

AMC 2005 Atlanta—Another \$ucce\$\$ \$tory



For over 55 years airline maintenance professionals and their counterparts at their supplier companies have been coming together annually to resolve the problems in commercial aircraft avionics that have proved difficult to solve at home.

Safety, regularity of flight, and cost of flying are key issues for passengers and airline management alike. Keeping the electronics that assist in that flying operating at the lowest possible life-cycle cost is a piece of the puzzle. Every dollar saved in maintenance is a sorely needed dollar on the bottom line of an airline. Every mechanical delay or cancellation avoided pays benefits. And so year after year, in good times and bad, the avionics maintenance industry comes together in the spring to help the bottom line.

This year 65 airlines took home ideas with the potential to save them over \$100 million dollars. If it were spread evenly that would mean about \$1.6 million added to the bottom line of each attending airline. This isn't free money, but it is certainly a great payback for the cost of supporting AMC and sending the people to the meeting. How many investments generate a payback of \$54.00 for every dollar invested – and in only four months?

AMC does it year after year. That is why as the number of players in the industry shrinks the number attending AMC keeps growing. That's why 65 airlines sent representatives this year and generated 286 maintenance questions. When the value of AMC was first calculated for the 1984 AMC, it was about \$20 million.

That value has grown along with inflation, the added complexity and cost of the aircraft electronics, and the size of the fleet carrying passengers and freight. The calculation used is widely considered a very conservative estimate. The details are on the AMC web at www.arinc.com/amc.



Many, although they clearly understand the value to the airlines, wonder what is in it for the well over 100 suppliers who make up three-fourths of the 750 or so registered attendees each year. The answer is that it pays for them as well. A piece of their capital is good will. Working with the airlines, their customers, adds to that capital. Although their primary customer for sales is usually an airframe manufacturer, the airframe companies listen to their customers and assess the value of competitors' good will. It is a commodity as important as anything they bring to the bidding process. Many of the supplier attendees have repair shops. A

solution helps them, too. Although this value is not in the calculated savings, it is certainly there for them.



The reason AMC continues to be so successful lies in its mode of working together to solve problems. AMC is not a place where the customer comes to “bash” the supplier. The questions are all available to the supplier in advance of the meeting and frequently the answers are brought to the meeting for the combined group to take away with them. It is this spirit of cooperation, not only between suppliers and their customers, but also between the companies whose marketing departments compete so fiercely for the business, that makes AMC unique.



Since statistics were used heavily to come up with the \$108,330,410 in savings for 2005 we will share a few with you. Airlines asked 286 questions in 2005. Of those 131 had a cost of the problem for that airline added. That cost totaled nearly \$26 million. This broke down to a per airplane cost of around \$362,000.00. The airlines attending represented a fleet of over 8600 aircraft. Although often only one airline asked the question, the answer frequently benefited all airlines that fly that aircraft. With so many airplanes represented, well, the number gets as big as a barn.

One growth area in the troubled industry is that of regional airlines who are adding regional jet aircraft in record numbers. Of the 8,635 aircraft represented at the 2005 AMC, over 1,200 aircraft and climbing, is part of this rapidly growing segment of our industry. And their problems and solutions generated over fifteen percent of the total industry savings.

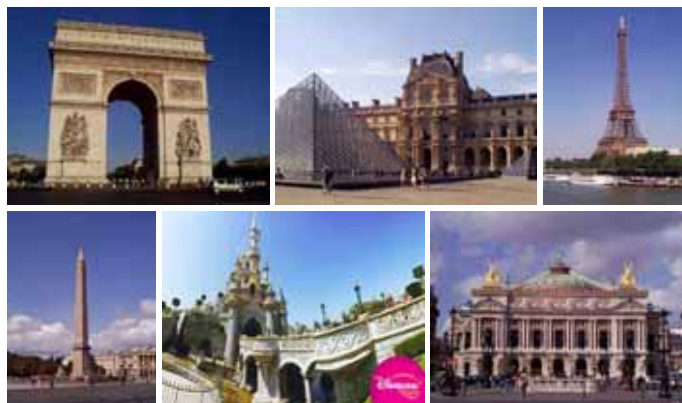
To help the bottom line of their companies, the airlines send their maintenance experts to AMC. They pay the bill to get the savings. Maybe you should add your voice next year. Supporting AMC doesn't cost, it pays.

2006 AMC

April 3-6, 2006

Hotel New York

Paris, France



2005 AMC Value Calculation

The analysis begins with a compilation of fleet compositions for each airline attending AMC. This is sheet one of the spreadsheet.

Once we know the number of aircraft flown by a specific operator and the total number represented by attendees, the next step is to log the discussion items that show an annual cost and are concerned with aircraft problems. All remaining information is on sheet two of the spreadsheet.

First, the annual cost that is provided by the airline submitting the question is divided by three. The rationale for this division is it is assumed that without AMC, the problem will get resolved; however, as a result of AMC, it is assumed that the problem is being resolved one-third faster than it would have been otherwise. In other words, we only claim four months of savings

The next step is to get the per-aircraft value by dividing the value to the airline by the number of aircraft of the type covered in the discussion items in that airline's fleet. This number is the per-aircraft value. Multiplying this number by all aircraft of that fleet type represented by attendees at AMC gives us the potential value, assuming all aircraft of that type are equally affected.

Once a value is assigned to all discussion items, the highest and lowest numbers are discarded, the items not considered resolved are zeroed out, and the average of the remainder is calculated. This becomes the average value of a discussion item. Occasionally a number is obviously overstated. When this occurs we divide the industry value by ten for that question to reduce its impact on the overall calculations.

At this point, the second conservative factor is used. We divide by two based on an assumption that, on the average, only half of the potential fleet will actually benefit from the improvement.

It is assumed that 20% of the discussion items do not fit the category of industry-wide problems with a dollar value, so we use 80% of the total solved discussion items.

Multiplying the remaining discussion items by the average industry value gives the total value of AMC. The spreadsheet is here for you to view and play with the calculations yourself.

Value of AMC

Discussion Items - New		286
Discussion Items - Old	+	11
Discussion Items - Unresolved	-	6
Discussion Items - Resultant		291
Discussion Items - Less 20%		232.80
Discussion Items - Average Value	*	465,336.80
Value of AMC to Industry		108,330,407
Number of Airlines	÷	65
Value per Airline		1,666,622

For those who feel the number is too low or too high (optimists and pessimists?), let's look at what we all ultimately have to answer for—the return on investment (ROI).

The cost figures reported for the discussion items alone, for just the airlines making those reports, add up to more than \$25 million. At least some of the other items are costing the airlines money and at least a few of the items are applicable beyond the airline bringing the item up for discussion. The bottom line is that whether you are an optimist or a pessimist, AMC generates dollars for the participants that outweigh the costs.

If most of us now agree that AMC is worthwhile, the question must be asked, “Why?” The probable answer lies in the numbers. In effect, there were over 8,600 airplanes at the last AMC. There were people representing 65 organizations who own those airplanes. The people from over 190 organizations who provide those airplanes or parts for those airplanes or services for those airplanes have an unparalleled opportunity to obtain the goodwill of some of those customers by showing the capability to provide the after-sale support needed. This goodwill can and does result in future business. The customer is there because he gets what he needs—support. The provider is there to give that support.

...AMC is one of those rare situations where everyone wins

In fact, everyone is there first to give—to give the prestige of their corporation to AMC through their presence and to give help to the industry in improving reliability and lowering costs. They also receive some in bucketsful, as a measure of what they give. AMC is one of those rare situations where everyone wins, even those who don't lend their support.

There is a message to airline management—lend your prestige to AMC and get your share of the pie.

There is a message to vendors—spend a few of your dollars to support the goals of AMC—dollar for dollar there is no better return on investment.

Above all, there is a message to everyone—get involved with AMC!

	Aerospatiale		Airbus					BAe/Avro		Boeing										Bombardier				Embraer			Fokker			Lockheed	Saab	Total						
	ATR42	ATR72	A300	A310	A320	A330	A340	A380	Avro RJ146	Avro RJ85	Avro RJ100	B717	B727	B737	B747	B757	B767	B777	B787	DC8	DC9	MD80	MD90	DC10	MD11	DHC8	CRJ	EMB120	ERJ135	ERJ145	28		70	100	L1011	2000		
ADRIA					3																						7											10
AIR ATLANTA ICELANDIC			2													45																						47
AIR CANADA					106	8	11							3		42									1													196
AIR CANADA JAZZ																											68											95
AIR FRANCE					133	16	21							14	33			35																			252	
AIR INDIA				20											15			3																			38	
AIR NEW ZEALAND					9									13	8		9	3																			39	
AIR TRANSAT				9		4																														1	14	
AIR WISCONSIN										17																											87	
ALITALIA					46										1	14	10					82															153	
ALL NIPPON AIRWAYS					35										26	54	28																				143	
AMERICA WEST					92									37		13																					142	
AMERICAN AIRLINES				34										77		143	74	45					335														708	
AMIRI FLIGHT				1							4				2		1																				8	
ASIANA					16	1								14	13		9	5																			58	
ATLANTIC SOUTHEAST		13																																			157	
AUSTRIAN AIRLINES					16	4	4										2																			3	29	
AVIANCA																5	5																			4	14	
BRITISH AIRWAYS					65				4	16				30	57	13	21	43									8										257	
CARGOLUX															15																						15	
COMAIR																																					164	
CONTINENTAL AIRLINES														254		50	26	18																			164	
CZECH AIRLINES	10	4		4	4									30																							348	
DELTA														118		121	102	8				120	16													52		
EL AL ISRAEL AIRLINES														6	10	6	7	4																			485	
EVA AIRWAYS						8									19		8																				33	
EVERGREEN															10																						46	
EXPRESSJET																																					10	
FEDEX	2		46	54																																	255	
FINNAIR					29											7						9															328	
HAWAIIAN AIRLINES											11						14																				51	
HORIZON AIR																											47	19									25	
IBERIA					79		36																														66	
ICELANDAIR															2	13						35															165	
JAPAN AIRLINES			27											7	74	12	34	32																		14		
JETBLUE					75																																221	
KLM															46	25		11	10																		75	
KOREAN AIR			10			19									28	43																					102	
KUWAIT AIRWAYS			6	4	4		4								1																						113	
LAN CHILE																																					21	
LUFTHANSA			14		72	10	40			18				61	30																						53	
MIDWEST											19												13														16	
NATIONAL JET SYSTEMS									14	1																											21	
NORTHWEST AIRLINES					152	16									34	65																					32	
PINNACLE																																					3	
QANTAS AIRWAYS																																					136	
ROYAL JORDANIAN AIRLINES				6	7		4																														121	
SAS					8	4	7																														17	
SAUDI ARABIAN AIRLINES			10																																		173	
SKYWEST AIRLINES																1	23																				90	
SOUTHWEST AIRLINES																																					226	
SUN COUNTRY															432																						432	
SWISS						25	9	9		4	15																										8	
TACA INTERNATIONAL AIRLINES						32																															9	
TAM LINHAS AEREAS						47	6																														82	
TAP AIR PORTUGAL				6	30		4																														19	
TRANSAERO																																					40	
TURKISH AIRLINES				6	17		7			6							7																				13	
TYROLEAN																																					79	
UNITED AIRLINES						152																															52	
UNITED PARCEL SERVICE				43																																	6	
US AIRWAYS						113	9																														8	
VARIG																																					52	
VIRGIN ATLANTIC AIRWAYS																																					6	
WESTJET																																					8	
65																																						58
Total	12	17	193	109	1367	125	165	0	35	23	37	34	129	1657	537	646	631	339	0	41	144	668	64	100	118	171	829	69	30	236	16	40	43	1	9	8635		
		29																																				

Discussion	Cost	1/3	Aircraft	Unit	Aircraft	Value	1/2	Value	Notes
Item	(In Dollars)	(In Dollars)	(Airline)	Cost	(Fleet)	(In Dollars)		(In Dollars)	
05-002	10,000	3,333	431	8	8,635	66,783	33,391	33,391	
05-006	10,000	3,333	31	108	8,635	928,495	464,247	464,247	
05-008	100,000	33,333	221	151	8,635	1,302,413	651,207	651,207	
05-009	6,000	2,000	19	105	537	56,526	28,263	28,263	
05-013	1,000,000	333,333	328	1,016	8,635	8,775,407	4,387,703	4,387,703	
05-018	10,000	3,333	47	71	8,635	612,411	306,206	306,206	
05-019	10,000	3,333	42	79	1,892	150,159	75,079	75,079	
05-020	10,000	3,333	173	19	8,635	166,378	83,189	83,189	
04-042	1,600,000	533,333	157	3,397	1,113	3,780,892	1,890,446	1,890,446	
05-045	50,000	16,667	102	163	8,635	1,410,948	705,474	705,474	
05-053	30,000	10,000	118	85	1,639	138,898	69,449	69,449	
05-055	60,000	20,000	152	132	1,363	179,342	89,671	89,671	
05-058	7,000	2,333	6	389	106	41,222	20,611	20,611	
05-060	1,000,000	333,333	31	10,753	629	6,763,441	3,381,720	3,381,720	
05-063	95,000	31,667	152	208	2,879	599,792	299,896	299,896	
05-064	4,000	1,333	4	333	321	107,000	53,500	53,500	
05-066	800,000	266,667	9	29,630	1,363	40,385,185	20,192,593		Max
05-067	50,000	16,667	154	108	2,003	216,775	108,387	108,387	
05-068	50,000	16,667	120	139	1,358	188,611	94,306	94,306	
05-071	40,000	13,333	27	494	878	433,580	216,790	216,790	
05-074	16,500	5,500	90	61	1,240	75,778	37,889	37,889	
05-076	50,000	16,667	164	102	878	89,228	44,614	44,614	
05-079	20,000	6,667	8	833	321	267,500	133,750	133,750	
05-080	20,000	6,667	144	46	144	6,667	3,333		Min
05-081	100,000	33,333	14	2,381	118	280,952	140,476	140,476	
05-082	100,000	33,333	164	203	4,955	1,007,114	503,557	503,557	
05-083	200,000	66,667	34	1,961	468	917,647	458,824	458,824	
05-085	100,000	33,333	170	196	1,630	319,608	159,804	159,804	
05-086	30,000	10,000	152	66	1,363	89,671	44,836	44,836	
05-087	100,000	33,333	11	3,030	267	809,091	404,545	404,545	
05-091	20,000	6,667	9	741	85	62,963	31,481	31,481	
05-095	76,800	25,600	6	4,267	85	362,667	181,333	181,333	
05-096	20,000	6,667	30	222	1,363	302,889	151,444	151,444	
05-098	100,000	33,333	14	2,381	594	1,414,286	707,143	707,143	
05-099	10,000	3,333	39	85	8,635	738,034	369,017	369,017	
05-100	10,000	3,333	39	85	8,635	738,034	369,017	369,017	
05-102	50,000	16,667	50	333	267	89,000	44,500	44,500	
05-103	20,000	6,667	5	1,333	17	22,667	11,333	11,333	
05-108	26,000	8,667	19	456	43	19,614	9,807	9,807	
05-109	25,000	8,333	75	111	100	11,111	5,556	5,556	
95-111	20,000	6,667	99	67	1,114	75,017	37,508	37,508	
05-115	40,000	13,333	42	317	118	37,460	18,730	18,730	
05-116	15,000	5,000	431	12	8,635	100,174	50,087	50,087	
05-117	15,000	5,000	20	250	105	26,250	13,125	13,125	
04-102	50,000	16,667	157	106	878	93,206	46,603		open item
05-118	16,000	5,333	35	152	588	89,600	44,800	44,800	
05-120	5,000	1,667	74	23	483	10,878	5,439	5,439	
05-121	3,000	1,000	34	29	483	14,206	7,103	7,103	
05-122	200,000	66,667	106	629	1,240	779,874	389,937	389,937	
05-125	30,000	10,000	34	294	594	174,706	87,353	87,353	
05-126	25,000	8,333	34	245	594	145,588	72,794	72,794	
05-128	20,000	6,667	223	30	1,250	37,369	18,685	18,685	
05-133	75,000	25,000	168	149	1,469	218,601	109,301	109,301	
05-134	500,000	166,667	263	634	1,373	870,089	435,044	435,044	
05-135	200,000	66,667	285	234	8,635	2,019,883	1,009,942	1,009,942	
05-136	15,850	5,283	11	480	34	16,330	8,165		Open Item
05-139	70,000	23,333	164	142	878	124,919	62,459	62,459	
05-141	485,000	161,667	157	1,030	878	904,098	452,049	452,049	
05-142	100,000	33,333	168	198	1,466	290,873	145,437	145,437	
05-143	40,000	13,333	267	50	2,588	129,238	64,619	64,619	
05-144	100,000	33,333	106	314	1,240	389,937	194,969	194,969	
05-145	100,000	33,333	106	314	1,240	389,937	194,969	194,969	
04-112	2,000,000	666,667	157	4,246	878	3,728,238	1,864,119	1,864,119	
05-147	98,000	32,667	157	208	878	182,684	91,342	91,342	
05-148	100,000	33,333	157	212	878	186,412	93,206	93,206	
05-151	13,500	4,500	19	237	483	114,395	57,197	57,197	
05-152	250,000	83,333	10	8,333	118	983,333	491,667	491,667	
05-160	20,000	6,667	108	62	1,017	62,778	31,389	31,389	
05-161	20,000	6,667	108	62	1,017	62,778	31,389	31,389	
05-164	14,700	4,900	140	35	1,353	47,355	23,678	23,678	
05-166	2,000,000	666,667	10	66,667	493	32,866,667	16,433,333	1,643,333	Overstated
05-169	600,000	200,000	9	22,222	1,363	30,288,889	15,144,444	1,514,444	Overstated
05-170	5,000	1,667	16	104	106	11,042	5,521	5,521	
05-171	12,000	4,000	108	37	1,087	40,259	20,130	20,130	
05-173	1,000,000	333,333	38	8,772	1,105	9,692,982	4,846,491	4,846,491	

