forced to face the full consequences of their problem by the voice of the Flight Engineer.

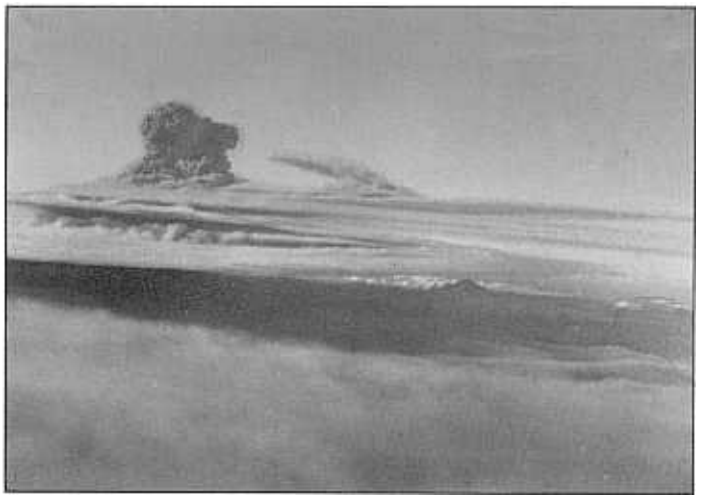
"Engine failure number 2 . . . "
"Three's gone . . . "
"They've all gone!"

Eric stared at the instrumentation in front of him and refused to accept the full impact of what had been said. "Four engines do not fail", was the refrain which dominated his thinking. He had practised a four engine failure detail on the simulator some months earlier and then, the assumption had been made that all generators would fail, leaving the aircraft on standby electrical power, fed from the aircraft batteries. This would have caused a failure of the co-pilot's instrumentation and much of the cockpit lighting. Yet the instrumentation all appeared to work and the auto-pilot remained in control. The display on the engine instruments was also very confusing as the instruments were a mixture of Smiths and General Electric, some which froze under power loss and some in which the needles dropped off the scale. There were also some amber lights indicating that engines had exceeded their maximum turbine gas temperatures. While he studied this confusing display, Eric heard Barry suggest that they shut the engines down. At the same time he noticed that the airspeed was decreasing. He put the auto-pilot into a gentle descent and turned to his co-pilot "OK Roger, put out a Mayday".

13.44z "Jakarta, Jakarta, Mayday, Mayday Speedbird 9. We've lost all four engines. We're leaving 370".

Eric then controlled the aircraft using the auto-pilot, while the other two carried out appropriate emergency drills. Both pilots shared the task of moving the engine start levers on different occasions. Because the auto-pilot remained in control, Eric had time to consider the likely cause of such a multiple failure: electrical? (check all circuit breakers): fuel? (turn on all pumps and cross feed cocks): icing? (turn on engine anti-icing). All the crew members, afterwards, felt that checklists, for such extreme emergencies, should contain every item for consideration and not

S.F.O. Roger Greaves, Captain Eric Moody and S.E.O. Barry Townley-Freeman.



Mount Galunggung erupting
(Photo by courtesy of L. J. R. Allen ANZ)

leave anything to intuition. Although crew members will always exercise their initiative, it is better that they have trust, that the check list covers everything. The dominant feeling of the crew at this point was the question 'what have we cocked up?'

The first relights were attempted on engines 1, 2 and 3, but Eric decided, with the agreement of the crew, to attempt relights on the number 4 engine along with the others. (The number 4 engine fire handle had been pulled when the fire drill had been carried out).

At 26,000 ft. the cabin pressure warning horn sounded as the cabin climbed through 10,000 ft. The crew started to don their oxygen masks. When Roger removed his mask from the stowage it fell to pieces in his hand. The bayonet fitting came out of the supply pipe and the tubing disengaged itself from the mask. Eric was presented with an unenviable choice. Should he continue to descend as slowly as possible and have his co-pilot suffer the effects of anoxia, or should he increase the rate of descent till the aircraft was at a more survivable altitude. He chose the latter, and began an emergency descent.

However he decided not to extend the gear, as instructed in the flying manual, because it opened up the possibility of having to ditch the aircraft with gear extended, should it prove impossible to retract them. With hindsight it is now obvious that during gear extension, the hydraulic power from windmilling engines might not be powerful enough to move the gear and the flying controls at the same time. They had previously turned the aircraft on a Northerly heading back towards Jakarta and they decided that with a safety height of 10,500 ft in that area, they would turn back out to sea when the aircraft reached 12,000 ft. At this time the inertial navigation systems were giving a display of gibberish and were no use in fixing their exact position.

When they reached 20,000 ft. Eric retracted the flight spoilers and reduced the rate of descent. Ironically he noticed that Roger had, by then, managed to fit the oxygen mask together (a test of intelligence and manual dexterity while under extreme pressure).

At this point Roger noticed that his airspeed indication showed 320 kts whilst Eric's showed 270 kts. Eric thought that it was worth assuming that the higher figure was correct in case they had been attempting to start the engines while outside the relight envelope. Again they had no luck, although the fuel had been igniting behind the engines and treating those passengers with window seats to a view of, what appeared to be, four engines on fire. At about that time the cabin reached 14,000 ft. and the passenger oxygen masks were deployed. Eric decided it was time to have a word with them.

"Good evening ladies and gentlemen. This is your Captain speaking. We have a small problem. All four engines have stopped. We are all doing our damndest to get them going again. I trust you are not in too much distress."

Eric then asked the Cabin Service Officer to come to the flight deck. He attempted to explain the problem to him while wearing