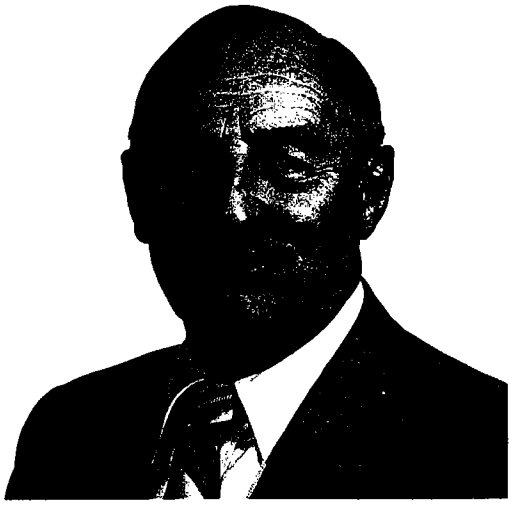
The Founding of ITEA

A Personal Remembrance by
ITEA Founder
Dr. Allen R. Matthews



Role and Character of Test and Evaluation

The roots of Research and Development were well established in the classical studies of science-astronomy, materials, mathematics, chemistry, electromagnetics, and physics—leading to other classical engineering fields. In contrast, the roots of Test and Evaluation are based upon (1) component testing, (2) validation of R&D, (3) selection for acquisition or production, and (4) integration into a complex operational system. *These fundamentals are essential in understanding the basic need for founding ITEA and consolidating the T&E community.* The role of T&E continues to expand. T&E has become the key component to establishing an operational system, *including R&D, production, training, logistics, and performance.* T&E is scientifically interdisciplinary, having both technological and operational objectives far beyond R&D.

Recognition of the need to test total systems of vehicles/platforms and weapons since the 1970s has emphasized the need for system simulation to save costs and safely explore operational extremes. In fact, the concept of *operational T&E* relative to *developmental T&E* demands the use of multiple components/equipments in an operational system, rather than the mere testing of individual components with the assumption of integrated system capabilities.

The assembly of multiple systems into a major system like an air defense system, which includes a complex radar network, command and control center, defense weapons, and other major components, demands initial complex, integrated simulation and requires validation by testing of the ultimately assembled major system.

A major advance in T&E on system hardware and software is the use of computer simulation supplemented by limited tests on an actual deployed system, which not only provides validation testing, but also an opportunity to train operators. Thus, there is an integration of T&E and training with critical inputs to the design and development of the master system, be it air defense, ground troop deployment, or Strategic Defense Initiative.

Founding ITEA

During the late 1970s it became clear to me that the T&E community needed the cohesion that would be provided by a separate organization oriented to the technology/management of the unique T&E profession, which spanned not only government, industry, and academe, but also the broad and separate organizational lines of the three armed services and the Department of Defense (DoD) Headquarters. Having been active in the Institute of Electrical and Electronic Engineers (IEEE), the American Institute of Aeronautics and Astronautics (AIAA), and the development of the Association of

Old Crows (AOC), I was convinced that the creation of a nonprofit professional society would be of great benefit to the T&E community.

Investigation in 1979 revealed general support for the idea of such an organization by many T&E practitioners. In December 1979, after meetings at the DoD and Defense Systems Management College (DSMC), an opportunity for another proposal developed. In December 1979, the DSMC initiated a two-week course in T&E, with key T&E attendees invited to critique the course content. I was among the attendees invited, since I had previously presented plans for ITEA to the DSMC staff.

The attendees, acting upon their own initiative, agreed to have dinner together, with about thirty attending. After dinner I was invited to present the concept of a professional association under the name ITEA, as I had previously conceived it. This informal group of T&E practitioners concurred with the proposal and then unanimously recommended that I should proceed to establish ITEA. Memberships could not be established until after incorporation (which occurred on January 18, 1980), so there was no discussion of any other founder. I was assumed to be the founder of ITEA at the dinner meeting and also after the first corporate meeting. Thus, the founder's responsibilities were assigned by independent T&E practitioners.

Incorporation in Washington, D.C. required a minimum of three individuals, so I selected Bob Klimek, attorney, who filed the incorporation papers, and Floyd McLaurin, the husband of my attorney's secretary. Both these individuals were given free ITEA memberships ($25.00 at that time) based on services rendered. At the first incorporation meeting, I was elected President/Treasurer, Bob Klimek was elected Secretary/Legal Counsel, and Floyd McLaurin was elected Vice President. Messrs. Klimek and McLaurin were designated founders, but did not subsequently retain membership.

The basic articles of incorporation and bylaws were developed, and my selection of the name ITEA and the original logo were approved at the first Board of Directors meeting. ITEA then filed and was granted authority to operate as a foreign corporation in the state of Maryland.

The first issue of the *ITEA Newsletter,* published in April 1980, was prepared to document and inform current and future members about the scope, policies, and plans for ITEA. It was well received and brought many new members to ITEA. That first issue (showing the original logo and corporate seal) is reprinted at the conclusion of this article.

A review of the first newsletter and a look at the progress of ITEA during the past ten years show close correlation between the initial objectives and the accomplishments of the organization. Thus, the articles of incorporation, bylaws, and goals stated in the first newsletter provided successful guidelines for the development of ITEA. In reprinting it here, it is my hope that the document may also provide guidance for ITEA's second decade.

Some of the initial plans, for example, the formation of geographic regions, defining standing committees, and professional working groups have not yet been incorporated in the bylaws, although the objectives of each have been partially accomplished by ITEA administrative action.

Initial Membership

A published blank visitor's registry was used initially to document membership name, addresses, and alpha/digital numbers (including membership categories). The original book will be provided to ITEA headquarters for reten-

tion. The log consists of 64 pages, listing members who joined ITEA between January 18, 1980 and December 26, 1984. The first page of the registry is shown on the next page.

Within the first six months of 1980, all membership statistical data from the membership application form was incorporated in a computer data bank. This provided printouts of total membership and/or specialized sorting by education, zip codes, interests, chapter membership, specialties, and addresses. Such listings were invaluable to the growth of ITEA and were provided to candidate chapter organizers, ITEA officers, and advertisers (without names, but including essential statistical data). ITEA had 1,000 members by December 1984 when the ITEA headquarters was moved from Lexington Park, Maryland to the Armed Forces Communications Electronics Association (AFCEA) Building in Burke, Virginia.

Early Activities

The Board of Directors was expanded in order to provide a larger staff that could chair working committees. Standing committees were appointed, and Board of Directors meetings were held regularly at the offices of MATTCON Inc., Andrews Air Force Base, the Naval Air Test Center, the BDM Corporation, and the Army-Navy Country Club. A number of key actions were taken in 1981 by ITEA management, among them the establishment of committees on plans, membership, corporate membership, finance, meetings, and symposia.

The first chapter symposium was hosted on June 24–25, 1981 by the Southern Maryland Chapter (chapter number 1), at the Cedar Point Naval Air Station Officer's Club with over 100 attendees. Other early symposia were conducted at Patuxent River Naval Air Test Center and the Defense Systems Management College. The first national ITEA symposium was held on June 21–23, 1983 in the DSMC auditorium, with about 250 attendees.

Membership grew to just under 100 during the first year; dues were $25, and many members made cash donations anywhere from $10 to $100. International membership was solicited while conducting numerous symposia and presenting many distinguished luncheon speakers.

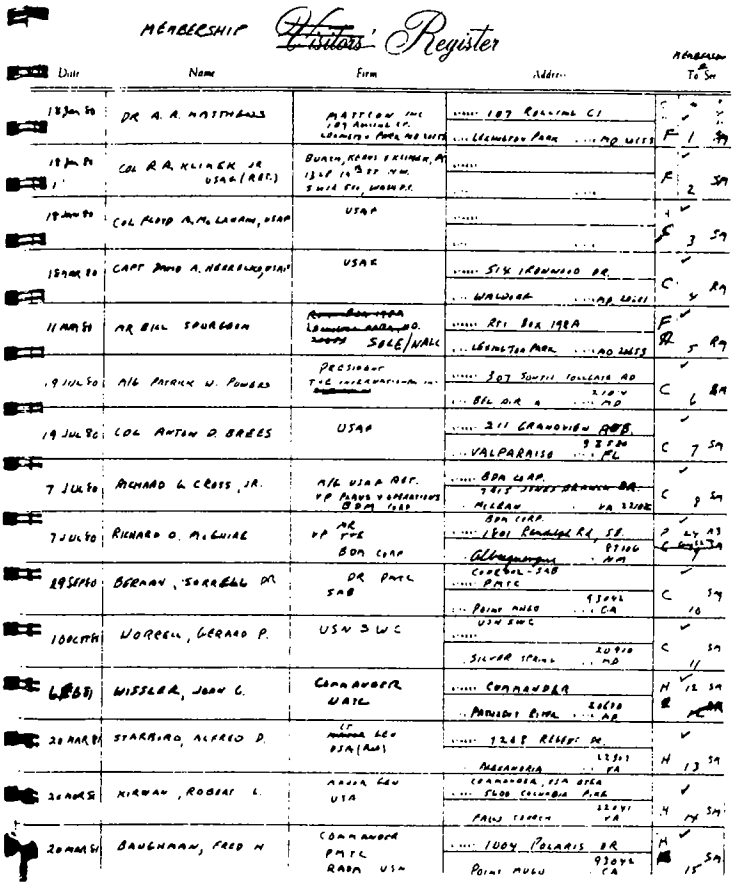
In 1982, I wanted to further encourage the formation of ITEA chapters and thus proposed to the Board of Directors that the first four officers of each chapter be designated founders. This led to the creation of the membership categories of Corporate Founder (CFM) and Chapter Founder (CHFM). All were known as founders.

A similar approach to encourage individual membership was the creation of the Charter Member category for all who joined ITEA prior to the last day of the first national symposium (June 24, 1983). Extensive support was also provided by Honorary Members with whom I talked and corresponded, and for whose membership I obtained Board of Directors' approval as required by the bylaws.

A key ingredient in providing a firm foundation for ITEA was the establishment of the George Washington chapter by Ed Connor. This chapter has provided assistance with many symposia, access to key T&E officials, and many other kinds of support. It also publishes an outstanding newsletter.

Accomplishments

ITEA contributed background information on T&E to the U.S. Congress, which created the DoD operational T&E organization. ITEA has now grown to approximately 2,000 members, 24 chapters, and 53 corporate members. The



MEMBERSHIP Visitors' Register

Date	Name	Firm	Address	Membership To See
18 Jan 80	DR A. A. MATTHEWS	MATTHEW INC	107 REGIONAL CT LEXINGTON PARK MD 20653	C 1 SM
18 Jan 80	COL R.A. KLINCK JR USAF (RET.)	BURNS, ROOVE & KLINCK, P.C.		F 2 SM
18 Jan 80	COL FLOYD A. McLAURIN, USAF	USAF		F 3 SM
18 MAR 80	CAPT DAVID A. HERRINGTON	USAF	514 IRONWOOD DR. WALDORF MD 20601	C 4 RM
11 MAR 80	MR BILL SPURGEON	SOLE/NAIL	RT1 BOX 198A LEXINGTON PARK MD 20653	F 5 RM
9 JUL 80	MAJ PATRICK W. POWERS	PRESIDENT	307 SOUTH COLLEGE AD BEL AIR MD 21014	C 6 RM
14 JUL 80	COL ANTON D. BREES	USAF	211 CRANDVIEW AVE. VALPARAISO FL 32580	C 7 SM
7 JUL 80	RICHARD L. CROSS, JR.	A/E USAF REP. VP PLANS & OPERATIONS BDM FSD	BDM CORP 7915 JONES BRANCH DR. MCLEAN VA 22102	C 8 SM
7 JUL 80	RICHARD O. McGUIRE	VP AR FOR BDM CORP	BDM CORP 1801 Randolph Rd, SE Albuquerque NM 87106	P LY A3 C Loyalist
29 SEP 80	BERMAN, SORRELL DR	DR PMTC SAB	CODE 3L - SAB PMTC Point Mugu CA 93042	C SM 10
10 OCT 80	MORRELL, GERARD P.	USN SWC	USN SWC Silver Spring MD 20910	C SM 11
6 OCT 80	WISSLER, JOHN C.	COMMANDER NAVE	COMMANDER Pentagon Rm. Washington DC 20350	H 12 SM
20 MAR 81	STARRARO, ALFRED D.	LT USA (Ret)	7248 RESER PL Alexandria VA 22307	H 13 SM
20 MAR 81	KIRWAN, ROBERT L.	MAJOR GEN USA	COMMANDER, FSA BDEA 5600 COLUMBIA PIKE FALLS CHURCH VA 22041	H 14 SM
20 MAR 81	BAUGHMAN, FRED H	COMMANDER PMTC RADM USN	1004 POLARIS DR Point Mugu CA 93042	H 15 SM

Page 1 of the Initial Registry

three membership categories (charter, honorary, and founder) were used advantageously to encourage the growth and leadership of ITEA. Membership grew annually by about 20 percent, with about 5–10 percent annual attrition.

It is with considerable pride that I note the accomplishment of my 1979 dream to help merge the people working in T&E into a cohesive community of professional T&E authorities.

Creation and Development of the Journal of T&E

I organized, edited, and published the first 15 issues of the newsletter on my own. This first publication, later known as the ITEA Newsletter/Journal, was issued for approximately four years (three to four quarterly issues per year, depending on the budget). It was a black and white and/or two-color newsletter containing news and technical papers.

Within three years, it had grown to a 32-page quarterly publication, containing technical papers, announcements of meetings, advertisements, membership rosters, and other key information. Publication was limited only by the ITEA budget. Over 12 issues (800 pounds each issue!) were published before the budget permitted 64 pages in multicolored print.

Initial printings were for 2,000–2,500 copies, distributed to members and a nonmember mailing list of 1,000. A team of Southern Maryland chapter members met on Saturdays to bag by zip code a station wagon load of

newsletters. Copies of these early publications are available in the archival library at ITEA headquarters.

I expanded the publication to 64 pages and retitled it the *ITEA Journal of Test and Evaluation*. Soon thereafter, it began to use full-color material, while retaining its 64-page undated (since 1985) quarterly format. In 1984, the ITEA headquarters and *Journal* publication responsibilities were transferred from my MATTCON Inc. offices in Lexington Park, Maryland, to the Washington, D.C. area.

Education for T&E

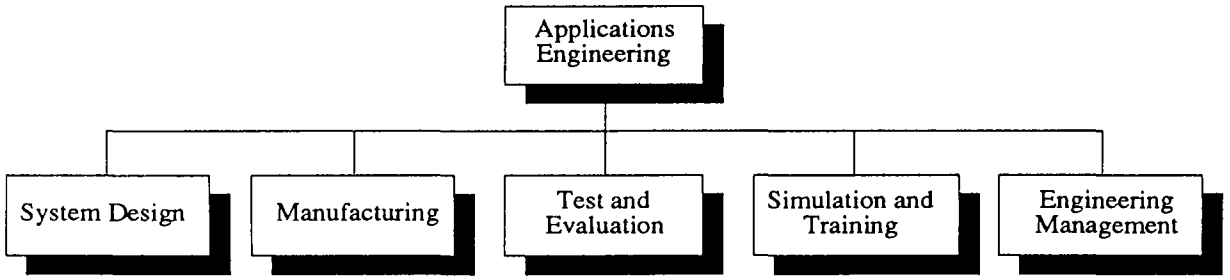
Education for T&E has a longer history than is often realized, but concern for it has been escalating since about 1970, when a series of Blue Ribbon Committees were established by the DoD and the U.S. Congress. In addition, the 6–12 month aircraft test pilot's schools of the Navy and Air Force concentrated on the T&E of airborne platforms while attempting to expand into weapons systems testing. The key reasons were danger/risk and cost. Many short courses were initiated, including a national series that I conducted.

Education in T&E was a fundamental concern in establishing ITEA. The newsletters, symposia, and journals have been key elements in the distribution of educational information. From 1980 to 1988, the ITEA Education Committee on T&E under my chairmanship was in contact with a variety of educational institutions and promoted the publication of related papers. I was pleased to have a paper of my own, "Requirements for Education in T&E," given at the 1985 Monterey, California Annual Symposium, appear in *The ITEA Journal of Test and Evaluation* (Volume 6, Number 3, 1985, pages 8–19). The *Journal* has recently published several more papers on this subject by other authors (in Volume 10, Number 4, 1989 and in this current issue).

A common denominator in facilitating a graduate T&E program is the interdisciplinary nature of T&E. In the past, industry failed to hire such graduates, preferring to cross-train, if necessary! That is now changing and related interdisciplinary professions like system design, manufacturing, simulation and training, and engineering management, shown along with T&E in the chart on the next page,"Scope of New Engineering Department," now exist or are being developed at some leading universities.

Key issues in relation to the scope of new engineering departments are national accreditation by recognized organizations, demand by employers, a one-year MST&E degree versus the two-year Degree of Engineer (DET&E), qualified faculty, and so forth. It is interesting to note that these professions of the technological era are at least one level of education above classical technical/management professions and promoted by practitioners like ITEA members. It is equally interesting to observe that all five of these professions are essential to the international competitiveness of products as well as to the Army School of Engineering and Logistics. Education in T&E is therefore one of the keystones of ITEA's coming to fruition after ten years of growth. *An insatiable demand for T&E education has not only fueled but bonded the growth of ITEA and brought cohesion to the T&E community for its present and future role in society.* The Board of Director's approval of a chair for T&E at a leading university, to be known under my name, is a deeply appreciated honor—the fulfillment of a personal objective.

Scope of New Engineering Department*



- System Analysis
- System Integration
- Trade-offs (cost/schedule/performance)
- Man-Machine Interface (ergonomics)
- Performance Decisions
- Subsystem Capabilities
- Long-Range Plans
- Interoperability
- Environmental Sciences

- Materials
- Standards
- Process & Control
- Equipment & Tooling
- Computer Control
- Robotics
- Quality Control
- Fasteners & Joiners
- Forming
- Flexible Manufacturing

- Morphology, Taxonomy (5) & Evolution
- Range Requirements (5) (TSPI: Radar/Theod/Laser/Multilateration)
- Instrumentation & Sensors (3)
- Data Transmission (Analog & Digital)
- Data Processing & Analyses
- Test Design (5)
- Statistical Analysis (1) (Error & Data)
- Computer Hardware (2) & Software
- Environmental Testing (5) (Molds/Explosives/Presses)
- "ilities" (Rel./Maint./Safety/etc.)
- Performance Criteria
- Systems Evaluation (6)
- System Integration (5)
- Evaluation Techniques (EM/g/Shock/Fungus/etc.)
- Simulation Validation
- Trainer Validation

- Design Simulation
- Equipment Simulation
- System Simulation (Eqpt./Micro/Macro)
- Vehicular Performance & Trainers
- Functional Simulation
- Manufacturing Simulation
- Delphi Study (4)
- Artificial Intelligence

- Budget Allocation
- Time Allocation
- Financial Control
- Process Analysis
- Cost Analysis
- Program Analysis
- Risk Analysis
- Planning
- Performance Requirements

*Industry, government, and consumer products

References

(1) *Practical Experiment Designs*, W. J. Diamond (text)
(2) *Software Test and Evaluation*, DeMillo, McCrackin, et al (text)
(3) *Nondestructive Testing*, American Soc. Nondestructive Test (Rad. only) (handbook)
(4) *Training Projected as Automation Needs*, Delphi (report)
(5) *Principles of Test and Evaluation*, A. R. Matthews (handout text)
(6) *Operational Test and Evaluation*, R. T. Stevens (text)

Although limited T&E was conducted for years prior to 1970, including World War I, the advent of complex systems in World War II demanded more comprehensive T&E. For example, initial operational T&E was accomplished only in actual combat situations, with feedback to the equipment manufacturer. The process was slow and often disregarded, with some fixes accomplished in the field. Weapons could not be tested against humans, but chicken carcasses were shot into the intakes of jet engines to simulate bird strikes!

Need for Improved T&E

In the 1970s, it became clear that an enhanced T&E process was needed within the Department of Defense. Basic flaws included inadequate T&E, off-the-record T&E, general use of outdated surplus operational equipment, lack of an R&D budget for T&E use, omission from industry of Independent Research and Development (IRAD) programs, weak interdisciplinary capabilities, limited professional staffing, inadequate T&E coordination, inconsistent financial costs, antique technology, component hardware instead of

system testing, nonrepeatable tests, competition among test centers, inadequate scope of tests reports, and so forth.

The role of T&E was addressed on September 14, 1989 by S. A. Trodden, DoD Office of the Inspector General (IG), when he was a luncheon speaker at the George Washington Chapter meeting (see *The ITEA Journal of Test and Evaluation,* Volume 10, Number 4, 1989, pages 49-55). The comparison with the functions of the Inspector General demonstrated the unique DoD technological/operational role of ITEA versus the legal role of the IG, in addition to the weaknesses of the T&E community. The comparison is exciting because it identifies the specific T&E functions needed to expand not only the DoD role of T&E but also its broader, independent role beyond the DoD, which can be the basis for a wider application and acceptance of T&E as a formal discipline.

The current movement toward greater breadth and acceptance of T&E is consistent with the ITEA Articles of Incorporation and so should now be addressed by the ITEA Executive Board, Board of Directors, chapters, and members. T&E is far more than a specialized outgrowth of R&D. In fact, the U.S. budget should separate the major budget category of RDT&E into two categories of R&D and T&E, with special subcategories in each. Realistically, these optimal T&E categories can then also be created as ITEA professional groups, as has been proposed since 1980, while being staffed by the ITEA Board of Directors. The current subcategories are appropriate for the DoD Range Committee Council and should remain with DoD specialties as one major category only. Such expansion of T&E by ITEA beyond the DoD is the very essence of professional leadership by ITEA.

Long-Range Plans

The future of ITEA is solid as it expands under the leadership of President Bob Klementz to develop further educational grants, conduct symposia, extend as planned beyond the Department of Defense to other governmental agencies, increase international membership and chapters, possibly acquire an ITEA building, develop geographical regions with regional presidents on the ITEA Board of Directors, and participate in the national competitive product program. The original Articles of Incorporation authorize activity in government, industry, academia, and nonprofit organizations, both foreign and domestic.

A Personal Note

Thanks for your help. I deeply regret that I can no longer actively participate in ITEA since I am confined to bed with cancer. However, I wish to acknowledge the early support received from numerous friends and the hundreds of others who developed ITEA into a nationally prominent society listed in annual books of professional associations. I am honored to know that ITEA, whose name I selected, will remain a memorial to me as its founder far beyond its present tenth anniversary. It is intended that the documents referred to and reprinted here be filed in a historical file, for reference by a future ITEA History Committee publishing the total history of ITEA. In particular, I wish to acknowledge the tremendous support received from Brad Granum, Major General Dick Cross, Colonel Dave Herrelko, Carl Smith, Charlie Watt, Bill Spurgeon, Carl Cooper, John Bolino, and all members of the Board of Directors from 1980 to 1988 when I served on the board and held various elected offices including President, Treasurer, Secretary, Editor/Publisher, Executive Director, and Committee Chair for Education.

Thanks for the memories! God bless ITEA.

ITEA NEWSLETTER

INTERNATIONAL TEST & EVALUATION ASSOCIATION

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LEXINGTON PARK, MD. 20653
"TEMPORARY" EDITOR: DR. ALLEN R. MATTHEWS

APRIL 1980
VOL. 1, NO. 1

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PREFACE

This Newsletter is the first product promised by the organizer in December 1979 to a nation-wide group of experts in T&E. It is hoped that the progress announced herein meets expectations. This issue is devoted to organizational matters and staffing with future plans covering publications, chapters, regions, and professional meetings.

All recipients and members are requested to submit their views and news items for consideration and/or publication of recommendations or issues. I solicit your offers of assistance, staffing, and specific interests for direct participating in the operations of the organization.

We need to formalize additional goals and objectives with time-phased milestones for further ITEA operations. Your views and news items will provide guidelines and ideas for presentation in the next Newsletter. Members are encouraged to explore establishment of local Chapters sponsoring technical meetings on T&E in coordination with the ITEA Board of Directors as discussed in this Newsletter.

As with the establishment of any new organization, ITEA needs operating funds to support the publication and technical meeting programs being organized. The membership dues and donations (all tax deductible) are the only current source of funds so please complete your membership applications insuring that the ITEA programs can be expanded to increase the professional benefits to all members. Additional income-generating activities will subsequently be developed.

The logo in the letterhead is offered as a candidate. Members are invited to submit candidate logos for a competitive selection.

1. BACKGROUND

The professional society for test and evaluation was formally established by its organizers COL R. A. Klimek, Jr., USAF (Ret.), COL Floyd A. McLaurin, USAF, and Dr. Allen R. Matthews, USN civilian, on 26 February 1980. The proposer, Dr. Matthews, first publically presented the concept to the students of the Defense Systems Management College (DSMC) at the Test and Evaluation Management Course Number 1 (TEMC 80-1). The concept with its pros and cons was discussed at an informal student (critiquer's) dinner meeting held in a private dining room of the Pheoneous II restaurant, Springfield, Virginia, on 5 December 1979.

The attendees were those students who participated in a fraternal dinner party which was organized by COL Harold (Hal) L. Johnson, USA. These attendees enjoyed an outstanding dinner and an impromptu two hours of informal and unanticipated discussion. They unanimously voted to proceed with the founding of a T&E professional society and appointed the proposer to implement the organization of the association. Ten other course attendees who could not attend the dinner meeting for various reasons were subsequently contacted and gave their general concurrence. Attendees were:

ARMY

COL Harold L. Johnson, USA, Yuma Proving Gr.
MAJ Lawrence J. Keller, USA, Ft. Bliss

NAVY

Mr. Thomas F. Fishburn, AUTEC
Mr. James A. Griffin, Jr., NAVSEASYSCOM
Dr. Allen R. Matthews, NATC
CDR Terry J. Myron, USN, OPTEVFOR
Mr. Melvin H. Sever, PMTC
Mr. E. D. Tranby, NSWSES
Mr. Donald J. Zeleny, PMTC

AIR FORCE

LTCOL Mark J. Daniels, USAF, AFTEC
LTCOL John McDonald, USAF, Eglin AFB
Mr. Donald E. Murphy, W-P AFB
LTCOL Arnold L. Snyder, Jr., USAF, Hanscom
Mr. Raymond J. Wagner, AFSC, Andrews AFB
LTCOL James M. Young, USAF, Eglin AFB

INDUSTRY

Mr. William Cutler, Grumman
Mr. William J. Reicks, Lockheed
Mr. A. Rosende, Jr., Lockheed

2. STATUS OF ITEA

Since the first informal meeting, a draft Newsletter was prepared in December 1979 but rapid development of events suggested publication delay until completed progress could be reported. The following milestones have been accomplished or established:

1. Name selected in December 1979: ITEA.

2. Nonprofit Incorporation papers prepared and executed by the law firm of Burch, Kerns and Klimek, P.C. 1320 19th Street, N.W., Suite 500, Washington, D.C., which is the initial registered office of ITEA with Christopher M. Kerns, District of Columbia Registered Agent.

3. Incorporation granted 18 January 1980 by the Government of the District of Columbia.

4. Organization meeting held at the registered office on 26 February 1980.

5. Initial Board of Directors as required by incorporation law of District of Columbia are the initial members who, during the organizing meeting, are required to elect the initial officers to assume responsibility for the non-profit corporate operations. Each of these individuals has had extensive experience in T&E and is located in the Washington area to facilitate meetings during the growth of ITEA.

6. Election of officers by BOD per corporate law:

President and Treasurer	Dr. Allen R. Matthews (Matt)
Vice President	COL Floyd A. McLaurin, USAF (Mac)
Secretary	Mr. Robert A. Klimek, Jr. (Bob)

7. Draft By-Laws as prepared by legal council reviewed with revisions proposed.

8. Post Office Box 603, Lexington Park, Maryland 20653 established on 3 March 1980 as official ITEA mailing address for principle operating office. (Cost $11.00 semi-annually with $1 deposit for key to box.)

9. ITEA checking account established at Lexington Park Branch of Maryland National Bank on 3 March 1980. Personal deposit of $100.00 made by the President to cover $25.00 for 1980 dues and $75.00 as a donation to help cover start-up costs.

10. Additional candidate members' names have been both telephoned personally to the President and/or had their names submitted by initial organization meeting attendees. All will receive this Newsletter directly or through friends.

11. The accounting firm of Jerry Colvin, CPA Incorporated, Leonardtown, Maryland, has been selected to provide independent financial statements, membership records, and audited tax reports.

12. The law firm of Burch, Kerns and Klimek was selected not only for incorporation of ITEA as a non-profit corporation but for post incorporation legal services. Bob Klimek as Secretary of ITEA and Partner of the law firm will maintain custody of the incorporation papers, seal, and corporate books.

13. The calender year was adopted to be the corporate fiscal year. Accordingly, membership dues and donations received during 1980 will be partly used to defray the normal start-up costs and entitle those members to charter membership status as well as all other benefits. An additional initial membership fee is not required as in many organizations.

3. ARTICLES OF INCORPORATION

The Articles are the foundation for any non-profit corporation and provide for a variety of legal aspects. They are available for review by any member and will be, as soon as feasible, concisely printed in a booklet format for all members. However, it is pertinent to publish at this time the first paragraph of the third article regarding purpose as follows:

> "To provide an organization for individuals who have a common interest in the discipline of test and evaluation and who wish to foster and preserve the art of test and evaluation, to provide the exchange of ideas and information in the field of test and evaluation, to recognize the advances and contributions to testing and evaluation, to document the history of test and evaluation, and to commemorate fittingly the memory of persons who have made substantial contributions in the field of test and evaluation."

The Articles serve as the initial Constitution of ITEA and further define the basic membership divisions and requirements.

The scope of T&E interest under the general incorporation articles is left open to include those substantive T&E matters associated with all domestic and foreign government agencies, industry, academia, and non-profit institutions. This scope includes the T&E associated with all types of vehicular systems (ships, aircraft, automotive, tanks, spacecraft, etc.) as well as mission systems (sensors, data processing, man-machine interface, etc.) all associated with recognized activities such as acquisition, operations, logistics, development, training, and related fields, including the unique T&E activities of management, process, resources, technology, etc. ITEA is essentially devoted to multi-technologies, oriented to the development of the T&E organization, and dedicated to the development and execution of the T&E art.

4. BY-LAWS

The law firm of Burch, Kerns and Klimek has drafted a set of proposed ITEA By-Laws. These were modified and expanded at the organizational meeting. These By-Laws will be again submitted to the Board of Directors for approval and subsequently to members in booklet format for review.

5. SUPPORT FROM OTHER ORGANIZATIONS

On 17 September 1979, Dr. Matthews discussed the concept of ITEA with RADM Isham Linder, USN, OUSDR&E (T&E) and received his support and encouragement. On 24 January 1980, Dr. Matthews again discussed the T&E professional society concept and the support of the attendees at the DSMC TEMC #1 with BGEN Jerry Max Bunyard, USA, OUSDR&E (T&E) who also offered his support and encouragement. This support is important to ITEA since it will facilitate DOD participation in and sponsorship of ITEA activities. It is very gratifying.

Expanded recognition of ITEA as a professional society devoted to professional development of T&E in both DOD and industry is one of the goals of ITEA. The present plan is to seek the support of the Aircraft Industries Association (AIA), Electronic Industries Association, and other industrial organizations both foreign and national in order to further the development of ITEA, to create a respected voice for the T&E field, and to contribute to the art of T&E.

It is also planned to establish a coordinated support and participation program with foreign governments having alliances such as NATO. In some instances, there is an active but specialized program in T&E; however, it is not formalized as a separate general purpose T&E activity such as ITEA.

This objective includes developing cooperative T&E programs with other professional societies such as AIAA, IEEE, SFTE, SETP, and others.

6. MEMBERSHIP

Membership is open to any individual, both U.S. and foreign nationals, who has a record of interest and participation in T&E.

It is anticipated that members will be identified as founder, charter, regular, or honorary members. These members will also be classified as student member, regular member, senior member, and fellow. The details, such as voting rights, professional recognition, and special dues arrangements, are under consideration for incorporation in the By-Laws.

7. CHAPTERS OF ITEA

The By-Laws will be expanded to include provisions and guidelines for establishment of local Chapters and geographic regions with officers who have representation on the ITEA Board of Directors. Chapters can most successfully be created in areas that have a concentration of T&E activities of all types. Chapters will hold meetings and may host national symposia as the latter is approved by the Board of Directors. Chapter dues will be minimal and supplemented by National rebates based upon membership. Chapters will operate under the ITEA Articles of Incorporation and By-Laws with officers such as President, Vice President, Secretary, and Treasurer.

8. GEOGRAPHIC REGIONS

Regions will be established to facilitate administration and provide strength of activities by consolidation of efforts. Regional symposia will be encouraged in concert with Chapter meetings. The ITEA Headquarters will provide assistance as requested for speakers, administration, publicity, and other support activities. One purpose of Chapters and Regions is to promote communication among members in a cost effective manner that minimizes travel costs.

9. STANDING COMMITTEE

In the course of evolution, ITEA Headquarters will establish, as required, a series of Standing Committees to provide specialized attention to areas such as:

T&E Education	Publications	Ethics
Membership	Publicity	Health and Insurance Programs
Financial	Congressional	Meetings and Symposia
Awards	Members Security	History
Long Range Planning	Constitution and By-Laws	International

10. PROFESSIONAL WORKING GROUPS

The ITEA will establish a family of professional groups representative of the interests of members. Candidate professional groups include:

Test Facilities	Quality Assurance and Guarantees
Test Planning and Process	Evaluation Standards
Test Project and Organizational Management	ET&E/OT&E/PAT&E Interfaces
Test Techniques	Multi- and Tri-Service Test Programs
Hardware Evaluation Standards	Psychology of Testing
Software Evaluation Standards	Economic Analysis of T&E

11. TECHNICAL MEETINGS AND INTERNATIONAL SYMPOSIA

A program of international symposia will be developed by the ITEA Board of Directors and will reflect the interests of the membership. Periodicity and location of international symposiums will be developed by the Board of Directors. Meetings of this type are expensive and will be limited to assure justification based upon the need.

Members are encouraged to hold local technical meetings including nationally recognized speakers and to submit professional papers for publication in the official journal with distribution to all members.

12. PUBLICATIONS

Chapters may publish newsletters and meeting reports on administrative or technical matters.

Regions may publish newsletters and regional symposia proceedings.

The sponsor of international symposia, ITEA Headquarters, will draw upon Regions, Chapters, Professional Working Groups, and other sources to host, manage, and present technical symposia including publication of Symposium Proceedings.

The ITEA Headquarters will organize, prepare, and periodically publish a professional journal for distribution to all members. News items and professional papers will be solicited for the ITEA Journal from all of the above sources.

13. MEMBERSHIP SUPPORT

The program herein outlined for ITEA is a major effort to achieve the objectives of ITEA and will require the active support of all members. It is anticipated that membership will increase exponentially over the next three to five years to approximately 5,000 members. This growth will require constant management attention.

The key to successful achievement of these goals is, as always, effective delegation of the responsibilities and authorities to the members and the Committees or Working Groups.

If you want to be a part of this new service to our International Society, complete and mail the enclosed application for membership form enclosing your annual dues and donation that are needed to finance initial operations.

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THE PROFESSIONAL SOCIETY EVOLUTION

EDITORIAL

THE NEED FOR T&E

The field of test and evaluation has become a dominant factor in government and industry during the past ten years. This fact is most evident in the DOD which has of necessity and by congressional action further institutionalized the DOD T&E activities. The basic result is the creation of industrially funded testing organizations for many DOD T&E activities and the creation of a series of DOD directives with subsequent specialized Service regulations. Other government agencies like the Environmental Protection Agency (EPA) and the Department of Energy (DOE) are also deeply involved, as well as industrial and consumer product suppliers ranging from pharmaceuticals, food, appliances, machinery, to automobiles.

The DOD and the Services have created special schools in T&E management and expanded the curriculum of the aircraft Test Pilots Schools. Unique management courses have been introduced into T&E organizations with attempts to increase productivity and decrease life cycle costs.

Industry has seen a legal need to improve products from catastrophic consequences and, in fact, to maintain marketability by performance and characteristics (like shelf life and R&M) including guarantees.

In all cases, T&E is now recognized as a partner to procurement, research, and development, production engineering, training, operations, and logistics. This recognition is essential in order to insure desired product performance and characteristics while guarding the economy, safety, and welfare of not only the national defense but the welfare of the citizens themselves.

A highly unique T&E technology has been buried for too long within the confines of science and engineering. ITEA intends to be at the forefront of bringing the T&E technology out in the open as an independent and viable technical field. The world now suffers from the lack of serviceability of products in such matters as consumer, industrial and military inventories incapable of being effectively operated or when operated routinely with excessively high operations and maintenance costs that prohibit the introduction of more efficient or productive operations with updated equipment due to investment costs. The life cycle of acquisition is extended forcing expensive update modifications of the inventory. Resulting new equipment or products have initial integrated logistic support problems.

The key to the solution of many current product problems is an improved developmental T&E program prior to production of defense and non-defense equipment such as drugs, nuclear reactors, and automobiles. Life cycle costs may force automobile design changes from a three to a ten year economic lifetime as basically required due to the consumption of national resources and energy. Ultra expensive, one-of-a-kind plants or space systems require a unique T&E process.

T&E has been repeatedly demonstrated as the key to product assurance and is intimately related to performance, acquisition costs, logistics, training, procurement procedures, and operations. T&E must be accepted as a continuum from the initial concept to the scrape pile. T&E may be the oldest profession since someone had to test it before purchase.

There is a basic need for an expanded professional T&E educational program in academia as well as in specialized organizations. History has demonstrated the need for a T&E professional society to provide a common meeting ground to exchange ideas and motivate more among all T&E practitioners regardless of their organizational affiliation.