Based on [**http://tinyurl.com/or9bzf2**](http://tinyurl.com/or9bzf2) **and** <https://bit.ly/2J1mR8U>

JK

Re the properly conducted MH370 analysis- directly and properly based solely upon precursor and precedent….

If you follow the theory of a cruise altitude event, you’ll see that the timescale  and development/aftermath is quite different to any ground level ramp event for environmental reasons (though based on the same basic issue/cause).

A.     LP hose burns through as a result of arcing supported and enhanced by the O2 - and the pinhole leak is then boosted by oxygen inside the hose (i.e an electrical  short heating its internal helical spring as per the Egyptair 777 Cairo event). Due to the leak outflow, there’s a pressure drop internal to the system so the oxygen system tries to maintain that low pressure as far as the (let’s say F/O’s) regulator – and so there’s no pressure drop and the outflow rate at the leak is constant, but slightly increases volumetrically as the pinhole enlarges its surrounds. At the point of leakage inside /beneath the F/O’s side console there is now an oxy torch bearing upon the fuselage side-wall. The effect of a blow-torch emanating from inside a combustible material is to enlarge that pinhole and exacerbate the localized heating as the pressure is being maintained to support the increasing flow-rate. The fuselage side is soon weakened to the point of rupture by that pinhole-leak’s torching and due also to the pressurization differential at height (around 8psi). Remember that oxygen does not burn, it just supports combustion. As for a source of the short, in the 767 ramp fire in SFO, the radio intercom select panel was found to have been the source of the short. As they had just been passed off to Vietnam ATC, requiring a frequency change, that tends to tie in.

B.     Meanwhile the pilots are both instantly aware of there being a short with audible arcing and visible smoke from beneath the side console. Whichever side of the flight-deck was affected would soon have that pilot necessarily out of his seat and attempting to retrieve the flt deck fire extinguisher. Whether he'd be able to get any oxygen from a donned mask is quite dubious. There'd be another mask available at the 3rd flight deck seat and that might be his aim. There’d be now no way in which they’d know that it was an oxygen-related fire, and in any case there’s no way to secure the oxygen except via entry into the avionics compartment (via the floor-hatch in the fwd passenger cabin) and using the stop-cocks at the bottles. The Halon fire extinguisher would be completely ineffectual.

C.      Whilst one pilot evacuates his seat and attempts to fight the fire, the other pilot would be turning back towards KL (or the Malay peninsular and Kuantan anyway). If he tried to don an oxygen mask, he may have been able to get some oxygen flowing from that compromised system.

D.     The culmination of the event would be when (and once) the oxygen reached saturation level on the flght-deck for a flash-over.... in spite of the pressurization/aircon flows. This is around 87% oxygen enrichment, a concentration level which would be reached in around 5 minutes inside a sealed flight-deck. The correct technical term for this phenomenon is DDT (see below) and it would cause an over-pressure which would be the point at which the torch-weakened hull would rupture, allowing all pressurization to be lost (as well as losing all the flight-deck oxygen build-up concentration as well). This is ***quite*** dissimilar to the ramp fire's development scenario.

E.   Timings, lack of emergency comms, human factors, Flight Control System characteristics and mystical turns during its "ghost-flight" until fuel exhaustion - all known MH370 factors tend to support this particularised scenario of oxygen enrichment. In particular, the effect of a non-incendiary self-extinguishing oxygen flash-fire *(i.e. a DDT or Deflagration to Detonation Transition due to oxygen enrichment reaching its flash-over trigger level)* and its effect upon circuit-breakers and cockpit plastics (such as pushbutton switches and their encapsulating housings) should be researched. The unique characteristics of a self-extinguishing oxygen flash fire tends to create environmental conditions within an airplane flight-deck that would pose a circumstance in which certain systems could be heat-disabled or partially compromised...... and others left unaffected. However these outages would not necessarily be to the extent that the aircraft could not continue uncontrolled (non-autopiloted) flight at "some" altitude - despite flight-deck surfaces being superficially scorched and all on board being deceased due to hull burn-through, lack of pressurization and supplementary oxygen depletion. It is important to note that oxygen enrichment is as insidious as Carbon Monoxide poisoning, oxygen being colorless and odorless and its enrichment level being quite undetectable. Because of the depressurization caused by the over-pressure, that ***DDT event*** would be audibly little more than a dull thump and probably unnoticeable aft of the locked flight-deck door. Even though the flight-deck is not hermetically sealed from the cabin, oxygen enrichment levels would climb quickly in that enclosed space - once 100% oxygen leak inflows became uninhibited. The Apollo 1 command module fire made NASA suddenly aware of the potential of the DDT phenomenon when it killed astronauts Chaffee, Grissom and White. Those astronauts were locked into a very confined space that was environmentally being fed 100% oxygen. They didn’t have to await the concentration levels for a DDT to build up. NASA was ignorant in those days of the potential for fire disaster in a saturated oxygen environment, but then started studying the incidence of oxygen-related disasters in all industries - and thus they now have the most extensive data-base in the world on the subject.

F.    This flash-over would’ve been catastrophic for the two MH370 pilots and they'd quickly pass out of course. Despite the wave of sudden intense heat during a DDT, any induced surface combustion would be quite superficial and cease at the point of flash-over, due to the fuselage rupture and total depressurization. The effect of the flash-over on the flight-deck switches, relays, CB's and screens/touch-screens is the further interesting and complex aspect. Electric relays replacing magnetically latched relays was a new initiative by Boeing and was first introduced on the B717 (just prior to the 777's advent).  The 777 adopted this very different electrical architecture configuration first introduced in the B717 (which became the MD95). The 777 sported these ***electric*** relays throughout (as against magnetically latched relays). These electric relays are far more likely to be affected by an oxygen flash-fire's DDT depredations of the electrical system than are magnetically-latched relays. This further supports the contention that there are many more vulnerabilities in a modern plastic cockpit with its preponderance of plastics (push-button illuminated switches, keypads and screens) - in comparison with the old school metal switchologies of toggled and mechanically-gated flick and flip-switches. If you "cook" certain modern electrical components for a short period (of a flash-over fire) and they thermally trip, that "trip" can also be self-resetting upon cool-down of relays - and impassively bring subsidiary systems back to an online status. That is inferred in this ATSB official document referred to here. ( <https://bit.ly/2KQ8wPI>).

      This would logically explain why some systems went off-line and then later came back online… in some cases simply via redundancy.

G.  Whether or not the autopilot tripped off at DDT or was deselected by the PF (pilot Flying) during the turnback -  for an emergency descent - is unknown, however the latter course of action would

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| |  | | --- | | **Automatic stability systems** (777)  Fly-by-wire control systems allow the 777's aircraft computers to perform tasks without pilot input. Automatic stability systems operate in this way. [Gyroscopes](https://en.wikipedia.org/wiki/Gyroscope) fitted with [sensors](https://en.wikipedia.org/wiki/Sensor) are mounted in the aircraft to sense movement changes in the [pitch, roll and yaw axes](https://en.wikipedia.org/wiki/Flight_dynamics_(aircraft)). Any movement (from straight and level flight for example) results in signals to the computer, which automatically moves control actuators to stabilize the aircraft | | [https://en.wikipedia.org/wiki/Fly-b](https://en.wikipedia.org/wiki/Fly-by-wire) | |

      be SOP for a depressurization. Quite unlike conventional airliners, the fly-by-wire  777-200 has some unique capabilities. The flight control system has the unique characteristic of instantaneous corrective responses to gust-induced wing-drops, yawing or unselected pitch-changes. The FBW of the FCS is also massively redundant. The net effect of this instant response capability is that in relatively smooth air any heading changes would be very minimal, even though the autopilot was OFF. However once in quite turbulent air (thunderstorm or clear air turbulence or orographic uplift experienced by overflying land-masses), a loss of control could be experienced during the period in which (say) the aircraft was inside a Cumulo-Nimbus storm cloud. It could be "spat out" (following an ***upset***)on any heading but once outside the turbulent cloud's convection currents it would once again quickly recover straight and level flight and maintain a quite straight unwavering course (i.e. plus or minus a very few degrees). Any conventionally controlled aircraft would, by comparison, simply enter a downward death spiral and not carry out any sort of "autonomous" recovery. Sudden seemingly inexplicable rapid course changes occurred once past the Malay Peninsular and into the Straits of Malacca and could have been caused/affected by airmass disturbances generated by higher level winds and terrain in Sumatra (up to 12,484 ft amsl). In fact most professional commentators and investigators profess to be mystified by these turns, mainly because they were outside the performance capabilities of a 777-200 at those speeds in the steepest of turns.... and certainly not physically npossible when on autopilot (per the idiotic theories that are prevalent for MH370 flight subsequent to the South China Sea "event"). However these impossibly acute changes of heading  are easily explained by a LOC (a momentary loss of control in very turbulent air). The clincher is that March is the period just N of the equator when convective activity at all heights up to 55,000 feet is at its maximum due to the latitudinal North-South movement of the Inter Tropic Convergence Zone (ITCZ). The ITCZ moves seasonally in a band 10 to 12 degrees either side of the equator. It is a phenomenon caused by the convergence of the Tradewinds. The ITCZ spends much more time well North of the Equator due to the larger overall size of the land-masses located North of the equator that affect the Tradewinds. Once 9M-MRO was spat out on its final southerly heading and clear of land, it was increasingly ***un***likely to encounter any more turbulent air, the air becoming much calmer at higher levels the further south it went.... and it then flying at height and well clear of land-masses. This enhanced stability in its flight path was also reinforced as it climbed due to the pitch-trim state and fuel burn-off. Because pax and cabin crew were motionless, the relationship between the longitudinal Centre of Gravity and the Wing's Centre of Lift Pressure Point was totally static, so 9M-MRO would have been trim-stable and thus steadily climbed as its all-up weight decreased. Somewhere a few hundred miles South of Sumatra, the aircraft would've been nodding slightly in pitch as it had reached its absolute ceiling..... and could climb higher only as a function of fuel burn-off.

H.  The timing of the turnback vis-a-vis the descent initiation with autopilot off might well be explained by what the NZ oil-rig worker saw from his elevated drilling platform off Vung Tau Vietnam.. It is a little-known fact that a sudden very distant bright illumination can be seen at a very great distance by an individual who is totally dark adaptated. The comparison can be made between this claim and the sighting of meteors in a night sky that are later found to be much further away by a huge factor (than seemed apparent at the time.) IMHO the oil-rig worker's sighting would seem to indicate that the oxygen flare fire happened only a few minutes after the turnback was initiated.... and probably when the aircraft was pointed AT the oil-rig during its turnback. See further below:

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| **That Oil-Rig Worker's Credibility**  **Ques:** One thing: do you really think it is plausible the 'burning jet' seen by that NZ oil-rig worker Mike McKay was MH370? I thought that its trajectory was way outside the MAS plane's track?   |  | | --- | | http://www.iasa-intl.com/folders/mh370/843248398.jpg | | from [link](http://s3.amazonaws.com/dk-production/images/72714/large/843248398.jpg?1394634330) |   **Answer:** On the question of the oil-rig worker’s sighting feasibility, I haven’t done any analysis in-depth on that. Once you read what’s below (here), you may or may not agree that it’s a case of “how long is a piece of string”?  There is a credible case to be made. Oxygen flare fires tend to be rather bright against the night sky  (particularly if they are “undercast” (i.e. below an overcast of cloud layer or inside cloud) i.e. think about the appearance of sheet lightning being lightning seen through an embracing cloud – it is that much more attention-getting). Also the flare tends to be attention-getting (in comparison with an established fire of a more-or-less static brilliance). Meteor sightings have been proven to have been impossibly distant for visual sighting, yet arriving particles as small as a  tiny pebble tend to generate brilliant trails seen over great distances. It’s a matter of varying contrast. You can clearly see a rising moon over a huge distance whilst it’s still low on the horizon, so I’d tend to favour the premise that something momentarily incandescent will be viewable at a great range, mostly because of the nature of its sudden emergence, as well as the distinct instantaneous contrast on a dark night.  If you put a strobe light alongside a light of the same number of “lumens”, at a great distance (but separated laterally), whilst you would easily see the strobe, you’d never notice the same intensity static light at the same range, but in a slightly different direction. That’s why a strobe light is used on aircraft nowadays-  to enhance its visibility. It is so effective for visual acquisition at great ranges and very low power. Its “pulse” waxes and wanes and thus “commands” attention due to easy visual acquisition. The sudden pulse of an oxygen flare fire outbreak, in an “empty visual field”, would be viewable over hundreds of kms at night IMHO. i.e .the flare event itself overcomes *empty visual field myopia* and provides a point of focus…. thus greatly increasing visibility ranges.  **See:**  [**http://tinyurl.com/ngnaa6p**](http://tinyurl.com/ngnaa6p)  **In case you’re not familiar with the phenomenon of "empty visual field myopia"……**  **Empty field myopia** (**Empty space myopia**) - a condition in which the eyes, having nothing specific within the available visual field upon which to focus, focus automatically at a range of the order of a few metres ahead. Detection of objects outside this restricted field of view is delayed and if an object of interest does enter the restricted field of vision, the determination of its size or range would be problematic.  Description  The normal function of the eye lens is to physically focus light from the object on the retina. To do this, the eye must be stimulated by an image. **Empty field myopia** manifests itself when the human eye is in a passive state of focal point adjustment, i.e. when there is no image (stimulus) for the eye to focus on, for example, when the eye is either in complete darkness , or looking at a bright empty field. If the eye lacks this stimulation, the lens is shifting to a resting state (i.e. "night adapted").  **Resting State of Accommodation of the Human Eye**  In this condition, the eye is usually focused at an intermediate point (about 80 cm on average, although there are large variations up to few metres), thus the healthy human eye becomes myopic.  In a nutshell:  ..."an aircraft that has a high degree of contrast against the background will be easier to spot, while spotting one with low contrast at the same distance may be hard and sometimes next to impossible." |

 If you can comprehend, embrace and endorse the possibilities and plausibilities of what is related above, you might be prepared to concede that all the conspiracy theories that have stemmed from the MH370 disappearance are just so much ill-informed speculative blather. It's also an unwholesome collective journalistic crapulence that has missed much of what is quite simply “logical sequitur” and per Occam’s Razor deductibles. The supportive plot for my above theory is the veritable plethora of SB's and AD's that were out there before (and those that came after) the MH370 accident. Boeing knew and the FAA knew and realized what they needed to do to preclude a recurrence. The surreptitious welter of quiet fixes is all there in the archives. MAS has covered up by claiming that 9M-MRO had the specified AD fix implemented three weeks before the loss of MH370. If you believe that, you'd believe anything. Air Accident History tells us that the cover-up should be the first presumption, never the last. Cf China Air 611 (B747 in the Taiwan Straits).\

For further confirmation of this MH370 theory, please note the following:

As soon as this above theory was part-published on the pages of [www.pprune.org](http://www.pprune.org/) it was deleted and the author (me) banned from Pprune for life (as were other forum participants in that same thread). If this sounds a little paranoid, you might also reflect that, earlier in our millenium, Boeing execs had tired of the proprietary facts and fictions making it to air on that Pprune Book of Revelations - and it bought that forum through a third party arms-length company – from its owner Captain Danny Fynne for a huge amount. They then engaged the very well known website company “[Internet Brands](https://www.internetbrands.com)” to manage, monitor, moderate, suppress, bully and ban – as they do with numerous other such whistleblower and technically oriented industry “vertical” participant sites. Some of these are shown at the foot of [this page](https://www.internetbrands.com/travel/contact/). It’s instructive to look at the Wikipedia entry for Internet Brands [here](https://en.wikipedia.org/wiki/Internet_Brands). That company has been involved in many law-suits. It’s the nature of the beast.

The explanations for the InMarsat satellite contacts are very firmly based in scientific fact- as is the logic for that final incomplete pre-crash satellite contact after APU auto-restart - courtesy of fuel in the lines becoming available due to the nose-down flame-out attitude. However it eludes me as to why they cannot divine the earlier developments by using the same degree of straightforward logic – one based solely upon precursor, precedent and aircraft characteristics. However it is never a good idea to strengthen any such argument in the face of massive pending litigation. But it’s all easily deduced (the MH370 subsequent developments and onwards flight) and merely incidental to the underlying issue that triggered this accident..

All accidents have a primal cause and once the train runs off the rails, all that happens weirdly thereafter can be either cataclysmic or an inordinately simple happenstance - and wholly reminiscent of Lemony Snicket's **"A Series of Unfortunate Events".** It happens. Tragic and unfortunate – but so was the 737 MAX story. I am personally amazed in frequent retrospection, that I ever survived a lifelong military aviation career. Methinks that it was due to simply having a very pragmatic oulook about all the intensely unpredictable variables – and never trusting Fate as being the Hunter..