Mr Lynch QC (Magellan Aerospace) counsel in his cross-examination of Mr Mark Bobbi – aerospace consultant on 8 June 2009 – and his W/S – P8-15

(this also demonstrates Mr Lynch QC assertions/interpretation and his client/MAC instructions re Mr Neill's email on 29 March 2007 – doc 3597 – see also pages 3 and 4)

Mr Lynch We have Mr Neill's email to Mr Moore of PricewaterhouseCoopers. I know it's a bit compressed in its typescript. Tribunal, of course there is a bigger version

in the bundle, if that's a bit small to read. (Pause).

Mr Bobbi, you can see, can't you, looking at the two substantive paragraphs it actually is a feature of both those paragraphs -- that Mr Neill makes it
expressly clear that Magellan is simply basing its calculations for
accountancy purposes on spares or replacements, he's not included
anything to do with repairs.

Mr Bobbi That's right.

Mr Lynch Good.

Mr Lynch ... But do you agree that it is certainly right that if Magellan sells a new unit,

whether as part of a new aircraft or as a new replacement unit, a spare, then

they would all count for EAC purposes?

Mr Bobbi Of course.

Mr Lynch Right. So it's plain, isn't it, that PwC did indeed examine and accepted,

for accountancy purposes, the validity of incorporation of Dr Thamburaj's

calculations, yes?

Mr Bobbi That was the only information that they had.

Mr Lynch Right. And that information would indeed, because it related to lifespan,

that information would indeed provide the basis on which PwC could rightly conclude that indeed these would involve new units that

would be sold, that's right, isn't it?

Mr Bobbi No, that's not. Because a component has a "lifespan" does not mean

necessarily it will be replaced by something new, it can be repaired.

Mr Lynch Yes. Well, no, I think the whole point is this, it's not, Dr Thamburaj's point

was not a question that they will need repairs after that period, **Dr**Thamburaj's point was that around 40,000 flying hours was indeed the lifespan of the unit. That after that, its lifespan was spent and

should be replaced. That was the point.

Mr Bobbi Well, and if that was the case, he should have informed the customers.

Mr Lynch Well, whether or not AIRCELLE was aware of that is another matter.

Mr Bobbi I think it's an absolutely incredibly important matter, if he believed

that.

As a result of the above Mr Bobbi promptly wrote to Aircelle Customer Support

WaldoBobb18aol.com

A gary.ives@aircelle.com

6.

10/06/200922:33

Objet Magellan

Gary:

As you probably now know, I have been working on behalf of Brian Little, ex of Magellan and engaged in a lawsuit against Magellan over his firing. My job was to provide insight into the forecasts of the A340-500/600, estimate spares/repair consumption for the Magellan assembly, and validate or dispute Magellan's spares forecast.

In my work, I contacted several A340 customer airlines inquiring whether or not Magellan and/or Aircelie have ever informed them that their was a 40,000 hour or less "replacement requirement" for the Trent 500 nozzle assembly. They were unanimous in stating there was no such information provided to them nor had they any other technical concerns with the A340-500/500 nacelle nozzle.

Now, I can formally ask you if Magellan had ever informed Aircell that their component would require replacement at 40,000 hours or less.

Mark A. Bobbi dba MB Strategy Consulting 104 Hammock Circle SaTnt Augustine, FL 32084

> From: gary.ives@aircelle.com Date: June 24, 2009 6:44:55 AM EDT To: WaldoBobbi@aol.com Subject: RE Magellan

Mark, Sorry for the late reply, I was on holiday when you sent the mail and its taken some time for it to come to the top of the pile again. We have no knowledge of any life limt for this component and we're the vendor. We believe the whole thing is a hoax...but its getting around. You got any more info?

Gary Ives Head of Customer Support Managers, Aircelle.

Tel. +33 (0) 1 30 07 95 24 Tel. port. +33 (0) 607 747 341 Fax. +33 (0) 1 30 07 95 02

Brian Little

From: Sent: Brian Little [brian@fortfield.com]

30 June 2009 10:47 'RAE Charles' FW: RE Magellan Subject:

Charles - as per my email just now. As per my email exchange with Mark Bobbi please find attached the Airceile response to his formal question re a specific "Hot Life" limit on the A340/Trent 500 Exhaust and nozzle system from Magellan Aerospace.

This will be document 4183/4184

Brian

This is the email disclosed after a Court Order in December 2008 which is referred to by Mr Lynch QC in page 1 above (doc 3597) and written just hours before the approval and release of the MAC Board FY2006 Financial Statements to the TSE/public. The full email trail for 3597/3598A-can be read by clicking this hyperlink

Herr 1 and Herr 2

John Furbay

From: Rich Neill

Sent: Thursday, March 29, 2007 12:09 AM

To: stephen.r.moore@ca.pwc.com
Cc: John Furbay; John Dekker

Subject: RE: A340 Requests

Stephen and Stephanie; Further to our conversation tonight I have the following comments on the forecasts,

The answers to the questions provided to you in the prior E Mail related to the EAC number of 1247 units that had been used in the projections of profitably and the recovery of the NRC amounts invested in the program. In mid 2006 the requirement indicated 1155 units would be produced as original equipment hence the balance of 190 would be produced as Spares. However, and Independently John Furbay was asked to produce a forecast of spares required based on the Engineering work completed by Dr Thamburaj which concluded that the useful life of the exhaust system was approx 35000 hrs. [To provide a margin of safety John Furbay's analysis used 40000 hrs as the useful life.] This analysis showed that the likely spares requirement was in excess of 800 units over the period 2007 to 2021, so to achieve a volume of only 190 units was an extremely safe number to use in the EAC analysis. This data was sent to you on the 14th March. Now with the latest FAI forecast it suggests the original equipment number will be reduced and with it the forecast for spares will also reduce by a corresponding amount, but the requirement for spares still exists andh will provide a total quantity in excess of the 1247 used in the 2006 EAC 6. Hence the amortisation methods used in the EAC are still valid and the conclusion that the program will be profitable overall still correct.

To attempt to explain the terminology "Spares and Repairs" generally if an exhaust achieves its predicted and recommended life it will be taken out of service and a new one will replace it. As far as I know there are no mandatory FAA or JAA service lifes on the exhaust to mandate this type of replacement so it will be an Engineering and Maintenance decision made by the Airline and the Overhaul Centre that causes this to happen. If an exhaust is damaged or suffers other forms of premature failure [e.g mechanic's errors] then the decision could be made to repair the parts rather than replace. This has already ocurred and a small number of ehaust parts have been repaired under these conditions. Clearly economics also enter this situation and if the repair cost is sufficiently high then the part would be scrapped and a new one fitted. We find it difficult to predict the business that would arise from these Repairs and hence we would choose to ignore this in any EAC analyis being done. But the business is there and will happen. As an aside on other programs we have completed repairs when new spares have not been available where the cost of the repair has been close to the original equipment price but the margin significantly better.

Some other factors to consider are Titanium Beta 21s is a difficult alloy to work with and hence it will be difficult for overhaul bases to repair these components and so we will likely see more returned to the factory for repairs than you would see with an inconel/steel exhaust

The Forecast International Data assumes Airbus will be unavailable to further improve the A340-500/600, and yet history has seen the opposite and the example I would use is the A300 which first entered service in the early 1970s and production is only now ceasing

I hope this deals with points raised in the telecon tonight.

from: stephen.r.moore@ca.pwc.com [mailto:stephen.r.moore@ca.pwc.com]

Sent: Wed 3/28/2007 5:48 PM

To: Rich Neill

Cc: stephanie.leblanc@ca.pwc.com

Subject: A340 Requests

Mr Neill oral evidence from 27 July 2009

amortization completed.

Mr Neill: I think you want me through the ... to show you that there was an error in the second line of their (PwC) calculations which would reduce the number, so on the basis of that's what they did, you've interpreted it that way and I would have to agree with you right now, but it still doesn't change the overall basis of the EAC, that we had more than the necessary 1250 or whatever the number was mentioned in this email to get all the

Mr Little: Rich, just so we're both on the same wavelength, the evidence you've given is that the table, you didn't correct, and both of us believe that it's probably wrong. You've said independently in this email that you've done a calculation that suggests 800 units on a replacement basis on 40 thousand hours is what is in the EAC and what I'm saying is, if that is true and everything has changed at 40,000 hours, purely for spares, that would meet the 1247, which is your point, but it's only in that situation that everything is getting replaced at 40 thousand hours without exception. No repairs, nothing, straightforward replacement. That's what your emails are saying?

Mr Neill: I think we're losing sight of the purpose of this email. At that point in time, PwC were trying to understand how the numbers stacked up to justify us getting more than 1247 units that had been used at that time in the EAC. I must admit I didn't go back and check in detail every calculation that followed that. All I was saying was that if you took Dr Thamburaj's 40 thousand hours it would generate a significant number which, on top of the production, would easily exceed the 1247 numbers needed to amortize out the recurring costs. That's what I was trying to say in the opening paragraph. (of his email dated 29 March 2007 at document 3597)

Mr Little
No, I'm suggesting to you you're lying, because that says to anybody, a replacement. The calculation of 800 stacks together with that, it only makes sense in that context. It can't mean anything else, and they then go off and say that's how they've done their calculations, but can't even get the maths right. (overspeaking)

(Please now re-read Mr Lynch's assertions / line-of-questioning on Page 1)

Mr Little Yes, he's deliberately lied and given that impression.

Judge In the email.

Mr Little In the email relating to the 800 and he then conditions --

Judge No.... Mr Lynch Wait.

Mr Little He's deliberately given the impression of that 40,000 hours

replacement.

Judge I hear what you say but I want to make a note of it. I suggest that you are lying in the email. Not anywhere else, but in that email. That's

In this email above Mr Neill refers to "the likely spares requirement was in excess of 800 units over the period FY2007-FY2021". The schedule he refers to was produced on 14 March 2007 and was finally disclosed at the end of Aug. 2009 (doc 3605H) following Mr Neill's further cross-examination in July 2009 above. Click AFFORCA NC.

AIRCELLE A340 PROGRAM ACTUALIESTIMATED QUANTITIES (ENGINE SETS) AS OF: 30467

		Actual Through			新人								は		が出る。	100	が必然		AS48 Trent 500/500
Engine	Application	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	25%	2017	2008	2019	2020	2021	Subtotal	Total
Role-Rogge Trent SSI Production	X340-500-600	43	6.12	- 10		- 1	9.5				1	19	1		- 0	0	1 6	1	1486
Spenes and Repairs	A\$46-500-600	200	- 3	. 9		1 10	90	. 1	100	11	- 2	- 40	X		90	39	18	36	

Arbus Wing Delvery Schedule taxad or sold alexan, no projections beyond 1999.

Network Estimates bessel upon school system the of 40,000 hours.

Actuals

The second second second		Actual Through 2006	2007	200	2009	2010	2011	2012	2013	2014	2015	2016	2017	2016	2019	2020	200	Subtotal	
Rolls-Royce Trent 500 Production	A340/500/408	3.00	234	19	2	52	100	1.0	11.14	. 9	11.0	. 0	0	- 8	- 0		1.0	225	1500
Speres and Repeirs	A340-800-600	- 18		- 1	- 6	- 81	90	, D	- 85		- 44	80	32	(25)	130	170	85	365	

Artius # de let based on soid elastit, no projective beand 2011.

Aeronas Estimates beend upon exhaust system ble d. 40,000 hours.

Actuals

The upper schedule shows an aircraft production build of a further 128 production nacelles (equivalent to a total 135 A340-500/600 aircraft production build (similar to what I had re-stated in January – March 2007) and was the Airbus production schedules given to PwC/E&Y by MAC. Both documents were excluded in the PwC report whilst PwC stated a production projection of some further 468 nacelles or a Total A340-500/600 build of 220 a/c. The lower schedule reflected an "unadjusted" Airbus A340-500/600 order book at 153 a/c.

I also draw your attention to my PwC.A340.Forensic.deceit report paragraph 9. 2 (pages 17+18) and paragraph 9.9 (pages 30 - 40) and supported by the factual analysis paras.9.3 – 9.8 (pages 18 – 30).

This was a fundamental change in the MAC Spares forecasts since the schedules produced in February (doc 3605/3605A) and 1 March 2007 (3605B-G) which maintained the long-standing forecasts of 190 Spares and Repairs with 168 scheduled to be delivered from FY2008 – FY2021as per the schedule

Aeronca, Inc.
A340 Summary of Best Information Available
at December 31, 2006

	# of	units justificati	on	initial co	st to compl	ete basis
		units			,	total
уеаг	production	spares/repairs	total	units	unit price	revenue
2008	69	7	76	156	201,396	31,417,776
2009	53	7	60	162	210,828	34,154,136
2010	127	8	135	162	221,170	35,829,540
2011	117	9	126	162	232,501	37,665,162
2012	103	11	114	151	244,970	36,990,470
2013	85	12	97			
2014	63		77			
2015	37	14	51			
2016	7	14	21			
2017		14	14			
2018		14	14			
2019		14	14			
2020		14	14			
2021		14	14			
	661	166	**************************************	793		176,057,084

As you know, both Ernst & Young and PricewaterhouseCoopers were comfortable with the manner in which the Respondent justified the quantity of units expected to be delivered. For the sake of clarity, we also attach (at page 2) a document that our client has recently prepared, which shows at a glance the assessment that would been carried out by the Auditors in order to satisfy themselves that the accounting on this matter was appropriate. We trust it is of assistance.

You may now listen to the audio tape of the relevant evidence/information about Spares provided to PwC on 29 January 2007, during my interview in Belfast, at the start of their "investigation".

and then in the Brian Little 2007 Witness Statement in UK court

224.4 Whilst choosing not to reflect the prevailing consensus market forecasts for the A340 production programme, PwC's report suggested that there would be a significant increase in the overall sale of spares to fill any contract production shortfall. This not only represented a fundamental shift in the basis for preparation of the EAC, it also assumed that the production programme extended beyond 2012, the expiry date of the Aircelle contract. In the circumstances, I considered the mathematical spares calculation included in the report to be at best, misguided. The EAC in the PwC report did not consider any volumes beyond 2012 (see volume 2, page 851; as per revenue recognition accounting policy, see volume 7, page 2890).

226.3 I estimated total spares production of 150 nacelle units – 18 spares have been built pre 2007, a further 20 are expected between 2007 and 2012, with a residual 112 produced post 2012. At a total production of 690 units (i.e. (135 x 4)+150), this represented a significant downgrade from the numbers included in the PwC report but was entirely consistent with all the third party commercial, market and technical information available to me and therefore, I assume the MAC management team.

Factually Magellan Aerospace have delivered 121 units (30.25 aircraft sets from January 2007 – 31 October 2010 which COMPLETES Airbus Toulouse aircraft production (at a total build of 131 A/C) as per the Airbus schedule below and which produced only 11 units for Spares in 2007 - 2010 during a period when MAC projected 104 Spares on 14 March 2007. I concur with Magellan's customer, Aircelle, that Mr Neill's assertion of widespread spares is a "hoax". The final year of the 2007 -2011 strategic plan for FY2011 projected 90 Spares - that will not happen.> That technical information included the Component Maintenance Manuals (which follow) and which you will note refer to "return the xxx to the manufacturer for analysis and repair" Aircelle.



COMPONENT MAINTENANCE MANUAL F78AE5110000 SERIES

- (b) Visually examine the nozzle assembly for deposits. Clean the nozzle assembly. (Ref. TASK 78-11-41-100-801).
- (c) Examine the nozzle assembly for dents as follows:
 - 1 If dent has sharp edges, return the nozzle assembly to the manufacturer for analysis and factory repair.



2 If dent depth is more than 1,5 mm (0.06 in.) with a width of more than 25,0 mm (0.98 in.), return the nozzle assembly to the manufacturer for analysis and factory repair.



- 3 If distance between dents is less than the width multiplied by four, refer to SRM chapter 54-40-11.
- 4 If the total area of sharp dents per brazement is greater than 1000,0 mm² (1.55 in.²), return the nozzle assembly to the manufacturer for analysis and factory repair.
- (d) Examine the nozzle assembly for cracks on the flange. If damaged, return the nozzle assembly to the manufacturer for analysis and factory repair.



- (e) Examine the nozzle assembly for holes.
 - 1 If diameter is more than 5,0 mm (0.197 in.), return the nozzle assembly to the manufacturer for analysis and factory repair.



- (f) Examine the nozzle assembly for nicks, gouges, scratches, and abrasions as follows:
 - 1 If depth is more than 0,05 mm (0.002 in.), return the nozzle assembly to the manufacturer for analysis and factory repair.
 - 2 If depth is less than 0,05 mm (0.002 in.), refer to SRM chapter 54-40-11.

- (g) Examine the nozzle assembly for skin separation into layers.
 - 1 If diameter is more than 25,0 mm (0.98 in.) from the core to the skin, return the nozzle assembly to the manufacturer for analysis and factory repair.
- (h) Examine nozzle assembly for damaged, loose or missing Hi-Lok (110). If Hi-Lok (110) is damaged, loose or missing, replace the damaged Hi-Lok (110). Refer to REPAIR, section 6001.
- Examine nozzie assembly for damaged, loose or missing spigots (50). If spigots (50) are damaged, loose or missing, replace damaged spigots (50). Refer to REPAIR, section 6001.

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COMPONENT MAINTENANCE MANUAL 78AE5110000 SERIES

- (6) USAGE CODE gives the applicability of the part. Letter code (A, B, C, etc.) after the related item number shows part variation to the NHA. If a letter code is not shown, the part is applicable to all the variants of the NHA.
 - (a) Figure 1 item 10 is on assembly 1
 - (b) Figure 1 item 10B is on assemblies 1A and 1B
 - (c) Figure 1 item 20 is on assemblies 1, 1A, and 1B
- (7) UNITS PER ASSY shows the quantity of parts used per one NHA or installation.
 - (a) AR = As Required
 - (b) RF = Reference (quantity shown in the NHA)

FIG	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	USAGE	UNITS PER
1 -1					ASSY
-1A					
-1B					
10				1	
10A				1A; 1B	
20					

SUBTASK 78-11-41-990-004-A01

D. Supplier's Name and Code List

V73197 Hi-Shear Corp.

2600 Skypark Dr.

Torrance, CA 90505

SUBTASK 78-11-41-990-005-A01

E. Overhaul

NOTE: The nozzle and cowl installation can be returned to Aircelle (F3700) for overhaul. For more information, either speak or write to a customer service representative at:

AIRCELLE Route du Pont VIII BP 91 76700 Gonfreville-L'Orcher France

78-11-41

IPL INTRO Page 3 Oct 01/07

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Once all of the evidence/docs were produced and our concern about Mr Lynch's "stated" position on A340 Replacement Spares as a litigant-in-person I took the unprecedented step of writing directly to him on 30 Sept.

BRISTOL between

MR BRIAN LITTLE

	Claimant
	And
(1)	MAGELLAN AEROSPACE (UK) LIMITED
(2)	MAGELLAN AEROSPACE CORPORATION
	Respondents
	WITNESS STATEMENT OF MARK BOBBI

I, Mark Bobbi of 104 Hammock Circle, Saint Augustine, Florida 32084, WILL SAY as follows: -

1. Career and Work Experience – I have been involved directly and indirectly in aerospace, defense, and power generation/energy industries and markets since 1979. My aerospace career began quite by "accident" when I was hired as a Subcontract administrator by then Garrett Turbine Engine Co, now a part of Honeywell. I was hired because I had rolling element bearing manufacturing experience acquired during summers and one full year away from college, at a major US bearing manufacturer. I spent 3 years with Garrett, was laid off during the 1982 business aircraft market collapse, then hired almost immediately by Forecast Associates of CT where I spent the next 11 years forecasting aircraft and aircraft engines and subsystems. I also

lead many consulting efforts which are identified in the attached bio. During my years at FA (Later FI), I earned a reputation for picking winners in military competitions and in development of business aircraft, helicopters, and supplier competitions. In 1993, I departed FI for Pratt & Whitney where I lead executive education programs, then migrated to strategic planning where I directly participated in launch of several commercial engine programs, lead studies of the engine supply chain, and aftermarket. I left P&W in 1998 to lead a CT based aerospace manufacturers rep firm where I also consulted for major companies Honda and Kawasaki; the former which I assisted in their entry into business aircraft engine and aircraft markets. In 2001, I started my consulting firm, MB Strategy Consulting, expanding my experience into aircraft structures, weapon systems, non-traditional electric power, and oil & gas development.

2. August 2007 report – In August 2007, I performed a study of the A340-500/600 for Mr. Brian Little. The results of that study are found in the referenced document 3015-3025. The essence of that report was that the A340-500/600 was a market failure, generating far less orders than anticipated in the 1990's by its maker, Airbus. In fact, total orders and options for the A340-500/600 were unlikely to exceed 130-135 which, as I am now aware, is approximately 150 /175 less than MAC's amortization figure for the A340 NRC. The August 2007 Airbus "Orders and Deliveries" website - document 3024 - recorded 144 orders - 33 x -500 and 111 x -600 - and continued to include "suspended" Virgin Airlines - 6 and Air Canada - 3 which everyone knows / knew would be cancelled - the resulting order total would then be net 135 production aircraft or 540 nacelles. The Airbus official O & D website position at April 2009 is 139 orders and unofficially, as of today, is 130 - 133 with 119 aircraft delivered. Of that total I would expect that with the further five Airbus "whitetails" parked at Toulouse and their current assembly line stock together with Aircelle work in process there will now be very few future production exhaust systems deliveries from MAC. Industry people now expect that Airbus will complete series production in 2010 and then only produce some "VIP type aircraft" to use up their remaining inventory. The VIP aircraft will be to low annual utilization customers including governments and private owners, with consequential depressionary effect on spares potential.

My August 2007 report for Mr Little concentrated on spares/repairs and from my experience, enquiries and information then available to me my initial new spares forecast was in the range of 100-300 (25 -75 shipset equivalents) - document 3022. I can see now, that this was far below the figure necessary with Airbus's 560 nacelles (135 production aircraft plus 20 development units) for the on-wing deliveries to get to MAC's 1285 nacelle units. That is those used in its financial calculations and audited Balance Sheets.

3. <u>March 2009 report</u> – In mid December 2008, Mr Little provided me with copies of the A340 11 December 2008 document disclosures by MAC. These were not available to me for review as

part of my August 2007 analysis and report and were only produced, Mr. Little tells me, following a United Kingdom Court Order that month. Concurrently, Mr. Little provided me with further terms of reference which are recorded in his email to me at document **3890**. The update to the A340 Market forecasts in March 2009 lsupports the consensus market forecasts from 2006/2007. The only real changes were being -- caused by the economic slowdown which began mid-2008 with Etihad Airways (their final a/c) and Iberia Airlines deliveries (at least 3 a/c) aircraft deliveries being deferred to 2010. Also that Kingfisher Airlines of India are now refusing to take their remaining three A340-500 whitetail aircraft (the last and only new airline Airbus A340 order in April 2006) which are completed and parked at Airbus Toulouse.

The resulting March 2009 report is found as reference document 3890AA – 3890XX. I was asked in early January to provide a much more comprehensive report that also utilized my industry contacts to determine actual A340-500/600 utilization, and most importantly, if there were any fatigue issues related to the Aircelle/MAC nozzle assembly which would require the scheduled replacement of these parts in airline service and some support to the MAC financial forecast for the same assembly. There were none reported. I was also asked to look at potential MAC nacelle spares usage and determined that there was little potential for such sales, not only because of lower than expected utilization and fleet propagation, but because airlines were far more accustomed to repairing such items. With the availability of more data and airline experience I also revisited my view of the forecast of spares and versus repairs from the August 2007 report. On this occasion this view was based on direct information from A340-500/600 customers, such as Lufthansa Airlines in Europe (LH), strongly stating that in the event a fatigue issue actually appeared on the A340-500/600 exhaust nozzle; repairs were far more likely than acquisition of new spares. A repair is estimated to cost less than \$50K while an all new nozzle assembly costs seems to be priced in excess of \$200K by MAC. More importantly, if there was a fatigue issue, then the manufacturer had a legal duty to inform customers and regulatory agencies that such was imminent and then provided those customers and agencies with information necessary for those entities to take appropriate action. There was no such information provided to customers or regulatory agencies up to my writing this statement.

In the end, I projected significantly fewer spares sales than the maximum 300 forecast in my August 2007 report, and crucially that of MAC. My forecast was now 100-130 versus a calculation recorded in the PwC report of expected demand of some 1572 units by MAC Head Office and PwC over a 20 year program life to 2021.

"Major nacelle produces Goodrich and SAFRAN (Aircelle) will confirm a very small percentage of nacelle sales being in spares or repair services. In short, a nacelle is very much like the airframe itself; it generates far less service and parts sales revenue than aircraft equipment (electric power, hydraulics/controls, avionics, environmental controls) and engines. And, the components that generate the highest maintenance burden of all are the inlet cowl, thrust reverser and thrust reverser actuation, and exhaust plug. The plug is the second highest cost component of these four but is also subject to airline repair schemes."

Therefore, I find it impossible to believe MAC's spares/repairs forecast is based on any rational market assessment and runs completely counter to my and others career-long experience together with the detailed communications I undertook with the maintenance people in the airlines flying the -600 aircraft . I cite Lufthansa (LH) for example who are the Number 1 Maintenance and Overhaul (MRO) business in the world and have the largest airline fleet with 24 of the A340-600 aircraft. Where required field repairs to these types of components are "normal" practice for their MRO facility. LH pointed to their website as an example with an A340-300 nozzle repair. They would never plan or expect to pay over \$1m an aircraft for exhaust nozzle replacements for any reason and for any aircraft when they could repair those same components for a fraction of the new cost.

- 4. Other Subjects for comment Last week Mr Little provided me with a copy of the August 2007 Price Waterhouse Coopers Final Report. There are several standout PwC statements that I simply cannot understand based on my experience and industry/market information available as far back as 2005/2006:
 - a. PwC states that MAC was "33% of the way through the programme" para 8.17 (page 76) and 8.122 (page 96) in 2006. At that time, most aerospace analysts had already significantly downgraded their forecasts of the A340-500/600. All the professional industry analysts (except Forecast International) were progressively calling the A340 program "dead." in late 2006/early 2007 and forecasting that A340 series production would end in 2009 2010.

By end December 2006 the A340-500/600 was all but dead in terms of order rate as the B777 was capturing 10-20 times the annual orders. Moreover, new wide bodies, Boeing 787 and Airbus 350XWB were coming, both in-direct competitors to the A340-500/600. MAC's own customer, Aircelle, and Aircelle's customer, Airbus, had already internally downgraded their own projections for the aircraft. The A350XWB-1000 prelaunch in July 2006, the Emirates cancellation of 18 A340 – 600 aircraft in October 2006 (document

2642/2643) and the further Boeing success in winning all the new airline 2006 wide body sales campaigns (except Kingfisher Airlines of India in April 2006) with their Boeing 777 in 2006 (77 aircraft ordered) had supported those conclusions and defined the pessimistic market reality for the A340 in 2006. A340 operational/weight problems and resulting higher operating costs were the foundation for the dearth of sales and severely damaged potential for future orders from the existing A340 airline operators in active sales campaigns. As such, any PwC/MAC statements to the effect that more than 800 units were still to be delivered from January 2007 defied logic and standard due diligence processes. PwC reported that it was the Q4.2006 Estimate at Complete which was provided to the public auditors. In it MAC states that all 1285 units would be delivered by FY2012 and this figure was then used for yearend audit testing purposes by EY (Para 8.61).

- b. Spares/repairs table prepared by PwC 1572 units by 2021 para 8.75 at page 88. I have commented earlier on this. The unit figure presented appears to be a simple "maths" sum, without benefit of any industry experience and knowledge. This projection is simply wrong and will never happen.
- c. Major Customer Ownership Policies that impact Spares/Repair Projections The major airline customers of the A340-500/600 are unlikely to purchase new spares for the MAC nacelle assembly. This is so due to their aircraft depreciation and replacement practices and policies, and internal engineering/design capability. The former leads to aircraft being sold into the secondary market in 12 years or less. Lufthansa, owner of 24 a/c, has a 12 year depreciation policy; at which time the aircraft is very probably going to replaced by an all-new type or growth in the Boeing 747- 8 or A380. Another example is Singapore which has a very aggressive, state allowed accelerated depreciation rule which sets aircraft replacement at five years. In cases, Singapore just buys brand new variants of the aircraft to be replaced but in many other cases, buys something entirely different; B777 for B747-400 as one example.
- d. MAC FY2006 NRC / USD \$38.25m Balance Sheet value- Para 8.117 "Current production costs per unit are such that at present the pre-amortisation margin generated per unit is not sufficient to absorb an amortization of 30,000 per unit and still breakeven. In order to report an overall break even position, while at the same time amortising inventory, it has been capitalizing that amount of production costs that is necessary to achieve the break-even position each year. For this reason production for the inventory has been increasing." Although not part of my considerations I am struck by the fact

that MAC are still capitalising labor learning costs in 2006 after producing some 400 units. I have no experience of ever witnessing any engine learning curves or methodology which continues to capitalise learning after 400 units. In any event if we assume production at 414 units (103.5 aircraft deliveries by MAC to Aircelle in December 2006) a further 126 units (to get to the projected 135 A/C for production) then a maximum recovery at \$30k per unit is less than a USD\$4m reduction in A340 inventory to circa 38.25m – 3.78m = approx \$34.5m This excludes any spares by FY2012 and any further improvement in selling prices.

My maximum spares estimate now is for a further 112 spares. However, even if we were to take the Aeronca Forecast estimate in February 2007 Attachment 2 in my report (Document 3890 WW) of some 172 replacement spares and repairs on a similar S30K basis, the total inventory value is brought down to approximately 34.5m – 5.16m or approximately \$29 - 30m.

In short, the chances of MAC recovering all the \$38.25m NRC inventory asset for the A340 – 500/600 in its December 2006 Balance Sheet were and are now, in my view, zero. Moreover, auditors and company officials had to know that, if they were looking at the Airbus order intake, the Airbus production delivery schedules of less than one aircraft per month and then using more than one "outside" market forecast sources, Forecast International, their assessment would be very different indeed. In short, my 2009 analysis simply confirmed my earlier August 2007 comment that "To be blunt, the nacelle supplier is unlikely EVER to see a return on investment; based on the backlog and expected service life of the aircraft."

The contents of this witness statement are true to the best of my knowledge and belief.

Mach 9. Est.	
Signed	Date
Mark Bobbi	27 May 2009

MB STRATEGY CONSULTING has unparalleled experience in aerospace, defense, and energy equipment finance, operations, engineering/technical, market research, strategic planning and strategic market development, new product development, and aftermarket services.

The MB Strategy Consulting track record of success includes direct participation in the development and commercial launch of the following products:

- Williams FJ44 turbofan engine
- Kawasaki M7A industrial gas turbine
- Pilatus PC-12 single engine turboprop
- Sino Swearingen SJ-30 corporate jet
- Kawasaki GPB15X industrial gas turbine generator set
- Kawasaki M7A gas turbine
- Pratt & Whitney Canada ST30/40 industrial gas turbine
- Pratt & Whitney Canada ST5 miniturbine
- Pratt & Whitney Canada PW600 turbofan
- P&W PW6000 turbofan engine
- Engine Alliance GP7200 turbofan engine
- GE/Honda Small Turbofan

Mark Bobbi's consulting history is as follows:

- Provide strategic market development of a new small low cost turboshaft engine for rotorcraft and industrial applications for the former Allison Division of GM
- Development of a strategic alliance between two of the world's largest diesel engine companies, Cummins Engine Co. and Niigata Engineering.
- Provided advance warning of 1990/1991 airline industry "crash"
- Assisted a First Bank of New York financial institution in a \$700 million aerospace private placement/leveraged buyout
- Accurate predictions of rapid, high volume growth of regional jets and new generation entry level iets
- Assisted **GE Capital** in taking aerospace component unit of ALCOA private
- Guided **Chromalloy**'s entry into the RR Trent maintenance market
- Assisted world leading aircraft company in development of a new super mid-sized bizjet
- Developed the aerospace market entry strategy for Honda Motor Company
- As one of four principal owners, developed small gas turbine (non microturbine) market entry strategy for a new firm, **Candent Technologies**. The company won US Army SBIR Phase I and II contracts in 2003/2004 for a 770 shp aviation turboshaft engine
- Provided strategic business planning guidance to operating units of Pratt & Whitney and Pratt & Whitney Canada

- Developed detailed competitive assessment and financial models of the BIG 3 aircraft engine and Big 6 industrial gas turbine firms including Solar, GE, Alsthom, and Siemens/Westinghouse
- Developed a comprehensive market and business development strategy for Pratt & Whitney's industrial turbine operation including recommending launch of FT4000 in 1996/1997. Resulted in launch of the new P&WC ST30/40 in 1998. The engine has won orders from Bombardier and the Swedish Navy for locomotive and fast patrol craft propulsion.
- Developed a comprehensive market and business development strategy for a Kawasaki Gas
 Turbine Americas including helping close the first commercial order for the world's most
 advanced gas turbine low emission combustion system
- Helped negotiate a joint marketing agreement between Kawasaki and Cummins for industrial gas turbines
- As State certified expert witness, helped a CA company win \$78 million jury award against GE
- In 1985, lead market research effort that resulted in formal launch of the **Williams FJ44 turbofan** engine. Two years later, Cessna selected the engine for its **CJ1**. The engine was also selected to power the **SJ-30 and Premier I jets** of Ed Swearingen and Raytheon Aircraft respectively
- In the mid-1980s, led market research effort that resulted in Kawasaki launch of the 5-7 MW class M7A industrial gas turbine
- In the mid-1980s, was integral member of market research team that defined the specification for what would become the Pilatus PC-12.

Over the past 20+ years, MB Strategy has accurately predicted the long-term competitive landscape in aerospace and defense to include:

- GE victory in the "Great Engine War".
- GE ascendance to the number one position in large commercial jet engines.
- RR ascendance to the number two position in aircraft jet propulsion behind GE and ahead of P&W
- Lockheed and P&W victories in the ATF competition (F-22 Raptor)
- Boeing/Sikorsky victory (and subsequent cancellation of) in the LHX competition (RAH-66 Comanche).
- Massive growth in regional jets.
- Record growth in sales and delivery of business jet aircraft including new high-speed aircraft, and new generation entry-level jets.
- Congressional salvation of the Bell/Boeing V-22 and eventual production.
- Procurement of a many more than 120 C-17s.
- Rapid incorporation of aero engine technology in all classes of industrial gas turbines.
- Massive growth in sales of base load combined cycle and simple cycle peaking gas turbines and subsequent market "bust"
- Impending collapse of the Eclipse business jet program