

INQUIRY INTO CASA'S ACTIONS RELATING TO
REPORTS OF DEFICIENCIES IN CERTAIN
ENGINES

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INQUIRY INTO CASA'S ACTIONS RELATING TO REPORTS OF DEFICIENCIES IN CERTAIN ENGINES

INTRODUCTION

Establishment of inquiry

1. On 13 October 1998 I was asked to investigate claims that CASA did not act properly in following up a number of complaints involving Alfred Geoffrey Leach and his son Nick Leach ("the Leachs") and a number of organisations associated with them, namely California Airmotive, California Airmotive Pty Ltd and Groupair Pty Ltd. The terms of reference for my inquiry are set out in Appendix 1. The CASA officers referred to in this report and the positions they hold are listed in Appendix 2. The persons interviewed in the course of the inquiry are listed in Appendix 3. I was ably assisted in the conduct of the inquiry by Paul Vane-Tempest, Senior Associate, Phillips Fox, Lawyers. However, I take full responsibility for the context of this report.
2. The inquiry is concerned with events that flowed from the filing, by David Dent of Dent Aviation Pty Ltd ("Dent Aviation"), of a major defect report relating to an engine that was being used in a tug aircraft owned by Concordia Gliding Club ("the Club").

Background facts

3. In August 1996, the Club requested Dent Aviation to carry out a routine maintenance check of its plane after 120 hours operation. The plane's engine, a Lycoming engine serial no. L-16281-40, had been bought by the Club from the Leachs in 1995. The engine log book indicated that it had been overhauled by California Airmotive Pty Ltd.
4. David Dent advised that his initial visual inspection of the engine indicated to him that it was burning an excessive quantity of oil. He had been informed by the Club that escape of oil from the engine had been causing difficulties for them. He formed the view that the engine warranted an examination that was more

comprehensive than the routine maintenance check would normally require. The examination that he undertook led him to conclude that parts of the engine were worn to a greater extent than would reasonably have been thought likely for an engine that had recently been overhauled. However, to check his initial view, he informally sent some parts to Mr Brian Rule of Reg-Air Pty Limited at Bankstown Aerodrome. Mr Rule agreed with Mr Dent's opinion. He later reiterated his assessment of the engine to me in interview.

5. Mr Dent, after discussing his concerns with Alan Preo on 12 September 1996, lodged a major defect report ("MDR") suggesting that the engine's condition was inconsistent with an appropriate overhaul having been undertaken.

EXAMINATION OF MDR

Movement of engine

6. Following the lodging of the MDR, the handling of the engine was as follows:

12/09/96 Alan Preo directed David Dent to retain the engine in his possession to allow a CASA investigation.

13/09/96 CASA took possession of the engine from David Dent at Camden and transported it to Bankstown Aerodrome.

08/10/96 An inventory of parts of the engine was compiled by Alan Preo.

25/10/96 The engine was transported by Gerry Comerford to the Failure Analysis Group Laboratory, CASA, Canberra.

- 25/11/96 The engine was collected from Canberra by Mike Shannon and returned to Bankstown.
- 06/12/96 Selected parts of the engine were delivered to Hawker Pacific, Bankstown, for examination.
- 10/12/96 The engine (less the parts delivered to Hawker Pacific) was collected from Bankstown by Tom Mercer acting on behalf of Nick Leach. David Dent had, on 2 December 1996, released the engine to employees or representatives of California Airmotive.

The return of the engine was made conditional upon the splitting of the crankcase being undertaken in the presence of a CASA officer. This condition was set out in a letter to the Club dated 28 November 1996. Work to reinstall the engine in the Club's plane was undertaken by Nick Leach. This involved splitting the crankcase. No CASA officer was present when this occurred. A representative of the Club stated that he had told Mr Leach of the CASA requirement. Mr Leach denied that he was aware of this requirement.

- 29/12/96 A fax was sent by Geoffrey Leach to Alan Preo indicating that there had been further inspection of the engine and it was found to be not un-airworthy. This view was repeated by Geoffrey Leach to Mike Shannon at an interview at Bankstown on 6 January 1997. Accompanying the fax was a report from Oilcheck Pty Limited (see below)
- 28/01/97 The engine was returned to Brian Rule of Reg-Air Pty Limited by the Club for overhaul to restore it to a state of airworthiness.
- 06/97 Overhaul was completed and the engine was returned to the Club.

Reports relating to engine

7. A number of reports were prepared in relation to the engine as follows:

12/09/96 MDR lodged by David Dent. The defect described was that the condition of the engine was inconsistent with its overhaul status. Piston pins were out of limit, small end bearings were out of limit, damage to rods, data plate altered.

20/11/96 A report was prepared by Dr A Romeyn, Failure Analysis Group. Dr Romeyn's inspection of the engine resulted in his reporting that glass beads had been introduced to the lubricating oil of the engine and that this had created an abnormal rate of wear. The report is accompanied by photographs which clearly reveal damage to parts of the engine. The matters covered in this report are limited by the fact that the examination was restricted to matters that could be observed without splitting the crankcase of the engine. [I am advised that glass beads are sometimes used as a blasting agent when cleaning engines.]

16/12/96 Report from Hawker Pacific on the parts supplied to it by CASA. The conclusion of the report is that the components provided to it were in poor condition for their time since overhaul (ie. 120 hours). Oil and residue deposits were consistent with infrequently changed or contaminated oil. The description of the individual components shows uniformly that they were defective in varying respects, mostly abnormally worn.

13/01/97 Report from Oilcheck Pty Limited accompanying letter from Geoff Leach to CASA stating that no presence of glass particles was evident.

07/02/97 Report from Brian Rule of Reg-Air Pty Limited indicating that numerous parts of the engine were unserviceable and that it would require a full overhaul. Further, it had not been assembled "in a professional manner", a reference to the re-assembly of the engine after its return to the Club.

Documentation relating to engine

8. Concurrently with these investigations of the physical state of the engine, investigations were also being carried out in relation to the documentation of the overhaul and subsequent maintenance of the engine. This action was prompted in part by the fact that the engine's identification plate had been tampered with and the carburettor serial number also appeared to have been altered. This led CASA officers to enquire into who had carried out the overhaul of the engine and where this had occurred.

9. It became apparent that part of the work had been carried out by Mr John Greaves of Moorabbin Airport, Victoria, but other parts of the work, according to Mr Greaves, had been carried out by the Leachs. It was also revealed that the engine, at the time of overhaul, had its capacity increased but the appropriate approvals for this to occur had not been obtained or, at the very least, were not noted in the engine's log book.

California Airmotive

10. In 1996, there appeared to be a confusion over the responsibility for the work between a partnership between Mr Geoffrey Leach and Mr Keith Hatfield who were trading as California Airmotive ("the Partnership") and a company California Airmotive Pty Limited ("the Company") which appeared to operate out of Mr Geoffrey Leach's house at 263 Connells Point Road, Connells Point, Sydney. The Partnership was the holder of a certificate of approval to conduct certain work. The Company at no stage held such a certificate of approval. Nonetheless, the log book stated that it was the Company that had undertaken work in relation to this engine, not the Partnership.

11. The Partnership had a certificate of approval to conduct engine repair work out of sites in Melbourne. Actions of CASA officers in enquiring about the activities of the Company prompted a response that the Partnership had changed its name to California Airmotive Pty Limited. Subsequent exchanges between CASA and Geoffrey Leach resulted in the certificate of the Partnership being surrendered.

Commencement of CASA investigation

12. The concerns about the engine prompted inquiries by CASA officers into the work of the Partnership and the activities of the Leachs. The investigation was conducted by Mike Shannon of CASA. He had been brought into the case on 17 September 1996. He made contact with Geoffrey Leach to obtain the worksheets and logbooks relating to the engine. In consultation with his superior officer, Bob Vale he arranged for the engine to be transferred to Canberra for examination. He also spoke to a number of the persons involved in the matter and obtained witness statements from David Dent, Michael Honeysett, the representative of the Club, Arjen Romeyn of the Failure Analysis Group, Canberra, and Brian Rule of Reg-Air. He also arranged for a statement to be obtained from John Greaves in respect of the work that he had carried out on the engine. Mr Shannon arranged to interview Geoffrey Leach on 6 January 1997 (after experiencing many difficulties in being able to obtain his consent to take part in an interview). However, when Mr Shannon endeavoured to tape the interview, Mr Leach declined to continue with the interview.
13. During this period draft letters proposing the suspension of the certificate of approval of the Partnership were prepared and commented upon by a CASA legal officer. No further action was taken in relation to these suspension letters, notwithstanding the fact that the legal officer had advised that the suspension should be directed to Groupair Pty Ltd as the organisation that installed the engine into the aircraft. On 10 January 1997, the Partnership requested the cancellation of its certificate of approval and this was approved on that date. This would not, however, have

prevented action being taken against the Leachs or one of the other companies if this had been thought appropriate.

14. At some time in mid December, David Dent wrote to Transport Minister Sharp, complaining about the delays in taking action in relation to his MDR. (An interim response to this letter was provided on 5 February 1997 and a final response on 26 May 1997. In the latter letter it was said that CASA had lodged a submission with the Director of Public Prosecutions ("DPP) on 8 May 1997).
15. By 27 February 1997, Mr Shannon had reached a stage in his investigation where he had prepared a summary of evidence and a list of possible breaches of the Civil Aviation legislation by Geoffrey Leach, the Partnership and Groupair Pty Limited. This summary was sent to Bob Vale, with a recommendation that Geoffrey Leach be asked to show cause why his AME Licence should not be cancelled and Groupair Pty Ltd be asked to show cause why its certificate of approval should not be cancelled. Approval was also sought to forward a brief of evidence to the DPP.
16. Mr Shannon stated that he was not authorised to take further action in relation to these recommendations himself. He would not prepare a brief of evidence unless told to do so. According to his electronic diary he raised the issue of taking action with his superior offices on four occasions during March and April 1997. The nature of the response is not recorded nor has Mr Shannon advised what was said to him. However, it is clear that no authority was given to him to take the matter further.

Issues raised with DPP

17. The next significant step in CASA activity occurred on 8 May 1997. On that day Mr Shannon said that he raised with Mr Chris Murphy of the DPP, Sydney, the issue whether sufficient evidence existed for action to be taken to prosecute the Leachs. This information is not derived from any direct entry in Mr Shannon's investigation file or in any other CASA file that I have seen but the meeting is noted with the words "Leach/Monarch for advise

(sic)" in Mr Shannon's diary. Reference to the meeting is contained in a brief to the Chairman dated 19 May 1998. Mr Murphy is the DPP's chief liaison officer to CASA. Mr Shannon had regular dealings with him in relation to CASA prosecutions. Mr Murphy has no recollection of the conversation referred to by Mr Shannon but does not say that it could not have occurred. No DPP file was opened. Mr Murphy said that if an issue required more than a 2-5 minute discussion, a letter would normally be sought from the agency concerned. What is clear is that no written submission or brief was prepared and submitted to the DPP for advice. Mr Shannon says that he raised the matter at the end of a discussion with Mr Murphy relating to other proceedings that were the subject of his meeting with the DPP.

18. The 19 May 1998 brief to the Chairman also refers to the DPP verbally advising CASA (by which I understand it to refer to Mr Shannon) that the evidence submitted was insufficient to support the case and that more crucial proofs were needed. Here again there is no material in a written form that supports these statements nor does Mr Murphy of the DPP recall any discussion. The statements are Mr Shannon's assertion of what occurred. It should be made clear that no further evidence was ever submitted to the DPP.

Mr Dent's contact with CASA

19. During the first half of 1997 (after he had written to the Minister for Transport), Mr Dent made contact with CASA officers from time to time asking what had happened in relation to his major defect report. He says that he was told by Mr Shannon that a brief was being prepared for the DPP. Mr Shannon concedes that he tried to fob off Mr Dent's inquiries. He said that he could have used this language to Mr Dent but he thought it unlikely. When Mr Dent received the letter from the senior advisor to the Minister for Transport dated 26 May 1997 which indicated that CASA had lodged a submission with the DPP on 8 May 1997, he ceased to pursue the issue believing that appropriate action was in hand.

Subsequent CASA activity

20. Mr Shannon's diary records his raising the Leach issue with his senior officers in June and again in July 1997. No response is recorded. On 15 August 1997 an e-mail from Les Lyons to Eugene Holzapfel brought to attention the fact that David Dent had further information relating to the overhaul of engines by the Leachs. This was in turn brought to the attention of Mike Shannon who on enquiry of Mr Dent, was advised that Roland Muscat of Sadleir, NSW, had information relating to work that had been performed by the Leachs at Connells Point, Sydney. Subsequently Mr Shannon, accompanied by Gerry Comerford, interviewed Mr Muscat at his place of work at the Qantas International Terminal. The outcome of this interview is dealt with further below but for present purposes it should be noted that no action was taken by Mr Shannon following the interview.
21. The issue relating to the engine revived again in December 1997. The first document that I have sighted of relevance is an e-mail from Paul Simpson, legal officer, to Dick Best relating to a possible show cause action on Mr Leach's AME licence for work carried out on the engine. Further exchanges on this topic continue through to 16 January 1998 but fall silent then until 22 May 1998. The 'show cause' letter was eventually agreed upon and served on 20 July 1998.
22. It is interesting to observe that as late as 18 June 1998 in an e-mail from Dick Best to Garth Cartledge reference is made to it being wise to run the 'show cause' letter *"past Mike Shannon to ensure it does not upset the proposed action with the DPP"*.

Discontinuance of criminal proceedings

23. These references to contact with the DPP should be contrasted with the statement made at interview by Mr Shannon that he had raised the question of continuing prosecution proceedings with the Regional Manager, South East Region, Trevor Burns. Mr Burns had told him not to proceed with the pursuit of a criminal prosecution but to adhere solely to the show cause procedure. It

appears from Mr Shannon's diary that this meeting was on 25 August 1997. The 19 May 1998 brief to the Chairman (see further below) also mentions that the Regional Manager, South East Region, had decided not to continue with criminal proceedings.

24. Fixing precisely the timing of this alleged decision to discontinue pursuit of criminal proceedings is complicated by the fact that on 31 October 1997 Trevor Burns in an e-mail to Sue Burns relating to a request by David Dent to speak to Dick Smith, refers to this matter as having been the subject of a long running investigation and *"sometime ago we submitted a brief to the DPP"*. The e-mail continues: *"I telephoned Mr Dent yesterday and discussed his concerns. After receiving a brief from Mike Shannon I again telephoned Mr Dent this morning and gave him an update and have given him an undertaking to keep him posted on progress"*.
25. In January 1998 David Dent telephoned Dick Smith's office and advised that, despite the fact of the issue being with the DPP since 8 May 1997 no action had been taken. Dick Smith wrote to Rob Elder on 14 January 1998 inquiring what action was being taken by the DPP. Rob Elder responded by letter dated 23 January 1998 indicating that the issue had not been submitted to the DPP: *"our investigator who is handling this case has not yet completed the brief for the DPP, as he has been involved on other investigations. However the brief should be completed within the next 2 weeks"*.
26. This information was presumably supplied by Mr Shannon. It is interesting to note, that despite the previous claim that it had been agreed with the Regional Manager that criminal proceedings should be abandoned, this information was not conveyed to Mr Elder.

Contradictory evidence

27. The letter from Rob Elder to Dick Smith was sent also to the Department of Transport and Regional Development ("the Department"). The Department compared it with a previous letter from Mr Elder to the Department of 20 May 1997 in which

the information had been conveyed that a submission had been lodged with the DPP on 8 May 1997 and that the further information requested by the DPP was expected to be provided by 23 May 1997. This prompted further examination of the issue within the corporate relations section of CASA which resulted in an e-mail from Aleksandra Valda, CASA, stating: "*CASA did approach the DPP on 8 May 1997 with the initial, preliminary submission concerning the legality of the engine overhaul work undertaken by California Airmotive and was at that time asked to provide additional evidence by 23 May. The DPP then advised CASA (verbally) that the evidence submitted is far from enough and that more crucial pieces of evidence were needed*". The note then went on to say that CASA's investigators had been working on gathering the required evidence and the final and current position was that the DPP were seeking 2 more pieces of evidence before they could accept CASA's brief as final. It was said that the investigator assigned to this case expected to have this evidence in 4 to 6 weeks time from now. Again there is no suggestion in the information that the criminal prosecution had been abandoned.

Brief of 19 May 1998 to Chairman

28. The next significant document was the brief prepared for the Chairman dated 19 May 1998. It is not clear from the files that I have seen what prompted the preparation of this brief.

29. In relation to the criminal proceedings the brief states:

"CASA approached the DPP on 8 May 1997 with a preliminary submission concerning the legality of the engine overhaul work undertaken by California Airmotive and was, at that time, asked to provide additional evidence by 23 May 1997.

Subsequently, the DPP verbally advised CASA that the evidence submitted was insufficient to support the case and that more crucial proofs were needed.

CASA investigators were working on gathering the required evidence which was becoming increasingly more difficult with the passage of time and the engine in question being sent from one place to another for evaluation and finally returned to Mr Leach (!) (sic)

In view of CASA's inability to establish the facts relating to the status of the engine at the time of the submission of the MDR, the current Regional Manager, South East Region has decided not to continue with criminal proceedings.

However the Regional Manager, South East Region has initiated the show cause process against Mr Leach's aircraft maintenance engineer's licence. It is expected that the show cause letter will be sent to Mr Leach by Friday, 22 May 1998."

30. This brief was prepared by Aleksandra Valda. In the course of its preparation she says she consulted with a number of people including Mr Shannon because she needed assistance in its preparation. She included the words "preliminary submission" in the brief as she understood that was the basis of the approach that had been made by Mr Shannon to the DPP. Ms Valda believed that she sent the draft of the brief to Mike Shannon for his comment. For his part, Mr Shannon indicates that he gave an oral briefing to Ms Valda but he did not see the text of the brief. Ms Valda expressed the view to me that she assumed the submission to the DPP had been in writing but she was of the view also that the expression preliminary submission could refer to a verbal briefing. The reference to the DPP providing subsequent verbal advice appears to be a misunderstanding as Mr Shannon had only the one discussion on the matter with the DPP in 1997.

31. Mike Shannon in an e-mail to Trevor Burns dated 1 July 1998 says:

"As discussed the other day I have been considering some way we could still lay charges against Leach even though for all practical purposes the engine involved in this issue is

contaminated (evidentiary wise). To this end I had discussion with DPP today on amongst other issues the Leach matter. It is their opinion that the only way that sufficient reliable evidence could be obtained that could allow us to prosecute Leach would be if the partners in California Airmotive (a Melbourne based firm) were to give statements that left no doubt that it was impossible for Leach who was also a partner to have the opinion that he could perform the engine rebuild at his own discretion and at any location.

One of the partners has already denied that California Airmotive did overhaul the engine subject to this enquiry. But, only in a letter he was not prepared to make a formal statement.

With this all in mind I proposed to approach the partners seeking formal statements. If they decline again I would suggest that any further perseverance with this enquiry would be futile."

32. It is difficult to accommodate this message with the previous statements in the brief to the Chairman and with the statements made by Mr Shannon in interview that the decision had been made that criminal proceedings should not be pursued.

Mr Dent's second letter to Minister

33. On 23 June 1998 David Dent wrote to the Minister for Transport and Regional Development, Mark Vaile, indicating that he had rung Mr Murphy of the DPP to ascertain for himself what was happening in relation to the criminal prosecution. Mr Murphy told David Dent, as he told me, that he had no recollection of any discussions with Mike Shannon on the matter and there was no record of any submission or brief having been sent by CASA to the DPP. This response by the DPP led Mr Dent to believe that CASA officers had deliberately misled him and had also misled the Minister in the letters that the Minister had written to him.

Description of approach to DPP

34. It is possible that there was some confusion between CASA officers as to the state of the proceedings. The 19 May 1998 brief to the Chairman refers to CASA having "approached" the DPP with a "preliminary submission" on 8 May 1997. However, the Minister's letter of 27 May 1997 refers to CASA having "lodged a submission". Mr Dent says that Mr Shannon had referred to a brief to the DPP. Ms Valda did not distinguish between a written and an oral submission. Overall it appears that there was a lack of precision in the various communications which led to confusion as to the action that had been taken.

Actions of Mr Shannon's superior officers

35. Mr Shannon says that throughout this period he was awaiting authority from his senior officers to direct the action that he should take. The ascertainment of the precise role played by Mr Shannon's superior officers in this matter has been difficult to establish. Mr Vale retired from CASA in September 1997. He was unwilling to discuss the matters raised by this inquiry with me. In a short telephone conversation, he was prepared only to say that he recalled that there were problems with the engine but he claimed to remember no involvement after his preparation of a summary of events up till 23 December 1996. This summary accompanies the 19 May 1998 brief to the Chairman and provides an accurate picture of events to that date.
36. Mr Barry Diamond, who was Regional Manager of the South Eastern region during 1996 and part of 1997, has retired from CASA. Mr Trevor Burns, who became Regional Manager during 1997, was suspended from duty during the period of this investigation. I did not consider it likely to be productive to contact either person for the purpose of the investigation.
37. During 1997 Mr Vale was DAM, Bankstown North, while Dick Best was DAM, Bankstown South. In the ordinary course of events, activities associated with companies operating at Camden Airport would have fallen within Mr Best's jurisdiction.

However, Mr Best said that in the division of duties, Camden airport companies were allocated to Mr Vale. Groupair Pty Ltd and the Leachs thereby became Mr Vale's responsibility.

38. There were periods during 1997 when Mr Vale was on leave for various reasons. During these periods and in the latter part of the year, different CASA officers acted in the relevant DAM office. This would undoubtedly have caused problems for Mr Shannon in activating any action arising from the investigations into the engine.
39. Mr Shannon says, and I have no reason to doubt him, that he was unable to obtain a decision from Mr Vale whether to proceed with action against the Leachs. He also asserts that the relationship between Mr Diamond and Mr Vale was unsatisfactory. None of this was conducive to the matter being properly advanced. However, it is to be noted that there is no further document directed by Mr Shannon to a superior officer after his memorandum to Mr Vale of 22 February 1997.]
40. It would have seemed essential that a further memorandum pointing to the lapse of time and its effect both on the evidence and Mr Dent's perception of the management of his report should have been directed to the DAM and copied to the Regional Manager.
41. It is also apparent that senior offices were given ambiguous information about the status of criminal proceedings against the Leachs. On the one hand, Mr Burn's direction of mid 1997 to abandon this line of conduct was referred to in the brief to the Chairman dated 19 May 1998. But prior to that, letters had been sent, seemingly after consultation with Mr Shannon, that indicated that the pursuit of criminal proceedings was still afoot. 7

"Corruption" of evidence and pursuit of prosecution

42. Mr Shannon had apparently come to the view that the chance of succeeding with the prosecution in so far as it related to the defects

in the engine were hampered by what he described as the "corruption" of the evidence. This in his view had stemmed from the number of hands through which the engine had passed in the period after it had been reported upon adversely by David Dent together with the somewhat conflicting views that ascribed deficiencies in the engine on the one hand to abnormal wear and on the other to glass bead blast damage.

43. It does not in fact seem that these are incompatible - in either case they would point to an unacceptable overhaul of the engine. But setting this to one side, there seemed ample evidence that unauthorised persons had worked on the engine and that the paperwork relating to the engine had not been properly dealt with and indeed contained false statements that could only be attributable to the actions of the Leachs. Examples of such matters include:

- the certification of the overhaul of the engine by California Airmotive Pty Ltd which had no certificate of approval;
- the carrying out of this overhaul by persons and at premises that were not approved;
- the lack of engine testing documentation;
- the upgrading of the capacity of the engine without approval and failing to record that fact in the engine's log book;
- the splitting of the engine crankcase without a CASA officer being present contrary to a formal direction;
- the failure to follow up the interference with the engine's identification plate and carburettor serial number.

Most of these are referred to in Mr Shannon's memorandum to Mr Vale of 27 February 1997.

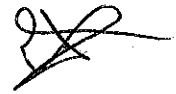
44. Mr Shannon said at interview that at the present time he is managing 21 investigations. During 1997 he had 15 investigations in hand. It may well be that this quantum of work is beyond his capacity to handle. I have no reason to think that Mr Shannon was deliberately failing to pursue the prosecution of the Leachs but it does appear that the matter was not being given any priority.

ROLAND MUSCAT INFORMATION

Information to CASA

45. As indicated previously, David Dent brought to the attention of CASA statements made to him by Roland Muscat that indicated that engines were being overhauled by the Leachs at their house in Connells Point, Sydney. These statements were passed on to Mike Shannon who interviewed Roland Muscat at his work at Qantas International Terminal. What passed between Mr Muscat and Mr Shannon is a matter in dispute.

Interview of Mr Muscat by Mr Shannon



46. Mr Muscat says that he told Mr Shannon that during the period 1989-1992 he was a partner of the Leachs in the ownership of a DC3 aircraft used for charter work. As such he went to Mr Geoffrey Leach's house in Connells Point Road on a number of occasions. There he saw engines being repaired and overhauled in the garage of the house. He said that there were various engines there at different times including at one stage a DC3 engine. He said that the garage was equipped as a workshop. When I pressed him, Mr Muscat described the house, including the placement of the garage and, significantly, the nature of the garage door (an old fashioned fixed tilt-a-door) and he made the point that it was possible to see into the garage from the road.
47. Mr Muscat indicated that he had been told by the Leachs that the work being performed at Connells Point was not authorised and he said that engines were reconditioned at Connells Point and then taken to Melbourne to be certified at the Partnership premises at Berwick. He had previously told me the same story when I had first spoken to him at Camden Aerodrome and he repeated it with a degree of accuracy adding only the particulars relating to the Connells Point house when I re-interviewed him at Mascot.

48. In total contrast to this, Mr Shannon, when asked about the interview with Mr Muscat, said that Mr Muscat said that he had not been to Connells Point, indeed that the Leachs had not permitted him to come there. Mr Shannon agreed that Mr Muscat had said that the Leachs worked on engines there but Mr Shannon formed the view that this was surmise on his part and was not based on first hand knowledge. Mr Shannon said that he had visited the house and he described the garage as unsuitable for the work that Mr Muscat had said occurred there and indicated that the garage door looked as though it had not been opened for some time.

Connells Point house

49. I viewed the house at 263 Connells Point Road, Connells Point, and found that it accorded precisely with Mr Muscat's description and less with Mr Shannon's. It was not possible to investigate whether the garage door had been opened recently but as Mr Shannon's visit was some years after the time Mr Muscat described, the circumstances could well have changed. It was, however, clear in my mind that Mr Muscat was familiar with the house and could have seen the activity that he described.

Relationship of Mr Muscat and Leachs

50. Mr Muscat was a former partner of the Leachs and their separation has not been amicable. Mr Muscat is bringing an action against them for the recovery of \$20,000 that he says they owe him. In viewing his statements this fact must be borne in mind as he clearly has no affection for the Leachs. However, the real issue for this inquiry is whether Mr Shannon acted properly after receiving the information that Mr Muscat had given him. Mr Shannon was accompanied at the interview by another investigation Mr Comerford, but Mr Comerford was less than forthcoming about the content of the discussions that had occurred.

Conclusion on interview

51. The events that were described by Mr Muscat to Mr Shannon had occurred between 5 and 7 years prior to the information being given to Mr Shannon. I could have understood Mr Shannon simply taking the view that the information was too old to act upon. However, his denial of having received the information is puzzling. Mr Muscat has reason to speak ill of the Leachs but he was, in my assessment, accurately stating what had passed between him and Mr Shannon. It would in my view have been appropriate for Mr Shannon to have made some further enquiries as to whether work was being or had been undertaken at Connells Point. He could have obtained a search warrant to have inspected the place or, if this was thought too draconian, he should at least have made enquiries of persons who had obtained engines from the Leachs in the period from the mid 1990s.

Action by CASA now

52. It does not seem to me to be necessary now to pursue the position in relation to the engines that Mr Muscat describes as they will have been subjected to many periods of maintenance and any deficiencies should have been identified. As is indicated below, other persons to whom I have spoken do not support Mr Muscat's allegations that engines were being certified by California Airmotive in Melbourne after being worked on at Connells Point and one could accept in the light of this that the allegations were false. However, the Lycoming engine was worked on in Sydney and certified as overhauled by the Company. The fact that this occurred raises the issue whether it was truly an isolated incident when regard is had to Mr Muscat's allegations. I cannot reach a conclusion that this matter has been satisfactorily investigated. I recommend that the issue whether engines have been overhauled or maintained at Connells Point be given further attention by CASA as a matter of urgency.

THE MELBOURNE CONNECTION

California Airmotive's activities in Melbourne

53. The Partnership was, during the relevant time, a partnership between Keith Hatfield and Geoffrey Leach. I am told that its primary function was to service the engines used by Groupair Pty Ltd, a company which also was owned by Messrs Hatfield and Leach. To this end, certificate of approval number 1193 was issued to Alfred Geoffrey Leach and Lesley Keith Hatfield trading as California Airmotive, 8 Coopers Road Macclesfield, Victoria. The last such issue of that certificate was 10 September 1992, but there had been previous certificates held in the same name. The authority was to maintain aircraft components limited to:

"Maintenance of aircraft piston engines excluding fuel injection systems.

Maintenance of alternators, generators and starter motors attached to or driven by aircraft piston engines."

There was also an authority to distribute aircraft components and aircraft materials excluding aviation fluids and greases.

54. In 1985 the Company, was registered. The directors of the Company from 14 December 1984 were Messrs Hatfield and Leach. Mr Hatfield ceased to be a director on 7 November 1994 and Margaret Leach became a director on that date. The initial registered office of the Company was at Mr Hatfield's address in Park Orchards, Victoria. It ceased to be the registered office and that office moved to Mr Leach's house at 263 Connells Point Road, Connells Point, NSW on 31 December 1992.
55. The Company has never held a certificate of approval to conduct work in relation to aircraft engines.
56. Mr Hatfield's shareholdings in Groupair Pty Ltd and the Company were transferred to the Leachs on 10 December 1994.

57. Mr Hatfield wrote to the DAM, Moorabbin on 31 December 1996 indicating that he would no longer be involved with the continuing operation of the Partnership and the Company. He told me at interview that he had in fact not been involved with either body since ceasing to be a director of the Company in 1994. He also said in his letter of 31 December 1996 that he had held the belief for some considerable time, in fact since the inception and registration of the Company, that licence approval no. 1193 was held by the Company and not by the Partnership. Mr Leach also wrote to CASA on 31 December 1996. In his letter he said that he had thought that the certificate of authority had been transferred to the Company and further that CASA had been notified of this change. In that letter he also requested that the certificate be transferred to the Company. After further discussion with CASA officers at Moorabbin, Mr Leach wrote on 10 January 1997 requesting that approval number 1193 be cancelled. This was said to be *"after further reflection on the workshop situation of California Airmotive and our discussions"*.
58. As far as I have been able to ascertain from Mr Hatfield and Mr Lee Bebbington, California Airmotive operated in conjunction with Groupair Pty Ltd from the Casey Aerodrome at Berwick, Victoria, until that aerodrome was closed in the early 1990s. The Partnership then transferred its business to the workshop attached to the house of Mr Bernd Heuser at 8 Coopers Road, Macclesfield, Victoria. The certificate of approval was amended to reflect this change of location on 12 December 1991.

Non-compliance notice

59. A non-compliance notice was issued to the Partnership in September 1992 because it had not submitted a quality control manual. This followed a change in legislation requiring bodies such as the Partnership to have such manuals. Further notice was issued again in June 1995 as the Partnership had still not submitted a manual. Mr Heuser at that date agreed with CASA officers that no further work would be carried out in his premises by the Partnership until a quality control manual had been accepted. A draft manual in the name of the Company was supplied to CASA by Mr Heuser with a covering letter dated

24 October 1996 and an indication from Mr Heuser that this manual had been sent to him by Mr Geoff Leach. The registered locations shown on the manual were at Macclesfield and at Camden Airport. The existence of the manual became otiose on the surrender by the Partnership of its certificate of authorisation.

60. It has been suggested that this delay in securing compliance with the non-compliance notice was a mistake on the part of the CASA officer concerned, Lee Bebbington.
61. Mr Bebbington defended his conduct on the basis that operators such as the Partnership had a period of grace within which to comply with the 1992 change in legislation. Thereafter he did not press Mr Heuser to whose premises the certificate of authorisation applied because, as he put it, the Partnership was virtually mothballed. He was satisfied that it was doing little work and only for Groupair Pty Ltd, with whom it was associated. It was only after Groupair moved its operation to Camden and the Partnership, if it continued to operate, would be seeking work from other companies that pressure was applied for the submission of a manual.
62. I am satisfied that Mr Bebbington considered the need for the Partnership to furnish a quality control manual. His judgment of the desirability of enforcing the legislation represented an assessment of the nature of the Partnership's operations and of Mr Heuser's involvement with it and his expertise. Mr Bebbington said that he did not wish to be too bureaucratic and had to assess the whole environment.
63. Mr Bebbington was probably generous in his approach to compliance with the requirements of the legislation. He allowed a considerable time to pass by without insisting on the submission of a manual. However, there is room for a degree of practicality in approach in matters of this kind. I do not find that Mr Bebbington's actions warrant criticism.

Dealings with engines repaired in Sydney

64. Mr Hatfield indicated in positive terms that, during his period of association with the Partnership (i.e. until November 1994), no engines had been brought from Sydney to be further worked on at the Partnership. Similar views were expressed by Mr Heuser in respect of the period that the Partnership operated from his workshop in Macclesfield. Mr Bebbington indicated that if engines were being dealt with in this way he thought it most probable that he would have heard that this was occurring.

65. In a letter dated 13 September 1996 from Mr Heuser to CASA, Moorabbin, Mr Heuser said that he was not aware of the overhaul of the engine that was the subject of complaint by Mr Dent. Mr Heuser said that he held no paperwork or job number for this engine. This followed the furnishing to him of the extract of maintenance details from the engine log book which was signed off as reconditioned by Geoff Leach on the Company's letterhead with the address shown as Connells Point. The certificate of approval number shown on the document is 1193, the approval number of the Partnership.

66. The information on file indicates that part of the work on the engine was carried out by John Greaves who is the Chief Engineer with the Royal Victorian Aero Club. Mr Greaves said that he used to relieve the Chief Engineer of Groupair and he believed that he was able to sign approvals on behalf of the Partnership. CASA was not aware of these arrangements and it did not seem that Mr Greaves was acting in this case for either the Partnership or the Company. Mr Greaves claimed that the job sheet relating to the work that he did was altered after he had completed it. This was a matter that warranted further investigation but is probably now too late to pursue.

THE FAILURE ANALYSIS GROUP INCIDENT

Request for inspection of engine

67. On 25 October 1996 the engine was transported from Bankstown to Canberra to the Failure Analysis Group (FAG) for examination at its laboratory. The request for an examination was directed to the then Acting Manager, Technical Specialists, Mr Bernie Hole, by Bob Vale as DAM, Bankstown North. The request for information had been prepared by Alan Preo and sought advice on a number of issues. It is significant that Alan Preo's request for inspection para 2.02 reads: *"It is proposed that the inspection and report be done in two parts. Part 1 to consist of inspection and report of disassembled and accessible parts. Depending on the results of part 1, the Bankstown district office may request further disassembly and inspection of the crankcase assembly."* It can be seen from this that the initial request did not contemplate the splitting of the crankcase.

Report of FAG

68. The analysis was carried out by Dr A Romeyn, who prepared a report directed to Mike Shannon dated 20 November 1996. Dr Romeyn moved from CASA to the Bureau of Air Safety Investigation in the Department of Transport when the Failure Analysis Group was transferred to that body in September 1997. I spoke to Dr Romeyn, who recalls the event. He said that once he saw evidence of damage caused by glass beads, he thought that there was no point in further more detailed examination of the engine as it would not be possible to distinguish the sources of damage. Dr Romeyn says that he carried out his task professionally.

Allegations of interference with inspection

69. A number of persons suggested to me that the extent of the FAG's examination of the engine had been affected by intervention on the part of Frank Grimshaw, who had directed that the

examination cease and the engine be returned to Bankstown. It should be said at the outset that Dr Romeyn denies any suggestion that he was pressured by any CASA officer to curtail his examination of the engine.

70. I interviewed Mr Grimshaw in relation to this allegation. He said that at the relevant time he had authority over FAG. He saw as its role the obligation to investigate failures that were of a systemic nature in order to enable the central office of CASA to carry out its air safety role. FAG was concerned with engine or aircraft standard deficiencies that might be found in other aircraft. Mr Grimshaw asserted the view strongly that at this time it was not possible for FAG to carry out examinations on individual engines where the examination was directed to a matter other than one of a systemic kind. To this end, he did not approve of the examination being conducted of the particular engine here as it was not concerned with a defect that the central office of CASA would pursue. The deficiency in the engine lay in either its overhaul or its maintenance. Mr Grimshaw considered that this was a district office problem and not one that should be brought to FAG.
71. Mr Grimshaw recognised that his assessment of the use of FAG was not necessarily known in all regions and was not necessarily accepted by all regional administrators. It was against this background that he indicated to FAG that examination of the engine should not be given priority and that it should be returned to Bankstown as soon as possible. However, he was not directing his attention to the role of Mr Dent in the matter or to the demands of an individual Airworthiness Surveyor from Bankstown. He was simply enforcing the policy that he had adopted in relation to FAG's work.
72. Mr Grimshaw's comments are supported by Eugene Holzapfel, who expressed in a minute dated 14 July 1998 to David Villiers and in interview to me that he believed Mr Grimshaw had acted correctly. Mr Shannon, on the other hand, said that at this time FAG was conducting tests on other material at his request where systemic issues were not involved.

Conclusion on interference allegations

73. The complaint that is made is that the FAG was prevented from splitting the crankcase and providing commentary on the extent of wear to the engine that this would reveal. However, it is clear from the original reference to FAG that this was only to be done if a further request to that effect was given by Bankstown. No such request was made as Dr Romeyn had made it clear that he did not think that further examination was warranted in the light of the damage that he had detected to the engine.

74. Mr Grimshaw had determined the policy to be followed by FAG. It may well have been that work was being done that did not accord with that policy. This could be because the policy was not understood or because it was not being adhered to. Whatever may have been the position in regard to examination of other material, I do not consider that the scope of the report on the engine here was affected by Mr Grimshaw's intervention, and Dr Romeyn's professional standing is such that I do not believe that he felt that the content of his report was affected. I find that there was no improper activity relating to the FAG examination of the engine.

CONCLUSIONS

David Dent's actions

75. There seems no doubt from all that has been said by various witnesses and as appears in various reports that David Dent acted properly in lodging a major defect report with CASA relating to the Lycoming engine that he had removed from the Club's tug plane. The engine was in a dangerous state and could have failed at any time with tragic results. Whether the deficiencies in the engine were caused by glass beads or inadequate replacement of parts at the time of overhaul is irrelevant to this issue. There should be no doubt in anyone's mind that the Club and the public at large have much to be grateful to Mr Dent for. I recommend that CASA formally record this fact in a letter to Mr Dent and to the Club.

Responsibility for defects in engine

76. It is not within my terms of reference to determine whether the responsibility for the state of the engine rested with the Leachs. It is, however, difficult to see who else would have been responsible. It appears to me that the only alternative explanation to the deficiencies having occurred at the time when the engine was overhauled would be to assume sabotage of the engine by the inclusion of glass beads in it after it had gone into service. Having regard to the fact that the engine was not overhauled in approved premises and probably not by approved persons, the probability seems to be that the deficiencies occurred at the overhaul. There may have been a difficulty in securing a prosecution for deficiencies in the engine: see below in relation to the "corruption" of the evidence. I should not be taken to be endorsing that view. However, there was considerable evidence of the matters referred to in para 43 of this report that was not affected by this problem.

77. A conclusion on responsibility could have been reached if a brief had been prepared in a form capable of presentation to the DPP for advice on whether a prosecution was likely to succeed or to a

CASA legal officer to determine whether a 'show cause' letter should be issued. The failure to do this means that a serious issue of air safety has been allowed to pass without those responsible being called to account for their actions.

Specific issues in terms of reference

78. I turn now to the specific matters on which I was asked to report:
- (a) *Whether a submission was made by CASA to the DPP in relation to the possibility of criminal action being commenced as a result of the defect report.*
79. No formal submission was made by an officer of CASA to the DPP. Mr Shannon says that he raised the issue orally with officers of the DPP. The limited documentation indicates that this occurred on two occasions. Mr Chris Murphy of the DPP's office cannot recall these conversations but does not say that they could not have occurred. To the extent that the expression 'submission' means that a summary of the relevant evidence was prepared and issues arising from that evidence raised for advice, it is quite clear that this did not occur.
- (b) *Whether the Minister was correctly advised in relation to any such submission.*
80. I have not seen the material that went to the Minister and on which the Minister's response of 26 May 1997 was based. Presumably, information was sought from Mr Shannon and the letter was based on his advice. It is to be noted that the brief to the Chairman of 18 May 1998 uses the expression 'preliminary submission', but I have no way of determining what was the language used in the original advice to the Minister in 1997. If indeed the word 'submission' was used, then I consider that the Minister was not correctly advised as that word has overtones of a written document. I do not think it appropriate that the Minister should have been allowed to write a letter advising that a submission had been prepared when the most that had taken

place was an informal oral discussion. Without having seen the relevant documentation, I cannot reach a conclusion as to how the content of the Minister's letter was reached.

(c) *The reason why no criminal action was brought as a result of the defect report, including a consideration of whether and, if so, how the evidence relating to the engine was "corrupted".*

81. I have found no reason to think that criminal action was not brought for any fraudulent reason. Rather, there was a failure within CASA to address the issues, and to direct the preparation of a brief for the DPP within a reasonable time frame. I return at the end of this report to a consideration of the inadequacies in the system for dealing with failures to proceed with investigations in an appropriate manner.

82. Whether the evidence relating to the engine was "corrupted" in the context in which the expression was used will not be known in the absence of the preparation of an appropriate brief for consideration by the DPP. Mr Shannon took the view that the engine had passed through too many hands prior to its return to the Concordia Gliding Club and its re-installation in the plane by Nick Leach. Whether this view was soundly held could only have been determined if the facts relating to the matter had been properly placed before the DPP for decision. It was not a decision that should have been taken by a CASA officer.

(d) *Whether there was any undue delay in taking action to review Geoffrey Leach's licence.*

83. This is a reference to the action that was taken in December 1996 to suspend the Partnership's licence in the light of the adverse report that had been received in relation to the overhaul of the Lycoming engine. The issue was overtaken by events in that the Partnership's certificate of authority was surrendered and then cancelled in January 1997. The only question of delay was whether CASA should have acted in October or November of 1996 when it first became apparent that there was a problem with the engine that the Leachs had overhauled.

84. There was some uncertainty at this point as to the nature of the deficiencies in the engine and as to who was responsible for the overhaul. The Partnership had not undertaken the overhaul. It had been done by the Company which had no Certificate of Approval to suspend. Having regard to the necessity to draft appropriate 'show cause' letters, that the matter had arisen close to Christmas and, most significantly, that steps had been taken to require the repair of the engine, it was not a matter that required rapid action for the protection of public safety. I do not find that there was undue delay in taking action at that time. The position subsequent to this time was very different.

(e) *Whether there was any improper interference by any CASA officer in relation to the inquiries following from the defect report.*

85. The principal allegation of improper interference is that directed against Frank Grimshaw and his direction that the Lycoming engine be returned to Bankstown. As indicated in my discussion of this issue, I do not find that there was an improper interference by Mr Grimshaw in relation to the inquiries. No other positive allegation of impropriety by a CASA officer (as distinct from rumours and conjecture) has been placed before me and I have not become aware of this as an issue in the course of this inquiry.

(f) *Whether CASA officers took appropriate action to investigate allegations of breach of the Civil Aviation Regulations by Geoffrey Leach or Nick Leach.*

86. The discussion of the actions taken by CASA officers following the original defect report has been outlined above. It can be seen from that discussion that there has been an absence of energy in pursuing the investigation of possible breaches. The issues arose in September 1996. A 'show cause' letter limited to only one activity of the Leachs was served in July 1998. No action was taken to investigate allegations made by Roland Muscat that engines were being overhauled at unapproved premises.

87. The primary failure to pursue this matter at first sight appears to rest with Mr Shannon. However, I accept that he was constrained in what he could achieve by the failure on the part of his superior officers to authorise the preparation of a brief for the DPP and instructions for show cause letters by CASA legal officers. I have expressed the view that Mr Shannon could have done more to focus the attention of his superiors on the issues when it became apparent that verbal reminders were not producing a result. I return below to the general issue of management of breaches of civil aviation safety legislation. For the present it is sufficient to observe that, for reasons that I have not been able to ascertain, the relevant senior officers in CASA did not give adequate attention to the allegations against the Leachs.
88. I find that appropriate action was taken in relation to the engine by the attempts to investigate its deficiencies in September through to November 1996. However, thereafter the sense of urgency rapidly dissipated and what, on the face, appeared to be improper actions on part of the Leachs were not properly pursued.
89. A matter for which Mr Shannon must assume responsibility is the inadequacy of information provided to Mr Dent. Mr Dent was persistent in his requests for information relating to the action being taken in regard to the MDR that he had lodged. Mr Shannon concedes that he endeavoured to fob off Mr Dent. In so doing he created an impression in Mr Dent's mind, that was confirmed by the letter from the Minister stating that a submission had been lodged with the DPP, that the investigation was much further advanced than was the reality. When the truth became known, Mr Dent reasonably considered that he had been deliberately given false information and that CASA was protecting the Leachs.
90. Mr Shannon says that he acted as he did to protect CASA. The outcome was the reverse. Transparency and honesty in dealing with members of the public is the only way to avoid the sorts of conclusions that follow from providing misleading information to persons who make legitimate enquiries of government officers.

(g) *Issues arising generally from the Category C grievance report dated 21 August 1998 conducted by an officer of CASA.*

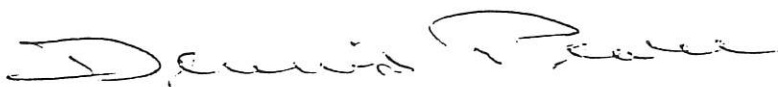
91. The matters raised have been dealt with in this report.

RECOMMENDATIONS

92. I suggest that the role of CASA investigators generally and Mr Mike Shannon's performance in particular needs consideration by CASA senior officers.
93. As indicated in this report, Mr Shannon's actions have led to criticism being levelled against CASA that could have been avoided. This is most apparent in relation to the statements relating to dealings with the DPP, whether the criminal proceedings had been terminated and the receipt of information from Mr Muscat. I consider that Mr Shannon should be counselled in relation to his performance, particularly in regard to his dealings with members of the public. I do not consider that the material that I have seen justifies any other action being taken against Mr Shannon.
94. Some, but not all, of the problems referred to in this report could be the result of Mr Shannon carrying an excessive workload. I suggest that there be a review of the demands being made on the investigation officers. CASA's work on maintaining safety standards will be set at nought if the officers charged with investigating breaches of safety requirements and preparing briefs for action do not have the resources available to carry out their duties in a timely manner. I am not suggesting that this is an explanation of the problems exposed by this inquiry. I do not have the means available to reach a conclusion. But the systemic issues should be considered.
95. This review should include consideration of the desirability of providing training in the handling of evidence and a determination of who has responsibility for the detailed management of an investigation to avoid any problems with the preservation of evidence.
96. An associated issue relates to the follow-up and oversight of alleged breaches of CASA investigations by senior officers. It is surprising in this case in the light of both external and internal interest in the matter that no senior officer authorised Mr

Shannon to take action or even requested further consideration of the issues. It was not until the second letter from Mr Dent to the Minister for Transport that any positive action occurred. It appears to me that CASA needs to have in place mechanisms that bring progress on the investigation of breaches of legislation to the attention of senior officers in the central office. The experience here indicates that it is not sufficient to leave oversight of these matters to District Managers.

97. As part of this monitoring process, there should also be in place a means to consolidate information relating to individual license holders. It emerged in the course of my inquiry that adverse information relating to the persons and companies involved was pooled for the first time at a meeting of CASA officers called to consider the issues that the report on the engine raised. The distribution of responsibilities between different areas in CASA can mean that there is no knowledge that a person operating in different sectors and through different companies may be performing less than satisfactorily at each. What may be accepted as marginal performance not warranting more than a warning can assume greater significance if it is known to be part of a pattern of inadequacy.
98. The system in Australia of private companies inspecting aircraft makes air safety dependent upon the integrity of these organisations. Action such as that taken by David Dent in this case is essential to the effectiveness of the system. It is incumbent on CASA to support persons who act to report deficiencies. This was not done in this case and it may be that Mr Dent has suffered personally and financially as a result. It is essential that CASA not allow this to occur and again in my view systems need to be put in place which inform interested parties of any action taken following the making of reports.

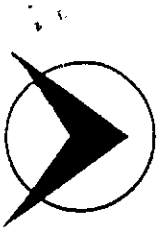


Professor Dennis Pearce

17 December 1998

APPENDIX 1

TERMS OF REFERENCE



CIVIL AVIATION
SAFETY AUTHORITY
AUSTRALIA

OFFICE OF THE DIRECTOR

RECEIVED
15 OCT 1998

13 October 1998

Professor Dennis Pearce
Consultant
Phillips Fox
13 London Circuit
CANBERRA ACT 2601

Dear Professor Pearce

Re: Inquiry into allegation by Messrs Dent and Muscat relating to various aircraft engines

I refer to recent discussions between you and Mr Ilyk in relation to the above matter, and now write on behalf of the Civil Aviation Safety Authority to confirm the arrangements on the basis of which I request that you undertake this Inquiry.

The terms of reference of your inquiry are as follows:

- "1. Conduct a full and complete review of the actions of the Civil Aviation Safety Authority in relation to a Defect Report relating to Lycoming engine serial number L-16281-40 made by David Dent on 12 September 1996.
- "2. Inquire into allegations reported to have been made by Roland Muscat that aircraft engines are or were being overhauled without authority by Nick Leach at his residence at Connell's Point, NSW and the action taken by CASA in relation to these allegations.

The Inquiry should include, but not be limited to, a consideration of the following:

- (a) whether a submission was made by CASA to the DPP in relation to the possibility of criminal action being commenced as a result of the Defect Report;

- (b) whether the Minister was correctly advised in relation to any such submission;
- (c) the reason why no criminal action was brought as a result of the Defect Report including a consideration of whether and, if so, how the evidence relating to the engine was "corrupted";
- (d) whether there was any undue delay in taking action to review Geoffrey Leach's licence;
- (e) whether there was any improper interference by any CASA officer in relation to the inquiries following from the Defect Report;
- (f) whether CASA officers took appropriate action to investigate allegations of breach of the Civil Aviation Regulation by Geoffrey Leach or Nick Leach; and
- (g) issues arising generally from the Category C Grievance Report dated 21 August 1998 conducted by an officer of CASA".

Your terms of reference should not be regarded as being curtailed in any way. The Authority is concerned to ensure that, if there is any aspect of its regulation of the overhaul of engines that may be less than appropriate and proper, such matter should be drawn to my attention immediately so that remedial action can be instituted for the future.

As to other relevant matters in relation to the Inquiry:

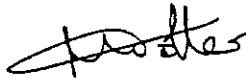
- You will personally undertake the Inquiry and be the signatory of the Inquiry Report and your report should be addressed to me;
- If required, you will be assisted by a team of CASA personnel. Please do not hesitate to contact myself or Mr Ilyk if you require such assistance;
- You will have full access to all relevant official records of CASA, and you are free to approach and address questions to any Authority officer. CASA's Assistant Director, Compliance, Mr Laurie Foley has been asked to advise all relevant staff about the Inquiry and to ask them to give you their fullest support and co-operation;
- If at any stage you consider that there is material which would suggest any current threat to aviation safety, I would ask that you draw that material to my immediate attention without awaiting the completion of your report, so that such material can be immediately examined in an operational context;
- I would appreciate it if you would seek to complete your Inquiry by 6 November 1998 but you should not feel compelled to meet that target

date if you consider that to do so would, for any reason, compromise the accuracy, thoroughness or fairness of your Inquiry. If it becomes apparent that your report will not be available by 6 November 1998, I ask that you keep me informed as to the likely time for its completion;

- CASA will meet your professional costs on the basis of the hourly rates agreed between Phillips Fox and Mr Ilyk, and will reimburse your disbursements at cost or in accordance with your firm's usual schedule.

Once again, I thank you for agreeing to undertake this important task, and I assure you of my full support in that regard.

Yours sincerely



Mick Toller
Director

APPENDIX 2

CASA OFFICERS

Lee Bebbington	Airworthiness Inspector, Moorabbin
Dick Best	District Airworthiness Manager, Bankstown South
Sue Burns	Administrative Officer
Trevor Burns	Regional Manager, South Eastern Region
Garth Cartledge	Assistant Investigation Officer, South Eastern Region
Gerry Comerford	Assistant Investigation Officer, South Eastern Region
Rob Elder	General Manager, Corporate Relations
Frank Grimshaw	General Manager, Airworthiness Branch (retired)
Eugene Holzapfel	Manager, Technical Specialists, Airworthiness Branch
Les Lyons	Technical Specialist
Alan Preo	Airworthiness Inspector, Bankstown
Arjen Romeyn	Failure Analyst Specialist (formerly Failure Analysis Group)
Mike Shannon	Investigator, South Eastern Region
Dick Smith	Chairman
Aleksandra Valda	Regional Coordinator, South Eastern Region
Bob Vale	District Airworthiness Manager, Bankstown North (retired)
David Villiers	Acting General Manager, Airworthiness Branch

APPENDIX 3

PERSONS INTERVIEWED

Lee Bebbington

Dick Best

Garth Cartledge

Gerry Comerford

David Dent

Frank Grimshaw

Keith Hatfield

Eugene Holzapfel

Neil Morton

Roland Muscat

Arjen Romeyn

Mike Shannon

Peter Shepherd

Aleksandra Valda

Bob Vale