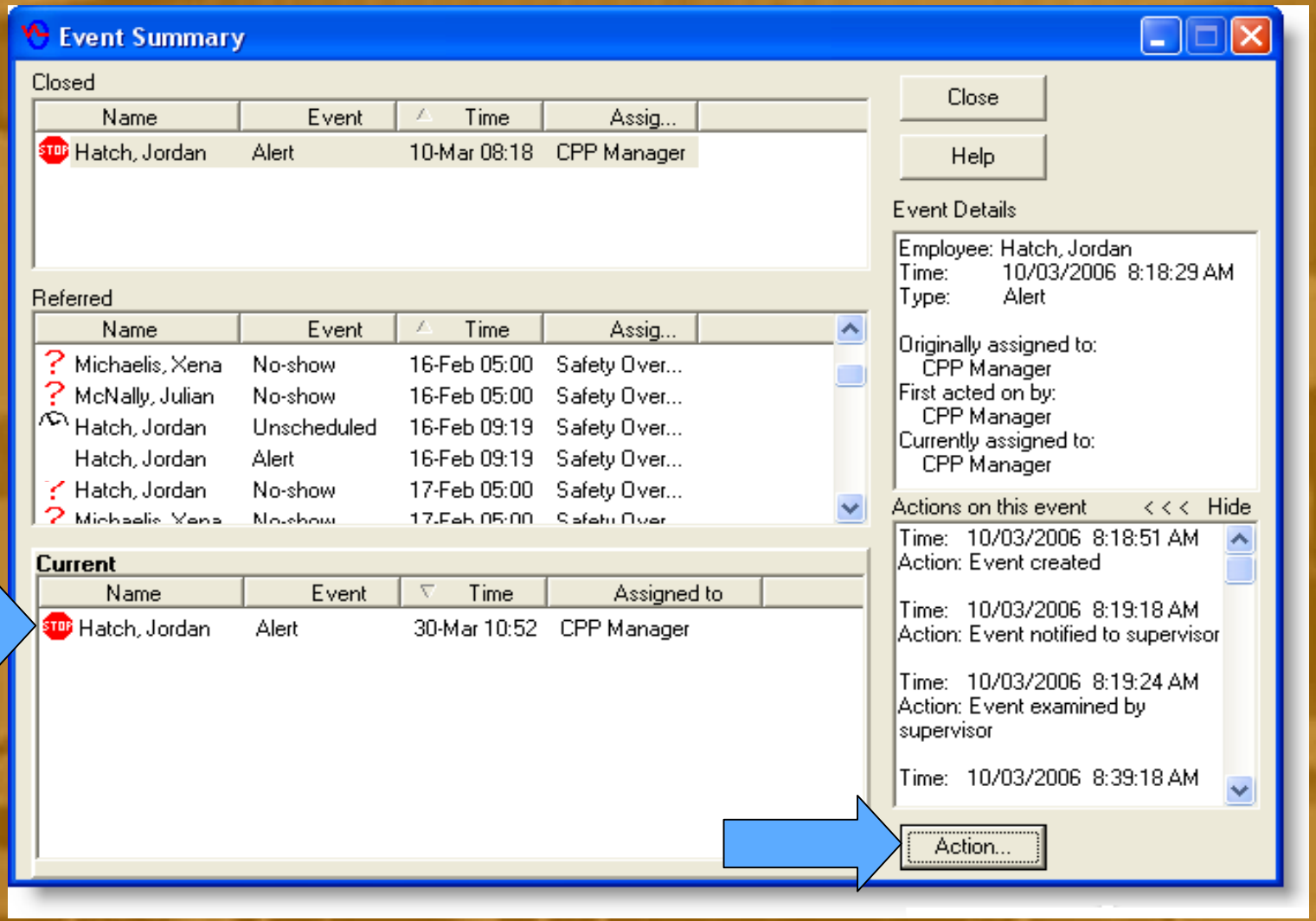
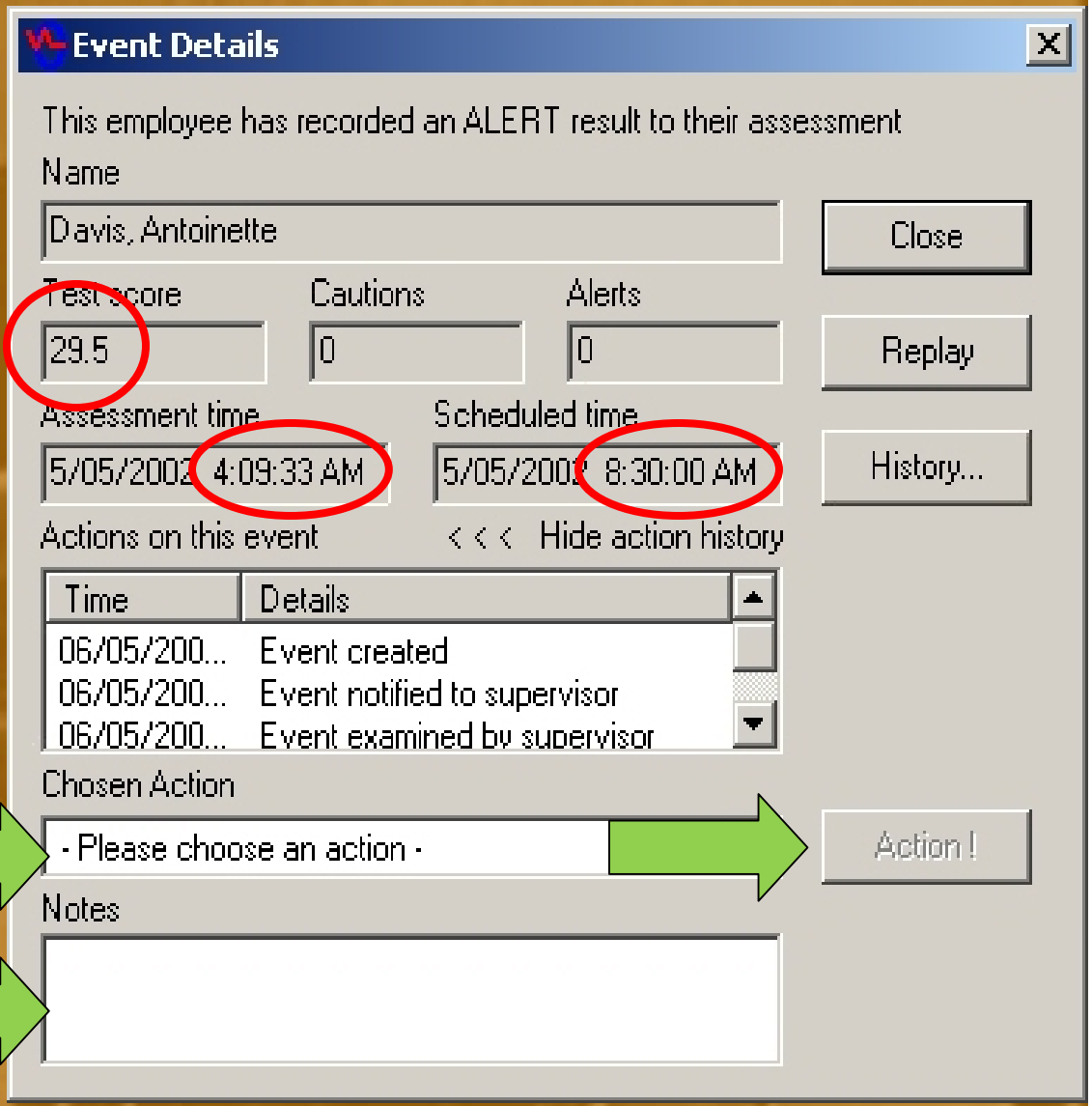
Supervisor's Event Summary Window



Action Procedure

1. Review assessment details
2. Review assessment history
3. Initiate action.

   (Interview Process)
4. Record action taken
5. Record notes.
6. Save changes



Reports Aid Risk Management

- Enable Safety staff to examine trends and possible causes of events, such as rosters, environmental or social issues
- Contain: Historical or current data

  Individual or group trends

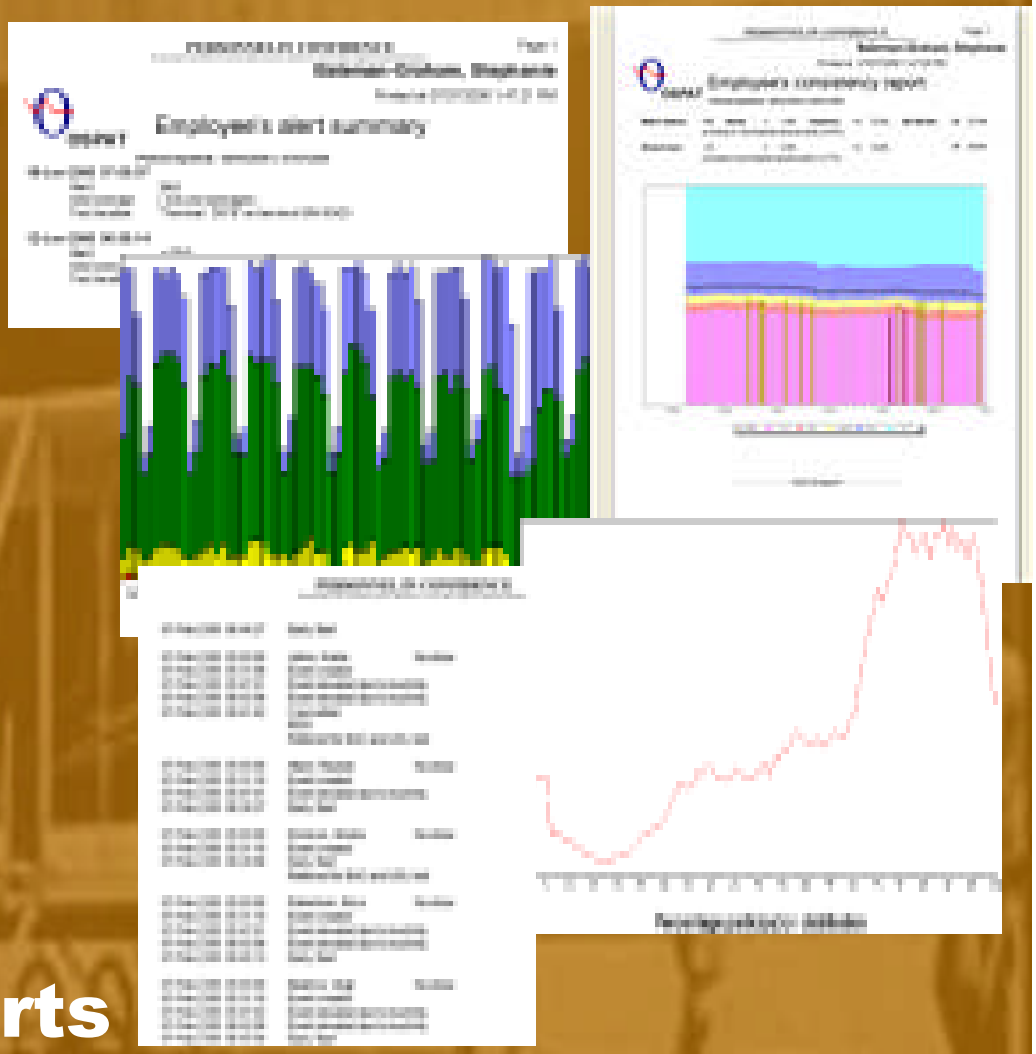
  Program participation and compliance

  Access is restricted to "need to know"

  Available in:
  - graphical,
  - list and
  - export formats

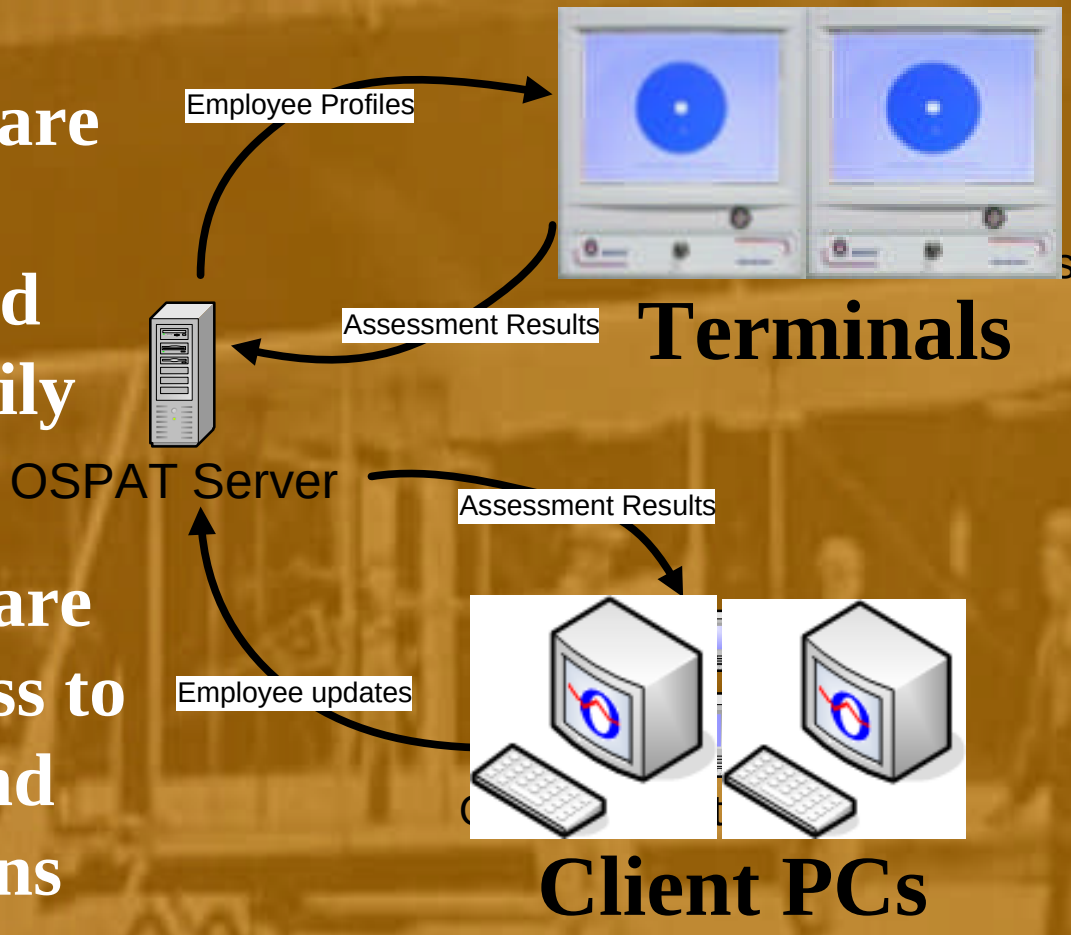
Example Reports

- Daily Safety report
- Shift summary
- Alert summary
- Active employees
- Group comparisons
- Consistency report
- System log
- Custom export reports



FFW Information Flow

OSPAT Server software manages secure movement of data and updates terminals daily



OSPAT Client software provides secure access to assessment results and management functions

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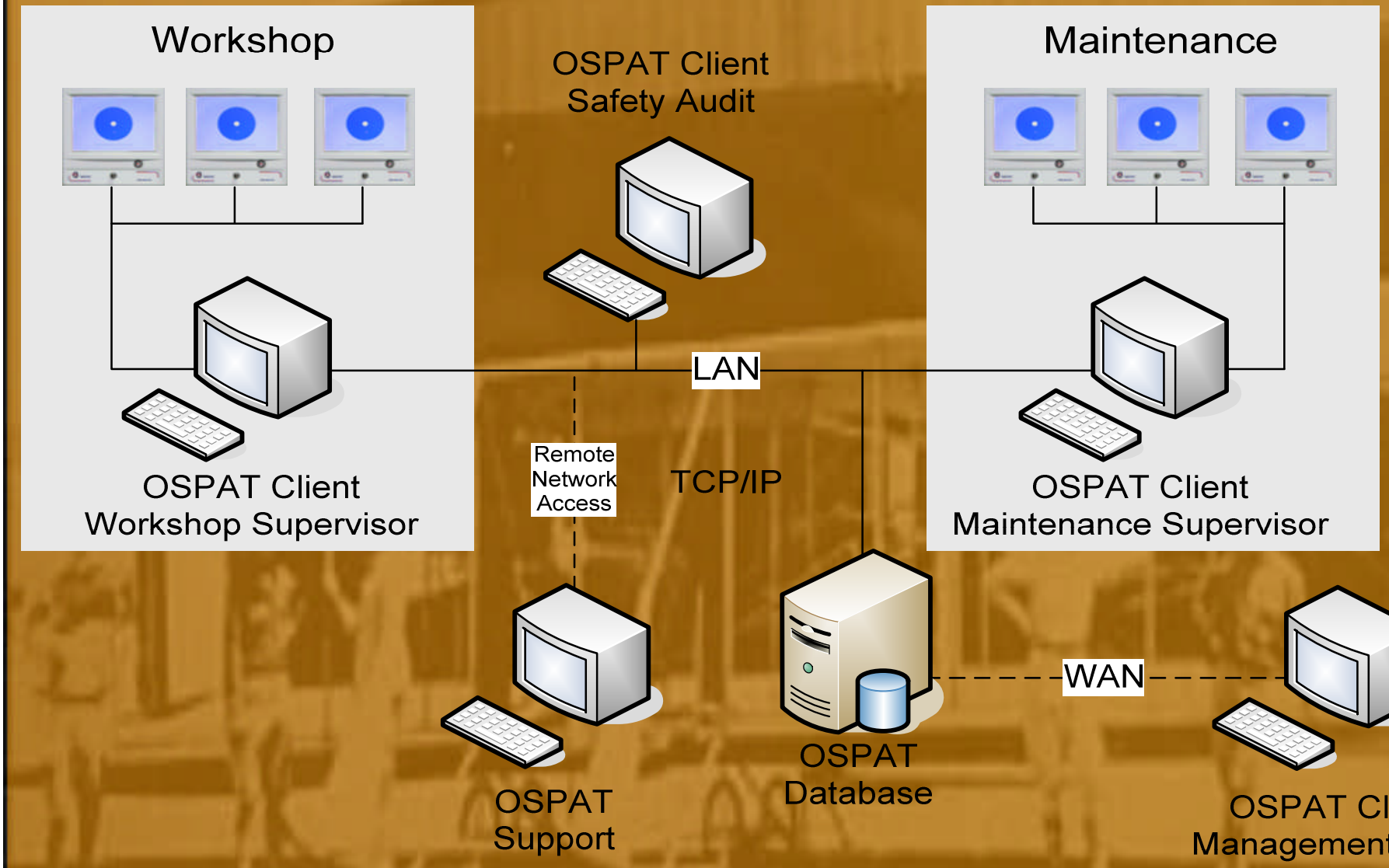
FFW Network Overview



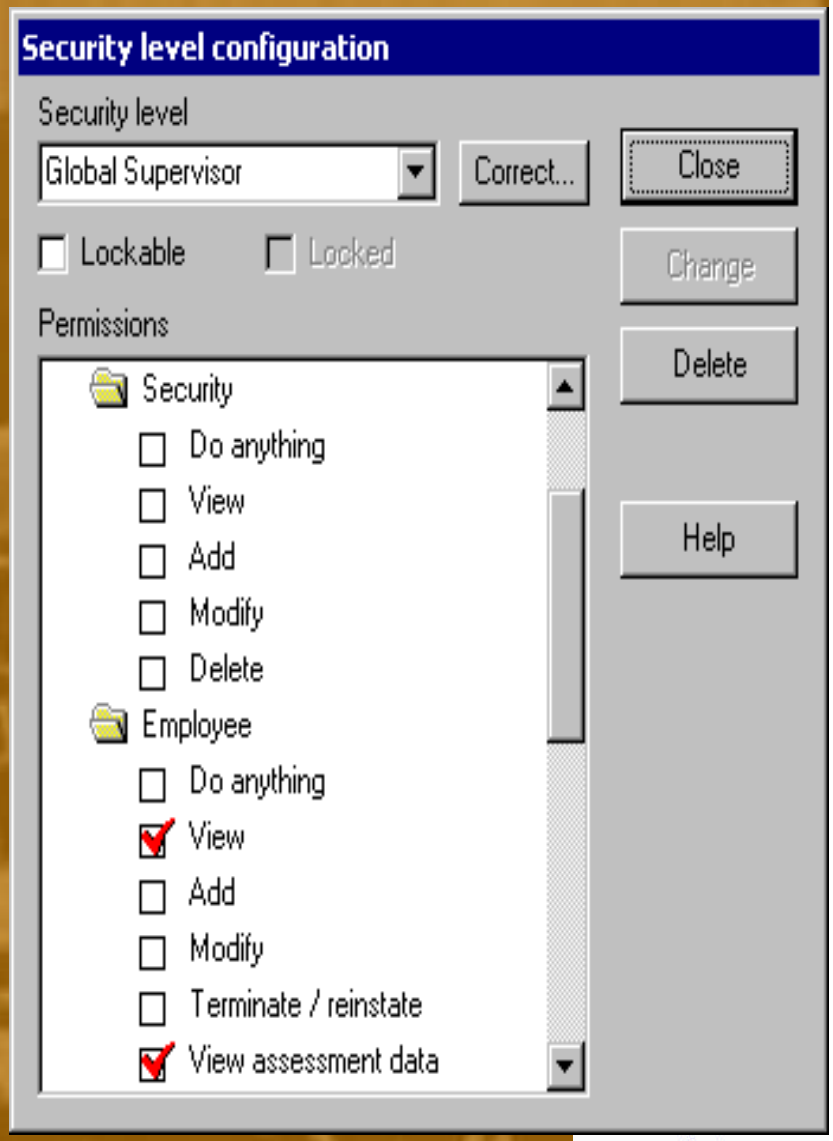
Ensuring Privacy

Only authorized users may:

- configure system parameters
- grant or change user permissions
- view employee details
- view assessment results
- run reports
- etc.

The system is designed to protect client data against any misuse.

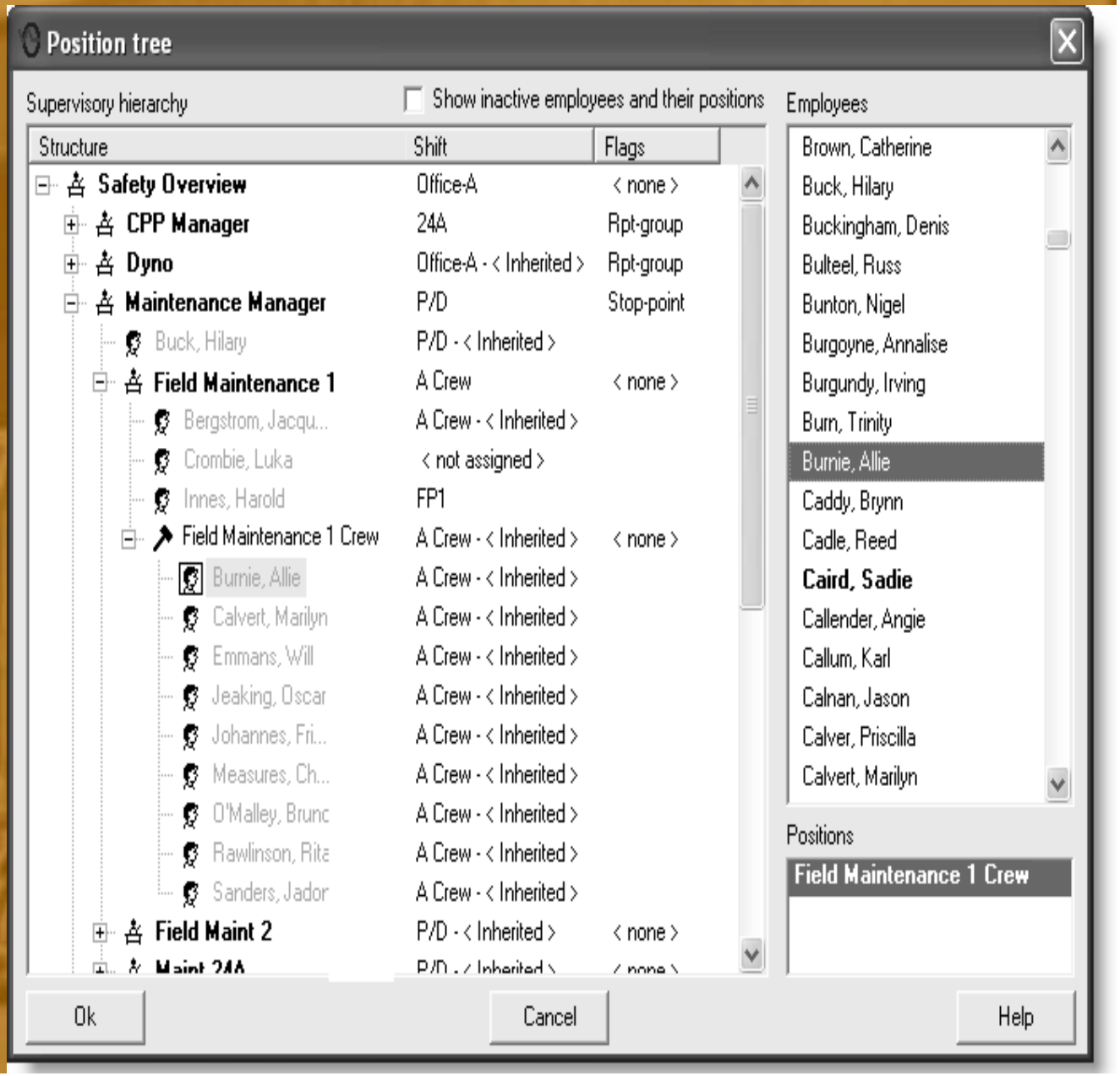
Special features provide secure transmission of data



The Position Tree

Represent Safety reporting relationships

Organise employee work groups and shift assignments



Assessment Summary View

Based on the common Position Tree

Instant review of the last 12 hours of results

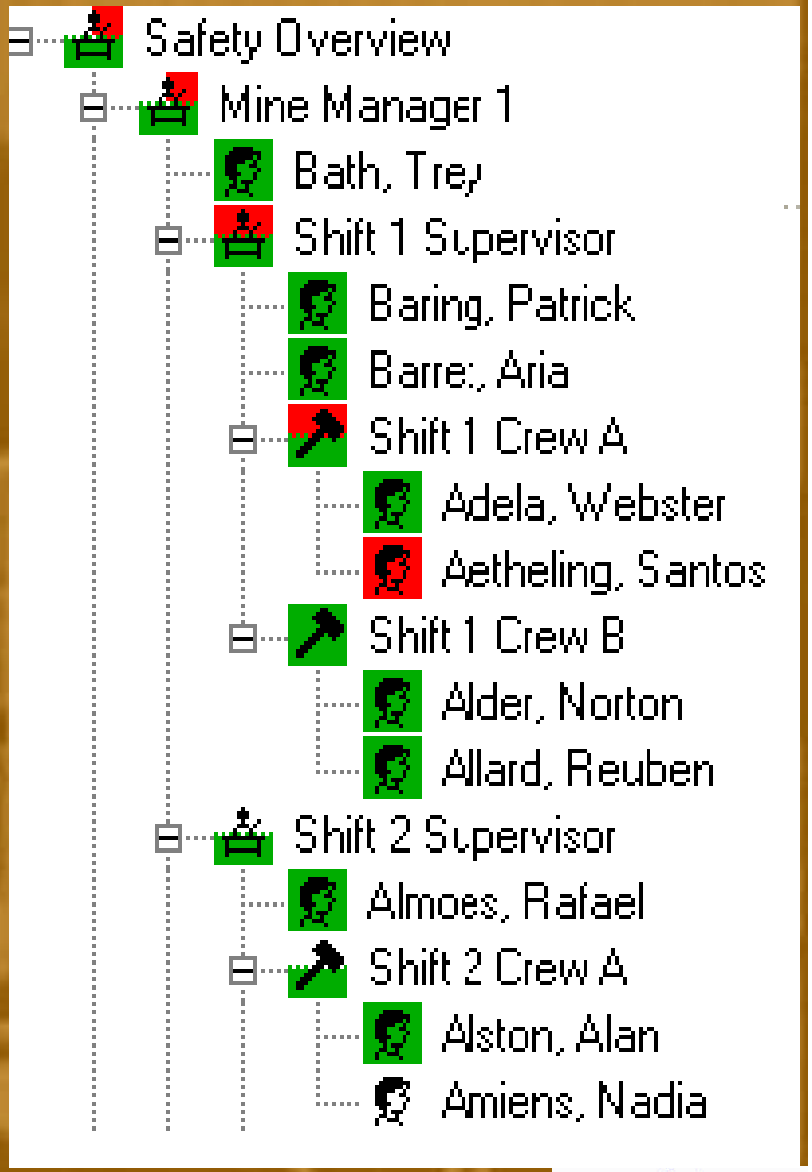
Colour coded:

Green = pass

Yellow = Caution

Red = Alert

White = No recent assessment



Additional Benefits and Options

- Emergency response:
  - "Rescue team" identification and report
  - Emergency assembly area lists
- Random D&A test selection and notification
  - Selection schedule is set to reflect policy
- Integration with process control systems
  - e.g. Truck control systems only unlock for employees who have passed their assessment
- Biometric and security card identification
  - Customised support service where required

Assessment Booths

Can come in a variety of styles & colours

Conclusions

- The Fit For Work Indicator provides a comprehensive fit for work assessment system to help organizations improve health, Safety and risk management.
- The assessment is sensitive to many causes of performance impairment.
- Assessments are non-invasive and the system addresses the important issues of privacy

Note: **OSPAT has been operating the FFW for over 15 years and currently has over 20,000 people registered In Australia, the USA and South Africa for impairment assessments every time they report for work.**

Fit for WORK ***Fit for LIFE***

"It is a question of Safety"

Thank You

Any Questions?

"Sorry, but our new Mark Four "Fit For Work Indicator" indicates that you're not thinking SAFETY today."

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Thanks for taking the time to learn a little about this exciting new Safety tool and have a Safe career

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