1965

Arrangements for summer conference of plastic design of multi-story frames, October 1965

J. H. Daniels

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ARRANGEMENTS FOR SUMMER CONFERENCE

PLASTIC DESIGN OF MULTI-STORY FRAMES

August 24 - September 2

1965

by

J. Hartley Daniels

October 1965

Fritz Engineering Laboratory Report No. 273.29
ARRANGEMENTS FOR SUMMER CONFERENCE

"Plastic Design of Multi-Story Frames"

August 24 - September 2
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by

J. Hartley Daniels

Fritz Engineering Laboratory
Department of Civil Engineering
Lehigh University
Bethlehem, Pennsylvania

October 1965

Fritz Engineering Laboratory Report No. 273.29
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This report presents a detailed account of the activities of the Arrangements Committee, which was charged with providing for the general comfort and convenience of participants attending the Summer Conference, PLASTIC DESIGN OF MULTI-STORY FRAMES, held at Lehigh University from August 24 to September 2, 1965. The Arrangements Committee is a subcommittee of the conference Steering Committee as shown in Fig. 1. It does not attempt to report on the activities of other subcommittees shown in Fig. 1, nor on the general financing of the conference or any other aspect not specifically a part of the duties of the Arrangements Committee. Information not covered in this report may be found in other references and reports which are listed in Part 13, REFERENCES, of this report.
1. INTRODUCTION

The Department of Civil Engineering and Fritz Engineering Laboratory presented a Summer Conference entitled, "Plastic Design of Multi Story Frames" from Tuesday, August 24 to Thursday, September 2, 1965. The conference was well attended, with engineers representing many parts of the United States and many foreign countries. The conference was sponsored by American Iron and Steel Institute (AISI) and The National Science Foundation (NSF). Cooperating societies were American Institute of Steel Construction (AISC), American Society of Civil Engineers (ASCE), American Society for Engineering Education (ASEE), Navy Department and Welding Research Council.

The earliest plans for this conference (also referred to as the "Plastic Design Summer Conference") were laid some two to three years in advance of the conference. Prior to November, 1964, all arrangements were made either by the conference director G. C. Driscoll, Jr. also chairman of the conference Steering Committee, or by J. Hartley Daniels, Secretary of the conference Steering Committee. The Steering Committee was formed in 1963 to supervise all activities relating to the Plastic Design Summer Conference.

The Arrangements Committee was one of several subcommittees proposed by G. C. Driscoll at the November 20, 1964 meeting of the Steering Committee. Each subcommittee was charged with a specific portion of the work of the Steering Committee and was required to report weekly to that committee. The final organization and responsibilities of the several
committees was adopted at the December 18, 1964 meeting of the Steering Committee and is shown in Fig. 1. Also shown are the appointed committee chairmen and members.

This report then basically outlines the work of the Arrangements Committee a subcommittee of the conference Steering Committee from December 1964 to September 1965. Arrangements which were made prior to December 1964 will be specifically noted. Information not contained in this report may be found in other references and reports which are listed in Part 15 REFERENCES, of this report.
2. REGISTRATION

Although much of the preliminary work of registration fell within the scope of the committee on Registration and Grants, under the chairmanship of A. Ostapenko, it was the duty of the Arrangements Committee to prepare the necessary registration forms, etc. and to plan and carry out all aspects of the registration itself which took place on Monday, August 23, 1965.

Preparations began on April 1, 1965 with the planning of the Registration Form and accompanying information sheets and letter of invitation which was to be sent to all prospective participants on June 1, 1965. Appendix A shows the forms which were prepared during this period and mailed by AISI to all conference participants as follows:

1. Form SC-R1 - Letter of Information
2. Form SC-R2 - Registration Information
3. Form SC-R3 - Registration Form
4. Form SC-R4 - Conference Information
5. Information Sheet on Hotels, Motels and Restaurants

In addition to the above information, a map prepared by the Office of Public Information entitled, "Welcome to Lehigh University" was also included in the mailing. The map showed the campus in relation to all the major traffic routes leading to the campus through the City of Bethlehem.
The next job was to prepare for the return of all Registration Forms following the mailing by AISI, and to devise a system of processing the information from the forms so that it was readily available for later use. It was decided to put the information on standard computer punch cards, use the card sorting machine to arrange cards according to the information desired, and to print out from the assembled cards. A typical print out of the information can be found in Section 11 - "Registration and NSF Grants" of Fritz Laboratory Report No. 273.30 Part II. The information was punched across the card in the following code letter sequence:

NUM MR LAST NAME FIRST I JR XE COUNTRY ABPT NM YNM ABCCB

One punch card was made up for each returned Registration Form. The information recorded under the above code letters was as follows:

NUM - A registration number assigned to each participant was punched in Columns 1, 2 and 3 beginning with 1

MR - MR, MRS, MISS, etc. was punched in Column 5, 6, 7 & 8

LAST NAME - Columns 9 to 27 inclusive

FIRST - Columns 29 to 38 inclusive

I - Initial - Column 40

JR - JR, II, etc. punched in columns 42, 43

XE - PE - Practicing Engineer

EE - Engineering Educator

ST - Student

The above letters were punched in columns 45 and 46

COUNTRY - Columns 49 to 55 inclusive.
ABPT - A - Auto - Column 57
B - Bus - Column 58
P - Plane - Column 59
T - Train - Column 60

One or more of the above letters were punched in Columns 57 to 60 inclusive, signifying the transportation the participant intended to use.

NM - Number of family, etc. that participant brings with him punched in Columns 62, 63

Y - Y - Yes, requires dormitories
N - No, doesn't require dormitories

Either Y or N punched in Column 65

NM - If Column 65 is Y, then number of nights participant will stay in dormitory was punched in Columns 66, 67

ABCCB - A - Meal Plan A - Column 69
B - Meal Plan B - Column 70
C - Meal Plan C - Column 71
C - Clambake - Column 72
B - Banquet - Column 73

The above letters were punched in Columns 69 to 73 inclusive depending on applicants choice.

As each registration form was returned, the participant was given a registration number (starting with number 1), the number was punched on his computer card and typed on his registration form. From this point on, the participants number was used as much as possible in all other aspects of the arrangements, as will be evident later in this report.
Additional preparation was required in the interval before the conference, primarily during July and August.

1. A ditto letter was sent to all taxicab companies in the vicinity to advise of the conference and to indicate exactly where to bring participants when requested to do so.

2. About once a week for the 6 weeks, or so, prior to the conference, the punched computer cards were printed up through the electronic computer to keep track of the number of prospective participants and their requests, and to supply up-to-date lists to Prof. Beedle, the sponsors and others as requested.

3. Just prior to the conference the two closest banks were given lists of prospective participants.

4. The combination name tag-conference program was planned by J. H. Daniels and printed by AISI through arrangement with G. M. Basford Company of New York.

5. Final arrangements were made with S. Connor of Lehigh University Office of Public Information for producing a folder into which material would be placed to form the information packet to be distributed at the conference.

6. Arrangements were made with the Bethlehem Chamber of Commerce to supply literature for the packet.

7. Arrangements were made with O. Beck of Lehigh University Printing Service to print up the triplicate receipt forms to be used at registration. This was done by letter presss.
8. I.D. Cards were obtained from Mr. Norman H. Sam, Director of Summer Sessions in consecutive numbers from 1 to 750.

9. The returned Registration Forms were examined critically by Mr. M. A. Macias and a suggested revised Registration Form for possible use at another conference was prepared. This is shown in Appendix A. The reverse side of the proposed form would contain essentially the same information as on the reverse side of the registration form used.

10. All pre-registration fees of $10.00 were recorded and deposited through the Bursar's Office by Mrs. Fielding. (The full registration fee was $35.00. The balance was collected during registration and deposited with other fees by Mr. Laub through the Bursar's Office following the conference).

In addition to the above specific items, many miscellaneous tasks had to be performed prior to registration such as preparing the signs used during registration, preparing name plates for each girl which would be placed on the desk in front of her when on duty, making boxes in which to keep name tags, keys, registration forms, etc., and many other details. The 2 week period immediately prior to the conference was spent on small details, all other preparations have been completed.

Registration itself took place at Fritz Laboratory from 9:00 a.m. to 12:00 Midnight Monday, August 23, 1965; the day preceding the start of the conference, and from 8:00 a.m. to Noon Tuesday, August 24 the first day of the conference. A total of fourteen persons were used in
three shifts; 9:00 a.m. to 1:00 p.m.; 1:00 p.m. to 6:00 p.m. and
6:00 p.m. to Midnight, on the first day of registration Monday, August
23. Of these fourteen persons, seven were secretaries from Fritz
Laboratory, five were girls hired temporarily as extra help, one was
a student helper and the other was the Fritz Laboratory Accountant,
Mr. Bruce Laub.

A meeting was held during the week preceding registration with all
persons involved in the registration. The registration procedures to
be followed were discussed in detail with the group, and all assignments
with the group, and all assignments to positions at the registration
desk and to the three shifts were discussed and agreed upon.
Mrs. D Fielding and Mr. B. Laub were assigned to cashier position and
were asked to provide some supervision of other positions.

Figure 2 shows the layout of the registration desk at the SW
corner of the main floor of Fritz Laboratory. Registration procedure
went as follows:

1. Conference participants entered through the large overhead
doors at the SW corner of Fritz Lab following directions
from a sign placed just outside the door, and proceeded
to either location 1, 2 or 3 depending on the
position of his name in the alphabet. Small signs were
placed on a wire stretched about 4 feet above the tables
to indicate the assignment of the alphabet to each of the
positions 1, 2 & 3. The assignment worked well.
2. From a group of forms kept in a specially prepared box, the girl at the registration desk located the participants Registration Form to which was previously attached an I.D. card shown in Fig. 3. The number on the I.D. card coincided with the participants registration number which was previously assigned on receipt of his Registration Form. Extra Registration Forms and I.D. cards were on hand for those participants that had not pre-registered during the earlier general mailing by AISI.

3. The Registration Form was reviewed for accuracy and for any last minute changes in plans the participant might want to make.

4. The reverse side of the Registration Form was then completed in detail, in pencil, and the amount owing was figured.

5. A receipt form was completed, in ink, in triplicant (white original with green & yellow copies) and all three copies given to the participant. The receipt form used is shown in Fig. 4.

6. The meal plans purchased (Plans A, B or C) were entered on the participants I.D. card by circling with red ink the appropriate letters A, B, & C which appear above the registration number. If the participant wished to attend the clambake, the C appearing to the right of the registration number was circled in red ink and a number written beside indicating how many clambakes had been paid for by the participant. Similarly, the B appearing to the right of the registration number was
marked to indicate the banquet meals paid for by the participant. The I.D. card was then given to the participant.

7. The Registration Form for that participant was then filed away. The participant was then asked to show his I.D. card when required (normally at meal times), and he was asked to take his 3 receipt forms to the cashier, position 4.

8. The participant presented either a check or cash to the cashier together with the 3 receipt forms. The original receipt form was marked paid and returned to the participant, the other two copies being attached to the money received for later deposit and record. The participant also paid a one dollar deposit on his room key at this time. The participant then was asked to proceed to positions 5 or 6 and present his receipt form.

9. At positions 5 or 6 the participant was given a packet (folder containing maps, brochures, and other information) a set of Lecture Notes, a combination name tag and conference program (shown in Figs. 5 and 6) and a room key, if he was staying in a dormitory.

10. The participant then left Fritz Laboratory and either walked up to his dormitory or rode up by taxi or in one of two or three cars provided by Fritz Laboratory personnel.
The conference registration on the Monday proceeded quite smoothly. The number of registrants handled per hour was remarkably uniform throughout most of the registration period, with small peaks prior to and following lunch and a significant peak about 3:00 to 5:00 p.m. About 370 registrations (including engineers from Fritz Laboratory) were processed in the 15 hour period or about 25 per hour. In the peak periods, a line of participants would accumulate opposite one or two of the stations 1 to 4 inclusive, but the lines were never more than 5 or 6 deep, and were cleared through in a few minutes. It was found that during most of the registration period one cashier could handle the output of up to 3 girls on the first desk, that is, at positions 1, 2 and 3. In the peak period 3:00 to 5:00 p.m. 4 & 5 girls were stationed at the first desk and two cashiers were used. The handing out of name tags, notes, etc. was fast and no line-ups occurred at these stations at any time and 2 girls handled these stations effectively. The student helper was used to keep stations 5 and 6 supplied with packets and lecture notes and to point out on a campus map the location and route to the dormitories. The last group of participants were registered about 11:30 p.m.

A smaller version of the registration line was set up outside the main doors to Packard Laboratory Auditorium from 8:00 a.m. to Noon on Tuesday, August 24, to handle registrants. It was staffed by 3 girls. About 30 participants were registered between 8:00 a.m. and 9:00 a.m. that morning. Thereafter, late registration was handled in the Information Center which was located in Room 122 of Fritz Laboratory.
and staffed by Mrs. D. Fielding and one hired girl helper. The Information Center also became the nerve center for all operations involving the participants. Appendix C contains the Registration List. A total of 409 participants registered for the conference. Another 19 were expected to attend, but did not arrive, and another 25 cancelled prior to the conference after previously indicating they would attend. This list was prepared and printed on August 31 and September 1 and was distributed to the participants prior to the last mornings lectures, September 2, 1965.

The names of all participants were previously typed on the combination name tag - conference program using a borrowed typewriter with 1/4 inch high letters. This typewriter was kept on hand during registration.

The information packet consisted of a large folder obtained from S. Connor of Lehigh University's Office of Public Information. The folder contained the following:

1. Brochure on Research and Industrial Testing at Fritz Engineering Laboratory
2. Folder on Northampton County
3. Folder on Moravian College
4. Folder on Lehigh University's Summer Recreation Program and Activities
5. Folder on Historic Bethlehem
6. Map of the City of Bethlehem
7. Map of the Lehigh University Campus
8. University Parking Permit - issued by R. Numbers, Dept. of Buildings and Grounds
Items 2, 3, 5 and 6 were supplied free of charge by the Bethlehem Chamber of Commerce.

Exhibits of most of the items mentioned in this section of the report can be found in Section 11 Registration and Grants of Report No. 273.30 Part II. A list of requisitions pertaining to the summer conference is contained in Appendix B of this report.
3. LECTURES AND DEMONSTRATIONS

3.1 Lectures

All conference lectures were held in Packard Laboratory Auditorium. Prior to the conference a hold was also placed on Grace Hall as a possible location for the lectures, but later released.

The lectures began at 9:15 a.m. and ended at approximately 12:30 p.m. Each morning was divided into 3 sessions, each about 50 minutes in length. On those mornings when 2 lectures were given the 3rd session was reserved for answering written questions submitted previously by means of a question box located at the rear of the auditorium.

A stretch break of 10-15 minutes was held between the first and second sessions. A coffee break of 20 minutes or so was held between the second and third sessions. Announcements were read prior to the mornings sessions and again from 12:30 to 12:45 p.m.

Prior to the conference, the Department of Buildings and Grounds was requested to perform some janitorial and maintenance service to put the auditorium in good condition. This was done satisfactorily.

All lectures were given with the aid of a Vugraph which projected onto a tilting screen at the rear of the stage. The Vugraph was located on a raised platform over the front row of seats. The permanent P.A. system in the auditorium was used, the lecturers wearing throat microphones. Mr. A. F. Bodner was in charge of the P.A. equipment while Jack Taylor of Fritz Laboratory regulated it while it was being used.
The Vugraph was highly successful, but the P.A. system could be improved. Difficulty of hearing was evident to all those sitting near the rear of the auditorium especially under the portion with low ceiling.

All evening guest speakers used the same equipment in addition to the 35 mm. projection equipment in the auditorium. No blackboards were used at any time. While the Vugraph was in operation about one half of the auditorium lights remained on which provided adequate lighting for reading the lecture notes. Further information on the lectures is contained in Section 8 "Lecture Notes and Arrangements", Fritz Laboratory Report No. 273.30, Part I.

3.2 Demonstrations

All conference demonstrations were held in Fritz Laboratory. About 300 chairs were obtained through "Whitey" of Buildings and Grounds and arranged each afternoon by Fritz Laboratory workmen to suit each demonstration test. The attendance remained about two-thirds of the total registration at each afternoons demonstrations. Further information on the demonstrations is contained in Section 9, "Demonstration Tests and Instrumentation", Fritz Laboratory Report No. 273.30, Part II.
4. HOUSING

In January, 1965 reservations were placed with Mrs. E. S. Eberman, Assistant Director of Residence Halls, through Mr. C. B. Campbell, Director of Residence Halls, on Richards House Drinker House, Dravo House and McClintic-Marshall. It turned out that only the reservations on McClintic-Marshall, Drinker and 2 floors of Dravo were required. Participants were charged $2.50 per night per person. Only men were admitted to the dormitories. Men with families usually stayed at motels or hotels, and made their own arrangements for this accommodation. Most rooms were made up as doubles, but some singles and triples were also available. Altogether, 67 participants requested singles. Some of these were accommodated in double rooms by using only one bed in the double room, when single rooms were no longer available.

The Residence Halls provided all linen, blankets, maid service, etc. However, laundry pick-up and delivery of newspapers (6 to each hall twice a day) had to be separately arranged. Much coordination was required with Mrs. Eberman with regard to assignment of rooms and issuing of keys. Floor plans were obtained from Mrs. Eberman and assignments were made by M. Macias by indicating the participants registration number on the floor plan, and then noting the room and dormitory on his registration form. About 2 weeks before the conference, when the room requirements could be fairly closely estimated, a block of rooms was selected with reservations dropped on all remaining rooms. Mrs. Eberman then was able to ascertain linens and maid service required.
In this way, rooms and beds could be assigned up to and during registration without conflicting with Mrs. Ebermans arrangements. On registration day, the available beds were listed and made available for on the spot assignments to those whose plans had changed or to those not previously requesting a dormitory room. About 25 beds were left over. Some of these included a second bed in a double room already assigned as a single. In an emergency these beds were available for assignment.

On Saturday, August 21, Mrs. Eberman issued all room keys to M. Macias for the block of rooms reserved. These were placed in small envelopes, one envelope per room with the number of keys per envelope corresponding to the number of beds in a room. Each envelope was marked with the room number, number of keys in the envelope and each key's serial number. The keys were then issued to participants from the envelopes at positions 5 and 6 during registration. As participants left at the conclusion of the conference, their key was returned to the proper envelope and the dollar deposit refunded. (Approximately 20 keys were not returned).

Further information on Housing is contained in Section 15, "Housing" of Fritz Laboratory Report No. 273.30, Part III.
5. MEALS AND REFRESHMENTS

5.1 Meal Plans

Arrangements were begun with Mr. L. H. Gackenbach of Lehigh University Dining Services in December, 1964 to provide 3 meals a day for the conference participants. Mr. Gackenbach supplied a suggested menu in January, 1965, which provided for 8 breakfasts, 2 brunches (weekend), 8 lunches and 8 suppers. The suggested menu was adopted.

Three meal plans, designated A, B, and C were provided as follows:

Plan A - Breakfast, Lunch, Supper on weekdays. Total cost $25.00
Plan B - Weekend meals. Total cost $5.00
Plan C - Lunch only on weekdays. Total cost $8.00

There were a total of 276 of Plan A, 80 of Plan B and 76 of Plan C sold to conference participants.

All meals were served cafeteria style in the Johnson and Cort Rooms of Lehigh's University Center. Mr. Gackenbach kept track of meal counts by recording the participants registration number from his I.D. card and checking his number with a previously supplied listing of meal plans purchased during registration. This listing was supplied about Wednesday morning August 25.

Service was relatively quick and no complaints were heard about the meals.
5.2 Clambake

Arrangements were made in May, 1965 with M. W. Wood Catering Service, Inc. to provide a clambake on the first evening of the conference, August 24, 1965. The clambake was held at Carwood Grove in Macungie. We were well satisfied in all respects with the clambake and the service provided by M. W. Wood (433-0281). Most people were very surprised with the amount of food provided following eating of the bake itself.

No precise method was established to control the number of people attending the clambake. Each participant carried on I.D. card which indicated the number of bakes he had bought at $5.00 each, but was not asked to produce it at the clambake. In addition, many participants, essentially Fritz Laboratory personnel were not required to pay for their bake. As a result it was difficult to determine the number of bakes to order, which had to be supplied to M. W. Wood, as a guaranteed figure one week in advance of the clambake. On August 17 we told M. W. Wood to provide 350 bakes. Actually 393 bakes were eaten and the caterer fortunately was prepared for about 400. (M. W. Wood normally would be prepared to supply approximately the number of bakes guaranteed plus or minus 5%). A final count obtained from registration information on Wednesday, August 25 showed that 385 had indicated that they would attend the clambake (393 actually attended). About 315 of these were required to pay $5.00 for their bake, the others being admitted free in recognition of their contributions to the conference. Families and individual girls from Fritz Laboratory were encouraged to attend.
When planning a clambake, settle details such as date, time, menu, place, cost, well in advance, say 4 to 6 months. If the clambake is very early in the conference it is very difficult to determine with accuracy the number of bakes required.

5.3 Banquet

Arrangements were also made with M. W. Wood Catering Service, Inc. to provide a banquet on the last evening of the conference. The banquet was held on the main floor of Grace Hall. The menu chosen included Roast Top Sirloin of Beef, Au Jus for $3.15 per person. The charge for the banquet was $5.00 per person. (Note: About 400 persons attended the banquet. Of these 325 were required to pay the $5.00 fee). The only criticism is that $3.15 didn't provide more than a moderate amount of food per serving. In comparison with the volume of food at the clambake it was small. (Don't forget to have the blowers turned on during the day to get rid of odors in the hall and don't forget to arrange for a microphone for after dinner speeches).

Only wives of participants were encouraged to attend the banquet along with the conference participants.

5.4 Coffee Break

Coffee breaks were arranged with W. B. Case Box Lunch Co. Each day of the conference they were instructed to supply a certain quantity of coffee (usually 20 to 25 gallons) together with cream, sugar, cups, and spoons, to Packard Laboratory in time for the coffee break which usually began about 11:15 to 11:30 a.m. Coffee was served by 8 girls from tables
borrowed from Packard Laboratory and placed at 4 locations, 2 locations in the hallway and the rear of the auditorium and 2 locations in the area North of the auditorium. The latter location was preferred by most participants, since it was more spacious and cooler. The Department of Buildings and Grounds cleaned up this area so that it looked quite attractive. Many participants used rest room facilities to the South of the auditorium so there was always demand for coffee on that side too. Coffee was supplied free of charge. (If the coffee arrives before the stretch break at about 10:15 a.m., hide it, otherwise most of it will be consumed then).

5.5 Vending Machines

Three vending machines were placed in Fritz Laboratory to the N.W. of Room 122 on arrangements with Coca-Cola Company. They supplied soda, coffee, hot chocolate and candy bars. These machines were well used. (The coffee and coca-cola machines remained in Fritz Lab after the conference).

5.6 Get-Together

A get-together was held on Monday evening August 23 from 8:00 to 10:00 p.m. in Room 308 University Center. Punch and cookies were served to participants free of charge. Arrangements were made with Mr. L. H. Gackenbach of the Dining Service.

This get-together was attended by about 250 participants who had already registered and was an excellent "ice-breaker" and beginning to the conference.
No chairs or other furniture was provided and none was needed.
It was standing room only most of the 2 hours. No speeches or
introductions were made.

Further information on meals and refreshments can be obtained from
Section 16 "Meals" in Fritz Laboratory Report No. 273.30, Part III.
6. **BUILDINGS AND GROUNDS**

Arrangements regarding buildings and grounds were made as follows:

1. Reservations on Plackard Laboratory Auditorium and Rooms 104 and 154 (to relieve congestion during coffee breaks) made with R. W. Numbers.

2. Reservations and arrangements for P.A. system and projection equipment in Packard Laboratory Auditorium made with Mr. Bodner.

3. Reservations on Grace Hall made with Prof. W. B. Leckonby.

4. Reservations on Room 308 of University Center made with Mrs. Margaret Bird.

5. Arrangements for Campus Police services made with Captain Frank Donchez through Mr. R. W. Numbers.

6. Arrangements for City of Bethlehem Police services made through Captain Frank Donchez.

7. All other arrangements regarding University grounds made with "Whitey" through Mr. R. W. Numbers.

Further information on buildings and grounds is contained in Section 21 "Buildings and Grounds", Fritz Laboratory Report No. 273.30, Part III.
7. TOURS

Three tours were held during the conference.

August 27 - Bethlehem Steel Corporation

Arranged for 10 buses to pick up participants from S. side of Packard Laboratory, 5 buses going to Bethlehem Steel Plant, the other 5 to Homer Research Laboratories. Approximately 200 toured the plant and 50 visited the research facilities. Buses returned to the same place. It had been planned that about half the group would tour the plant and half the research facilities. The threat of a general strike of the steel plant on September 1, induced a larger number to tour the plant than the research facilities. Actually no strike occurred. The few who toured the steel plant on September 1 were treated to a much more satisfactory tour.

August 29 - Mrs. D. Fielding arranged for 2 buses to take some of the participants to the New York World's Fair leaving Bethlehem at 7:00 a.m., returning 10:00 p.m. Cost $6.00 per person included entrance fee to fair.

September 1 - Same tour to Bethlehem Steel Mill and Homer Research as on August 27, except only 7 buses were needed. A cocktail party was provided by Bethlehem Steel Corporation in the restaurant at Homer Research Laboratories from 5:30 to 7:00 p.m. preceeding the banquet.

Further information on tours is contained in Section 14 "Tours", Fritz Laboratory Report No. 273.30, Part III.
8. **PARKING**

Campus parking permits were obtained from Mr. R. W. Numbers and supplied to all participants with autos on campus. Participants parked pretty much as they pleased on campus, regardless of permits which limited them to certain areas. Although the campus police were very concerned about the illegal parking (no parking zones, on main streets, and on lawns), they overlooked many of the violations for the conference duration. This situation persisted even though three pleas were made during morning announcements to obey parking restrictions. The parking lot between Fritz Laboratory and Xmas Saucon Hall was reserved and kept relatively empty during the conference. The campus police supplied an entrance barricade. Refer to Section 17 "Parking", Fritz Laboratory Report No. 273.30, Part III.

9. **TRANSPORTATION**

Buses for the Bethlehem Steel Corporation tours were arranged for by them.

Buses for the N. Y. World's Fair and the Clambake were arranged for through Public Service Buses - Charter Service. Eight buses were required to transport participants from Fritz Laboratory to Carwood Grove. No other transportation services were required. Refer to Section 18, "Transportation", Fritz Laboratory Report No. 273.30, Part III.
10. ENTERTAINMENT AND LADIES PROGRAM

No entertainment was provided since the conference schedule was very heavy and there was no time to schedule other events.

Mrs. D. Fielding arranged to take the wives of conference participants to a noon lunch at Homer Research Laboratories and on a small tour of the research facilities. Approximately 10 wives participated. Refer to Section 19, "Entertainment and Ladies Program", Fritz Laboratory Report No. 273.30, Part III.

11. LITERATURE AND LIBRARY

Copies of Fritz Laboratory Report No. 273.17 (65) "Current Research Projects" and Fritz Laboratory Report No. 273.29 (65) "List of Publications" were distributed to participants. Copies of available Fritz Laboratory reports were made available in the Fritz Laboratory Library, Room 601 for a charge of 25¢ per copy. Refer to Section 20, "Literature and Library", Fritz Laboratory Report No. 273.30, Part III.

12. MISCELLANEOUS

Fifteen small signs were made by "Whitey" of Buildings and Grounds and posted at strategic places through the campus, pointing to Fritz Laboratory.
Signs were placed at the Broadhead and Packer parking lot to indicate that it was to be used by the participants.

"Summer Conference Announcements" signs were placed on bulletin boards in the residence halls, in Packard Laboratory and in Fritz Laboratory. The bulletin boards were well used, many notices being posted on coming activities, etc.

A large map (5' x 5') of the City of Bethlehem was obtained and placed on the wall opposite the entrance to Room 122, "Information Center."

The "Information Center" in Room 122 was a constant center of activity with sometimes as many as 10 to 20 men in the room on business ranging from placing phone calls and telegrams, leaving or picking up messages, signing up for tours, extra sets of Lecture Notes and many other things. At times it was much more than enough for 2 girls to handle--especially during afternoon demonstration tests when everyone was in the lab and the "Information Center" was so handy.

A group photograph was taken by Mr. R. Sopko, Fritz Laboratory photographer, at 2:00 p.m. Tuesday, August 31. Nearly everyone was present. The photo was taken from the elevated lawn S.W. of Fritz Laboratory. Other photographs were taken of conference lecturers and personnel conducting demonstration tests. In conclusion, keep all activities of the arrangements of future conference in writing and make continuous detailed check lists of activities, especially during the 2 months preceding the conference.
13. FIGURES AND ILLUSTRATIONS
Fig. 1 PLASTIC DESIGN SUMMER CONFERENCE - ORGANIZATIONAL CHART
Fig. 2 FLOOR PLAN OF FRITZ LABORATORY SHOWING LAYOUT USED DURING REGISTRATION
LEHIGH UNIVERSITY
IDENTIFICATION CARD
1965 Special Summer Programs

NOT TRANSFERABLE

Name: ____________________________

This card, issued for sole purpose of the person whose name
appears hereon, is valid only for the Summer Session indi-
cated above and is void upon end of individual's affiliation
with each of the special Summer Programs at the University.
ALL CURRENT SUMMER SESSION CARDS ARE VOID
AFTER SEPTEMBER 5, 1965.

Fig. 3 I.D. CARD GIVEN TO
CONFERENCE PARTICIPANTS

Fig. 4 RECEIPT FORM USED DURING
REGISTRATION - IN TRIPlicate
CONFERENCE LECTURERS

Dr. Lynn S. Beedle
Lehigh University, Bethlehem

Dr. George C. Driscoll, Jr.
Lehigh University, Bethlehem

Dr. John W. Fisher
Lehigh University, Bethlehem

Dr. Theodore V. Galambos
Lehigh University, Bethlehem

Dr. Le-Wu Lu
Lehigh University, Bethlehem

Dr. Alexis Ostapenko
Lehigh University, Bethlehem

Mr. J. Hartley Daniels
Lehigh University, Bethlehem

GUEST SPEAKERS

Dr. Glen V. Berg
Prof. of Civil Engineering, University of Michigan—Ann Arbor

Dr. Roy W. Clough
Prof. of Civil Engineering, University of California—Berkeley

Mr. Henry J. Degenkolb
H. J. Degenkolb & Associates, Engineers, San Francisco

Dr. Yuzuru Fujita
Asst. Prof. of Naval Architecture, University of Tokyo—Japan

Dr. Jacques Heyman
Prof. of Civil Engineering, University of Cambridge—England

Mr. Ira Hooper
Senye-Stevenson-Value-Knecht, Consulting Engineer—New York

Dr. Michael R. Horn
Prof. of Civil Engineering, University of Manchester—England

Dr. Bruce G. Johnston
Prof. of Civil Engineering, University of Michigan—Ann Arbor

Dr. Tadahiko Kawai
Assoc. Prof., Institute of Industrial Science, University of Tokyo—Japan

Dr. Robert L. Ketter
Prof. & Head of Department of Civil Engineering, State University of New York at Buffalo

Dr. Nathan M. Newmark
Prof. of Civil Engineering; Head, Department of Civil Engineering, University of Illinois—Urbana

Dr. John W. Roderick
Challis Professor of Civil Engineering & Head of School of Engineering, University of Sydney—Australia

Dr. Bruno Thurlimann
Prof. of Civil Engineering, Federal Institute of Technology, Zurich, Switzerland

Dr. Minoru Wakabayashi
Prof. Disaster Prevention Research Institute, Kyoto University—Japan

PLASTIC DESIGN OF MULTI-STORY FRAMES

In cooperation with
American Institute of Steel Construction
American Society of Civil Engineers
American Society for Engineering Education
Navy Department
Welding Research Council

Fritz Engineering Laboratory,
Civil Engineering Department
Bethlehem, Pa.
August 24—September 2, 1965

Fig. 5 EXTERIOR FACES OF COMBINATION
NAME TAG - CONFERENCE PROGRAM

Name was typed in blank area
at upper right
PROGRAM

PLASTIC DESIGN OF MULTI-STORY FRAMES

Morning Lectures 9:15 AM-12:30 PM, Packard Laboratory Auditorium
Afternoon Demonstrations 2:00 PM-4:00 PM, Fritz Engineering Laboratory
Evening Guest Lectures 7:30 PM-9:00 PM, Packard Laboratory Auditorium
Sat. Morning Guest Lectures 9:15 AM-12:00 Noon, Packard Laboratory Auditorium

TUESDAY, AUGUST 24, 1965

WELCOMING REMARKS AND INTRODUCTION
Morning 1. General Design Problems—George C. Driscoll, Jr.
2. Basic Concepts in Plastic Design—Lynn S. Beedle
Afternoon Basic Experiments—Tension Coupons, Stub Column Test, Residual Stress
Evening Clambake (Buses leave Fritz Laboratory at 4:30 p.m. and return at 10:00 p.m.)

WEDNESDAY, AUGUST 25, 1965

Morning 3. Beams—Theodore V. Galambos
4. Columns—Le-Wu Lu
5. Connections—John W. Fisher
Afternoon Braced Frame Test
Evening Practical Design Problems for Multi-Story Frames—H. E. Hopper
Multi-Story Frame Design in Earthquake Zones—Henry J. Ongenciolu
Structural Design in the Steel Making Industry—Bruce G. Johnston

THURSDAY, AUGUST 26, 1965

Morning 6. Preliminary Design of Braced Frames—George C. Driscoll, Jr.
7. Design of Braced Frames—Bracing—Theodore V. Galambos
8. Design of Braced Frames—Beams—Alexis Ostapenko
Afternoon Composite Beam Test
Subassemblage Test
Evening Earthquake-Resistant Design of Tall Buildings—Nathan M. Newmark
Non-Linear Response of Tall Buildings to Earthquake Motions—Ray W. Clough

FRIDAY, AUGUST 27, 1965

Morning 9. Column Deflection Curves—Theodore V. Galambos
10. Subassemblages and Restricted Columns Without Sway—Le-Wu Lu
Afternoon Tours of Bethlehem Steel Corp.—Bethlehem Plant and Horner Research Laboratories
Evening Behavior of Actual Buildings in an Earthquake—Elen V. Berg
Studies in Composite Construction—John W. Roderick

SATURDAY, AUGUST 28, 1965

Morning Plastic Design of Braced Multi-Story Frames—Jacques Heyman
Review of Recent Japanese Research in Plastic Design—Yuzuru Fujita
Use of Analog Computers in the Analysis and Design of Steel Frames—Robert L. Keller

MONDAY, AUGUST 30, 1965

Morning 11. Design of Braced Frames—Columns—Le-Wu Lu
12. Examples of Braced Frame Design—J. Hartley Daniels
13. Behavior of Unbraced Frames—Alexis Ostapenko
Afternoon Test of High Strength Steel Frame, Unbraced
Evening Methods Proposed in Britain for the Design of Multi-Story Sway Frames—Michael R. Horne
Plastic Analysis and Minimum Weight Design of Multi-Story Frames—Tadahiko Kawai

TUESDAY, SEPTEMBER 1, 1965

15. Frame Buckling—Le-Wu Lu
17. Restricted Columns Permitted to Sway—Theodore V. Galambos
Afternoon Tours of Bethlehem Steel Corp.—Bethlehem Plant and Horner Research Laboratories
Evening Banquet (7:30 p.m., Grace Hall)

THURSDAY, SEPTEMBER 2, 1965

Morning 18. Design of Columns in Unbraced Frames—Le-Wu Lu
19. Examples of Unbraced Frame Design—J. Hartley Daniels
20. Closing Remarks—George C. Driscoll, Jr.
Afternoon Unbraced Frame Test

Fig. 6 INTERIOR FACES OF COMBINATION NAME TAG - CONFERENCE PROGRAM
Standing from left:
Carol Hulbert
Nancy Turner
Dorothy Fielding
Phyllis Barthol
Marilyn Courtright
Shirley Verba
Helen Molnar
Flo Ann Saeger
Brenda Herstich

Kneeling from left:
J. H. Daniels
M. A. Macias

Fig. 7 SOME OF THE PERSONNEL RESPONSIBLE FOR THE ARRANGEMENTS
14. REFERENCES

273.29 Daniels, J. H.
REPORT ON THE ARRANGEMENT FOR SUMMER CONFERENCE ON PLASTIC DESIGN OF MULTI-STORY FRAMES, Lehigh University, October, 1965

273.30 Daniels, J. H.
SECRETARIES FILE, PARTS I, II, III (3 VOLUMES) FOR SUMMER CONFERENCE ON PLASTIC DESIGN OF MULTI-STORY FRAMES, Lehigh University, October, 1965

273.31 Daniels, J. H.
APPLICATION FORMS - PARTICIPANTS; APPLICATION FORMS - NON PARTICIPANTS; (2 VOLUMES) FOR SUMMER CONFERENCE ON PLASTIC DESIGN OF MULTI-STORY FRAMES, Lehigh University, October, 1965

273.32 Daniels, J. H.
REGISTRATION RECEIPTS FOR SUMMER CONFERENCE ON PLASTIC DESIGN OF MULTI-STORY FRAMES, Lehigh University, October, 1965

273.33 Daniels, J. H.
CORRESPONDENCE - ENGINEERS, REGISTRATION, NSF GRANTS ETC; CORRESPONDENCE - CANCELLATIONS, REQUESTS FOR LECTURE NOTES (2 VOLUMES), Lehigh University, October, 1965

273.34 Staff
PROGRAM FOR SUMMER CONFERENCE ON PLASTIC DESIGN OF MULTI-STORY FRAMES, Lehigh University, October, 1965

PLASTIC DESIGN OF MULTI-STORY FRAMES, Lecture Notes, Volumes 1 & 2, Lehigh University, Summer 1965

273.24 Parikh, B. P., Daniels, J. H., and Lu, L. W.
DESIGN AIDS BOOKLET, Lehigh University, Summer 1965
The Summer Conference on Plastic Design of Multi-Story Frames was sponsored jointly by Lehigh University, American Iron and Steel Institute, and National Science Foundation.

The research reported on during the Summer Conference formed part of an investigation sponsored jointly by the Welding Research Council and the Department of the Navy with funds furnished by the following:

- American Institute of Steel Construction
- American Iron and Steel Institute
- Institute of Research, Lehigh University
- Column Research Council (Advisory)
- Office of Naval Research (Contract No. 610(03))
- Bureau of Ships
- Bureau of Yards and Docks

Professor W. J. Eney is Head of the Civil Engineering Department and Professor L. S. Beedle is Director of the Laboratory.

The author wishes to express his thanks and appreciation to the many people who made his task immeasurably lighter. First, to Professor G. C. Driscoll, Jr. whose excellent guidance and helpful suggestions ensured successful completion of all the arrangements. Then to M. A. Macias, Mrs. Dorothy Fielding and Ken Harpel, who took direct charge of many aspects of the arrangements. Their help was invaluable. The author also expresses his thanks to the many secretaires in Fritz.
Laboratory who kindly consented to give of their time and energies during the long and tedious hours during registration. Also his thanks are extended to all those who gave additional assistance and advice. Thanks are also due to Miss Marilyn L. Courtright who typed this report with care.
Dear Sir:

We are pleased to extend you an invitation to attend the forthcoming Summer Conference, "Plastic Design of Multi-Story Frames", to be held at Lehigh University August 24 - September 2, 1965.

If you definitely plan to attend would you kindly complete and return the attached REGISTRATION FORM, along with your $10.00 pre-registration fee, by June 30, 1965.

Sincerely yours,

George C. Driscoll, Jr.
Research Associate Professor
Director, Summer Conference

GCD:mlc
The following information will assist you in the preparation of the REGISTRATION FORM.

REGISTRATION

Please supply addresses and telephone numbers where you may easily and quickly be reached prior to the Conference should the occasion arise. If you will be bringing your wife, family, or someone other than a conference participant indicate how many will be in your party.

ACCOMMODATIONS

Lehigh dormitory accommodations are available to men only, in campus residence halls, at the rate of $2.50 per night per person in either single, double or triple rooms. Total cost for the full conference duration (10 nights) is $25.00. Normally, assignments will be made to double or triple rooms. Most rooms are furnished with double deck bunk beds. Dormitory accommodations have been reserved for the period from the night of August 23 to the night of September 1, inclusive. If you plan to use these facilities for a shorter period, indicate alternate number of nights accommodations desired. Although it is hoped that all participants will make use of the campus accommodations available, if this is not possible (those bringing families, etc.) arrangements should be made with a local hotel or motel. For your convenience, the addresses of the nearest suitable accommodations and their distance from the campus in driving time, are as follows (see enclosed map).

Bethlehem Hotel, 437 Main Street, Bethlehem, Penna.
(5 minutes from campus)

Howard Johnson's Motor Lodge, Rt. 22 & Airport Road, Bethlehem, Penna.
(next interchange west of Schoenersville Road and 20 minutes from campus)

An attached listing also includes these accommodations plus information on suitable restaurants in the vicinity.

MEALS

Meals will be available on a contract plan at the University Center. The menu will provide a variety of meals with a choice of hot or cold plates on most conference days. All meals will be served cafeteria style, available to conference participants only and will be provided according to the following schedule:

Plan A — All meals (breakfast, lunch, dinner) from dinner August 23 to lunch September 2 inclusive, excepting dinner August 24 and dinner September 1 (clambake and banquet) and meals on Saturday and Sunday, August 28 and 29. Cost $25.00

Plan B — Two meals (brunch and dinner) each day Saturday, August 28 and Sunday, August 29. Cost $5.00

Plan C — Lunch only August 24 to September 2 inclusive except August 28 and 29. Cost $8.00.

(Note: Plan B offered only upon minimum demand of 100 persons. Meals not offered under Plan C and other occasional meals may be purchased on a cash basis as follows: Breakfast $1.00 Luncheon $1.25 Dinner $2.50)

The normal meal plans covering the full conference duration will be Plan A and Plan B, total cost $30.00.

All conference participants (plus families and guests, if any) are invited to an outdoor clambake which will be held in place of the regular dinner August 24. It will be an informal gathering where everyone can become acquainted. The clambake itself will consist of a variety of foods designed to appeal to all tastes and will feature clam chowder and baked clams. The cost will be $5.00 per person.

A final banquet will be held in place of the regular dinner September 1.
# REGISTRATION FORM

**LEHIGH UNIVERSITY**

**Department of Civil Engineering**

**SUMMER CONFERENCE:** PLASTIC DESIGN OF MULTI-STORY FRAMES

**Aug. 24 — Sept. 2, 1965**

After noting the general information regarding registration, accommodations, meals, etc. (See REGISTRATION INFORMATION), please fill out this registration form, enclose pre-registration fee of $10.00 and send to Prof. G. C. Driscoll, Jr., Chairman, Plastic Design Summer Conference, Department of Civil Engineering, Lehigh University, Bethlehem, Pennsylvania, 18015.

## REGISTRATION

<table>
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<th>PRINT</th>
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| SEND MAIL TO | BUSINESS ☐ | HOME ☐ | OTHER ☐ |

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<th>STATE</th>
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<th>HOW MANY OTHERS WILL ACCOMPANY YOU?</th>
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<th>FAMILY ☐</th>
<th>OTHERS ☐</th>
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<tr>
<th>ACCOMMODATIONS</th>
<th>LEHIGH DORMITORY ACCOMMODATIONS DESIRED?</th>
<th>YES ☐</th>
<th>NO ☐</th>
</tr>
</thead>
</table>

If yes, are accommodations desired for conference duration: YES ☐ NO ☐

If Lehigh dormitory accommodations are required for less than conference duration, state alternate number of nights accommodations required: __________ Number nights.

<table>
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<tr>
<th>LEHIGH DORMITORY ACCOMMODATIONS</th>
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</thead>
</table>

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<th>EXPECTED ARRIVAL AT BETHLEHEM</th>
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<th>TIME</th>
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<tr>
<th>WOULD LIKE TO SHARE A ROOM WITH</th>
<th>CANNOT USE A BUNK BED ☐</th>
</tr>
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<table>
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<tr>
<th>MEALS</th>
<th>CHECK MEAL PLANS DESIRED:</th>
<th>PLAN A ☐</th>
<th>OR</th>
<th>PLAN C ☐</th>
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<tbody>
<tr>
<td>PLAN B ☐</td>
<td>NONE ☐</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CHECK IF RESERVATIONS DESIRED FOR:</th>
<th>CLAMBAKE ☐</th>
<th>BANQUET ☐</th>
</tr>
</thead>
</table>

Enclose check or money order payable for $10.00 payable to LEHIGH UNIVERSITY

SIGNATURE

DATE

Balance of registration fee, cost of accommodations and meals, and dormitory room key deposit to be paid during registration.
REGISTRATION FEE $35.00

DORMITORY ACCOMMODATIONS __________ NIGHTS AT $2.50 (MAX. 10)

MEAL PLAN A ($25.00) (ALL WEEKDAY MEALS)
MEAL PLAN B ($5.00) (SAT. & SUN. MEALS)
MEAL PLAN C ($8.00) (ALL WEEKDAY LUNCHES)
CLAMBAKE, AUG. 24 __________ PERSONS @ $5.00
BANQUET, SEPT. 1 __________ PERSONS @ $5.00

TOTAL

PAID IN ADVANCE: DATE

BALANCE PAID AT REGISTRATION

TOTAL

NSF PARTICIPANT YES □ NO □

SUBSISTENCE GRANT __________ DATE PAID __________

TRAVEL GRANT __________ DATE PAID __________

DORMITORY ROOM ASSIGNMENT __________

ROOM KEY DEPOSIT PAID $1.00 □ DATE __________

ROOM KEY RETURNED REFUND □ DATE __________
The following general information is intended to answer your questions regarding travel, registration details, etc. If you have further questions please do not hesitate to write Prof. G. C. Driscoll, Jr., Chairman, Plastic Design Summer Conference, Department of Civil Engineering, Lehigh University, Bethlehem, Pennsylvania, 18015.

1. If you arrive by automobile, follow one of the main routes shown on the enclosed map to the Lehigh University Campus. When close to the campus you will find direction signs leading to Fritz Laboratory. There will be University personnel in the vicinity of Fritz Laboratory who will assist you in parking. To assist those arriving by train, plane or bus, all taxicab companies will be alerted. Direct the driver to Fritz Engineering Laboratory, Lehigh University Campus, Packer Avenue and Adams Street, Bethlehem.

2. Registration will take place at Fritz Laboratory from 9:00 A.M. until 12:00 midnight, Monday, August 23, 1965. For the convenience of late arrivals, a registration booth will be located outside the lecture auditorium in Packard Laboratory between 8:00 A.M. and 12:00 noon, Tuesday, August 24, 1965. Payment for meals, accommodations, and the balance of the registration fee will be taken at the time of registration. A one dollar deposit on your room key will also be taken during registration. This deposit will be returned upon return of the key at the close of the conference.

3. Following registration at Fritz Laboratory you will be able to go directly to your dormitory. There will be parking around the dormitories for those with autos. Complimentary parking permits will be issued to those with an auto on campus. This permit must be displayed in the front window at all times when the auto is parked on the campus or in one of the campus parking lots. Parking areas both on and off campus will be clearly marked for your convenience.

4. The first meal (Plan A) will be served at the University Center at 6:00 P.M., Monday evening August 23, for the convenience of those who arrive prior to that time.

5. All conference participants are invited to an informal get-together at 8:00 P.M. in Room 308, University Center, so that the conference participants and the Lehigh University staff may get acquainted. The University Center may be located on the campus map which you will receive during registration. The main entrance is located on the North side of the building near the East end. Take the elevator to the third floor.

6. We encourage participants to take dormitory accommodations in order to facilitate the exchange of information on an informal basis.
RECOMMENDED HOTELS AND RESTAURANTS
Bethlehem and Vicinity

Anna-Maria, Inc.
1102 Union Boulevard
Allentown, Pennsylvania

Hotel Bethlehem
437 Main Street
Bethlehem, Pennsylvania

Brau Haus
428 West Broad Street
Bethlehem, Pennsylvania

Holiday Inn Motel
U. S. Route 22 and 512
Bethlehem, Pennsylvania

Howard Johnson's Motor Lodge
U. S. Route 22 and Airport Road
Bethlehem, Pennsylvania

Plaza Restaurant
618 East Third Street
Bethlehem, Pennsylvania

Trainer's Restaurant
Quakertown, Pennsylvania

Walp's Restaurant
911 Union Boulevard
Allentown, Pennsylvania

Prepared by
Bethlehem Chamber of Commerce
May, 1965
The enclosed tentative REGISTRATION FORM HAS BEEN PREPARED having in mind an easier processing of the IBM cards, and to eliminate as many as possible the omissions and mistakes done by the registrants when filling up the form already used for the coming 1965 Summer Conference. The idea is to help the registration processing of future conferences organized at Fritz Laboratory.

Main remarks about the tentative form:

1. PLEASE PRINT OR TYPE.

2. The lines of the form are set at triple spaces (0.500 in.) to facilitate the typing. Most typewriters have this setting, with the exception of some electric ones.

3. The form is prepared in blocks to avoid ambiguous answers.

4. Names are easier to read: First, Middle, and Last; and therefore the direct check of the punched cards is faster. The IBM printing machine can change the relative locations from the data punched in the cards.

5. The requested information is arranged hierarchically trying not to break the homogeneity of lines or of groups of lines.

6. FOR OUT OF BETHLEHEM REGISTRANTS; WHOM TO NOTIFY IN CASE OF EMERGENCY may prove be very convenient.

7. It is believed that the question of the license number for those coming by auto is difficult to answer and not very helpful.

8. The questions concerning accommodation at Lehigh are made in terms of RESIDENCE halls and room. The elimination system is used to minimize problems of interpretation, and regarding the use of a bunk bed the questions is negative to avoid the possible wrong impression that all double and triple rooms have bunk beds.

9. The question of how many persons will accompany the registrant is necessary in order to have an advance estimate of the attendance to the Clambake and Banquet; thus this question is included in the line of NUMBER OF RESERVATIONS DESIRED.

10. The final instructions for the advance payment and mailing of the form are easier to follow.

11. If properly organized, the remaining space can serve for the office use that in this year's form required the back of the form.
# LEHIGH UNIVERSITY
Department of Civil Engineering
Bethlehem, Pa. 18015, U.S.A.

## REGISTRATION FORM

(To be received at the mailing address shown below prior to June 30)

**PLEASE PRINT OR TYPE; OTHERWISE REGISTRATION FORM CANNOT BE PROCESSED**

<table>
<thead>
<tr>
<th>Mr.</th>
<th>Mrs.</th>
<th>Miss</th>
<th>First</th>
<th>Middle</th>
<th>Last</th>
<th>Reg. No.</th>
<th>Date</th>
<th>Class</th>
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</thead>
</table>

**YOUR POSITION**

**NAME OF COMPANY OR INSTITUTION**

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<th>Street and No.</th>
<th>BUSINESS ADDRESS</th>
<th>City</th>
<th>State</th>
<th>Zip Code</th>
<th>Country</th>
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<td>HOME ADDRESS</td>
<td>City</td>
<td>State</td>
<td>Zip Code</td>
<td>Country</td>
<td>Telephone No.</td>
</tr>
</tbody>
</table>

**ADDRESS WHERE TO SEND SUMMER CONFERENCE MAIL**

Business | Home | Other

**FOR OUT OF BETHLEHEM REGISTRANTS; WHOM TO NOTIFY IN CASE OF EMERGENCY**

Name | Address | Telephone No.

**TRANSPORTATION**

Auto | Bus | Plane | Train | EXPECTED ARRIV. AT BETHLEHEM | EXPECTED DEPART. FROM BETHLEHEM

| Date | approx. time | Date |

**ACCOMODATION AT LEHIGH RESIDENCE HALLS**

Yes | No | If yes, how many nights? (10 max.) | If less than 10, state dates

**SHARING OF RESIDENCE ROOM**

Yes | No | If yes, cannot use a bunk bed | Would like to share a room with:

**MEALS AT THE UNIVERSITY CENTER**

Plan A | Plan B | Plan C | None | NUMBER OF RESERVATIONS DESIRED

| Clambake | Banquet |

**REGISTRANT'S SIGNATURE:**

Enclose check or money order for $10.00 payable to LEHIGH UNIVERSITY.
Mail completed FORM prior to June 30, 1965 to:

Professor George C. Driscoll, Jr.
Chairman, Plastic Design Summer Conference
Department of Civil Engineering
Lehigh University
Bethlehem, Pennsylvania 18015

Please do not write in the space below: OFFICE USE ONLY
APPENDIX B
## Requisitions Related to Summer Conference

<table>
<thead>
<tr>
<th>Requisition Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>65-67</td>
<td>Sawyer &amp; Johnson, Inc. (Florist)</td>
</tr>
<tr>
<td>65-68</td>
<td>Allentown Bus Terminal Co. (Buses for Clambake at Carwood Grove, Macungie)</td>
</tr>
<tr>
<td>65-69</td>
<td>Bursar (payment of meal plans)</td>
</tr>
<tr>
<td>65-70</td>
<td>Wood Catering (Banquet)</td>
</tr>
<tr>
<td>65-75</td>
<td>Sawyer &amp; Johnson, Inc.</td>
</tr>
<tr>
<td>F65-12</td>
<td>Bursar (deposit of pre registration fees)</td>
</tr>
<tr>
<td>F65-27</td>
<td>Bursar (ditto)</td>
</tr>
<tr>
<td>F65-44</td>
<td>Bursar (NSF checks)</td>
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<tr>
<td>F65-45</td>
<td>Bursar (NSF checks)</td>
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<td>F65-47</td>
<td>Bursar (deposit of pre-registration fees)</td>
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<td>F65-48</td>
<td>Bursar (petty cash fund)</td>
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<tr>
<td>F65-49</td>
<td>Bursar (change of NSF grant)</td>
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<tr>
<td>F65-50</td>
<td>Bursar (ditto)</td>
</tr>
<tr>
<td>F65-52</td>
<td>Bursar (change of NSF grant)</td>
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<tr>
<td>F65-53</td>
<td>Bursar (deposit of conference costs for participants)</td>
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<td>Bursar (ditto)</td>
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<tr>
<td>F65-55</td>
<td>Bursar (ditto)</td>
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<td>F65-56</td>
<td>Case Box Lunch (deposit for daily coffee break)</td>
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<td>F65-60</td>
<td>Bursar (deposit of proceeds from Summer Conference)</td>
</tr>
<tr>
<td>F65-65</td>
<td>Bursar (change of NSF grant)</td>
</tr>
<tr>
<td>F65-67</td>
<td>Accounting Office (change of NSF grant)</td>
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<tr>
<td>F65-77</td>
<td>Bursar (bill to company for Lotters fee)</td>
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<td>F65-78</td>
<td>Bursar (bill to company for Clements fee)</td>
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F65-79  Bursar (ditto for Super)
F65-80  Bursar (ditto for Sutherland)
F65-81  Bursar (deposit of Dempsky's fee)
F65-82  Bursar (deposit of pre-registration fees)
F65-92  Bursar (deposit for petty cash fund)
F65-93  Accounting Office (cancelling of NSF grant)
F65-94  Bursar (deposit of conference costs for participants)
F65-95  Bursar (deposit of conference costs for participants)
### SUMMARY FROM REGISTRATION LIST

**Participants:**

<table>
<thead>
<tr>
<th>Category</th>
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<td>Engineering Educators</td>
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<td>Practicing Engineers</td>
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<td>Students</td>
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<td><strong>Total</strong></td>
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**Cancellations and No Show:**

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<td>Engineering Educators</td>
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<td>Practicing Engineers</td>
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<td>Students</td>
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<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

44 states of the U.S. represented plus Puerto Rico; 15 foreign countries represented by 58 foreign participants.
PLASTIC DESIGN OF MULTI-STORY FRAMES

SUMMER CONFERENCE

August 24 to September 2, 1965

Registration List

Department of Civil Engineering
Fritz Engineering Laboratory
Lehigh University
Bethlehem, Pa.
Falvio Acaron  
University of Puerto Rico  
College Station  
Mayaguez, P. R. 00709

Fred S. Adams  
American Inst. of Steel Const.  
6434 Maple Building  
Dallas, Texas 75235

Peter F. Adams  
Lehigh University  
Bethlehem, Penna. 18015

Ronnie G. Adams  
Lehigh University  
Bethlehem, Penna. 18015

Rodolfo J. Aguilar (Dr.)  
Dept. of Civil Engineering  
Louisiana State University  
Baton Rouge, Louisiana

Jameel Ahmad  
David Bloom Inc.  
Lewis Tower  
Philadelphia, Penna. 19102

Loren B. Almy  
Washington State University  
Dept. of Civil Engineering  
Pullman, Washington 99163

Alfred N. Amatangelo  
Lehigh University  
Bethlehem, Penna. 18015

Charles C. Ang  
A. Ernest D'Amby Inc.  
Consulting Engineers  
117 S. 17th Street  
Philadelphia, Penna. 19013

Peter Arnold  
Lehigh University  
Bethlehem, Penna. 18015

Morris Atkin  
E. I. duPont de Nemours & Co.  
Wilmington, Delaware 19898
John C. Badoux  
University of California  
College of Engineering  
Davis, California 95616

Gunnar Bagge  
Lehigh University  
Bethlehem, Penna. 18015

Joseph V. Baglio  
Whitman & Howard Inc., Engineers  
89 Broad Street  
Boston, Massachusetts

Edwin C. Bak  
Great Lakes Steel  
Foot of Tecumseh Road  
Ecorse, Michigan 48229

Harold P. Bakke  
Schuetz-Meier Company  
6311 Wayzata Boulevard  
Minneapolis, Minnesota 55416

Konrad Basler  
8132 Egg b. Zurich  
Switzerland

Amiya Kumar Basu  
Imperial College of Science & Technology  
Civil Engineering Dept.  
London S.W. 7, Great Britian

William Baugher  
American Inst. of Steel Const.  
176 West Adams  
Chicago, Illinois 60603

Ira M. Beattie  
University of New Brunswick  
Fredericton, N. B., Canada

Charles F. Beck  
Sargent & Lundy Engineers  
140 S. Dearborn Street  
Chicago, Illinois 60603

Lynn S. Beedle  
Lehigh University  
Bethlehem, Pennsylvania 18015

Robert J. Beiner  
American Inst. of Steel Const.  
831 Standard Building  
Cleveland, Ohio 44113

Mace H. Bell  
American Inst. of Steel Const.  
101 Park Avenue  
New York, New York 10017

Glen V. Berg  
Civil Engineering Dept.  
University of Michigan  
Ann Arbor, Michigan

Thomas J. Bevacqua  
U. S. Army Engineer Division-North Atlantic-Corps of Engineers  
90 Church Street  
New York, New York 10007

Edward L. Bezkor  
Parsons, Brinckerhoff, Quade & Douglas  
165 Broadway  
New York, New York 10006

William S. Birney  
United States Steel Corporation  
#5 Gateway  
Pittsburgh, Penna. 15230

Nicholas A. Bittenbinder (Dr.)  
Pennsylvania Dept. of Highways  
300 Liberty Avenue  
Pittsburgh, Penna. 15222

Oscar J. Blake  
VPI College of Architecture  
Dept. of Architectural Engrg.  
Blacksburg, Virginia 24060

Alvin I. Bloch  
Port of New York Authority  
111 8th Avenue  
New York, New York 10011

German Adolfo Blomeier  
Instituto Tecnologico y de Estudios Superiores de Monterrey  
Monterrey, N. L., Mexico
Rene Cabassa-Voustad  
Engineering & Constr. Division  
Puerto Rico Water Resources Auth.  
San Juan, Puerto Rico

George B. Cain  
KSM Stud Welding Division of  
KSM Products, Inc.  
946 Main Street  
Hackensack, New Jersey

Linden C. Campbell  
Hahn and Campbell  
Consulting Engineers  
North 1118 Washington  
Spokane, Washington 99201

Paul F. Campbell  
William F. Koelle Sons  
Western Savings Fund Building  
Philadelphia, Penna. 19107

Harry P. Carichner  
The R. C. Mahon Company  
P. O. Box 4666  
Grosse Pointe Woods, Michigan 48236

Joseph Carlson, Jr.  
Consulting Engineer  
159 Centre Street  
Shelton, Connecticut 06484

Malcolm Lander Causey  
The Citadel  
Charleston, South Carolina 29409

Mauro A. Cetra  
Basford Company  
1301 Avenue of the Americas  
New York, New York 10019

Robin Chen  
Whitehead & Kales Company  
58 Haltiner Street  
River Rouge, Michigan

Chao Ton Chi  
Bellante & Clauss, Inc.  
130 N. Washington Avenue  
Scranton, Penna. 18503

James Chinn  
University of Colorado  
1200 University Avenue  
Boulder, Colorado 80304

Arthur N. L. Chiu  
University of Hawaii  
2565 The Mall  
Honolulu, Hawaii 96822

Richard J. Christopher  
Eastman Kodak Company  
Engineering Department  
Kodak Park, Rochester  
New York

Kuang-Han Chu  
Civil Engineering Dept.  
Illinois Institute of Tech.  
Chicago, Illinois 60616

Charles E. Clarridge  
Clarkson College of Technology  
Main Street  
Potsdam, New York 13676

David L. Cleavinger  
State of California - Dept. of  
Water Resources  
P. O. Box 388  
Sacramento, California 95817

Harold D. Clements  
Office Chief of Engineers - Department of Army  
Room 2218, Building T-7  
Washington, D. C.

Ray W. Clough  
University of California  
Dept. of Civil Engineering  
Berkeley, California

Felix Colinas  
Colinas, De Buen, S. A.  
Consulting Engineers  
192 Viaducto Miguel Aleman  
Mexico 12 D. F., Mexico

Alvaro L. Collin  
Kaiser Steel Corporation  
300 Lakeside Drive  
Oakland, California 94612
Richard E. Colter
Sorrell & Mattis Assoc., Inc.
4000 Meadows Drive
Indianapolis, Indiana 46205

R. Glenn D. Cook
George A. Fuller Constr. Co.
9000 Gibraltar Life Building
Dallas, Texas 75201

Peter B. Cooper
Lehigh University
Bethlehem, Penna. 18015

C. M. Corbit
714 W. Olympic Boulevard
American Inst. of Steel Const.
Los Angeles, California

Stephen H. Cowen
Lehigh University
Bethlehem, Penna. 18015

William V. Coyle
South Dakota School of Mines
and Technology
Rapid City, South Dakota 57701

Lee W. Crandall
University of Wisconsin
2212 Engineering Building
Madison, Wisconsin 53706
George C. Driscoll, Jr.
Lehigh University
Bethlehem, Penna. 18015

Vlastimir Djordjevic
Swindell Dressler Co.
441 Smithfield Street
Pittsburgh, Penna.

Kyle E. Dudley
Lehigh University
Bethlehem, Penna.

Daniel R. Dunlap
American Inst. of Steel Const., Inc.
1380 South Sante Fe Drive
Denver, Colorado 80223

Jackson L. Durkee
Bethlehem Steel Corporation
Fabricated Steel Construction
Bethlehem Steel Corporation
Bethlehem, Penna.
Allan C. Eastman  
Haven-Busch Co  
3443 Chicago Drive S. W.  
Grandville, Michigan 49418

Henry N. Edamura  
Marshall Macklin Monaghan Ltd.  
1480 Don Mills Road  
Don Mills, Ontario

Stuart H. Eddy  
Lehigh University  
Bethlehem, Penna.

Carl E. Ekberg, Jr.  
Iowa State University  
Ames, Iowa 50010

Philip N. Eldred  
Knight Consulting Engineers  
RFD 2  
South Burlington, Vermont 05403

John S. Ellis  
Royal Military College of Canada  
Kingston, Ontario, Canada

Richard G. Ellis  
American Inst. of Steel Const., Inc.  
Suite 915-D, 201 S. Tryon Street  
Charlotte, North Carolina 28202

Edward R. Estes, Jr.  
Florida Steel Corporation  
P. O. Box 3321  
Tampa, Florida 33601

Fiorello R. Estuar  
Lehigh University  
Bethlehem, Penna.

Charles G. Etter  
Villanova University  
Villanova, Penna. 19085
Diethelm K. Feder
Technische Hochschule Stuttgart
77 Keplerstr.
Stuttgart, Germany 7000

Phil M. Ferguson
University of Texas
173 Taylor Hall
Austin, Texas 78712

Greer W. Ferver
Ferver, Dorland & Associates
3481 Kurtz Street
San Diego, California 92110

Morris N. Failkow
U. S. Army Engineer District, New York
111 East 16th Street
New York, New York 10003

James R. Fincher
Georgia Institute of Technology
School of Civil Engineering
Atlanta, Georgia 30332

Norman L. Firkins
Chrysler Space Division Dept. 4813
Marsh Building
Huntsville, Alabama

Allan D. Firmage
Brigham Young University
Provo, Utah 84601

John W. Fisher
Lehigh University
Bethlehem, Penna.

Nairne R. Fisher
Koppers Company Inc.
200 Scott Street
Baltimore, Maryland

Walter H. Fleischer
Bethlehem Steel Corporation
701 E. Third Street
Bethlehem, Penna.

Ronald L. Flucker
United States Steel Corporation
#5 Gateway Center
Pittsburgh, Penna. 15230

D. Gordon Follett, Jr.
Bethlehem Steel Corporation
Bethlehem, Penna.

Aaron M. Franco
Stein Steel & Supply Company
933 Kirkwood Avenue, SE
Atlanta, Georgia 30316

Yuzuru Fujita
University of Tokyo
Bunkyo-Ku, Tokyo, Japan

Richard W. Furlong
University of Texas
212A Taylor Hall
Austin, Texas 78712
Theodore V. Galambos
Lehigh University
Bethlehem, Penna.

Don A. Garst
Virginia Polytechnic Institute
College of Architecture
Blacksburg, Virginia 24061

James T. Gearhart
Bethlehem Steel Corporation
Bethlehem, Penna.

Andrei Gerich
General Services Administration—Region 3
7th & D Streets S.W.
Washington, D. C.

Benjamin Gersovitz
McGill University
Montreal, Quebec

Kenneth F. Gillen
Bethlehem Steel Corporation
Leetsdale, Penna. 15056

James W. Gillespie
United States Steel Corporation
Room 1105 - Five Gateway Center
Pittsburgh, Penna. 15222

John A. Gilligan
United States Steel Corporation
525 William Penn Place
Pittsburgh, Penna. 15230

Harold S. Gillis
American Inst. of Steel Const.
11 Beacon Street
Boston, Massachusetts 02108

Edward E. Gilvey
Sanders & Thomas Inc.
First Federal Building
Pottstown, Penna. 19464

Mateo L. P. Go
Department of Civil Engineering
University of Hawaii
2565 The Mall
Honolulu, Hawaii 96822

G. Bernard Godfrey
British Constructional Steelwork Assoc.

Raymond E. Green
Trygve Hoff and Assoc.
1922 E107
Cleveland, Ohio 44106

Robert W. Green
American Inst. of Steel Const.
3294 Poplar Avenue
Memphis, Tennessee 38111

Zareh B. Gregorian
National University of Iran
College of Architecture
Pahlavi Road
Tehran, Iran

John E. Griffith
University of South Florida
Tampa, Florida 33620

Clyde Guder
American Inst. of Steel Const., Inc.
230 South Bemiston Street
St. Louis, Missouri 63105

Elmer E. Gunnette
American Inst. of Steel Const.
1307 Dexter Horton Bldg.
Seattle, Washington 98104
Robert A. Haas
Thalheimer & Weitz Arch.-Engrs.
1315 Walnut Street
Philadelphia, Penna. 19107

Muhammad A. Hadi
Surveyor, Nenninger & Chenevert
1440 St. Catherine Street W.
Montreal 25, Quebec

Daniel W. Haines
Columbia University
New York, New York 10027

Otto Halasz
Lehigh University
Bethlehem, Penna.

John P. Hanley
A. Lucas & Sons
1318 S. Washington Street
Peoria, Illinois

William C. Hansell
Lehigh University
Bethlehem, Penna.

Roger M. Hansen
Hansen Engineers
520 Sixth Street
Racine, Wisconsin 53403

Robert D. Hanson
California Institute of Technology
1201 East California Street
Pasadena, California 91109

Howard B. Harrison
University of Sydney
Sydney, N.S.W., Australia

Willard H. Hart
American Inst. of Steel Const.
4465 N. Oakland Avenue
Milwaukee, Wisconsin 53211

George F. Hauck (Dr.)
Tri-State College
Angola, Indiana 46703

John M. Hayes
Purdue University
School of Civil Engineering
Purdue University
Lafayette, Indiana 47907

Floyd E. Hensley
American Inst. of Steel Const.
115 Cameron Bldg.
Oklahoma City, Oklahoma 71306

John B. Herbich
Lehigh University
Bethlehem, Penna. 18015

George J. Herman
Montana State University
Bozeman, Montana 59715

Jaques Heyman
University of Cambridge
Trumpington Street
Cambridge, England

Theodore R. Higgins
American Inst. of Steel Const. Inc.
101 Park Avenue
New York, New York 10017

Teddy J. Hirsch
Civil Engineering Department
Texas A & M University
College Station, Texas

Anthony Roadley
Union College
Schenectady, New York 12308

Virgil E. Hochstetler
Bethlehem Steel Corporation
2700 Prudential Bldg.
Chicago, Illinois 60601

Alden R. Hodgen
Penn State University
1600 Woodland Road
Abington, Penna. 19001

Richard W. Hoisington
Collins, Uhl & Hoisington
Architects & Engineers
221 Witherspoon Street
Princeton, New Jersey 08540

James C. Holesapple
American Bridge Div.
208 South LaSalle Street
Chicago, Illinois 60690
Ira Hooper  
Seelye-Stevenson-Value-Knecht  
99 Park Avenue  
New York, New York 10017  

J. F. Hoosic  
The Babcock & Wilcox Company  
Barberton, Ohio 44203  

Harold L. Hornbeak  
Architecture Department  
University of Illinois  
Urbana, Illinois 61803  

M. R. Horne  
University of Manchester  
Simon Engineering Laboratories  
Manchester 13, England  

James Q. Hossack  
University of Omaha  
60th at Dodge  
Omaha, Nebraska  

John G. Hotchkiss  
American Inst. of Steel Const.  
101 Park Avenue  
New York, New York 10017  

Pei T. Hsu  
Aluminum Company of Canada  
Box 6090  
Montreal 3, Quebec  

Tseng Huang  
Arlington State College  
Arlington, Texas 76010  

John W. Hubler  
American Iron and Steel Institute  
#306 Capitor Park Towers  
301 G. Street, S. W.  
Washington, D. C. 20024  

Roland L. Hummel  
Rensselaer Polytechnic Institute  
Troy, New York 12180  

Gus J. Hutto  
The Citadel  
Charleston, South Carolina 29409
Sadayoshi Igarashi  
Department of Architecture  
Faculty of Engineering  
Kyushu University  
Fukuoka, Japan

Akira Ishida  
Japan Bridge Company, Ltd.  
1-1, Nagarahamadori, Oyodoku  
Osaka, Japan

R. Mason Jackson  
Tears Engineers, Inc.  
4617 Cole Avenue  
Dallas, Texas 75205

Victor Janone  
National Aeronautics and Space Administration  
Hic Building  
Huntsville, Alabama

Juris Jauntirans  
Inland Steel Company  
30 W. Monroe Street  
Chicago, Illinois 60603

Austin T. Jennings  
United States Rubber Company  
1230 Avenue of Americas  
New York, New York 10020

Frederick R. Jetter  
North Carolina State University  
Civil Engineering Dept.  
Raleigh, North Carolina 27607

Bruce G. Johnston (Dr.)  
Civil Engineering Dept.  
University of Michigan  
Ann Arbor, Michigan

Harvey D. Johnson  
Panhandle Eastern Pipeline Co.  
Box 1348  
Kansas City, Missouri 64114

Leslie Gordon Johnson  
Dorman Long & Company, Ltd.  
Royal Exchange  
Middlesbrough, England

Russell C. Johnson  
Builders Trussed Products Co.  
10340 S. Western Avenue  
Chicago, Illinois 10643

Sanford C. Johnson  
Myers, Macomber & Faber, Inc.  
1824 N. Fourth Street  
Harrisburg, Penna. 17102

Walter E. Johnson, II  
Enterprise Industries, Inc.  
10340 S. Western  
Chicago, Illinois

Byron I. Jones  
H. H. Robertson Company  
14th Street  
Ambridge, Penna. 15003

Robert S. Jones  
Frank Klein and Company  
Engineering Consultants  
14 E. Jackson Boulevard  
Chicago, Illinois 60604

Alfred V. Jurevics  
Lakeside Bridge & Steel Company  
5300 North 33rd Street  
Milwaukee, Wisconsin 53209
Charles H. Kahn  
School of Design  
North Carolina State University  
Raleigh, North Carolina 27607

Hassan Kamalvand  
Lehigh University  
Bethlehem, Penna. 18015

William A. Kastius  
City of San Francisco  
Bureau of Bldg. Inspection  
450 McAllister Street  
San Francisco, California 94102

Tadahiko Kawai  
Institute of Industrial Science  
University of Tokyo  
Azabu-Shinsyudocko, Tokyo, Japan

J. Joseph Kelly  
The Port of New York Authority  
111 Eighth Avenue  
New York, New York 10011

Gordon A. Kelsen  
American Iron and Steel Institute  
633 3rd Avenue  
New York, New York

D. J. Laurie Kennedy  
University of Toronto  
Department of Civil Engineering  
Toronto 5, Ontario, Canada

Robert P. Kerfoot  
Lehigh University  
Bethlehem, Penna. 18015

Robert L. Ketter  
State University of New York  
at Buffalo  
Buffalo 14, New York

Thurston Klayton  
Thurston Klayton Assoc.  
1955 W. Union Blvd.  
Bethlehem, Penna. 18018

Lawrence A. Kloiber  
American Inst. of Steel Const.  
Foshay Tower  
Minneapolis, Minnesota

Dundar Kocaoglu  
United Engineers & Constructors, Inc.  
1401 Arch Street  
Philadelphia, Penna. 19105

Robert Kormanik  
Lehigh University  
Bethlehem, Penna. 18015

Carl L. Kreidler  
Belmont Iron Works  
Industrial Highway  
Eddystone, Penna. 19013

Hugh A. Krentz  
Canadian Institute of Steel Const.  
1815 Yonge Street  
Toronto 7, Ontario, Canada

Robert H. Krone  
American Oil Company  
2400 New York Avenue  
Whiting, Indiana 46394

Edwin P. Krysinski  
The R. C. Mahon Company  
P.O. Box 4666  
Detroit, Michigan 48234

Albert C. Kuentz  
The International Nickel Co., Inc.  
67 Wall Street  
New York, New York 10005

Geoffrey L. Kulak  
Lehigh University  
Bethlehem, Penna. 18015
Thomas D. Labiosa
Civil Engineering Dept.
West Virginia University
Engineering Sciences Bldg.
Morgantown, West Virginia

Andrew Lally
American Inst. of Steel Const.
980 Penobscot Building
Detroit, Michigan 48226

V. Dale Lane
American Inst. of Steel Const.
1200 Century Building
2120 Travis Street
Houston, Texas 77002

Allen M. Lansdown (Dr.)
Civil Engineering Dept.
University of Manitoba
Winnipeg 19, Manitoba, Canada

George E. LaPalm
University of Detroit
Civil Engineering Dept.
Detroit, Michigan 48221

Frederick M. Law (Dr.)
Newark College of Engineering
323 High Street
Newark, New Jersey 07102

Jay Law
Mississippi Valley Structural Steel Company
3117 Big Bend Boulevard
St. Louis, Missouri 63143

Ronald Lazar
University of Manitoba
Winnipeg 19, Manitoba
Canada

George C. Lee
Dept. of Civil Engineering
State University of New York
Main Street
Buffalo, New York 14214

Al Leichtman
Weinberger, Frieman, Leichtman and Quinn
20 Vesey Street
New York, New York 10007

Victor Levi
University of Panama
Box 3277
Panama, R. de P.

Albert D. M. Lewis
Purdue University
Civil Engineering Building
Lafayette, Indiana 47907

Stanley Dean Lindsey
Volunteer Structures, Inc.
4108 Dakota Avenue
Nashville, Tennessee

Samuel L. Lipson
University of British Columbia
Vancouver 8, British Columbia

William A. Little
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, Massachusetts 02138

Robert S. Loomis
Loomis & Loomis
Consulting Professional Engrs.
Box 322, 252 Broad Street
Windsor, Connecticut

Robert F. Lorenz
American Inst. of Steel Const.
101 Park Avenue
New York, New York 10017

John E. Lothers
Consulting Engineer
1004 E. Elm Street
Olathe, Kansas 66061

Albert A. Lotters
General Services Administration
PBS, D & C Division
Design Branch, Rm. 1724
30 Church Street
New York, New York 10007
Marshall I. Loughin
Consulting Engineer
9537 Lackland Road
Overland, Missouri 63114

Jacobus M. Louw
Van Wyk & Louw
128 Oribi House
Proes Street
Pretoria, R. of S. Africa

James R. Lower
Swindel Dressler
441 Smithfield
Pittsburgh, Penna.

Le-Wu Lu
Lehigh University
Bethlehem, Penna. 18015

Leon D. Luck
Washington State University
Dept. of Civil Engineering
Pullman, Washington 99163

King S. Luk
California State College at
Los Angeles
5151 State College Drive
Los Angeles, California 90032
Frank J. Miksitz  
Alpha Portland Cement Co.  
15 South 3rd Street  
Easton, Penna.

William A. Milek  
American Inst. of Steel Const.  
101 Park Avenue  
New York, New York 10017

Robert E. Miller  
Lehigh University  
Bethlehem, Penna. 18015

Saeed M. Mirza  
McGill University  
Montreal, Quebec

Neal B. Mitchell, Jr.  
Harvard University  
Robinson Hall  
Cambridge, Massachusetts

Za Lee Moh  
Department of Civil Engineering  
West Virginia University  
Morgantown, West Virginia 26506

Neil C. Montgomery  
Butler Manufacturing Company  
7400 East 13th Street  
Kansas City, Missouri 64126

Luis E. Mora  
University of Puerto Rico  
Mayaguez, Puerto Rico

John A. Mueller  
Lehigh University  
Bethlehem, Penna. 18015

Donald L. Murdock  
American Inst. of Steel Const., Inc.  
530 Oak Street  
Syracuse, New York 13203

B. B. Muvdi  
Department of Civil Engineering and Engineering Mechanics  
Bradley University  
Peoria, Illinois
Nadigar R. Nagaraja Rao
Lehigh University
Bethlehem, Penna. 18015

Suni Chandra Nadi
Civil Engineering Dept.
University of Wisconsin
Engineering Building
Madison, Wisconsin 53706

Lowell A. Napper
Bethlehem Steel Corporation
1601 Atlas Road
Richmond, California 94804

Ernest E. Nester
Lehigh University
Bethlehem, Penna. 18015

Nathan M. Newmark
University of Illinois
Dept. of Civil Engineering
Urbana, Illinois 61803

Jimmy L. Noland
Bechtel Corporation
220 Bush Street
San Francisco, California

Gerald S. Odom
Regional Engineer
American Inst. of Steel Const.
733 Frank Nelson Building
Birmingham, Alabama

Nobutsugu N. M. I. Ohmori
Kajima Inst. of Construction Technology
462 Yanagiyato, Kamiishiwara
Chofu, Tokyo, Japan

John E. O'Keeffe
American Bridge Division
United States Steel
1509 Muriel Street
Pittsburgh, Penna. 15203

Elmer C. Osgood
University of Massachusetts
School of Engineering
Amherst, Massachusetts 01002

Alexis Ostapenko
Lehigh University
Bethlehem, Penna. 18015

Albert J. Oudheusden
Bethlehem Steel Corporation
Homer Research Laboratories
Bethlehem, Penna.

Alan M. Oze1l
Beiswenger, Hock, Arnold & Associates
1000 Riverside Avenue
Jacksonville, Florida 32204

Ernest E. Nester
Lehigh University
Bethlehem, Penna. 18015

Nathan M. Newmark
University of Illinois
Dept. of Civil Engineering
Urbana, Illinois 61803

Jimmy L. Noland
Bechtel Corporation
220 Bush Street
San Francisco, California

Gerald S. Odom
Regional Engineer
American Inst. of Steel Const.
733 Frank Nelson Building
Birmingham, Alabama

Nobutsugu N. M. I. Ohmori
Kajima Inst. of Construction Technology
462 Yanagiyato, Kamiishiwara
Chofu, Tokyo, Japan

John E. O'Keeffe
American Bridge Division
United States Steel
1509 Muriel Street
Pittsburgh, Penna. 15203

James H. O'Neill
Holforty Widrig O'Neill & Levin
344 Hamilton Street
Birmingham, Michigan
Frederick J. Palmer  
American Inst. of Steel Const.  
101 Park Avenue  
New York, New York 10017  

Balmukund P. Parikh  
Lehigh University  
Bethlehem, Penna. 18015  

J. Garland Pass, Jr.  
Pratt & Whitney Aircraft  
Div. of United Aircraft Corp.  
400 Main Street  
East Hartford, Connecticut 06118  

Alton L. Peck  
Anaconda American Brass  
414 Meadow Street  
Waterbury, Connecticut 06720  

Charles P. Perrault  
Perrault & Perrault, Inc.  
562 Lafayette Street  
Baton Rouge, Louisiana 70802  

Edward D. Perry  
Perry Associates  
1028 Connecticut Avenue, N.W.  
Washington, D. C. 20036  

Charles Peshek, Jr.  
The Belmont Iron Works  
Industrial Highway  
Eddystone, Penna.  

Edward O. Pfrang  
University of Delaware  
Dept. of Civil Engineering  
Newark, Delaware
James H. Pielert
Lehigh University
Bethlehem, Pa. 18015

George Pierides
U. S. Army Corps of Engineers
Savannah District
Savannah, Georgia 31405

Orrin H. Pilkey
General Electric Company
Bay St. Louis, Mississippi

Egor P. Popov
University of California
Dept. of Civil Engineering
Berkeley, California

Mel P. Poucher
University of Western Ontario
London, Ontario, Canada

Angelo A. P. Pozzi
Swiss Federal Institute of Technology
33 Leonhardstr.
Zurich, Switzerland 8006

Chester I. Quick
Egger Steel Company
Sioux Falls, South Dakota 57101
Abdur Rahim  
University of Virginia  
Dept. of Civil Engineering  
Charlottesville, Virginia

Wesley H. Randig  
Merrimack College  
North Andover, Mass.

Robert E. Rapp  
Basford Company  
1301 Avenue of Americas  
New York, New York

Edward A. Reider III  
Edward A. Reider, Inc.  
521 Van Reed Road  
Wyomissing, Pa. 19610

Paul H. Reimer, Jr.  
Fuller Company  
124 Bridge Street  
Catasauqua, Penna.

Edward J. Rhomberg  
University of New Mexico  
Dept. of Civil Engineering  
Albuquerque, New Mexico 87106

Keith Rich  
Interlake Steel Company  
135th & Perry Street  
Chicago, Illinois 60627

Jack Q. Richardson  
Trygve Hoff & Associates  
1922 E. 107th Street  
Cleveland, Ohio 44106

Stanley E. Richardson  
Stanley E. Richardson, Inc.  
P. O. Box 47  
Hope, New Jersey 07844

John O. Robb  
City of Los Angeles  
Dept. of Buildings & Safety  
200 N. Spring Street  
Los Angeles, California 90012

Hugh Robinson  
McMaster University  
Dept. of Civil Engineering  
Hamilton, Ontario, Canada

John W. Roderick  
The University of Sydney  
Sydney NSW Australia

Frederick J. H. Roethke  
Bethlehem Steel Corporation  
Homer Research Lab  
Bethlehem, Penna.

John L. Rumpf  
Drexel Institute of Technology  
32nd & Chestnut Streets  
Philadelphia, Pa. 19104
Jun Sakamoto
Dept. of Architecture
Nagoya University
Furo-Cho Chigusa-ku
Nagoya, Japan

Albert J. Sanger
Texas Technological College
Lubbock, Texas 79409

Richard J. Schleis
Wisconsin Bridge & Iron Co.
5023 N. 35th Street
Milwaukee, Wisconsin 53209

Ewald E. Schmidt
NASA
Goddard Space Flight Center
Code 311
Greenbelt, Maryland 20771

Duane R. Schmiedel
Rust Engineering Company
930 Fort Duquesne Blvd.
Pittsburgh, Pa.

Vincent F. Schulte
W. E. Hanson Company
1227 S. 6th Street
Springfield, Illinois

Heinz G. Schwarz
The Babcock & Wilcox Company
20 S. Van Buren Avenue
Barberton, Ohio 44203

Morris W. Self (Dr.)
University of Arizona
Dept. of Civil Engineering
Tucson, Arizona 85721

William B. Senarens
United States Steel Corp.
American Bridge Division
71 Broadway
New York, New York 10006

Anton Sesan
Polytechnic University
38 Karl Marx
Tassy, Romania

F. Stanley Shaw
University of South Wales
School of Engineering
P.O. Box 1
Kensington, Australia

William R. Sheldon
Engineering Dept.
City of Hollywood
P.O. Box 20
Hollywood, Florida

Robert S. Sherman
Carolina Steel Corporation
P.O. Drawer F
Greensboro, North Carolina 27402

Michael A. Shimkus
U.S. Naval Research Lab.
Washington, D.C. 20390

Zaher Shoukry
South Dakota State University
Civil Engineering Dept.
Brookings, South Dakota 57007

Edwin S. Shymanski
Great Lakes Steel
Foot of Tecumseh Road
Ecorse, Michigan 48229

Norman W. Simon
Air Products & Chemicals
Box 538
Allentown, Pa.

Roger G. Slutter
Lehigh University
Bethlehem, Pa. 18015

Alexis Smislova
Smislova & Catcaterra
8719 Colesville Road
Silver Springs, Md. 20910

Eugene F. Smith (Dr.)
U.S. Army Engineer
Waterways Experiment Station
P.O. Drawer 2131
Jackson, Mississippi 39205
Ted A. Smith  
State of California  
Dept. of Water Resources  
P. O. Box 388  
9th & O Streets  
Sacramento, California

Henry L. Snead  
Arthur G. McKee Company  
2300 Chester  
Cleveland, Ohio  44114

Robert R. Snell  
Kansas State University  
Civil Engineering Dept.  
Manhattan, Kansas

John E. Soule  
American Institute of Steel Construction  
815 17th Street NW  
Washington D.C.  20006

Walter G. Speirs  
Nova Scotia Technical College  
Barrington Street  
Halifax, Nova Scotia, Canada

T. William Spilman  
Bethlehem Steel Corporation  
701 E. Third Street  
Bethlehem, Pa.

James E. Stalnmeier  
University of Illinois  
111 E. Talbot Laboratory  
Urbana, Illinois  61803

Joseph D. Steigerwald  
American Institute of Steel Construction  
981-B Union Trust Building  
Pittsburgh, Pa.  15219

Daniel L. Stember  
United States Steel Corporation  
Room 1105 - Five Gateway Center  
Pittsburgh, Pa.  15222

Henry J. Stetina  
American Institute of Steel Construction  
1617 J. F. Kennedy Blvd.  

William J. Stockard  
Hart, Freeland & Roberts  
Architects - Engineers  
303 Third National Bank Blg.  
Nashville, Tenn.

Dale A. Strub  
Warren & Van Praag, Inc.  
253 South Park Street  
Decatur, Illinois  62523

Richard J. Super  
District of Columbia Government  
Dept. of Buildings & Grounds  
3rd & Indiana Avenue N.W.  
Washington, D. C.  20001

William G. Sutherland  
Montague-Betts Company, Inc.  
1619 Wythe Road  
Lynchburg, Virginia  24505

Gerald R. Swihart  
University of Nebraska  
308 Stout Hall  
Lincoln, Nebraska  68508

Vincent B. Szykman  
Consulting Structural Engineer  
716 N. Pennsylvania Avenue  
Wilkes-Barre, Penna.
Lambert Tall (Dr.)
Lehigh University
Bethlehem, Pa. 18015

Derek L. Tarlton
Canadian Institute of Steel Construction
1815 Yonge Street
Toronto 7, Ontario, Canada

Kenneth A. Thigpen
Kenneth A. Thigpen - Consulting Engineer
1208 Edgewater Drive
Orlando, Florida 32804

Spiro S. Thomasides
Bethlehem Steel Corporation
Fabricated Steel Construction
Bethlehem, Pa.

Bruno Thurlimann
Swiss Federal Institute of Technology
Dept. of Civil Engineering
Zurich, Switzerland

Raymond H. R. Tide
Lehigh University
Bethlehem Pa. 18015

Anthony L. Tilmans
University of Pittsburgh
325 Engineering Hall
Pittsburgh, Pa. 15213

Robert F. Tiry
Tennessee Valley Authority
415 Union Bldg.
Knoxville, Tenn. 37902

A. A. Toprac (Dr.)
University of Texas
Austin Texas 78712

Jorge Torrealba
Dominion Bridge Company
Lachine, Quebec, Canada

Robert L. Tracy
Office of Chief Engineers
Dept. of Army
Bld. T-7
Washington D. C. 20025
Ado Valge
Bureau of Yards & Docks
Dept. of Navy
Washington, D. C.

David A. VanHorn
Lehigh University
Bethlehem, Pa. 18015

Robert E. Van Sicklin
H. H. Robertson Company
2400 Farmers Bank Building
Pittsburgh, Pa. 15222

Ivan M. Viest (Dr.)
Bethlehem Steel Corporation
701 East Third Street
Bethlehem, Pa. 18016

Val Villanyi-Hausner
Val Villanyi-Hausner, Consulting Engineer
724 West Colonial Drive
Orlando, Florida 32804

Udo Vogel
Technische Hochschule Stuttgart
11 Keplerstrasse
7 Stuttgart 1, West Germany
James M. Wooten
Arkansas Foundry Company
1423 East Sixth Street
Little Rock, Arkansas 72202

Richard N. Wright, III
University of Illinois
203 Civil Engineering Hall
Urbana, Illinois 61803

Whitman Wright
Carleton University
Colby Drive
Ottawa, Ontario, Canada

Paul C. M. Wu
Ohio Northern University
Ada, Ohio 45810
Mete Yalcin
Sir George Williams University
Montreal, Canada

Charles W. Yantis
University of Arkansas
Civil Engineering Dept.
Fayetteville, Arkansas 72701

Erol Yarimici
Lehigh University
Bethlehem, Pa. 18015

Ben T. Yen
Lehigh University
Bethlehem, Pa. 18015

Robert I. Young
Trygve, Hoff & Associates
1922 E. 107th Street
Cleveland, Ohio 44106

Ching-Kuo Yu
Lehigh University
Bethlehem, Pa. 18015

Wei Wen Yu
American Iron & Steel Institute
633 3rd Avenue
New York City, New York 10017

Joseph A. Yura
Lehigh University
Bethlehem, Pa. 18015
Jesse F. Zimmerman  
University of California  
Los Alamos Scientific Lab.  
Bldg. SM-43  
Los Alamos, New Mexico  87544

Antonino Zingari  
Università di Roma  
18 Via Eudossiana  
Roma, Italia

V. Joseph Zukowski  
City of Chicago  
Bureau of Engineering  
320 N. Clark Street  
Chicago, Illinois  60610

Charles A. Zwissler  
Kaiser Steel Corporation  
300 Lakeside Drive  
Oakland, California  94612
LATE REGISTRATIONS

Walter J. Douglas  
Lehigh University  
Bethlehem, Pennsylvania

Morris L. Hong  
Edwards & Hjorth Consulting Engineers  
Room 210, 67 West 44th Street  
New York, New York 10036

Jun Kondo  
Lehigh University  
Bethlehem, Penna.

Luis Lemus, Jr.  
R. G. Cunningham Consulting Engineers  
3203 Mercer Street  
Houston, Texas 77027

Marcel Save  
Faculte Polytechnique de Mons  
9 rue de Houdain  
Mons, Belgium

Thomas W. Schaffer  
Lehigh University  
Bethlehem, Penna.
REGISTRANTS - NO SHOW

J. Parke Boyer
Mississippi Valley Structural Steel Co.
2100 E. Eldorado Street
Decatur, Illinois 62525

Joseph W. Cooke
Birdsall and Cooke Consulting Engineers
1427 Spruce Street
Philadelphia, Penna. 19102

John T. Dibble
John T. Dibble Co.
2414 East Main Street
Ventura, California 93003

R. G. Elliott
Denver, Colorado

Robert C. Entwisle
Advance Research, Inc.
Walnut Park
Wellesley Hills, Mass. 02181

Alois G. Farkas
Central Piedmont Community College
1141 Elizabeth Avenue
Charlotte, North Carolina

Chuan C. Feng
University of Colorado
Boulder, Colorado 80304

John F. W. Koch
International Steel Co.
1321 Edgar Street
Evansville, Indiana 47707

Joseph M. Lambert
J. M. Lambert Consulting Engineers
1814 Ludlow Street
Philadelphia, Penna. 19103

Putinas V. Masalaitis
A. W. Lookup Company
1505 Race Street
Philadelphia, Penna 19102

William E. Moore, II
Fireproof Products Co.
P. O. Box 753
Charleston, W. Virginia 25314

J. David Pounder
Swan Wooster Engineering
107 Yates Street
St. Catharines, Ontario

David A. Sauer
Structural Engineer
1321 Maple Avenue
Fort Wayne, Indiana 46807

Edmund P. Segner, Jr.
University of Oklahoma School of Civil Engineering
Norman, Oklahoma 73069

Carlos Silva
Petroleos Mexicanos
Juarez 92
Mexico 1, D. F.

Marion M. Slattery
Headquarters, USMC
Washington, D. C.

B. Szostak
B. Szostak Consldg. Struct. Engineer
720 Summit Avenue
Greensboro, North Carolina 27405

Vincent J. Vitagliano
I. B. M.
555 Madison Avenue
New York, New York 10022

John Denton Witt
Zimmerman Evans & Leopold
120 Spring Street
Atlanta, Georgia
Lawrence H. Archer
College of Engineering
Ohio Northern University
525 N. Main Street
Ada, Ohio 45810

Roger L. Brookenbrough
United States Steel
Applied Research Laboratory
Monroeville, Penna. 15146

Thomas W. Brokenbrough
University of Delaware
School of Engineering
Newark, Delaware 19711

Lloyd T. Cheney
Wayne State University
Detroit, Michigan 48202

Robert C. Cornforth
Sorey Hill Binnicker
809 N. W. 36th Street
Oklahoma City, Oklahoma 73118

Samuel J. Errera
Cornell University
Hollister Hall
Ithaca, New York 14850

Larry J. Feeser
University of Colorado
Department of Civil Engineering
Boulder, Colorado 80302

Francis W. Fewore
Steco Engineering Corp.
Turnpike & Edward Streets
Canton, Massachusetts 02021

Paul J. Ford
Consulting Engineer
44 East Broad Street
Columbus, Ohio 43215

William J. Gregg
Reid, Crowther & Partners Limited
1134 Eighth Avenue S.W.
Calgary, Alberta, Canada

John D. Griffiths
Paxton & Vierling Steel Co.
P. O. Box 1985
Omaha, Nebraska

Rolland C. Hamm
Lakeside Bridge & Steel Co.
5300 N. 33rd Street
Milwaukee, Wisconsin 53209

Alois J. Hartmann
Faculty of Engineering Science
University of Western Ontario
London, Ontario, Canada

George F. Heimberger
Bethlehem Steel Corp.
Mining Division
Bethlehem, Penna.

Stephen G. Jochum
Thalheimer & Weitz
Architects and Engineers
1315 Walnut Street
Philadelphia, Penna. 19107

Robert W. Layer, Jr.
Schmidtke and Layer Architects
28 N. Grove Avenue
Elgin, Illinois 60120

Ronald H. Leaman
D. P. Memmert Co.
125 S. Duke Street
York, Penna. 17403

Milos Marincek
University of Ljubljana
Ljubljana, Yugoslavia

Richard W. Marshall
Lehigh Structural Steel Company
Foot of Allen Street
Allentown, Penna. 18105

William H. Peth
Swinde11 Dressler Co.
441 Smithfield Street
Pittsburgh, Penna. 15222
Max D. Sorota
Fay, Spofford & Thorndike, Inc.
11 Beacon Street
Boston, Massachusetts 02108

Wayne C. Teng
Teng & Associates, Inc.
176 W. Adams Street
Chicago, Illinois 60603

Faying F. Yin
The Rust Engineering Co.
930 Duquesne Blvd.
Pittsburgh, Penna. 15222

Tsi V. Yu
Kerr-McGee Oil Industries, Inc.
Kerr-McGee Building
Oklahoma City, Oklahoma

John H. K. Yuan
A. M. Kinney, Inc.
2912 Vernon Place
Cincinnati, Ohio 45219