

## THE HISTORY OF SIGSIM

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This brief article describes the history of SIGSIM during its formative years (1967-1969) and explains the motivation and forces surrounding the creation of the SIG.

### SIGs and SICs

SIGSIM is an acronym for the ACM Special Interest Group on Simulation. In the beginning SIGSIM was established as a committee--SICSIM. The distinction between a SIC and SIG is important and worth discussion.

SIGs are permanent entities created by the Council of the ACM. SIGs function as largely independent technical societies under the ACM "umbrella." They have bylaws, usually elect their own officers, and have both fiscal responsibilities and authorities. They have the authority to levy dues.

SICs, on the other hand, are chartered by Council for a probationary period of one year, have appointed officers, and are dependent upon ACM for all fiscal support and services. They are not allowed to charge dues and any revenues are placed in an escrow account at ACM headquarters pending their conversion to a SIG. The principal purpose of a SIC is to determine if sufficient interest exists within ACM to charter a SIG in the particular area.

### SICSIM

SICSIM's origin can be traced back to May, 1967. At that time the ACM SIG/SIC Board was composed of 15 SICs and 4 SIGs. None of these 19 SIG/SICs were inclined toward simulation per se. Today ACM has 26 SIGs, no SICs, and SIGSIM is the 13th largest.

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The initial spark of creation was induced by an open letter to the ACM membership published in the Communications (CACM 10(5) May, 1967) written by then Vice-President B. Galler.<sup>1</sup> The letter lamented the fact that most ACM members were basically unaware of the many services offered by ACM. The letter made the point that an active member could shape the purposes and goals of ACM in an effective and valuable manner. It stressed the concept that the Association is eager to respond to an active member's interests and suggestions. Finally, the letter summarized several ways members could enhance their relationship with ACM. One particular mechanism cited was increased involvement in the SIG/SIC activities.

Responding to this suggestion I decided to join the SIG or SIC on simulation. Unfortunately the ACM SIG/SIC Reference Guide, published in Communications, listed no such group or committee. I viewed this omission as a basic editing error. However, on the off chance that such a SIG/SIC on simulation did not exist, I wrote a letter to the Chairman of the Committee on SIG/SICs (now referred to as the SIG/SIC Board). My letter stressed my interest in simulation, requested information on the SIG/SIC on simulation (if any) and expressed my interest in organizing such an activity in the unlikely event no such group existed. The reply to my letter--from Charley Bradshaw, then Chairman of the Committee on SIG/SICs--confirmed the lack of such a group and listed the constitutional requirements for establishing a SIC.

Two documents were required: (a) a brief Statement of Function summarizing the goals and objectives of the proposed SIC, and (b) a petition to the Council requesting formation of SICSIM signed by 20 regular (voting) members of the ACM\*.

The Statement of Function prepared was a brief document delineating the purposes of SICSIM:

- Advancement of the state-of-the-art in digital simulation.
- Serving as a forum for exchanging techniques in digital simulation, simulation languages, related computational mathematics, and new applications.

The statement was attached to a general petition form and signatures were collected. In order to demonstrate a national interest, copies of

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\* These requirements have since been raised to 50 voting members of ACM and may be increased again in the next few years.

the petition were distributed on both Coasts and in the Midwest. Copies of the executed petitions were sent to the Chairman of the Committee on SIG/SICs and the Association's Executive Director. Signatures were verified and the petition was subsequently presented to the Council of the ACM in August, 1967. The Council ratified\* the petition and SICSIM was born (SICCAI--Computer Assisted Instruction was chartered at the same time).

The first formal listing of SICSIM appeared in the October, 1967 issue of Communications. The November, 1967 issue of Communications announced that the author had been appointed Chairman of the new SIC by then President Tony Oettinger. Carlton Gebhart and Nancy Zimmer were appointed Vice-Chairman and Newsletter Editor respectively by the Chairman.

Newsletters were published every quarter. The documents were quite crude when compared with present editions of SIMULETTER, but they served an important function. Membership grew and SICSIM became an active SIC within ACM sponsoring symposia, conferences, and professional development seminars. Newsletter contributions were sparse, unfortunately, and during this period the document never achieved any technical significance. The Newsletter Editors, however, did a fantastic job and it was largely through their efforts that SICSIM grew dramatically from approximately 30 members at conception to over 300 members in 1969.

From the beginning SICSIM was interested in technical activities. During the 1967-1969 period SICSIM sponsored:

- Professional Development Seminar--Digital Simulation of Physical Systems (presented in approximately 15 cities).
- Professional Development Seminar--Digital Simulation of Discrete Systems (presented in approximately 10 cities).
- Several Conferences on Application of Simulation.
- Conference on Applications of Continuous System Simulation Languages (CSSL).

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\*The speed with which SICSIM was chartered is most unusual. The present SIG/SIC Board now requires sufficient time to review petitions for conflicts with existing SIG/SICs before recommendations for approval are presented to Council. Up to several months delay can be expected.

## The History of SIGSIM < continued >

The professional development seminars were quite popular. Art Wachowsky and Dave Brandin presented the Physical Systems Seminars; Phil Kiviat and Arnold Ockene presented the Discrete Systems Seminars.

In addition, SICSIM

- Organized technical sessions at the ACM annual meetings.
- Organized sessions at the Joint Computer Conferences.
- Provided reviewers and referees.
- Recommended lecturers for the ACM Lectureship Series.
- Worked with Simulation Councils Inc. Committees and Conferences.
- Participated in the ACM session at the 1969 AAAS meeting.

Our objectives during this period were to build the membership base, to establish an effective means for communicating with the membership (Newsletters) and to demonstrate a strong technical interest and viability within ACM. An increased membership was desired in order to meet larger membership requirements as a SIG, since we expected to lose some members when dues were implemented.

In general we met all of our objectives although conversion to a SIG was not completed until 1969. This necessitated a request to the Council in 1968 to extend the SICSIM charter for one additional year. Fortunately, our technical activities and publications were sufficient to demonstrate viability and the charter was extended.

### SIGSIM

SICSIM opted to convert to a SIG in 1969. Such conversion was desired for several reasons:

- It established SIGSIM as a permanent entity within ACM.
- It gave the SICSIM membership an opportunity to select their own officers.
- The membership gained authority over their own funds.
- A more formal structure was established for transacting business via bylaws.

In order to convert to a SIG, it was necessary to obtain the signatures of 100 voting members of the ACM on a petition to the Council. This was accomplished by sending petitions to the entire membership of SIGSIM and by collecting additional signatures at the 1969 Spring Joint Computer Conference.\* The Council ratified our petition by a mail vote in April of 1969 and SIGSIM was established.

SIGSIM's bylaws were of the self-government type (Exhibit 2). The only exception from the standard recommended bylaws distributed by ACM was in the consolidation of the offices of Secretary and Treasurer into a single office--Secretary/Treasurer. The self-governing form of bylaws authorized election for officers.

In August 1969 SIGSIM conducted its first elections. S. Schram was elected Chairman. Dues were established at \$5.00 and SIGSIM was on its own.

SIGSIM's membership is presently 830, including all types of members. SIMULETTER is distributed to over 950 persons and organizations. Functioning as the 13th largest SIG, SIGSIM has grown into a healthy, viable, and valuable technical organization. SIGSIM's financial surplus is \$2500, which places it in an enviable position. SIGSIM is actively involved in sponsoring the following activities:

1. Symposium on Simulation of Computer Systems, SIGSIM/1, June 19-20, 1973, NBS, Gaithersburg, Md.
2. Environmental Simulation Conference, Summer, 1974.
3. 1974 Winter Simulation Conference, January, 1974.
4. Sessions at the 1973 Annual ACM Conference on World Modeling, August, 1973, Atlanta, Ga.

I believe the present success of SIGSIM can be attributed to several factors:

1. The excellent work performed by Mike Morris and his set of officers.
2. The obvious interest in simulation displayed by members of ACM and others.
3. The generous, real support provided by ACM in the formative years and the services rendered by Headquarters on behalf of SIGSIM.

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\*Present requirements specify that at least 50 of the 100 voting members must be members of the petitioning SIC.