# DOWN TO A SUNLESS SEA

## The anatomy of an incident

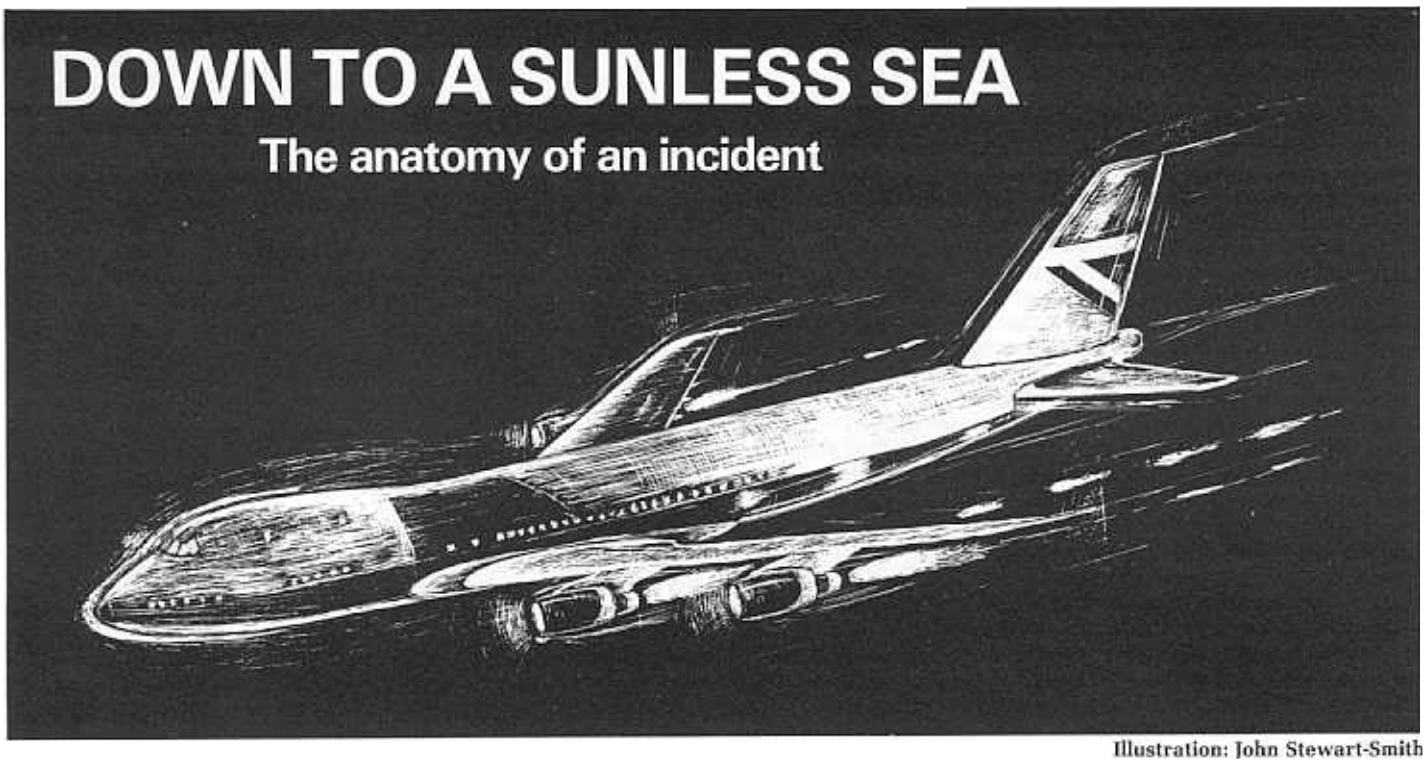

Illustration: John Stewart-Smith

**The job of the airline pilot in the early days of civil aviation was one in which character, skill and a dogged ability to stick to the task, under extreme pressure, were tested on an almost daily basis. Weather forecasting was rudimentary, navigation was based on fleeting glimpses of railway lines through ragged cloud and accurate landings on an ability to discern a dim line of gooseneck flares. The aircraft were subject to frequent technical failures and the engines had to be nursed with the sensitivity old stagecoach drivers used in handling an inexperienced team of four. Those who learned their trade during the war came through an even more deadly and unforgiving school. Nowadays, the modern generation of pilots sit in air-conditioned comfort, with reliable engines, navigating errors measured in yards rather than miles on aircraft which can land themselves, smoothly and accurately, in almost impenetrable fog.**

We are the first generation of pilots who may go through a whole career without having a genuine emergency; many pilots have completed fifteen years flying without having suffered an engine failure. Although this is undoubtedly a blessing, it does beg the question, how will they behave if they are eventually put to the test?

Apart from those who have an innate ability to generate excitement (it is known as lack of airmanship) we tend to be posed our most difficult problems on the simulator. The adrenalin which flows through the veins and the clammy hands which are caused by it, are a pale imitation of the real thing. It is a sham, because the fear which causes it is a fear of appearing a fool, rather than fear for one's life.

Pilots by nature have to be a fairly self-confident breed and such a charmed life is likely to over-enhance confidence in their own basic flying ability, but most would admit to occasional doubts about how they would behave under extreme stress. They would like to emerge triumphant from a trial but, at the same time, they have no wish to be put to the test. They obviously have great interest in the design faults and mechanical failures which affect airline safety but they are even more interested, in a vicarious sense, in the behaviour of the pilot under stress.

Did he think as quickly and as clearly as in normal circumstances? Did he feel he had plenty of time to make decisions or did time appear to pass quickly? Was the story presented to him by the instrumentation consistent, or confusing? Did he handle the aircraft as well under pressure as he did normally?

Captain Eric Moody, Senior First Officer Roger Greaves and Senior Engineer Officer Barry Townley-Freeman found the answers to these questions, and many more, on the 24th June 1982, when they set out to fly BA 009 from Kuala Lumpur to Perth.

*12.09z "Speedbird 9 cleared for take-off.*

The aircraft was laden with 247 passengers and 91,000 kg of fuel for the flight to Perth, the night was moonless, but clear, and the flying conditions were smooth. The en-route weather forecast was good and the crew expected an uneventful flight lasting 5 hrs. The flight crew ate their meal after settling into the cruise at 37,000 ft. This was supplemented by a tray of satay (a speciality of Malayan cookery). The crew had finished their meal by the time the aircraft was south of Jakarta on Airway B69.

Eric Moody had a quick look at the area ahead of the aircraft with the weather radar and picked up nothing more interesting than returns from the surface of the sea. He made his way aft and found that the crew toilet was occupied. He descended the stairs to the first class area and started a conversation with the forward purser Sarah Delane-Lea. Almost immediately he was called to the flight deck by Fiona Wright the Stewardess I. As he climbed the stairs he noticed puffs of 'smoke' billowing out from the vents at floor level and a smell which he described as 'acrid, or ionised electrical', such as one finds near sparks from electrical machinery. He entered the flight deck to find the windscreens ablaze with what appeared to be the most intense display of St. Elmo's fire he had ever experienced. Eric strapped himself into his seat and again looked at the weather radar. Nothing of significance was in view, but he was pleased that in his absence, the other two crew members had put on the seat belt signs and the engine igniters.

Roger then pointed out the side windows at the engine intakes which were glowing as if lit from within. The electrical discharges had a stroboscopic effect which gave the illusion that the fans were moving slowly backwards. At the same time the St. Elmo's fire on the windscreen had given way to a display of what looked like tracer bullets. All this happened so quickly that there was little time for discussion and Eric had been distracted by the display from what he considered to be the most important consideration, the smoke which appeared to have got into the air-conditioning.

Before he could speak Barry called out "Engine failure number 4!" Eric immediately asked for the Engine Fire Drill, and the other two crew members carried it out. Roger believes the crew were helped by the fact that the problem compounded itself gradually. The slow build-up of danger ensured that they were not plunged instantly into an extreme situation. They became more alert and concentrated as the incident became more complex and at no time lost control of their reasoning processes. They were soon