

# Ellis Nester Left a Valve Open!

Bob Nelms

Failsafe Network. Inc.

[www.failsafe-network.com](http://www.failsafe-network.com)









CISCO IP PHONE  
7940 SERIES

7712-9  
Your current options  
Hold New Call/End Call



CISCO IP PHONE  
7940 SERIES

7713-9

Your current options  
New Call Forward

Microsoft Word Document

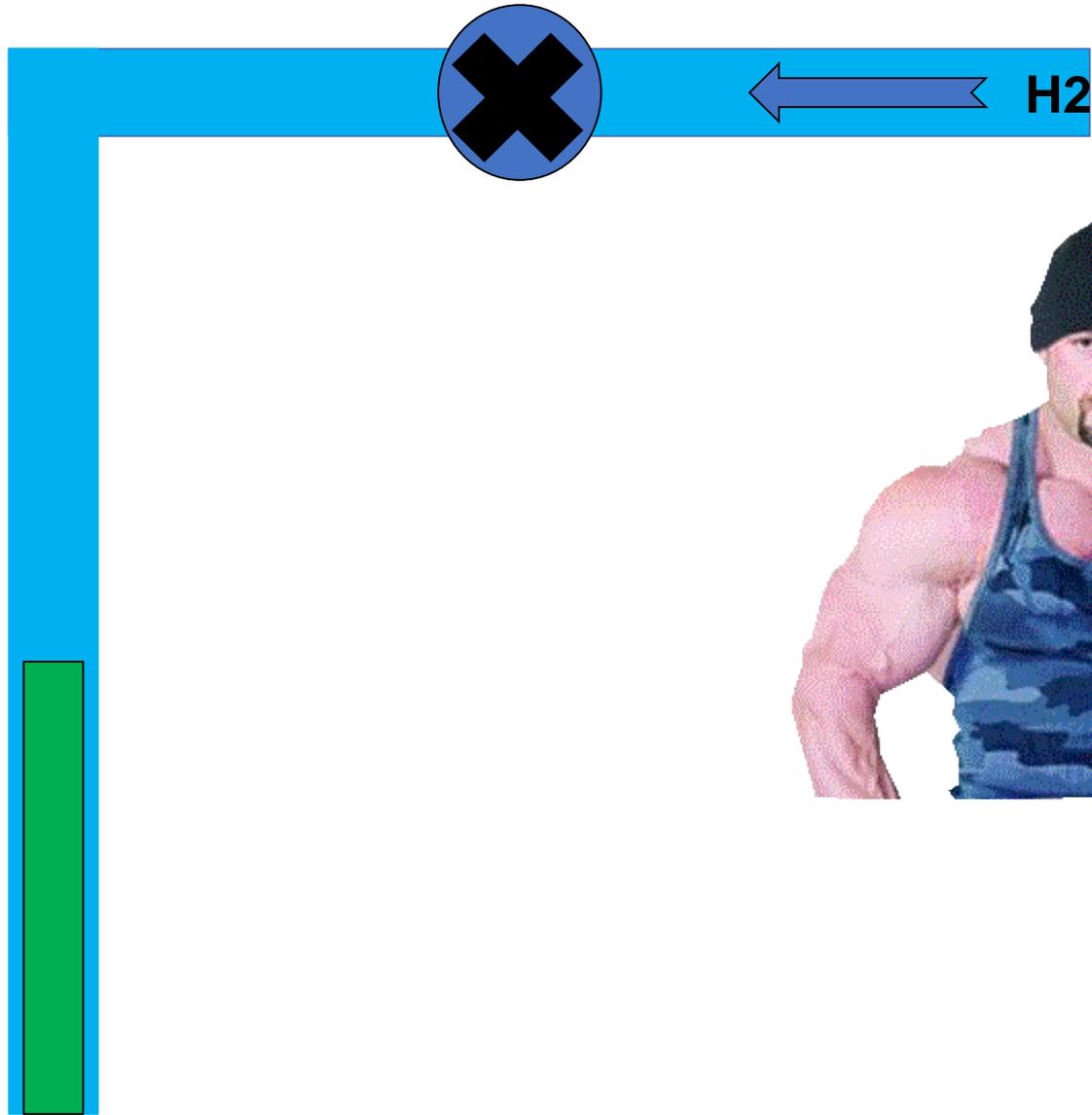


*They want you to  
lead a Root Cause  
Analysis*

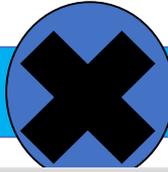


*Ellis Nester  
left a valve  
open!*

Isolation Valve



# Isolation Valve



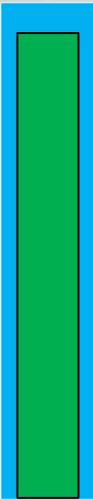
**Checklist: Trip planning for Covid-19**

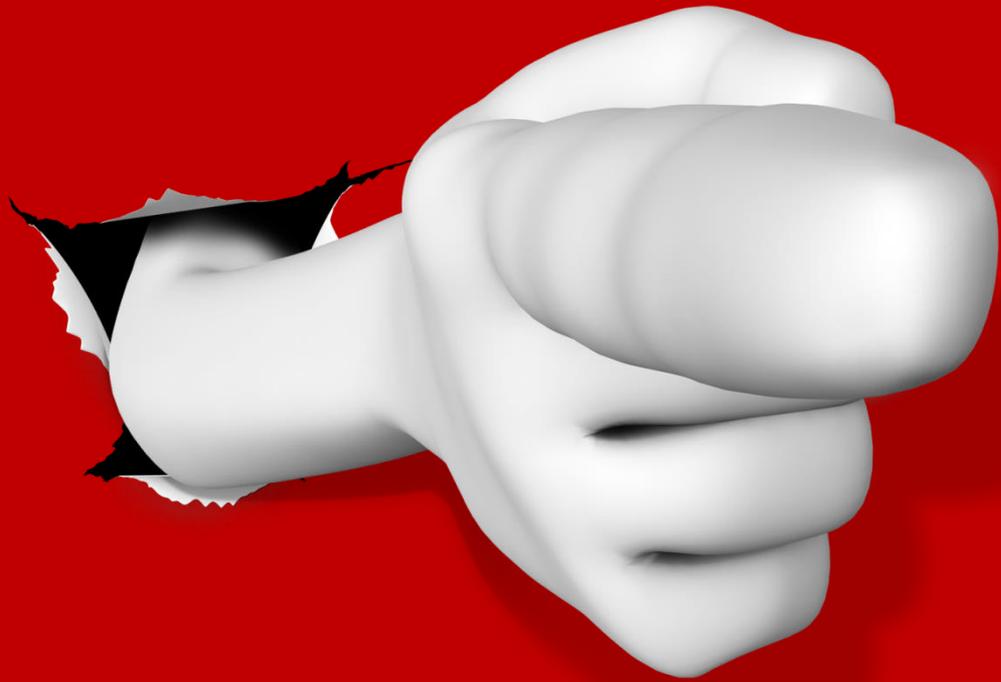
Item	Considerations	Notes	Action
<b>Airport</b>			
Check for each airport planned to. Some of these are routine and not Covid specific, but they are included as a reminder.			
<b>Airport</b>	Check availability, status, restrictions, local Covid-19 status. Research regulations that country is operating on for current status. Review flightcards.		
<b>Opening Hours</b>	Daylight hours left? Runway lights? Any restrictions to land? Any Covid-19 changes to hours?		
<b>Customs</b>	International flight requires customs - Is an Airport of Entry in operation. Customs can be postponed to domestic airports. Health considerations? Check customs hours changes for Covid-19.		
<b>Visas</b>	Do you need a visa for this stop? Destination? Check?		
<b>Health</b>	Any Covid quarantine rules on arrival?		
<b>ATC</b>	Check ATIS hours availability, availability of instrument approaches, any procedure changes.		
<b>Runway Length</b>	Check that runway condition is suitable for landing gear for aircraft weights. Check aircraft performance vs. weight and		
<b>Fuel Price</b>	Compare fueler to contract fuel price.		
<b>Fuel Availability</b>	Any recent supply issues?		
<b>Runway Hours</b>	ATIS in AICN. Can usually be included with Airport permission but not by itself.		
<b>Strength</b>	Is this the right airport for the stop? Domestic or international. Is there a full medical support there today?		
<b>Weather</b>	Any low factors eg. Windy/icing fog. Winter ops.		
<b>Handling</b>	Is there a reliable ground handler? For BA, is there an H2 in handling capability?		
<b>Maintenance</b>	Availability of aircraft gate tech.		

Item	Considerations	Notes	Action
<b>Passenger processing</b>	Customs delays, need for larger aircraft? Check in times and "Passenger terminal" vs "terminal"?		
<b>Noise restrictions</b>	Curfew hours, APU start prohibitions, aircraft type banned?		
<b>Security</b>	Any risk? Crime, political instability, terrorism, medical.		
<b>Fire and Rescue</b>	Compare NF category to your requirements. Check helipads for any Covid-19 arrangements.		
<b>GH Equipment</b>	Any need for airbrakes, APU, cargo offload, fuel containers, GPU required? Check and.		
<b>Prior reports</b>	Check company reports, OPS/GRUP Airport Day, Ops/Aviation group/flight. Any comments that may cause concern?		
<b>Regulatory requirements</b>	Can we land here? Eg. USA Border overflight rules, Mexico: Customs? Approaches that etc.		
<b>Enroute</b>			
Check for each FIR enroute			
<b>Airspace</b>	Entry requirements, H.A. North Atlantic, RVSM, etc.		
<b>Comms</b>	HF, CPDLC, VHF #333, Datalink		
<b>Navigation</b>	DBP, RNAV requirements		
<b>Surveillance</b>	ADS-B, ADS-C, Mode S		
<b>Permits</b>	Complexity, lead time, any Covid-19 additional documents required?		
<b>Risk</b>	Shoeborn not? Check SubAirspace not		
<b>Closures</b>	Any specific report or potential airspace closures due to Covid-19?		
<b>Engine failure</b>	Consider whether we want to be in this airspace in an emergency (check regarding a divert) engine, fuel, medical, airport approval.		
<b>Star Ops</b>	Equipment/Star ops needs met?		
<b>Aircraft type, registration</b>	Some countries will not allow to land manufactured or registered aircraft under the FIR or land. Review registration and approval from the country. Any updates.		

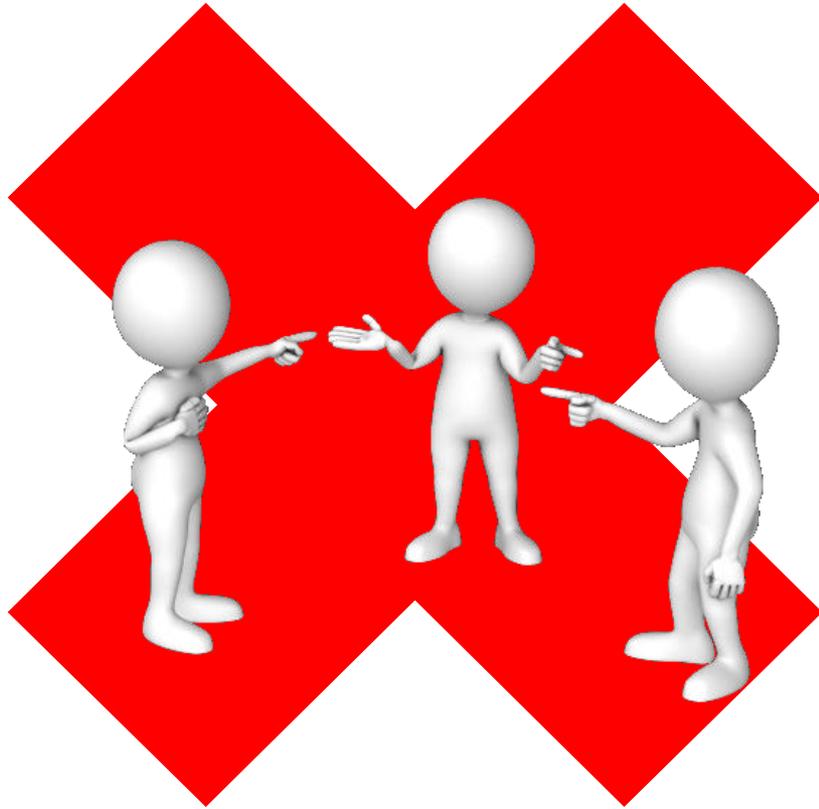
**Checklist: Aircraft supplies (Covid-19)**

Item	Notes	Quantity	Checked
<b>On board - additional Covid-19 stock items</b>			
<b>Surgical Masks</b>	For crew For passengers		
<b>Gloves</b>	For crew For passengers		
<b>Goggles</b>	For crew For passengers		
<b>Capes</b>	For crew For passengers		
<b>Hand Sanitising Gel</b>	For crew For passengers		
<b>Disinfecting Wet Tissues</b>	For crew For passengers		
<b>Approved Aircraft Disinfecting Spray</b>	For crew For passengers		
<b>Infra-red Thermometer (contactless)</b>	For crew For passengers		
<b>Universal Protection Kit (UPK)</b>	For crew For passengers		
<b>Biohazard Bags</b>	Additional to those in the UPK for disposal of masks, gloves.		
<b>Passenger Locator Cards</b>	For crew For passengers		
<b>Overnight PPE Kits</b>	For crew For passengers		
<b>Crew cleaning kits</b>	For crew For passengers		





# No Blame



# Required Introspection



A photograph of an airport waiting area with rows of blue plastic chairs. In the background, there is a glass door with an 'EXIT' sign and an 'AIR CANADA' logo. A vending machine is visible on the left. A white speech bubble with a blue border is overlaid on the center of the image, containing the text 'Ellis Nester left a valve open!'.

Ellis Nester  
left a valve  
open!

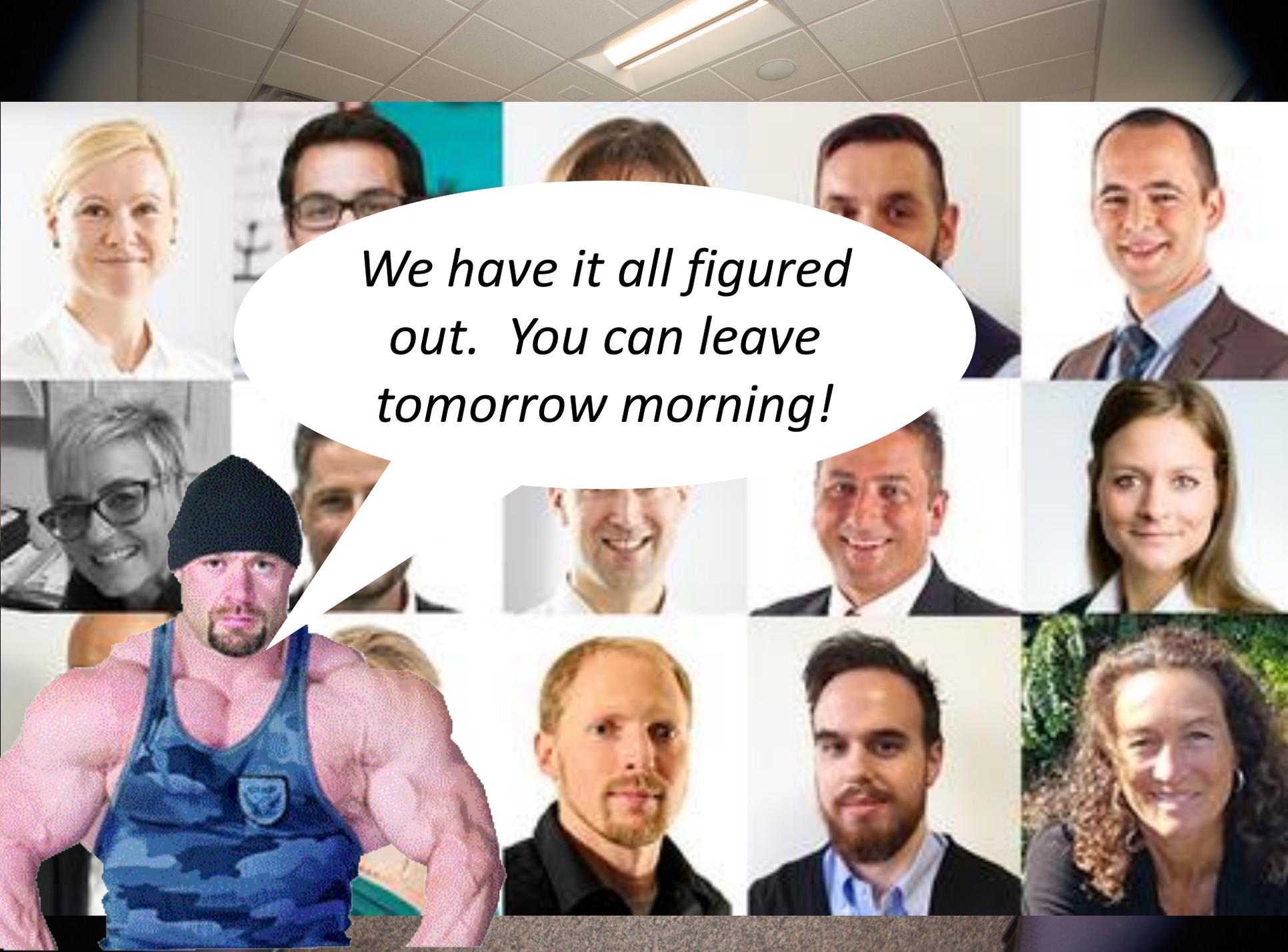
**What thoughts or feelings are you experiencing right now?**

Please use the CHAT box.



SAWRIDGE INN  
AND CONFERENCE CENTRE  
JOY WOLFE



A collage of diverse business professionals' faces, with a speech bubble in the center and a bodybuilder in the bottom left. The background is a grid of various people's faces, mostly men in business attire, with a few women. A large white speech bubble is centered over the collage, containing the text. In the bottom left corner, there is a cutout of a very muscular man wearing a blue camouflage tank top and a black beanie.

*We have it all figured out. You can leave tomorrow morning!*



# The 5 Items

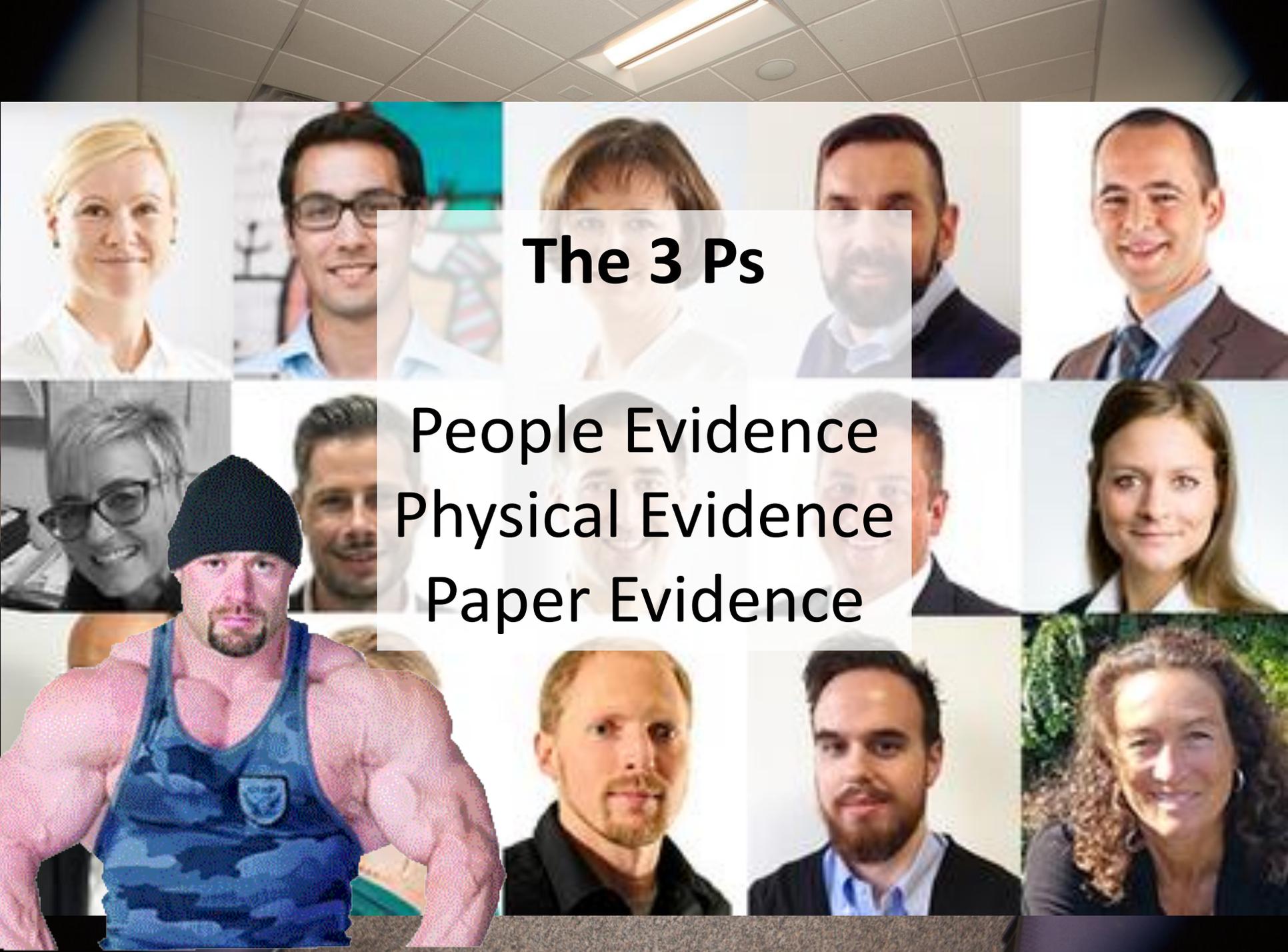
Problem Statement

Schematic

Relationship

Sequence

Oddities



# The 3 Ps

People Evidence  
Physical Evidence  
Paper Evidence

**Why might “ignorance” be so important when trying to understand the causes of a serious incident?**

Please us the CHAT box.





*Something wrong  
Nelms?*



*I need a second ignorant person!*





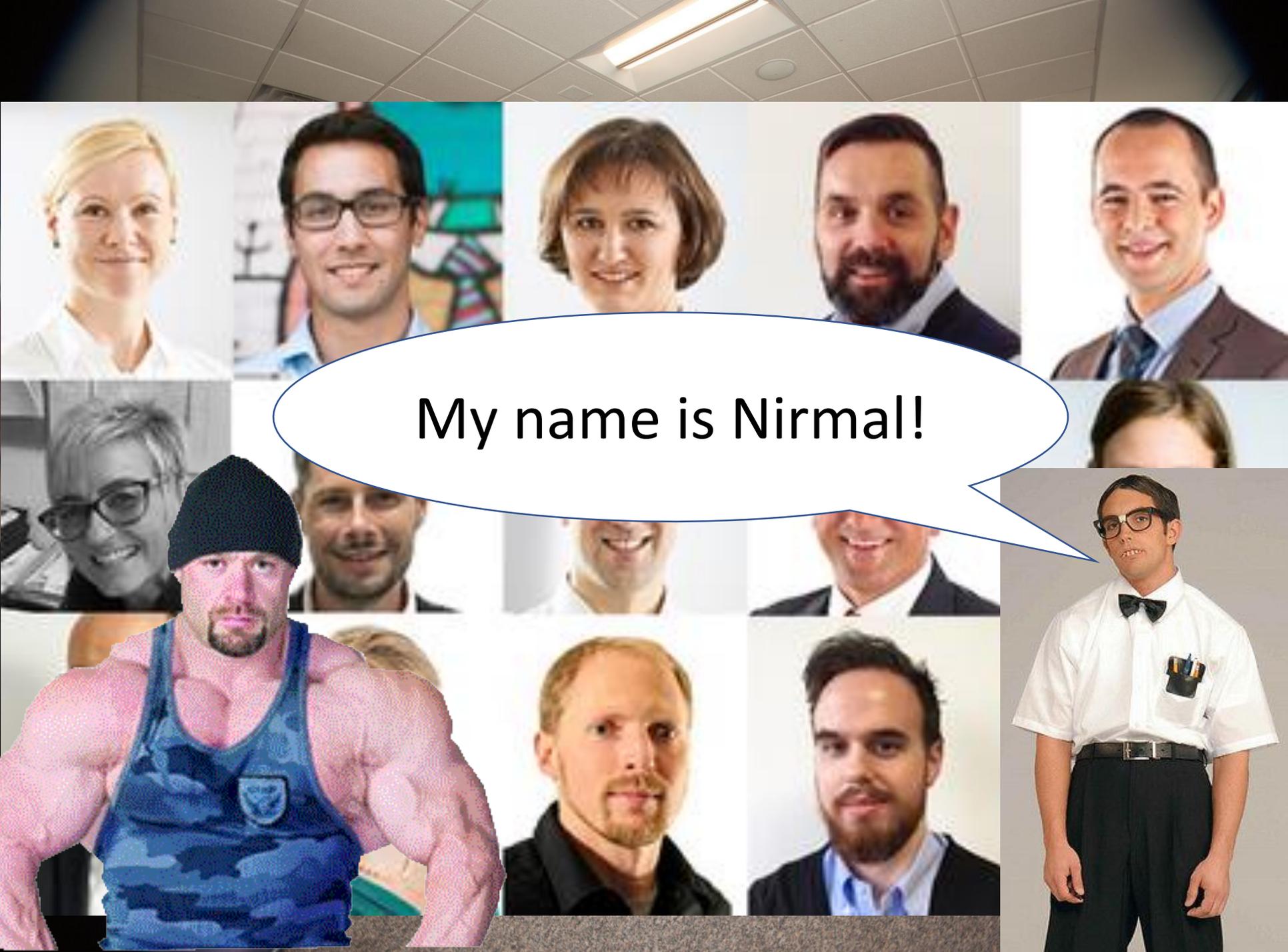
**RAGE!**











My name is Nirmal!



# The 5 Items

Problem Statement

Schematic

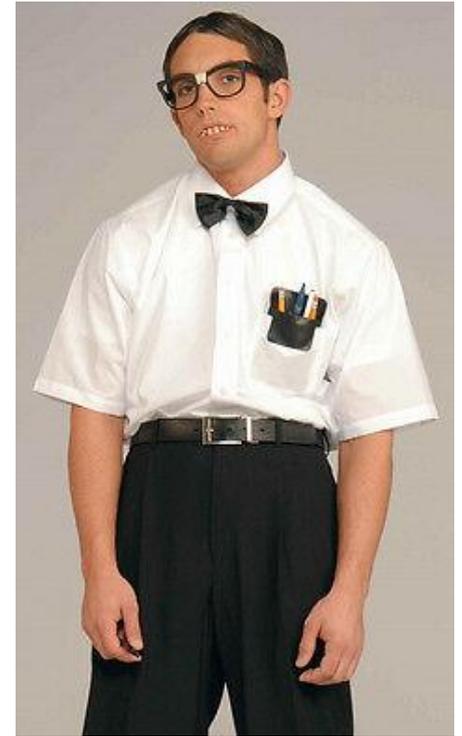
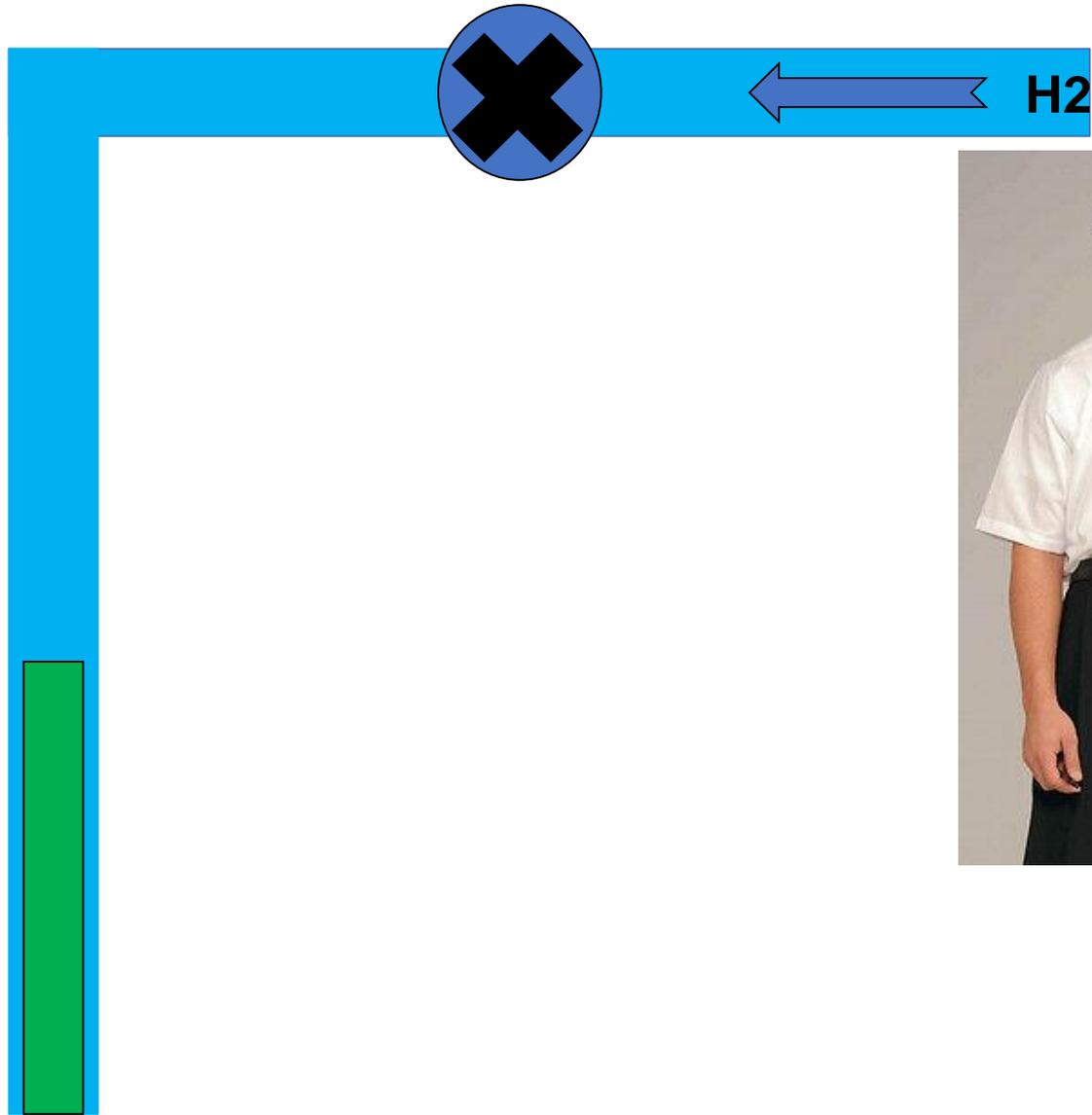
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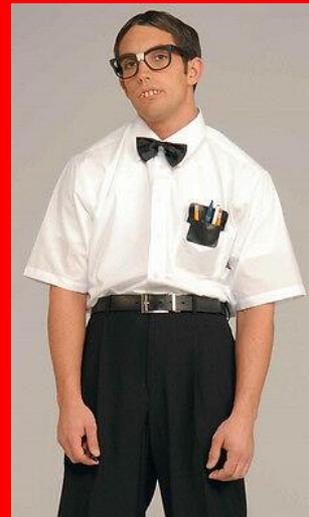
Isolation Valve



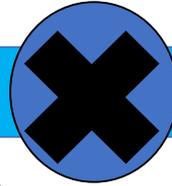
# RAGE!



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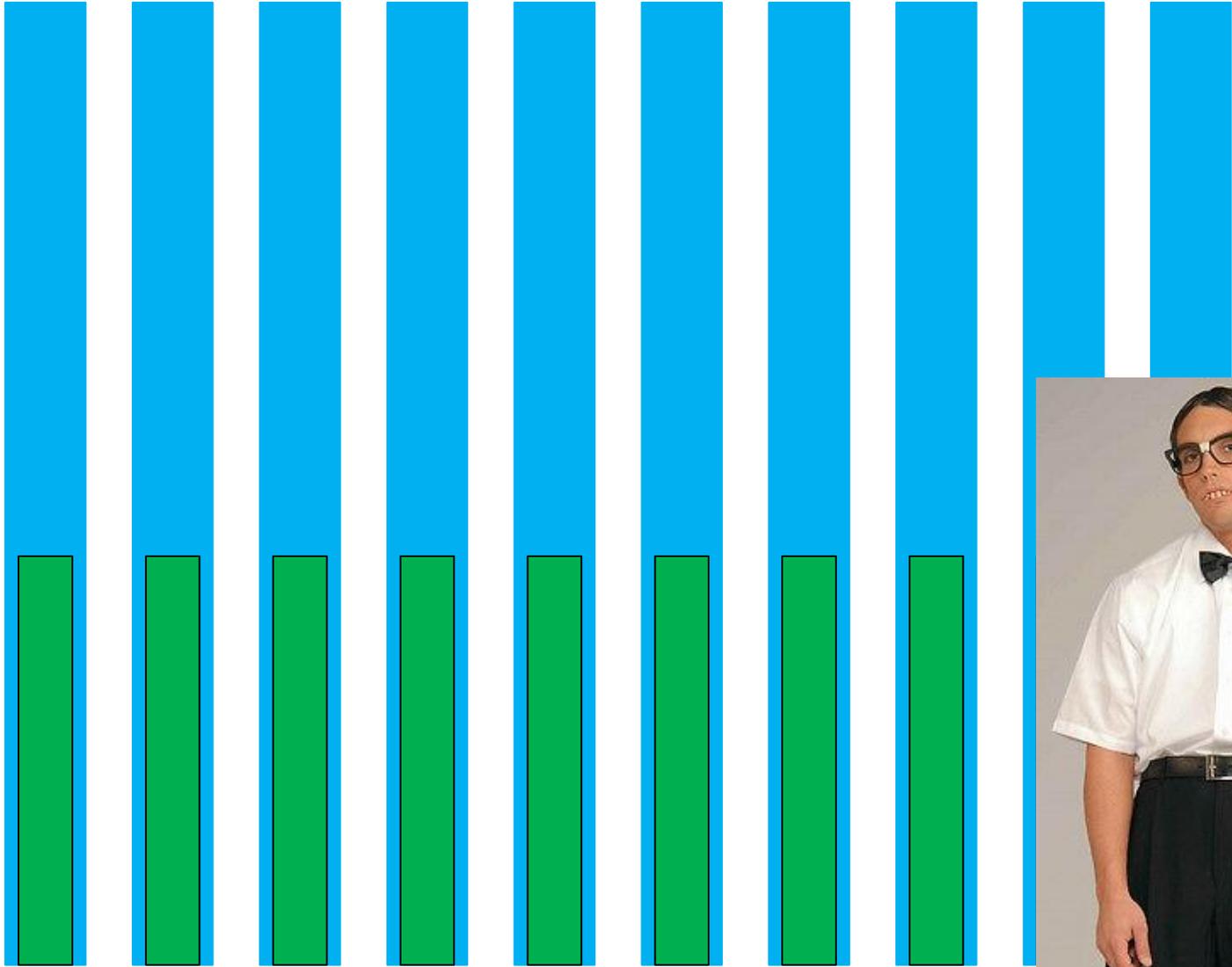


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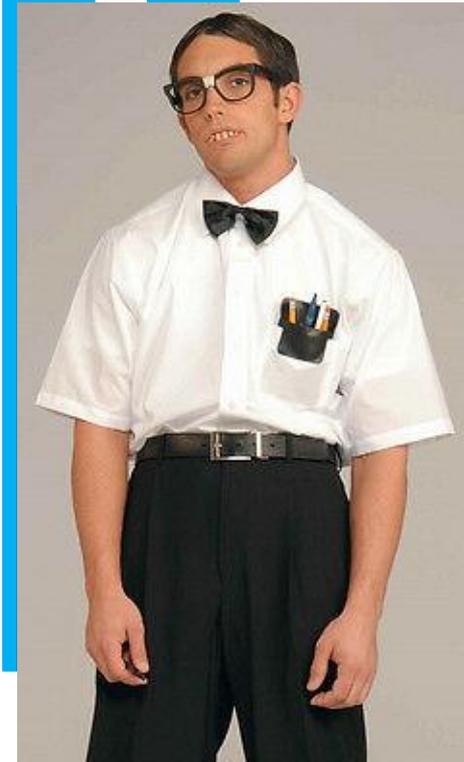
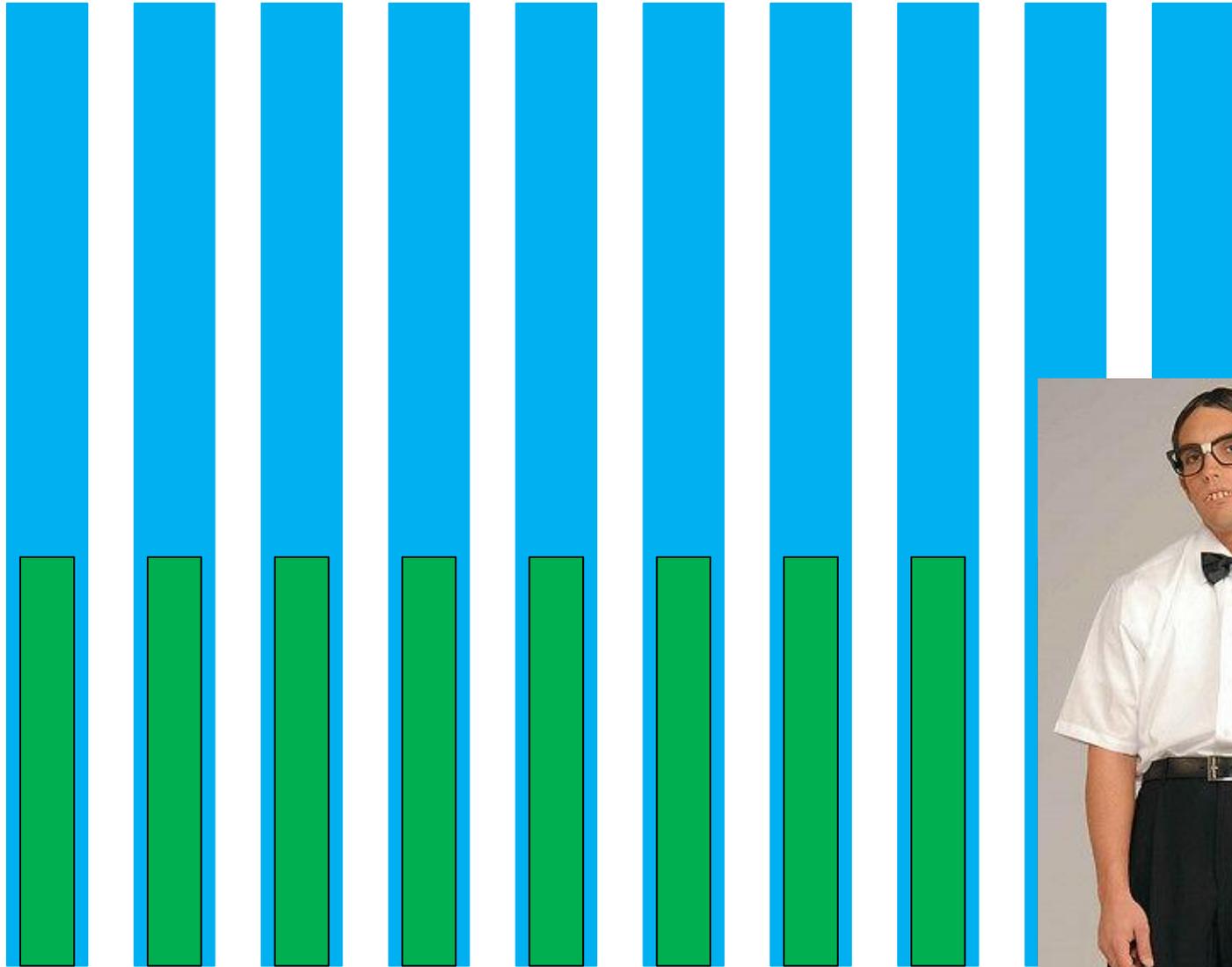


Let's do a test!





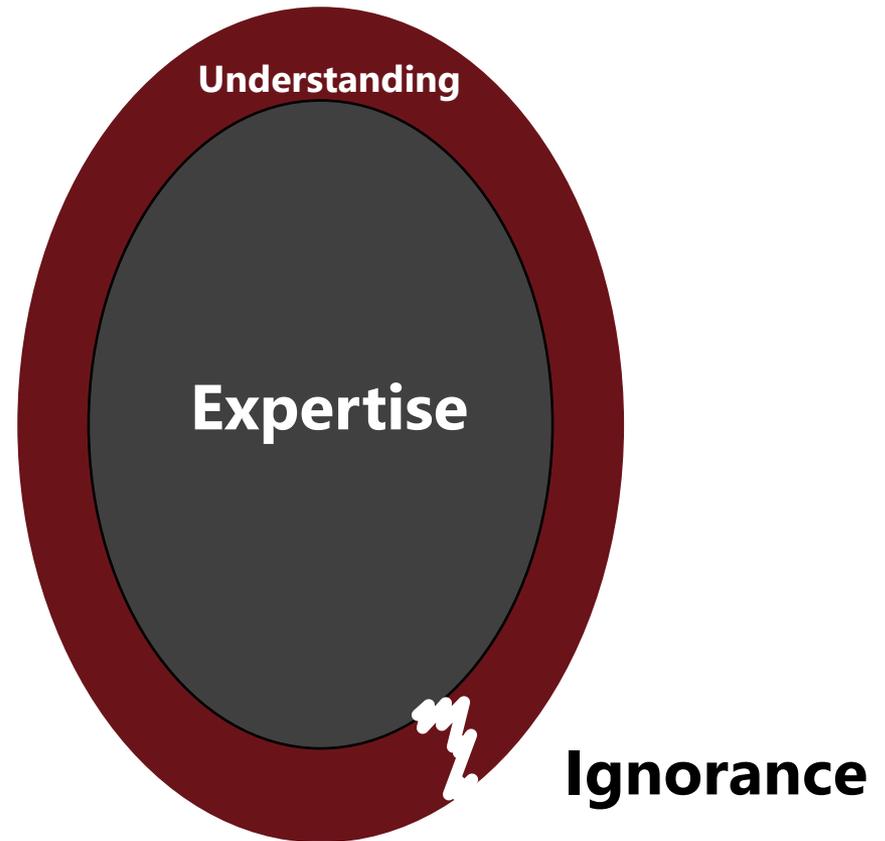
# Not even ONE tube burst!



"Your **pain** is the  
breaking of the shell  
that encloses your  
understanding."

Kahlil Gibran, the Prophet

**No pain, no gain.**



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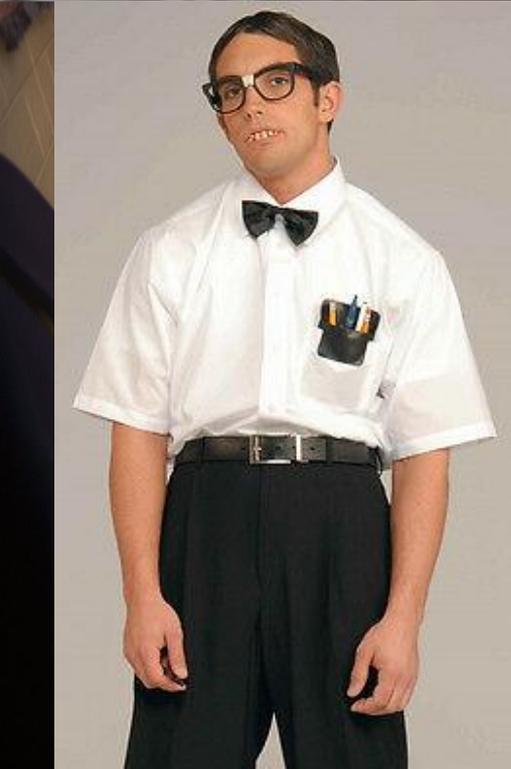
**No pain, no gain.**



**What thoughts are going  
through you mind at this  
point?**

Please us the CHAT box.









Looks closed to me!





That's exactly what I thought!



Looks closed to me!

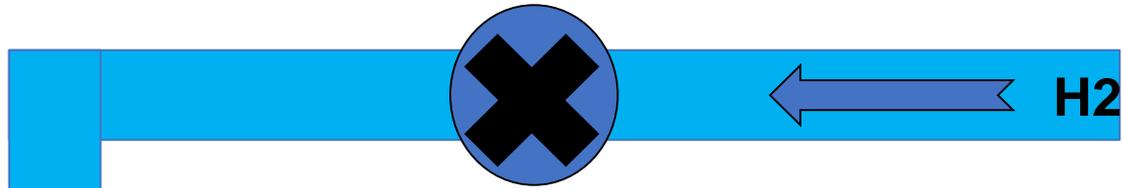




# What REALLY Happened?



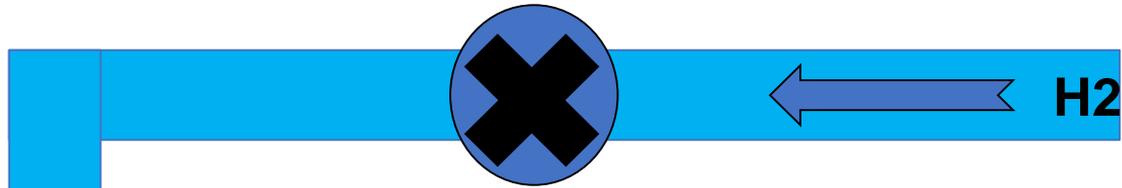
Isolation Valve



1. Operator A cracked-open isolation-valve months prior to incident.

Lower Valve

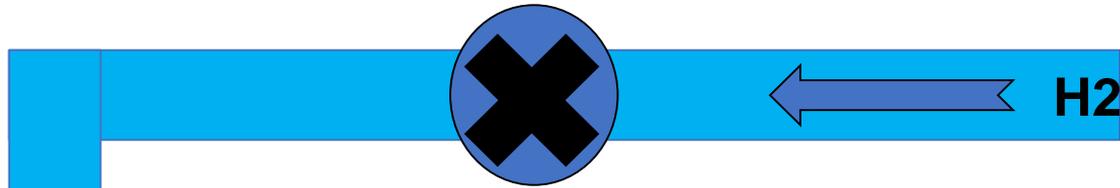
Isolation Valve



1. Operator A cracked-open isolation-valve months prior to incident.
2. Operator A takes routine samples at lower valve.

Lower Valve

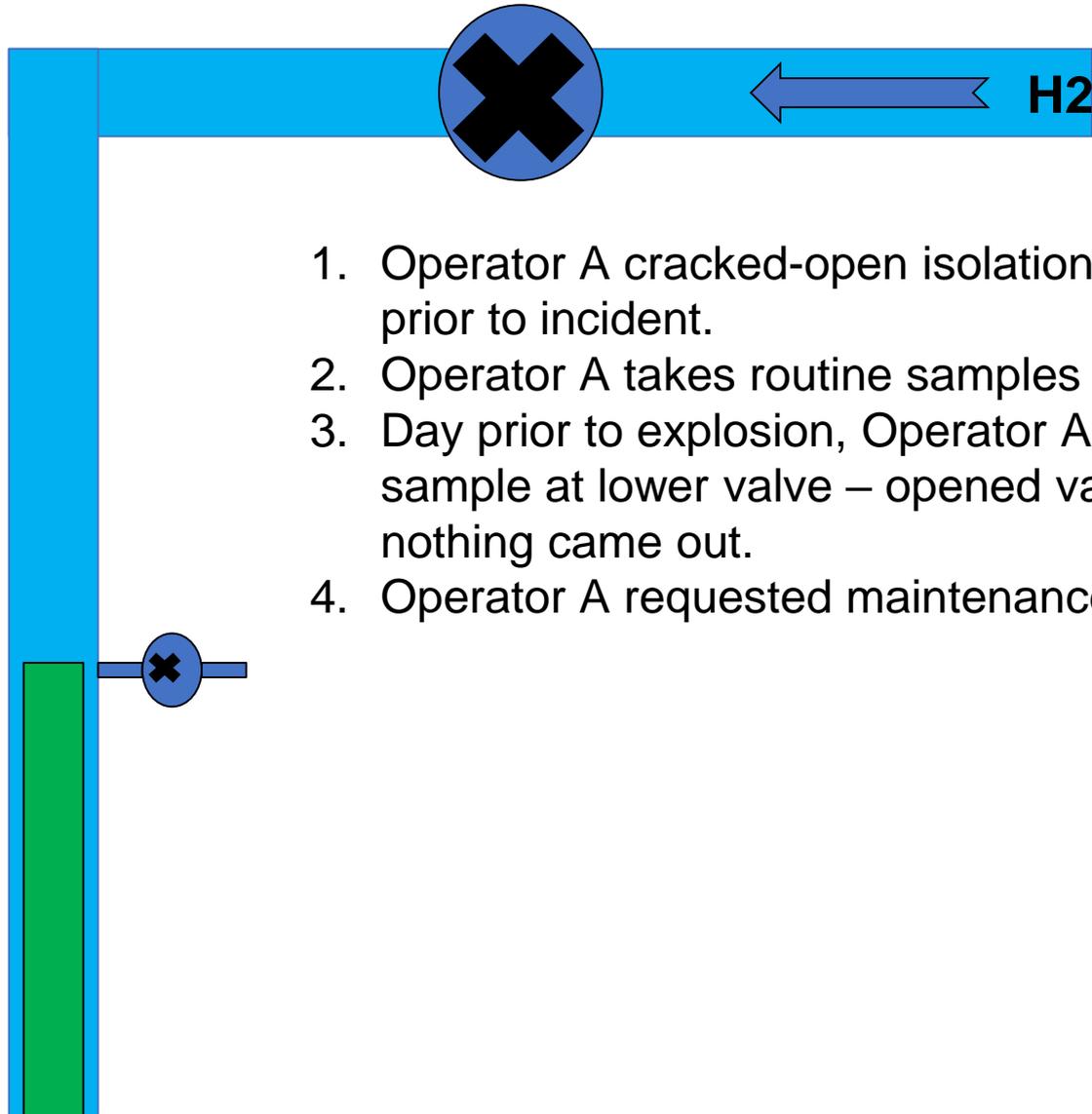
Isolation Valve



Lower Valve

1. Operator A cracked-open isolation-valve months prior to incident.
2. Operator A takes routine samples at lower valve.
3. Day prior to explosion, Operator A could not get sample at lower valve – opened valve but nothing came out.

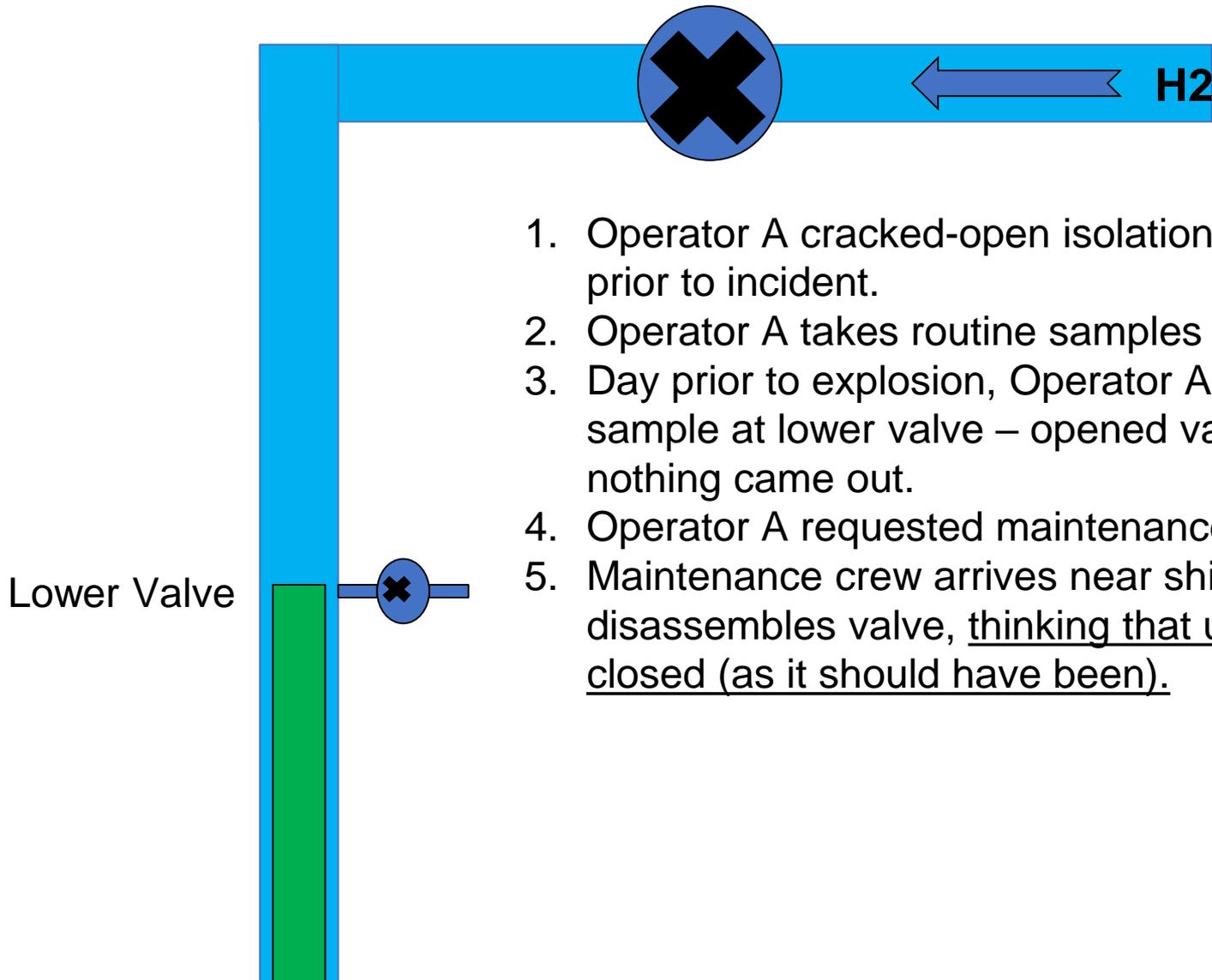
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4. Operator A requested maintenance on valve.

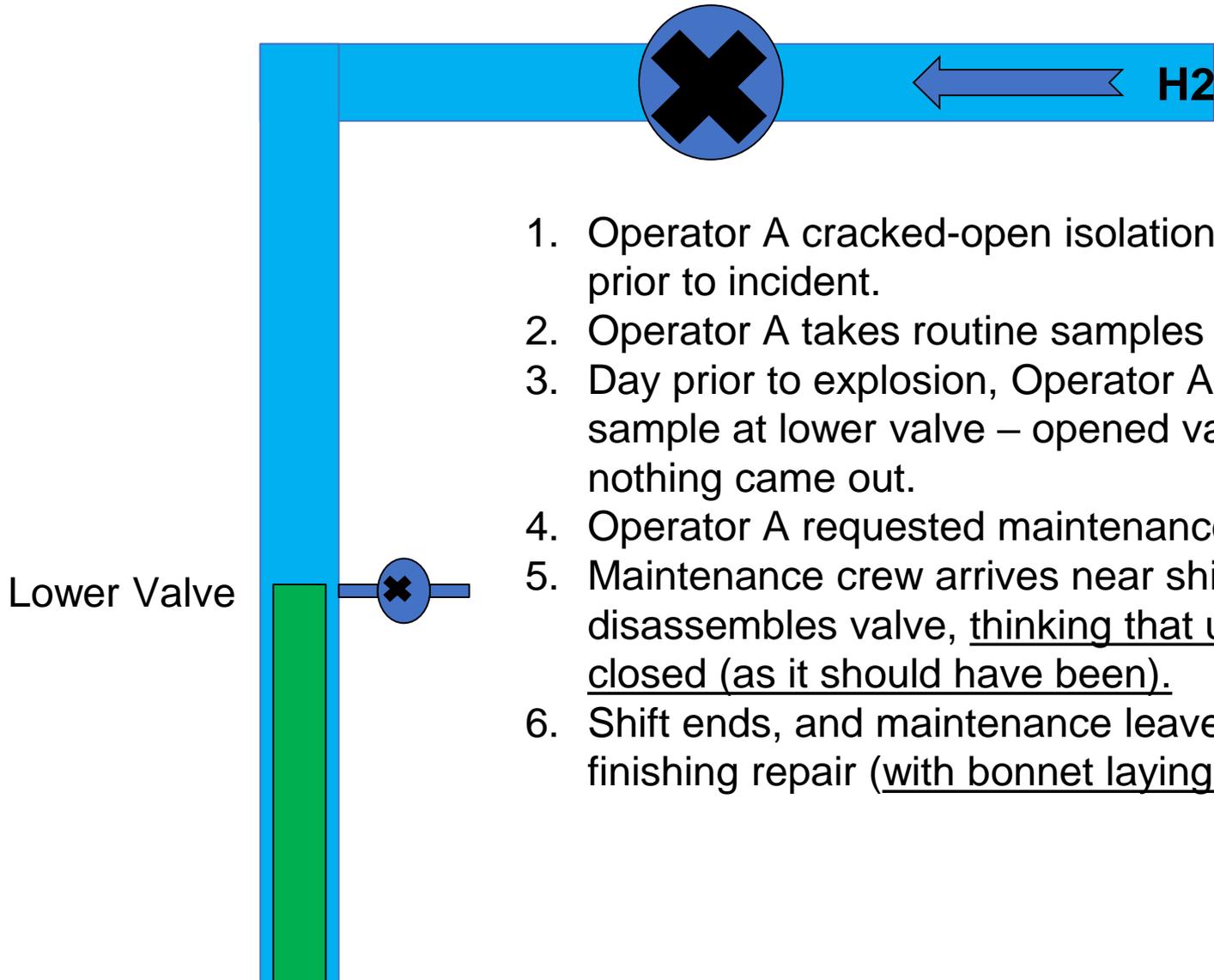
Lower Valve

## Isolation Valve



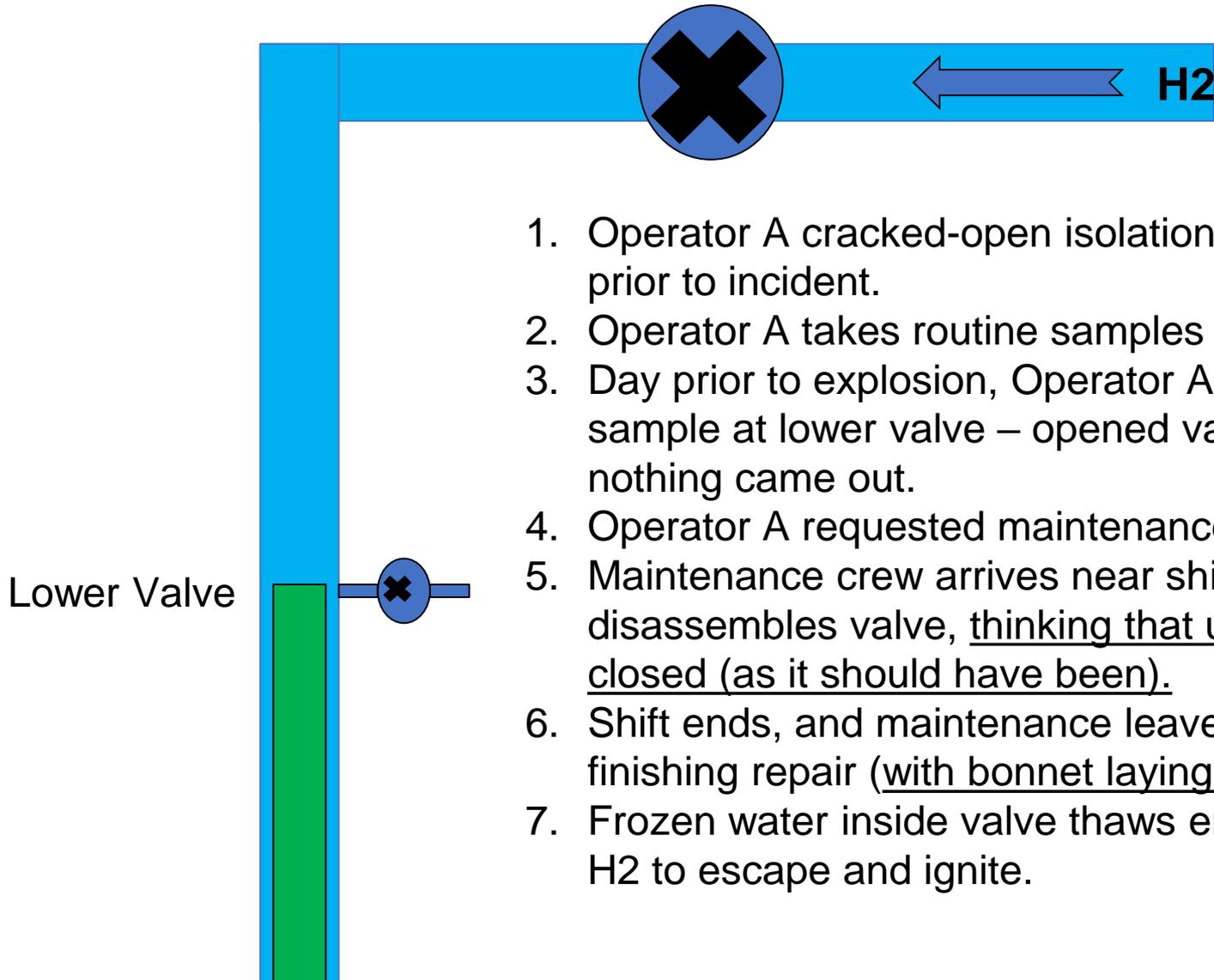
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5. Maintenance crew arrives near shift-end, and disassembles valve, thinking that upper valve is closed (as it should have been).

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6. Shift ends, and maintenance leaves without finishing repair (with bonnet laying on ground).

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5. Maintenance crew arrives near shift-end, and disassembles valve, thinking that upper valve is closed (as it should have been).
6. Shift ends, and maintenance leaves without finishing repair (with bonnet laying on ground).
7. Frozen water inside valve thaws enough to allow H2 to escape and ignite.

A decorative graphic in the bottom-left corner consisting of several red arrows of varying sizes pointing upwards and to the right, and a horizontal red bar crossing through them.

Blame is very close to the “root cause”  
of all our problems.

Embrace the mantra: No blame,  
required introspection from all.

It's our biases that cause our problems.

Make sure to tap into ignorance. Its value is inestimable.

Painless learning is not learning at all.

The shell must crack for profound learning to have occurred.

It's almost never what it seems to be on  
the surface.

When something goes wrong in our lives,  
there's an EPIC STORY that is begging to  
be revealed.

# Ellis Nester Left a Valve Open!

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**Questions?**

**Comments?**



# Breakout Session

Please spend 15 minutes (total) to discuss and then rate your site's status on each of the following (0 to 5, 5=high). Ask for each person's response and then determine your groups' average for each question.

- How prevalent is BLAME in your workplace?
- How often does your site intentionally tap into IGNORANCE to help understand why things go wrong?
- Do your causal learning exercises acknowledge the need for constructive PAIN in order to achieve breakthrough growth?
- How often do you feel that your site reveals the EPIC STORY behind the things that go wrong?

At the end of the 15 minutes, we'll re-convene and share each group's responses, one bullet at a time.