

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

been disclosed by the chief inspector in his report dated 31 May 1980, 6 months after the disaster. But it was not until the Commission of Inquiry began sitting that the airline publicly admitted that this had occurred. Hence the tactics adopted by the executive pilots and by the Navigation Section witnesses which were designed to prove, if they could, that the computer mistake and its consequences could and should have been avoided by the crew, and that Captain Collins and his co-pilot had committed that very long catalogue of aviation blunders and malpractices to which I have previously referred. I can visualise without difficulty not only the extent but also the nature of the managerial pressure exerted on these witnesses. They all declined to admit that there had been any mistake or omission on their part which could have been a material cause of the disaster.

375. The adoption of such tactics led to the inevitable result. These witnesses were cross-examined with skilled persistence by counsel assisting the Commission, by counsel for ALPA, and by counsel appearing for the passenger's consortium. There were documents produced to the airline witnesses in the course of cross-examination, and there were facts extracted from them, which had very clearly in a number of cases not been revealed by the airline to the highly competent and distinguished counsel whom the airline had retained. In the end, these tactics of attributing everything to pilot error came to nothing, and counsel for the airline adopted, in the course of their detailed and exemplary final submissions, the very proper course of not attributing blame to any specific quarter but leaving it to me to assemble such contributing causes as I thought the evidence had revealed.

376. But I cannot let pass the nature of the evidence which the airline witnesses tried to persuade me to accept. There were aspects of that evidence which I have been obliged totally to reject, namely the assertion by the executive pilots that they had no specific knowledge of antarctic flights operating under the minimum safe altitude specified by the Civil Aviation Division, and this was also asserted by the chief executive—the allegation by Captain Johnson that he believed Captain Simpson had told him that the McMurdo waypoint was incorrectly situated—allegations by Navigation Section witnesses that they believed that the alteration to the co-ordinates only amounted to 2 miles—the explanation by a highly skilled navigational expert that he drew an arrow on a meridian of longitude so as to remind himself that the meridian pointed north—the allegation by Navigation Section witnesses that the misleading flight plan radioed to McMurdo on the morning of the fatal flight was not deliberate but the result of yet another computer mistake. These particular assertions and allegations I have been obliged to reject.

377. No judicial officer ever wishes to be compelled to say that he has listened to evidence which is false. He always prefers to say, as I hope the hundreds of judgments which I have written will illustrate, that he cannot accept the relevant explanation, or that he prefers a contrary version set out in the evidence.

But in this case, the palpably false sections of evidence which I heard could not have been the result of mistake, or faulty recollection. They originated, I am compelled to say, in a pre-determined plan of deception. They were very clearly part of an attempt to conceal a series of disastrous administrative blunders and so, in regard to the particular items of evidence to which I have referred, I am forced reluctantly to say that I had to listen to an orchestrated litany of lies.

#### WHETHER CIVIL AVIATION DIVISION COMPLIED WITH ITS STATUTORY OBLIGATIONS IN RESPECT OF THE ANTARCTIC FLIGHT OF 28 NOVEMBER 1979

378. Pursuant to the Civil Aviation Act 1964 the Civil Aviation Division of the Ministry of Transport has the responsibility to administer the provisions of the Act which relate to the safety of air operations. It was the view of the chief inspector, after examining the part played by the division in the planning for and the supervision of antarctic flights, that the division had been at fault in certain respects. In addition, there were other areas suggested by counsel during the hearings of the Commission where it was claimed that the division had not effectively complied with its statutory obligations relating to air safety. Some of the criticisms against the division are, to my mind, purely technical and I am not concerned with that type of suggested default because, in terms of paragraph (h) of my terms of reference, I am asked to report whether the practice and actions of the division in respect of flight TE 901 were such as might reasonably be regarded as necessary to ensure the safe operation of aircraft on flights such as TE 901.

379. The conduct of the division seems also to be relevant under paragraph (g) of my terms of reference, which relates to the question whether the disaster was caused or contributed to by an act or omission in respect of any function which any person had a duty to perform or which good aviation practice required that person to perform. The function in question must be one which relates to all aspects of the operation of the aircraft, and I am not sure whether it was intended that the division, even though theoretically within paragraph (g), was intended to have its conduct considered in that context. I shall proceed, however, on the basis that its conduct is relevant under both paragraphs (g) and (h).

380. Having studied all the allegations made against the division I propose to exclude those of a nature which are purely technical and not directly related to the safety of this particular air operation. I will discuss what I think are the relevant allegations in the paragraphs which follow and will express my conclusion as to each.

381. (a) It was contended that the RCU briefing conducted by the airline contained omissions and inaccuracies which had not been detected by the supervising airline inspectors.

The airline inspectors had in fact approved the audio-visual part of the RCU briefing for the fatal flight, and one of the inspectors had witnessed a normal audio-visual briefing for an antarctic flight, this having occurred on two occasions, but no amendments to the audio-visual briefing had been required and errors contained in the briefing (to which I have previously referred) were evidently not detected.

#### *Conclusion*

It was the responsibility of the airline to procure compliance by its pilots with regulation 77, which requires a pilot to satisfy the operator that he is familiar with the flight route. It is the responsibility of the division to take reasonable steps to see that the airline is observing regulation 77 and, in my opinion, the division failed in one material respect to comply with its duty in respect of this regulation. I do not hold any airline inspector accountable for not detecting certain descriptive errors in the RCU briefing, but I think that there was a breach of statutory obligation on the