

## ADMINISTRATIVE SYSTEMS OF AIR NEW ZEALAND

364. System failures within the structure of the Flight Operations Division was the originating and decisive cause of this disaster. I am therefore required to consider why this failure took place. I am in no way concerned with the general administrative systems of the airline, and if I have to say anything about the general systems then it will be only in the context of the antarctic flights, or it will represent the reason for some of the system failures which occurred in relation to the antarctic flights. The evidence which I heard seemed to me to establish two separate areas of administrative deficiencies namely, defects in administrative structure and defects in the communication system within that structure. I shall deal with these in order.

### *Defects in Administrative Structure*

365. Keeping within the context of the antarctic flights, the branch of the airline's organisation which was immediately concerned in this Inquiry was its Flight Operations Division within which there operated as sub-departments the Navigation Section, the Computer Section, the Flight Despatch Section, and the RCU briefing system. The following defects in this administrative structure were revealed:

- (1) Within the Flight Operations Division there were operational pilots who held executive positions. Captain Gemmell, for example, was chief pilot for the airline from 1975 until July 1978 when he became flight manager (technical). Captain Grundy was flight manager (training) until November 1979 when he was promoted to flight operations manager for DC10 and DC8 aircraft. Captain Johnson, since 1 September 1978, has been flight manager (line operations) for DC10 and DC8 aircraft. I have selected these three pilots merely by way of example. They were operational pilots at the same time as they occupied these executive positions. This is said to be necessary because of the aviation expertise required for persons occupying such positions and I can well see that this is so. In addition it would, of course, be very difficult to persuade an operational pilot to give up flying in order to assume an executive position of this kind when the transition would mean a heavy decline in salary and an extension of the term of years which would need to be served before qualifying for full superannuation. It was clear from evidence which I heard that while an executive pilot was away on operational flying, and he might be away for a good many days, there was no official system of recording what had happened in his particular department in his absence. Incoming documents were being dealt with and decisions made by his subordinates, and there appeared to be no filing system which could tell an executive pilot exactly what had happened within his jurisdiction while he was away.
- (2) None of the executive pilots ever seems to have been given an adequate training course in administrative management.
- (3) There appear to have been no written directives emanating from Flight Operations Division settling the duties and the exact nature of administration responsibility in respect of any executive pilot.
- (4) In respect of other administrative sections of the Flight Operations Division, there were no written directives specifying the manner in which various duties were to be carried out. For example:

- (a) There was no written instruction specifying the detailed contents of the antarctic RCU brief, nor specifying what was required for the simulator instruction.
- (b) There was no written directive addressed to the Navigation Section or the Computer Section or to the Flight Despatch Section specifying the steps which must be taken to transmit adjustments to flight plans, navigational procedures, and the like.
- (c) With particular reference to the Flight Despatch Section, there was no direction requiring that section to maintain an adequate written description of the documents contained in the "Antarctic Envelope" which was handed to each antarctic flight crew and returned by that crew after the flight, nor was there any instruction to Flight Despatch to maintain a file containing up-to-date copies of every document included in the Antarctic Envelope.

I digress to say that in the course of the present Inquiry there was evidence about pilots signing an acknowledgement of receipt of the Antarctic Envelope which purported to have on the outside a general description of its contents, but the precise contents of the envelope on the fatal flight were never disclosed, and I doubt whether Flight Despatch ever knew, when an antarctic flight was about to depart, what actually was in the Antarctic Envelope.

### *Defects in Administrative Communications System*

366. I need not say too much about this within the antarctic context because, as I have made clear already, there were only two documents produced to me with reference to decisions and communications made by Flight Operations, Navigation Section, Computer Section and the Flight Despatch Section in relation to the fatal flight. One of them, as will be recalled, was the so-called "log" of Mr Kealey, which was merely his handwritten notes reminding him of verbal messages which he had received from various people. The other was Captain Johnson's memorandum of 8 November 1979 recording the advice received from the Civil Aviation Division that the McMurdo NDB had been withdrawn. This lack of documentary evidence as to administrative decisions which had been reached, and of communications which had been made, is demonstrated by the following list of particulars:

- (a) Captain Keesing, when Director of Flight Operations, had submitted to the Civil Aviation Division a detailed operational scheme for the initial antarctic flights and thereafter believed that the Civil Aviation Division had approved these terms because, not long afterwards, the first flight departed with one of the Civil Aviation Division inspectors as a passenger. Unknown to him, Captain Gemmell (who was then chief pilot and a subordinate of Captain Keesing) had made an arrangement with the Civil Aviation Division which involved a minimum safe altitude totally at variance with Captain Keesing's proposals, which Captain Keesing thought had been approved. Captain Keesing knew nothing about this separate agreement with the Civil Aviation Division until after the disaster.
- (b) The report of Captain Simpson after his flight of 14 November 1979, as to the distance between the TACAN and the destination waypoint (27 miles), was never recorded by Captain Johnson, to whom the report was made, and Captain Johnson then communicated his

mistaken impression of the verbal report to the Navigation Section and again, that communication was verbal. The Navigation Section then furnished its own verbal report to Captain Johnson. The consequential catalogue of mistakes and misinterpretations in this area was all directly due to the absence of any written record of these very important operational decisions.

- (c) The direction to the Navigation Section to alter the destination co-ordinates was verbal, and consequently there is no record of the reason for that decision. There was no written reply from the Computer Section confirming that the instruction had been carried out. There was no written direction to the Flight Despatch Section notifying the section of the change, and directing that Captain Collins be informed.
- (d) When the chief executive was called as a witness I felt obliged to raise with him the adequacy of this system of unrecorded communications between one division and another, and within each section of that division, in respect of decisions which were directly related to the safety of flying operations. The chief executive said he controlled the airline on a verbal basis. He said that when he communicated with a senior executive officer such as the director of flight operations then any instructions he gave or any decisions he made were verbally communicated, and no memorandum was drawn up recording any such decision. The chief executive asserted that many large companies were controlled on this basis. I said to the chief executive that so far as I could ascertain he had never supplied his board of directors with a report concerning this disaster and outlining its circumstances and causes as then known to him. The chief executive agreed that this was so, but said that he was in touch from time to time with the chairman of the board by telephone. It seemed to me an extraordinary thing that the circumstances of an aircraft disaster of this magnitude were not reported to the company's board in writing by its chief executive.

#### *Position of the Board*

367. It is clear enough that the original and continuing cause of the accident was a breakdown of the systems organisation of the Flight Operations Division of the airline. The various sections of the Flight Operations Division seem to have been administratively unco-ordinated. There was no proper organisation chart clearly setting out defined areas of responsibility and authority, and the failure of the communication system within the Flight Operations Division has already been exposed.

368. Another aspect of the systems failure was the lack of administrative continuity which overshadows the duties of those executive personnel within the division who were also operational pilots, in that without a proper system of filing and recording decisions they could only acquire, on a verbal basis, knowledge of what had happened within that division while they were away. In respect of the antarctic operation there was not even a control file containing all the instructions and information which related to the antarctic flights.

369. Arising from all this, it was submitted by Mr Baragwanath that it is remarkable that there is not a single document originating from the board in relation to the antarctic flights. There appears to have been no written submission lodged with the chief executive by the Commercial Division, and backed up by a brief from Flight Operations Division,

suggesting at the end of 1976 that the antarctic flights be inaugurated so as to compete effectively with QANTAS in this area. There appears to have been no written brief prepared for the board by the chief executive at that time asking for approval of the flights.

370. However, in considering the board's position, it must be borne in mind that the flights to the antarctic were only a part of the airline's operational function. The feasibility of operation and safety of such flights was a matter for the Flight Operations Division, and I can have no doubt that the proposal in 1976 to institute the flights must have been sanctioned by the board.

371. As to the failure of the board to require from the chief executive a written account of the disaster, it may have been thought that he should not put any views in writing pending the outcome of a formal inquiry, and I can not doubt that the circumstances of the disaster must have been canvassed by the chief executive with the board on the first available occasion, although there are no board minutes to that effect. Even allowing for the fact that the predominant cause of the disaster was a systems breakdown within the Flight Operations Division and consequently an administrative defect, it does not seem possible to attach any blame to the board for what occurred. No board member could be expected to investigate the day-to-day administration of flight operations. Overall, I am not satisfied that there can be any criticism levelled at the Board of Air New Zealand in respect of the organisational defects of the Flight Operations Division in so far as they related to, and were responsible for, the disaster in Antarctica.

372. I can only summarise this brief analysis of the airline's administrative and communications system by expressing my very considerable concern when I discovered the haphazard and informal manner in which the Flight Operations Division was conducted in relation to these antarctic flights. The result has been, as I have said before, that in looking into the communication lapses which led to the disastrous mistake over the co-ordinates, I have been confronted at every turn with the vague recollections of everyone concerned, unsupported by the slightest vestige of any system of recorded communication and of course it was this communications breakdown, which in turn amounts to a systems breakdown, which is the true cause of the disaster.

#### **THE STANCE ADOPTED BY THE AIRLINE BEFORE THE COMMISSION OF INQUIRY**

373. There is no doubt that the chief executive, shortly after the occurrence of the disaster, adopted the fixed opinion that the flight crew was alone to blame, and that the administrative and operational systems of the airline were nowhere at fault. I have been forced to the opinion that such an attitude, emanating from this very able but evidently autocratic chief executive, controlled the ultimate course adopted by the witnesses called on behalf of the airline.

374. The relevant evidence in this context was that given by the executive pilots and by members of the Navigation Section. The fact that the navigation course of the aircraft had been altered in the computer had