

EQUINE INFLUENZA COMMISSION OF INQUIRY

SUBMISSIONS OF INTERNATIONAL RACEHORSE TRANSPORT PTY LTD IN RESPECT OF THE EVIDENCE RELATING TO CONSIGNMENT 6 FROM JAPAN

Introduction

1. Part of the Commission's inquiry has focussed upon the route, and in particular the horse or horses, by which equine influenza is likely to have entered Eastern Creek;
 - (i) Eastern Creek Quarantine Station;
 - (ii) Spotswood; and
 - (iii) Australia.

2. It appears to be the case, based upon the evidence, that equine influenza is likely to have entered Australia by Consignment 6 from Japan. It is then possible to attempt to narrow the likely source or sources of infection to a number of horses within that consignment. For instance, if it is the case that insofar as the horses in that consignment were infected, those entering Spotswood were infected earlier than those entering ECQS, then one or more of the Spotswood horses are then likely to have been the original source of infection within that consignment and therefore of the virus entering Australia.

3. Based upon the serological evidence as presented by Dr. Watson and the scientific evidence of Dr. Newton, it is submitted that the candidate for the original source of infection and its arrival into Australia can be narrowed to one of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (numbers 5 to 9 on my analysis EII.0006.001.0263, a copy of which is attached), all of which spent their PAQ in Spotswood.

4. By his questioning of Dr. Britton before Dr. Newton gave evidence, Mr. Henskens appeared to suggest that Jungle Pocket was the source of the infection into Spotswood (eg. T4029.14 and T4030.1); and by his questioning of Dr. Britton after Dr. Newton

gave evidence, he appeared to suggest that Zenno Rob Roy and Snitzel were at least candidates for the source of infection into Australia (eg. T4312.1 to 4316.24).

5. It is therefore not known what submission counsel assisting intends to make in this regard, particularly given that the inquiry was opened on the basis that, albeit on the basis of the evidence known at that time, none of the Spotswood horses in Consignment 6 became infected with the virus (T4.6).
6. It is submitted that the scientific evidence is such as to exclude Jungle Pocket, Zenno Rob Roy and Snitzel as being the potential source of infection and the outbreak. More importantly for present purposes, however, if counsel assisting intends to assert to the contrary or if the Commissioner is not fully satisfied to that effect, then there are gaps in the evidence relating to the horses in Consignment 6 that have not been explored.
7. Put simply, it is submitted that those gaps in the evidence would affect the Commission's ability to make, and indeed prevent it from making, any positive findings that any of Jungle Pocket, Zenno Rob Roy or Snitzel were the potential source of the outbreak and of the virus entering Australia.
8. A conclusion that a particular horse was, or one of a number of particular horses were, responsible for bringing equine influenza into one of the quarantine stations may well carry with it a necessary conclusion that the said horse brought the virus into Australia. A finding, whether expressly or by implication that a particular horse or one of a number of particular horses brought the virus into Australia and was the source of the outbreak is a very serious finding.
9. Such a finding could be extremely harmful to those involved with that horse or horses, not only in terms of potential exposure to claims, but also in terms of encouraging legal proceedings against that party, negative publicity and potential harm to business. It should therefore not be made without firm and convincing evidence based upon all the relevant facts and all of the information available. This is particularly so when a number of the parties involved with Consignment 6 (eg. Arrowfield stud) and the importers of a number of those horses (Crispin Bennett Horse Transport) were not represented in the Commission.

The evidence of Dr. Newton

10. Dr. Newton gave evidence (T4200.17-39) that a horse (such as Jungle Pocket) that seroconverted in the period 24/25 July to 24 August as well as between 13 to 24 August was likely to have been infected later than a horse that only showed seroconversion over the period 24/25 July to 24 August. This accords with logic since the former horse shows identified later seroconversion and is therefore likely to have been infected later. Dr. Newton was not challenged on this opinion.
11. Dr. Newton also gave evidence (T4202.10-31) that a horse that seroconverted over the period 13 to 24 August (such as Black Hawk), but not over the period 24/25 July to 24 August was likely to have been infected later than a horse that only seroconverted over the period 24/25 July to 24 August.
12. The effect of this was that if one accepts all of the records of seroconversion recorded in the annexure JW38 to Dr. Watson's statutory declaration (WIT.AAHL.001.0244), then by reference to my analysis document (EII.0006.001.0263):
 - a. TH Dancer, Stravinsky and Grandera (nos. 10, 12 and 13) did not seroconvert and therefore can be excluded as the likely source of infection;
 - b. Black Hawk and Rock of Gibraltar (nos. 4 and 11) only seroconverted between 13 and 24 August and were therefore likely infected after the horses Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9) so as to be excluded as the likely source of infection;
 - c. Zenno Rob Roy, Jungle Pocket and Snitzel (nos 1 to 3) seroconverted in the period 13 and 24 August as well as the period 24/25 July to 24 August and were therefore likely infected after the horses Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9) so as to be excluded as the likely source of infection.
13. On the basis of the above, it would be submitted that the most likely earliest infected horse and therefore the source of the virus into Australia was one of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9).

Mr. Ryan's questioning of Dr. Newton

14. It should be observed that Mr. Ryan's cross-examination of Mr. Newton does not affect this analysis. Mr. Ryan put various matters (T4207.6 – 4208.23) as to how Zenno Rob Roy, Jungle Pocket and Snitzel (nos. 1 to 3) spent PEQ together, how Black Hawk (no. 4) travelled to the airport with those horses and how Rock of Gibraltar and Stravinsky (nos. 11 and 12) spent their PEQ separately.

15. Having put these matters, he asked the following question (T4208.17):

Q...won't you agree with me that it's far more likely that Rock of Gibraltar and Stravinsky, if they carried the virus into Eastern Creek, did so from having travelled on the plane with Snitzel, Black Hawk and Jungle Pocket?

A. I would agree with that.

16. It would be self-evident that Rock of Gibraltar and Stravinsky were unlikely to have been the origin of the virus from Japan since Stravinsky did not seroconvert at all during this period and Rock of Gibraltar only between 13 and 24 August.

17. There was, however, nothing in the matters put to Mr. Newton by Mr. Ryan as to how Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9) spent PEQ together and then travelled on a plane with all the other Japanese horses. Put another way, the epidemiological significance of five of the six horses who spent their PEQ together at Northern Farm becoming infected would seem similar to that of the three horses at Shadai Stallion Station becoming infected.

Counsel assisting's questioning of Dr. Britton

18. In his further cross-examination of Dr. Britton, Mr. Henskens suggested (T4312.1 to 4316.24) that, based upon the results of the Animal Health Trust rather than AAHL, Zenno Rob Roy and Snitzel did not in fact seroconvert in the period 13 to 24 August.

19. If that is correct, then it simply gives Zenno Rob Roy and Snitzel (nos. 1 and 3) similar serological profiles to Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9).

20. In other words it does not establish Zenno Rob Roy or Snitzel (nos. 1 and 3) as the likely source of the virus, but simply adds them to Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9) as potential sources.
21. Furthermore, Mr. Henskens did not attempt to suggest to Dr. Britton that the results of Jungle Pocket were in the same category as Zenno Rob Roy or Snitzel and he was correct to do so. On that basis and on the evidence of Dr. Newton, Jungle Pocket remains outside of the category of likely sources of infection.

Relevance

22. If counsel assisting does not intend to submit that any particular horse or group of horses was the original source of the outbreak in Australia (as opposed to ECQS) and if the Commissioner does not intend to make any positive findings in this regard, then this may not be of importance.
23. Further, if it is now accepted that one or more of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9) was or were the likely sources of infection then again this may not be of importance.
24. The position in this regard, however, is not clear. Mr. Henskens put assumptions to Dr. Britton, suggesting as “*facts that [she was] familiar with*” (T4025.22) the history of the PEQ and travel into Australia of Zenno Rob Roy, Jungle Pocket, Snitzel and Black Hawk (nos. 1 to 4) (T4023.23 and T4026.24 et seq). Reference was then made to Snitzel and Jungle Pocket seroconverting (T4024.25, T4024.29 and T4027.17), before the following question was put (T4029.14):

Q. Based upon the assumed facts that I just recently recited, do you also agree that the most likely explanation is that equine influenza came into Spotswood Quarantine Station via Jungle Pocket?

A....When he was exposed to the virus it is difficult to say, whether it was in PEQ or on the aeroplane with Snitzel. Could you repeat the question please?

The question was reiterated thus (T4029.46):

Q. Do you also agree that taken with the assumed facts, which include that Jungle Pocket performed PEQ with Snitzel, it is probable that Jungle Pocket introduced equine influenza into Spotswood?

A. ...you can't definitively say that he had equine influenza, but certainly all the other information is very strongly suggestive that Jungle Pocket was exposed to virus and therefore had the potential to have equine influenza in Spotswood.

25. Dr. Britton did not accept the proposition that Jungle Pocket brought the virus into Spotswood. Even if one accepts the Animal Health Trust results, it would seem from the cross-examination of Dr. Newton and the further cross-examination of Dr. Britton as set out above that this is only relevant to the question of whether Zenno Rob Roy and Snitzel are likely to have been in the subset of early seroconverters consisting of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9), or whether they are likely to have been infected later. On no view, however, would there appear to be any support for the proposition that Jungle Pocket was the source of the outbreak in Spotswood.

Potential gaps in the evidence

26. The apparent discrepancies in the results of blood testing between 13 to 24 August in relation to Zenno Rob Roy and Snitzel as between AHT and AAHL were apparent in Dr. Watson's table at his annexure 38 at the time he gave evidence. He was not questioned by counsel assisting about this, but I cross-examined him about different results from AAHL and AHT and he gave the following evidence (T3928.35):

...I think it is clear, looking across these results, that the AHT results for the Sydney antigen are fairly uniformly high, and while I don't intend to criticise the AHT lab in any way, it is reasonable to conclude that their results for the Sydney antigen were all running fairly high compared to tests in the other two labs.

And then at T939.20:

Q. But the fact that there is seroconversion shown, as you pointed out to us earlier, on some of the other tests, the non-AHT, for the Spotswood horses in this period, does that not strike you as a matter of concern, that AHT appear not to have demonstrated any seroconversion for any of these horses over this period?

A. To the Sydney antigen, yes; there is from the AHT results for other antigens.

Q. But just on the Sydney alone, is that a matter of concern?

A. It's an anomaly, yes.

Q. If you like, it's an anomaly one way or the other. Either the seroconversions are an anomaly or the consistent levels are an anomaly, and really one can't say which one is the anomaly?

A. *I think on balance, given that there are seroconversions demonstrated by multiple other results, if you were to raise a question, it would have to be about that one set of results.*

Q. *If one raises a question now, if I said to you, "Can you investigate and look into this", is there anything that you can do to go back to AHT and say, "Can we look at these tests again or test the equipment or try to work out if anything did go wrong"?*

A. *One could do that, yes. Taking the bigger picture, I think the overall conclusion drawn from the results as a whole is not going to change.*

27. In other words, contrary to the position later suggested by Mr. Henskens to Dr. Britton, Dr. Watson preferred the results of the AAHL over the AHT, based upon scientific reasoning, and he was not questioned to the contrary.

28. After the evidence of Dr. Watson and Dr. Newton had passed without comment or questioning on this matter by him, Mr. Henskens put the following question to Dr. Britton at (T4314.11):

Q. *As a scientist, if you were to see a conflict in results in relation to the same sample between a world reference laboratory [AHT] and a non-world reference laboratory [AAHL], which results would you be more inclined to accept?*

A. *The world reference laboratory [AHT].*

When this matter was raised at the end of the hearing on 28 February, Mr. Henskens also made the following submission (T4336.44):

It is axiomatic, in my submission, that Dr Newton would prefer his own inconsistent results to Dr Watson's results, unless it was suggested to the contrary, and Mr Cheshire never did that. He had the opportunity to do it. You have heard evidence from Dr Britton today that scientists would readily accept the world reference laboratory over inconsistent results from a non-world reference laboratory.

29. There are several gaps in the scientific evidence as is currently presented:

- (i) Dr. Britton's evidence was that as a scientist **she** would be **more inclined to accept** the results of AHT as a world reference laboratory and not, contrary to Mr. Henskens' submission, that **scientists generally** would **readily accept** the world reference laboratory over inconsistent results from a non-world reference laboratory.
- (ii) Neither of the positions set out in the previous sub-paragraph can be said to provide an epidemiologically sound basis for the Commission to conclude that the AHT results were in fact to be preferred over those of AAHL. Dr. Newton

himself referred in his report to inter-laboratory as well as intra-laboratory variations in test results.

- (iii) Further Dr. Britton:
 - (a) accepted that the interpretation of serological results was a matter in respect of which Dr. Newton was a world expert (T4281.44);
 - (b) was unable or refused to make assumptions that were based upon Dr. Newton's evidence (T4282.20, T4283.45);
 - (c) suggested that questions concerning the interpretation of serological data should be put to Dr. Newton (T4282.9, T4285.25); and
 - (d) was reluctant to answer certain questions on the basis that she was not a virologist (T4303.25).
- (iv) Dr. Watson gave evidence as set out above that he would prefer the results of AAHL and would regard those of AHT as an anomaly. This evidence was reasoned and he was not questioned to the contrary and (by contrast with the questioning of Dr. Britton) neither was it suggested to him that his results should be disregarded where AHT had recorded different results simply because AAHL is not a world reference laboratory. To reject his evidence without doing so would be unfair on him, even before considering the unfairness on other parties, and wrong.
- (v) Dr. Newton was not questioned about these discrepancies at all. It is true to say that the AAHL serological results were put to him as assumptions, albeit only after he had difficulties booting up his laptop computer to find the relevant results for himself. Given that Dr. Watson had put forward a full combined table of results and indicated that he preferred those of AAHL in this regard and that this had passed without comment or suggestion to the contrary, there can have been no onus upon me to have cross-examined Dr. Newton on this aspect. Indeed, it is submitted that in a Commission of Inquiry, there can be no onus upon any party to put particular matters to a witness. The fact remains that Dr. Newton was not questioned about these matters and it is not known what he would have said.
- (vi) It would not be axiomatic that Dr. Newton would necessarily prefer the results of AHT over AAHL simply on the basis that they were "*his own results*". A scientist should be alive to the possibility of results produced by him (or more accurately here by technicians working under him) being inaccurate or simply part of the variations inherent in nature.
- (vii) Indeed Dr. Newton in his report at pages 16 to 17 (AHT.0001.001.0016 to 0017) addresses in general terms inter-laboratory variations and intra-laboratory variations. He does so without any suggestion that AHT results are intrinsically more reliable than those of AAHL or indeed any other laboratory.

30. In addition to the non-scientific evidence, it is also to be noted that although there is evidence as to the PEQ relating to Zenno Rob Roy, Jungle Pocket, Snitzel and the journey to the airport with Black Hawk (see in particular the witness evidence at

WIT.SHAD.001.0001 to WIT.SHAD.004.0001), upon which counsel assisting's cross-examination of Dr. Britton was based, there does not appear to be any evidence in relation to the PEQ of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor (nos. 5 to 9), all of whom spent their PEQ together and seroconverted at an early stage.

31. It is therefore submitted that on the evidence available, no conclusions can be drawn to the effect that any of Zenno Rob Roy, Jungle Pocket or Snitzel were within the category of potential sources of the outbreak; that the evidence could not on any view support that conclusion in relation to Jungle Pocket; that the evidence has not been fully explored in relation to Zenno Rob Roy and Snitzel; and that one or more of Orchid Oasis, Acoustics, Western World, Full of Laughter and Royal Successor was the source of the outbreak and the virus entering Australia.



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EII.0006.001.0263

**ANALYSIS OF SEROCONVERSION OF HORSES ON CONSIGNMENT 6
(EII.0004.001.0023) FROM JAPAN USING RESULTS OF DR. JAMES WATSON
AT AAHL (WIT.AAHL.001.0244)**

	Horse	PEQ	PAQ	Seroconversion	
				24-25/7 to 24-27/8*	13/8 to 24-27/8*
		<i>Hokkaido</i>			
1.	Zenno Rob Roy	Shadai Stallion Station	Spotswood	S	S
2.	Jungle Pocket	"	Spotswood	S	S
3.	Snitzel	"	ECQS	S	S
4.	Black Hawk	Breeders Stallion Station#	Spotswood	x	S
5.	Orchid Oasis	Northern Farm	Spotswood	S	x
6.	Acoustics	"	Spotswood	S	x
7.	Western World	"	Spotswood	S	x
8.	Full of Laughter	"	Spotswood	S	x
9.	Royal Successor	"	Spotswood	S	x
10.	TH Dancer	"	Spotswood	x	x
11.	Rock of Gibraltar	Shizunai Stallion Station	ECQS	x	S
12.	Stravinsky	"	ECQS	x	x
13.	Grandera	Japan East Stud	ECQS	x	x

- * Spotswood blood sample 24/8; ECQS blood sample 27/8
- # Black Hawk travelled to the airport following PEQ in a float with Snitzel