50th | AMC | 1949–1999

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AMC Fifty Years 1949 → 1999

Hosted by

ARINC

AMC - The First 50 Years

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Executive Secretary, Avionics
Maintenance Conference

This year in Baltimore, the Avionics Maintenance Conference (AMC) will celebrate its fiftieth year of service to the commercial airlines and their suppliers. When the major problems in aircraft avionics were the short life of radio tubes, AMC was there to help solve the problem. As avionics moved further and further into the airplane, AMC was there to guide the growth and solve the new problems. As the complexity of the avionics increased, AMC was there, helping the industry to understand the new complexities and to solve the new problems that came with them. As avionics matured and the problems became less frequent but more difficult to understand, AMC was there to help. As the industry matures from the barnstorming days of its beginnings to the business of transportation, AMC is there to help the avionics leaders change with it. With the future changes in the philosophy of maintenance and the change from “why did it break” to “where can we get repairs and parts”, AMC will continue to evolve to support the needs of avionics maintenance specialists.

Here then, is the story of AMC told decade by decade as it and the industry matured.

1949

ARINC Board of Directors authorizes formation of the Airlines Electronic Engineering Committee (AEEC), replacing the ARINC Radio Committee (ARC) which had been operating since 1944.

The ARINC Board directs that one day of AEEC be devoted to maintenance issues “so the engineers can better understand the deficiencies of past designs.” Clarence Rice/Northwest was selected to coordinate. First ARINC Secretary is Mr. Morse.

Decade 1, 1950-1959 The Beginnings

In 1950, the forerunner of the modern AMC met for the first time as an additional day added to the (also new) AEEC. It was then called the AEEC Maintenance Meeting (AMM) and was staffed and supported by the same group that supported AEEC.

The stated goal was to foster an understanding of maintenance problems in current avionics so as to allow better designs of next generation airplanes.

1950
The first AEEC Maintenance Meeting (AMM) is held on October 13 in Washington, D.C. following the AEEC meeting. Walt Rollick/Piedmont is elected Chairman. Attendance is 16 from 10 airlines. Clarence Rice/ARINC is appointed as the first Secretary. First Planning Group also included P. Wolf/Eastern, E. W. Helken/Trans Texas, D. J. Lisor/Northwest (replaced Clarence Rice when Clarence came to ARINC), and H. R. Ward/Northeast.

Even at this first meeting, the philosophical differences between engineers and maintenance people were evident. The engineers saw the near future as the next airplane. Maintenance people saw the near future as the next takeoff. The agenda was set to meet the stated goal, but the discussion centered quickly around how to get tubes to last longer and how to keep boxes on the airplane longer.

By the 1952 meeting, the maintenance folks set up their own planning group to prepare for the next meeting. The emphasis was shifting from design issues to “nuts and bolts” problems of maintaining the existing fleet.

The discussion in 1953 was almost exclusively about current problems and how to improve current avionics. Some bright soul thought that perhaps inviting the suppliers to meet together with them could help solve the problems. The suppliers were invited “as observers” and they came.

For the 1955 meeting, pre-submitted questions were solicited from the airlines and the suppliers were asked to formally answer them in an “open forum”. The results were published for the future benefit of industry as a report of the meeting. The basic format of the modern AMC was off and running.

1953
Manufacturers and others are invited to participate. Emphasis shifts from design deficiencies to “nuts and bolts” issues. The name changes to ARINC Maintenance Meeting (AMM).

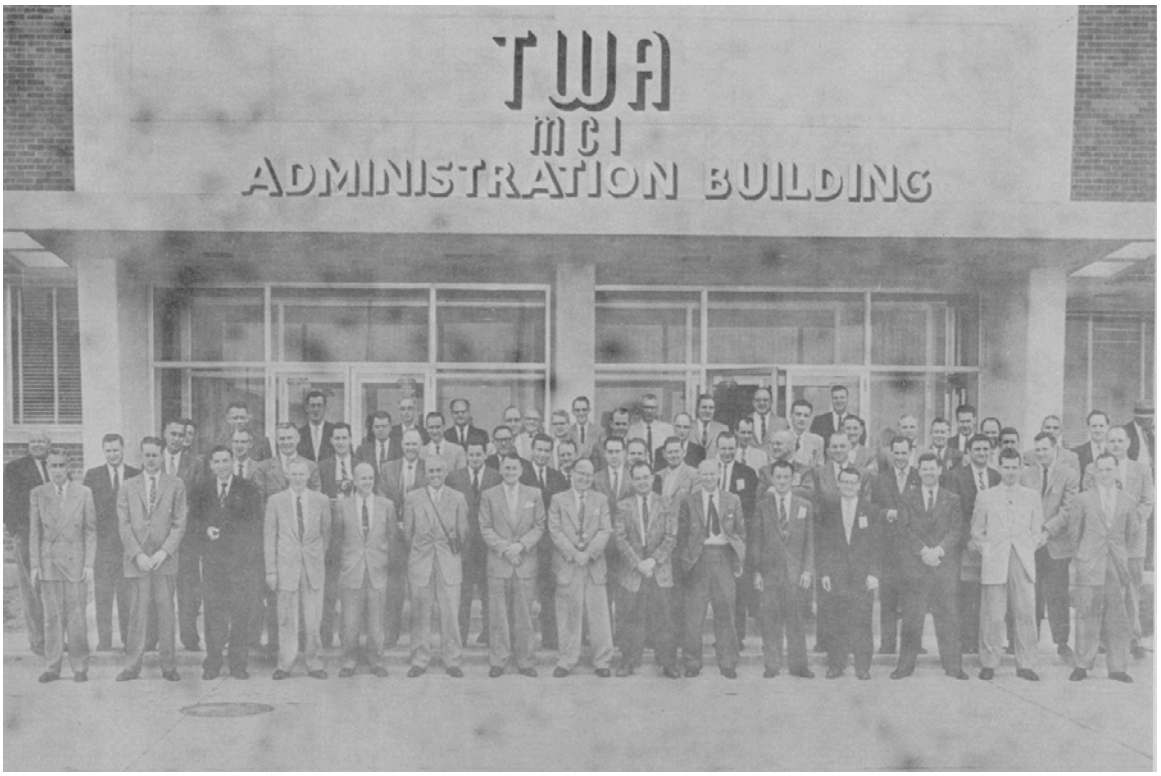
1954
Siegbert Poritzky/ARINC is appointed Secretary of AMC.

1955
Attendance exceeds 100 for the first time. The ARINC Board agrees that the Maintenance Meeting be organized and staffed separately from the AEEC meeting. The name is changed to Airlines Electronic Maintenance Meeting (AEMM). J.E.M. Lagasse/Trans-Canada (now Air Canada) becomes the second Chairman of AEMM (1955-1959).

1957
The meeting first convenes at a time and place separate from AEEC.

1958
Bill Smoot joins ARINC and is appointed AMC Secretary. First Manufacturer’s Exhibit/Reception is held.

1959
First European Airlines Electronic Meeting (EAEM) is held in London.



The philosophical differences between engineering and maintenance made an uneasy alliance and by 1957 the groups agreed to separate, each with their own staff and planning group. A liaison was maintained through an AEEC member being on the AMC Planning Group. This was done in the hope that a better knowledge of the existing problems would help the AEEC as they deliberated the standards for the future. The name was changed to the Airlines Electronic Maintenance Meeting (AEMM).

By 1957, there were representatives from about 35 airlines coming to each meeting. Suppliers saw this gathering as a great opportunity to showcase what they were doing and organized an exhibit and reception for their customers on the second evening of the meeting in 1958. “Some of the manufacturers of test equipment pertinent to airline use for radio and electronic equipment exhibited and demonstrated service techniques with many new types of equipment. These exhibits were on the evening of April 16th in a room set aside and operated concurrently as part of an informal cocktail party.” This is how the first function of what was to become the AAI Exhibit/Reception was described in the report of the 1958 meeting held at the Hotel Muehlebach in Kansas City.

By this time, the organization of the planning committee was in place with elections to be held each year as one member rotated off. The discussions still centered on radios and radar - communications gear. There was a catchall section, other, for the less important avionics like autopilots. Some of the concerns seem never to change. The airlines couldn't get adequate and timely manuals then either. Hermetically sealed relays that had moisture and FOD in them were complained about. "…UAL made a firm stand that (they) wanted to go on record to AEEC that maintenance people don't want sealed relays in equipment." We wonder if AEEC listened?

The 1959 meeting in Dallas, Texas attracted 157 people. The format was solid now and the foundation for future growth was set. 1959 also saw the birth of the European meeting, now known as AIEM.

Decade 2 1960-1969 Growth

The first year of the growth decade had 187 attendees in Los Angeles and ended in Miami in 1969 with 371. By the end of this decade, the questions were on a much broader range of topics, broken down by ATA category. The suppliers had organized the informal exhibit and the AAI came into formal existence. The concept of "Task Groups" was in full use by the end of the decade and a regular publication "Plane Talk" was coming out every month to "keep the community informed between meetings." The name had changed to Avionics Maintenance Conference and the Planning Group had become a committee of seven airlines.

1962
Attendance breaks 200 at the New York meeting this year. First European airline joins the Planning Group, Jean Filz/Lufthansa.

1963
Plane talk, which had been irregularly sent out since 1961 “to keep maintenance people informed between maintenance meetings” becomes a monthly (sometimes bi-monthly) publication.

1965
ARINC moves from Washington, D.C. to Annapolis, Maryland.

1967
The name is changed to Avionics Maintenance Conference (AMC) following the May meeting in San Diego.

1968
Attendance jumps to over 300 in Tulsa.

Plane Talk

Airlines Electronic Maintenance Meeting

PLANE TALK

AERONAUTICAL RADIO, INC.
1700 K Street N.W.
Washington 6, D.C.

J. Lehman, Chmn. UAL
W. S. Smoot, Sec'y. ARINC
J. Filz DLH
A. J. Koman SOU
B. C. Moffatt BNF
J. R. Reagan PAI
L. F. Reilly AAL

PT 64-11 MONTHLY DEPARTMENTAL ISSUE APRIL 1964

The first issue of Plane Talk was mailed in 1963 although the name had been used for a couple of years as a header for irregularly spaced news bulletins between meetings. These early issues were mostly a compilation of informational letters received from the members.

Even this early, though, the germ of the regular columns and information that is still in Plane Talk today was evident. By 1965 the industry was giving kudos to AMC for the great informational value of this publication and it had expanded to a regular system of information, news and calendars much as it is today.

Task Groups

By 1963, the Planning Group had realized that some maintenance problems needed more effort than could be mustered in a once a year meeting. ATA had published ATA Specification 100, the bible for documentation required for an airplane, earlier. The maintenance community felt that the rapid increase of avionics in their aircraft

needed a more complex breakout of maintenance information than was provided in the ATA document. Task Group 100 was formed to work on subdividing the sections of ATA 100 involving electronics systems so that better tracking could be accomplished in the supplier Component Maintenance Manuals.

By 1967, AMC had added TG-102, Training and TG-104, Removal Rate/Reliability Reporting to their in-between workload. In 1968 TG-103, Test Equipment was formed. This task group is still active today, guiding the future of avionics test. The AMC Planning Group report for the fall 1968 planning meeting notes, “Since our change from AEMM to AMC we are happy to see the progress made in the area of Task Group activities. These have been very modest in scope but have been far reaching in effectiveness in the industry.”

TG-101, Aircraft Lamps, had been formed early but had no activity to report during the entire decade. Even the maintenance folks couldn’t fix everything.

Steering Group

During this decade, the group moved from an informal planning group to a formal structure with rules and responsibility for all of the activities of AMC. They added members from the European, Pacific and South American regions in recognition of their growing international scope and reorganized the terms of office and election procedures for members. By the end of the decade they were looking in their crystal balls and positioning the meeting for the first half of the next decade.

AEEC and AMC

By 1967, the AMC Secretary, Bill Smoot was handling the liaison function between AEEC and AMC, as an “official liaison to AEEC” and the AEEC liaison was “excused from further attendance.” A note from the 1968 Planning Group meeting commented that, “Our liaison with AEEC is well established, the Secretary being a member of the AEEC. ‘Living in the same house’ should improve relations.” AEEC had approved and published several "Gray Covers" developed by AMC including ATLAS.

AAI

Airline Avionics Institute

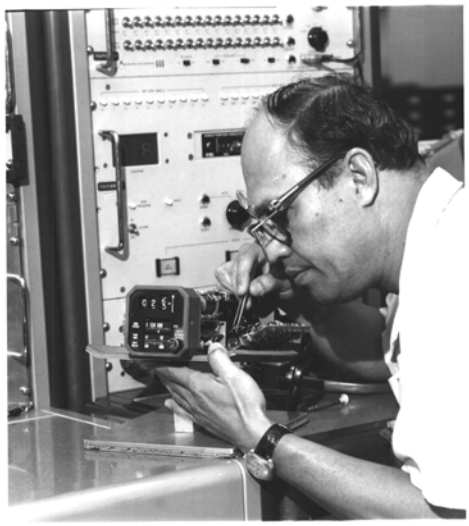
For several years, the “arm” had been put on suppliers in the area of the Open Forum to host an exhibit and reception. As the meeting grew in size and stature, this arrangement became both costly and unwieldy. The manufacturers stepped in and formed an informal organization they called the Airline Avionics Institute (AAI). Their purpose was to promote the AMC through support of their activities. They hosted their first AAI exhibit/reception at the 1969 meeting in Miami. The reception was held in the evening but the exhibits were placed around the perimeter of the conference room and were open all day.

Early on, the AAI members recognized the need to reward those who had helped move the industry forward. They established the Volare awards to recognize these people. The first awards were given at the Miami meeting in 1969. The Volare award has become a major mark of accomplishment for both the engineers and maintenance people. The Volare pin is worn proudly by the recipients.

Spouse Program

As the decade progressed, each host tried to have a gathering of the spouses accompanying their attendees. By the end of the decade, the spouse “Coffee” had become an institution. More and more registrants were accompanied by their “better half” and many friendships, renewed annually at AMC, were formed. The ladies began looking to AMC for ideas about touring the area and shopping each year.

In Miami in 1969 arrangements were made through the Convention and Visitor’s Bureau for their attendance at “style shows and for general sightseeing.”

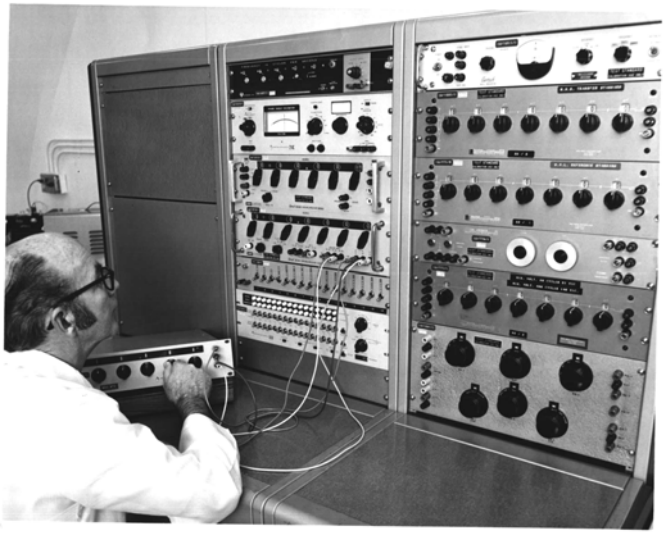


Open Forum

At the beginning of the decade, the Open Forum was only about half of the annual meeting. A full day was devoted to a closed, airline only session with just one day for the questions. By the end of the decade, this closed session was reduced to half of the first day and the meeting ran from Monday morning until Friday noon with three full days devoted to the question sessions.

In 1968 the name was changed from AEMM to Avionics Maintenance Conference (AMC), an informal AMC guide for the Planning Group was in place and the meeting began to take on the look and feel it has today.

The decade began with a list of 170 questions and ended with 354. In 1960 most questions were around the radios and radar. By 1969, although these questions were still heavy, the emphasis had broadened to follow the significant increase of avionics as the jet fleet was introduced.



This decade ended with most of today's emphasis and breadth in place. The foundation for the future had been established and the industry was ready to reap the rewards.

Decade 3 1970-1979 Reaping the Rewards

As the era of the jet aircraft took firm hold, so did the increase in avionics being managed by the airlines and the resultant headaches.

The seventies are regarded by some as the Golden Era of commercial aviation. Jet aircraft were bringing unprecedented profits to user and supplier alike. While Lockheed departed the scene Airbus came on as an outgrowth of the Concorde program.

Jet airplanes were being sold faster than they could be produced and the resultant flood of used piston aircraft was creating an exciting feed carrier market for the major carriers.

1972
The AMC Planning Group is renamed AMC Steering Group.

1975
The meeting sets a *record of 526 questions* at the twenty-fifth anniversary celebration in Washington, D. C. Attendance was a record 392 representing 60 airlines and 109 supplier side companies from 25 countries.

1976
Attendance at the Phoenix meeting breaks the 400 barrier.

1979
Vancouver draws the first crowd over 500.

This was the era of second-generation jet aircraft and avionics. Transistors and small-scale integrated circuits were making the electronics better and cheaper. More of the aircraft was being controlled by silicon.

Perhaps this decade best shows the wisdom of the engineers looking further into the future while learning from the maintenance group what the mistakes were. Industry standards played a major role in improving the quality and cost of these second-generation avionics. Although friction between AEEC and AMC periodically occurred, the respect of each for the other as a part of a total solution also grew. Life-cycle costs became a part of the world jargon. Purchasers and suppliers considered both initial and life of the system costs for perhaps the first time. The aviation industry was growing up and it was growing as well. There were bumps in the road like recessions and fuel cost increases but by and large, the industry was healthy and growing. And the maintenance function grew rapidly with it.

The first meeting of the decade was held in Seattle. There were 46 airlines bringing 291 problems for review and solution. 90 suppliers came to answer them and provide support. The decade ended with the meeting in Vancouver, BC. 68 airlines came with 368 problems to discuss and 90 supplier companies were there for support. Total attendance in 1970 was 363 and by 1979 it had reached 502. During this decade, AMC celebrated its 25th meeting in Washington, DC with 526 questions, the highest ever at an AMC. That the airlines were getting benefit from AMC was obvious. Problems were being solved and money was being saved.

In 1970 the Planning Group changed its name to the AMC Steering Group in recognition of its continuing role in steering AMC year round. That year had representatives from National, KLM, General Motors Airlines, United, Continental Can, American, Air West, TWA, and Paul Wulfsburg of King Radio representing AAI. In 1979 the members included Flying Tigers, Air Canada, Southern, VARIG, Japan Air Lines, Delta, Sabena, Continental and CP Air. The AAI rep was Nick Scardino of Bendix.

Although the record is not clear just when hospitality suites became a part of the Open Forum, they began to be noted regularly on the agenda in 1975. By the end of the decade the suites were a fixture of AMC that continues today. AAI continued to support AMC throughout this decade helping to fuel its continued growth.

By the middle of the decade, the meeting had expanded to five full days and was still having trouble getting everything done. The business slump in the second half of the decade, coupled with the growth of AMC in both size and length of meeting caught the attention of the ARINC Board. The Board requested that the meeting be reduced to three days in length. The ultimate compromise was four days as is still done today.

The decade ended with the industry moving to a more businesslike stance with deregulation looming. ARINC too was growing and maturing. AEEC moved to a more businesslike operation along with their members and so did AMC, although more reluctantly.

Decade 4 1980-1989 Reevaluating and Maturing

ARINC hired Rick Charles in 1980 as the Assistant Secretary and understudy to Bill Smoot. Bill retired in 1981 and Rick became the AMC Executive Secretary. Rick left to join Rockwell Collins in 1982 and Larry Carpenter was hired as the Executive Secretary. AMC and AEEC were operating comfortably together by the end of the decade. The separation of AMC and AEEC became complete in 1989 when the Executive Secretary of AMC was promoted to Director.

The 1980 Open Forum was held in Kansas City with 490 attending to handle 326 Input items. The decade ended in Portland, Oregon with an attendance of 522 to handle 349 discussion items. The format that is now familiar to AMC attendees was in place throughout this decade and despite serious disruptions in both airlines and the economy, attendance was pretty constant. The low point was 1983 when only 385 showed up in Houston due to a combination of a major airline strike and airport-closing weather in the mid-west. The high was reached the next year in Seattle with 526 in attendance.

1981
Bill Smoot/ARINC retires as the Secretary of the maintenance meeting.

1982
Larry Carpenter arrives from Continental to become the AMC Secretary following a one-year term by Rick Charles.

1984
A new record attendance of 526 is set in Seattle.

1989
Roger Goldberg transfers from AEEC to become the AMC Assistant Secretary.

A significant number of airline questions began to fall in the areas of perceived poor product support and what might be called philosophical questions. This trend would grow throughout the decade as the avionics continued to improve in reliability. By the end of the decade fourteen Task Groups had been formed with varying success. Also, early in the decade, AEEC Subcommittees and AMC Task Groups began to work together formally in joint activities. This formula was successful and continues today where both engineering and maintenance expertise are beneficial to development of standards or solution of problems.

It was in 1984 that AMC fully recognized the need to make a business case for its continued existence. Beginning that year the Steering Group devised a formula which measured, most say very conservatively, the actual monetary value of the Conference. The first number for the 1984 Open Forum was an airline saving of over twenty million dollars directly attributable to the annual meeting. By the end of the decade this number had grown to nearly thirty million dollars.

Only minor changes were made to the format and organization of AMC during this decade. It was tuning itself and resting for the surge that would usher in the next decade.

Decade 5 1990-1999 Growth and Maturity

This decade was ushered in by a jump in AMC attendance unprecedented and totally unexpected by the AMC Steering Group. The meeting in Atlanta had been planned three years earlier for the regular attendance of 500 plus a little growth and for the usual 25 or so hospitality suites. Things were going along smoothly in January.

1990
The 1984 attendance record shatters as 755 attendees join together in Atlanta. A *record 74 airlines* are represented. Representatives are from a *record 44 countries*.

1991
The increase continues in Kansas City where the registration hits 800.

1995
The Orlando meeting uses a *record 730 rooms* to house attendees and hospitality suites.

1996
The current *823 attendance record* is set in Phoenix fueled by a *record 218 supplier companies*.

1999
The fiftieth year of AMC is being celebrated in Baltimore, Maryland. Some of the current records (current records are in *italics*) may be broken at this meeting.

Plane Talk, with the hotel registration form, had just mailed and preparations for the 500 friends expected in Atlanta were well underway – until the hotel called. "Your room block is full. Where do you want us to send your people?" was the message. Following a period of disbelief and after some excellent epithets were uttered, the AMC staff began looking for more space in nearby hotels. When the dust settled nine hotels had coughed up rooms for the 755 who came to Atlanta that year and visited the 40 suites that were open to host them.

The Steering Group, wiping the sweat from their brow, decided it was an aberration caused by timing and location, not to be repeated. And it wasn't. The next year in Kansas City, not quite as desirable a travel spot as Atlanta maybe, 800 showed up! It has been that way at AMC ever since. With airlines merging and suppliers doing the same, the numbers should have been shrinking. They didn't and by the end of the decade a new set of average numbers is in place. There are about 750 people from 65 airlines and nearly 200 suppliers that register each year and take part in all the activities including the hospitalities and functions which now number around 50 each year.

The savings have grown as well, hovering around the fifty million dollar mark each year. How about the benefits to the city where AMC is held? Well, in Memphis in 1998 the hotels took in over $500,000 from the meeting and the city of Memphis had a cash infusion of nearly $800,000.

This year AMC will celebrate its 50th Anniversary in Baltimore. From the view of today it looks a little like AMC Atlanta in that we have just increased the room block for the third time at the third hotel. The question count isn't as high but that is a good sign that AMC is accomplishing its mission. Pre-registration is rapidly approaching record numbers and we are seeing some airlines we haven't seen before. Maybe this decade should be followed by another decade of rest and reward. Yeah, right!

Decade 6 2000-2009 The Change Decade

Maybe after 50 successful years AMC should relax and rest. The attendance is up, the problems are down, the MTBF of the avionics is way up and the meeting runs smoothly. But the industry isn't resting. It is going through significant changes on the operations side and the marketing side.

Global strategic alliances are forming. Avionics maintenance is moving away from the airline to the suppliers and other third party maintenance operations. Maintenance and engineering divisions, particularly outside of North America, are being cut loose on their own to sink or swim. As the face of aviation maintenance changes the AMC needs to change to keep up or the need for AMC will go away.

Some of the changes are already in the works. In 1999, for the first time, manufacturers are submitting questions to the airlines. In 2000 AMC will meet outside North America for the first time in Hamburg, Germany, hosted by Lufthansa. Other changes might come soon. AMC and AIEM are in discussion to join their forces in a single annual meeting. The proponents believe these moves will both make better use of scarce people and budgetary resources and form stronger maintenance alliances across international boundaries just as their companies are doing.

Since the reliability of avionics units has increased, the emphasis may change from the nuts and bolts issues that sustained AMC throughout its first fifty years to more strategic issues of support and management. The gap in training that came with downsizing of the world’s military may have to be partly made up through industry education. Although resistors don’t cook as often and tubes are mostly a distant memory, the problems don’t get easier but really more complex and even less amenable to individual solution by a single company. Software is now a major part of the aircraft and the software design maturity is maybe where hardware design was thirty years ago.

Although starting with a clean slate is not appropriate, change needs to come to AMC to keep it as a viable and cost-effective tool in the next century. The current Chairman of AMC, Martin Story of Delta, has said that we must not stray from our historic strengths but use them to tweak the organization as it moves forward. These words say it all.

Welcome to AMC!