

THE CONVERSATION

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Ajit Solanki/AP

Speculation about the cause of Air India crash is rife. An aviation expert explains why it's a problem

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It has only been a few hours since Air India flight AI171 crashed in Ahmedabad, killing more than 260 people, yet public speculation about the causes of the disaster is already rife.

Parts of the media seem to be encouraging this. For example, earlier today I was contacted by an international news organisation for an interview about the tragedy. While I agreed, I cautioned that I could only say “it is too early to speculate”. They decided not to proceed with the interview. No reason was given, but perhaps it was my aversion to speculation.

Of course, I want to know as much as anyone else what caused this disaster. But publicly speculating at such an early stage, when there is so little evidence available, is more than unhelpful. It is also harmful, as many examples throughout history have shown.

Like an archaeological excavation

Aviation accident investigations start as soon as first responders have extinguished the fires and completed the search for survivors – the first and foremost driver when responding to such a disaster – and have declared the site safe. The identification of the victims will then commence, completed by a different agency, parallel to the accident investigation.

State authorities aren't the only people involved. The aircraft manufacturer (in this case Boeing) will usually send representatives to assist the investigation, as can the home countries of victims. Investigators in the country where the accident occurred may also request assistance from countries with more experience in aviation accident investigation.

An early step for investigators is finding the black boxes (flight data recorders and cockpit voice recorder) among the debris. These contain data about the flight itself, what the aircraft was doing, and what the pilots were saying.

But a plane crash investigation involves much more than just finding the black box.

An aviation accident investigation is akin to an archaeological excavation – methodical and painstaking. If the evidence is not collected and preserved for later analysis at the time, it will be irrevocably lost.

In the case of Air India Flight 171 the scene is further complicated by the crash location – a building. It will take time for the aeroplane wreckage, victims and personal belongings to be sorted from the building debris. This must occur before the search for answers can commence.

Investigators will also gather witness statements and any video of the event. Their analysis will be further informed by company documentation, training, and regulatory compliance information.

Around 80% of aviation accidents are due to “human factors”.

According to the International Civil Aviation Organisation human factors are:

what we know about human beings including their abilities, characteristics, and limitations, the design of procedures and equipment people use, and the environment in which they function and the tasks they perform.

It could take several years for the full forensic investigation into this disaster to run its full course. For example, the [final report](#) into the Sea World helicopter crash in Queensland, Australia, back in 2023, which claimed the lives of four people and injured nine others, was only released in April this year.

A history of speculation – and vilification

There is a long history of undue and harmful public speculation about the possible causes of a plane crash.

For example, since the disappearance of Malaysia Airlines flight MH370 on March 8, 2014, speculation has swirled about whether chief pilot Zaharie Ahmad Shah was responsible for the disaster and the deaths of the other 238 people on board. This has deeply upset his sister, Sakinab Shah. In 2016, [she told CNN](#) she feels her brother is a “scapegoat” she must defend.

Similarly, the pilots of the [British Midlands accident](#) near Kegworth in 1989, in which 47 people died, were also publicly vilified.

The pilots, who survived the crash, were experienced but misidentified which engine had failed, and shut down the wrong one. They were widely criticised in the press for the error, tarnishing their reputations, losing their jobs, and no doubt causing more stress to their families. The investigation later revealed the pilots themselves had not received any simulator training as they transitioned to a newer variant of the aircraft they were flying.

This shows how undue public speculation about an airline disaster can add to the distress of victims and their families.



A woman in front of a memorial for flight MH370.

Public speculation about the cause of the disappearance of MH370 in March 2014 has upset some victims' families. Nazri Mohamad/EPA

Respect the process

No doubt pilots and aviation experts are speculating in private right now about the causes of this particular disaster. Cafes, pubs and crew rooms will be rife with discussions and opinions. It is human nature to want to know what happened.

But to speculate in public won't assist the investigative process. Nor will it help the families of the victims, or the first responders and investigators themselves, get through this horrible time.

Investigators need to work without external pressures to ensure accurate findings. Respecting this process maintains integrity and supports the many people who are currently experiencing unimaginable grief.