

*****SEE YOUR CONTACT MAN*****
(need new contact men) GE. B'WAY EAST DAVE MARTIN I&M SUMMIT SQ JAMES RINGSWALD ITT
GE. B'WAY WEST JOHN CONRAD I&M SPY RUN ED WILLIAMS INTL. HAR
EUGENE MARTIN GE TAYLOR ST BILL ZAWADNI DANA HARRY WATSON MX.
BILL AKSAMIT VH ELECTRONICS BOB MARSHALL IN/TEC
DON SINISH PHELPS DODGE RAY BENCHENSTEIN RTRD. MBR JOHN ROSENCRANS IPFW

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OCTOBER MEETING WILL BE JOINT WITH IEEE AT THE INDIANA INSTITUTE OF TECHNOLOGY WITH IRVING FOGEL SPEAKING ON "ENGINEER'S LIABILITY", A VITAL, CURRENT SUBJECT WHERE ENGINEERS AS WELL AS OWNERS AND MANAGERS ARE HELD LEGALLY RESPONSIBLE FOR ACCIDENTS, WITH EXTRAVAGANT AWARDS MADE BY JURYS FOR INJURIES. THIS CAN INVOLVE MOST ANY PHASE OR TYPE OF ENGINEERING IN REMOTELY RELATED TYPES OF ACCIDENTS. THE MEETING WILL BE HELD IN THE ANTHONY BUILDING ON THE INDIANA INSTITUTE OF TECHNOLOGY (IIT) CAMPUS AT 7:30 PM. IN ROOM 360.

THE ANTHONY BUILDING IS LOCATED AT THE CORNER OF ANTHONY AND MAUMEE WITH PARKING CLOSE TO THE BUILDING.

NOTE THIS MEETING IS ON THE SECOND THURSDAY!

IRVING IS A PROFESSIONAL ENGINEER, REGISTERED IN 21 STATES.

HIS OFFICE SPECIALIZES IN CONSULTING ENGINEERING AND PROJECT MANAGEMENT. HIS COMPANY, WHICH HE FOUNDED AND IS PRESIDENT IS FOGEL AND ASSOCIATES, INC. AND SERVES AS CONSULTANTS TO ENGINEERS, ARCHITECTS, CONTRACTORS, GOVERNMENT AGENCIES, AND INSURANCE COMPANIES.

HIS FIRM IS BASED IN NEW YORK CITY WITH BRANCHES IN DETROIT, FORT LAUDERDALE, AND CARMEL, CALIFORNIA.

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THE GENERAL MOTORS TOUR IS RESCHEDULED TO NEXT YEAR DUE TO CURRENT LABOR NEGOTIATIONS AND UNCERTAINTY OF OPERATION SCHEDULING. THE BOARD DECIDED NOT TO OFFER ANOTHER TOUR OR PROGRAM AT THIS TIME.

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MARK YOUR CALENDAR FOR DECEMBER 4 OR 5 CHRISTMAS PARTY / DINNER DANCE.

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MOST INFORMATIVE SEPTEMBER MEETING PRESENTATION:

SEPTEMBER SPEAKER GAVE AN EXCELLENT, MOST INTERESTING, MULTIMEDIA PRESENTATION OF OUR PROGRESS IN PLANNING A TRIP TO MARS. HE CITED MARCO POLO, COLUMBUS, AMMUDSON, AND BYRD FOR THEIR PERSONAL DRIVE IN MEETING THEIR CHALLENGE OF DOING WHAT NO OTHER HAD DONE IN EXPLORATION AND LIKENED IT TO TODAY'S INTEREST IN A MANNED VOYAGE AND EXPLORATION OF MARS. ATTRACTION, CURIOSITY, CHALLENGE, ENERGY, AND FOR THE NATIONAL GOOD ARE SOME OF THE INCENTIVES OF TODAY'S 'SPACEMEN'.

OBJECTIVES FOR REACHING MARS ARE SCIENTIFIC, POLITICAL, HUMANISTIC, AND UTILITARIAN.

SOME ONGOING STEPS IN THIS EFFORT ARE BEING MET BY BOTH OUR SPACE PROJECTS AS WELL AS SOVIET AND OTHER GOVERNMENTS IN SEEKING THE 'RISK TO LIFE' IN EXTENDED SPACE ENVIRONMENTS. WE HAVE BEEN BORN AND LIVED OUR ENTIRE LIFE IN UNIT g.

WITH GREATER OR LESS THAN 1 g, BODILY FUNCTIONS AND ABILITIES CAN BE SEVERELY DAMAGED. STUDIES HAVE BEEN MADE ON PLANTS AND ANIMALS WITH INDICATIONS OF LOSS OF REPRODUCTIVE POWERS, INFERTILE SEEDS, OR LACK OF FRUIT PRODUCTION. MALFORMATIONS OF SUCCESSIVE GENERATIONS CAN BE A RESULT. LOSS OF MUSCLE POWER, DECALCINATION OF BONES IN LOWER EXTREMITIES WITH LOSS OF ABILITY TO WALK CAN COME FROM LOWERED g FORCES. PLANTS RAISED IN SPACE AT LOWERED g WHEN BROUGHT BACK TO EARTH, PRODUCED INFERTILE SEEDS, IN EARTH ENVIRONMENT!

FRUIT PRODUCTION FROM GROWING PLANTS IS PARTICULARLY DESIRABLE FOR EXTENDED SPACE-TRAVEL SUCH AS A MARS ROUND-TRIP, TAKING THREE YEARS (WITH A 30-DAY LAYOVER). USE OF GROWING PLANTS THROUGH SUCCESSIVE LIFE AND FRUITING CYCLES CAN PROVIDE FOOD AND SUSTENANCE TO SPACE TRAVELERS WITH MINIMUM LOAD OR VOLUME REQUIREMENTS OF THE SPACE VEHICLE. THIS EMPHASIZES THE VALUE OF PLANT REPRODUCTION FOR FOOD, AND MASTERY OF THE g EFFECTS.

TO CORRECT THESE PROBLEMS, ESTABLISHING A UNIT g ENVIRONMENT BECOMES ALMOST MANDATORY UNLESS NEW DISCOVERIES ARE MADE. THIS COMPLICATES THE SPACE VEHICLE BY, SAY REQUIRING AN EXTENSIBLE BOOM ROTATING AT 2 RPM WITH 'HABITATS' LOCATED AT EACH END AND SEPARATED BY 61 METERS. IF .4g CAN BE TOLERATED, A GREATLY SHORTENED TRANSVERSE BOOM, ONLY 18.4m LONG AND ROTATING AT 2 RPM CAN BE USED BETWEEN HABITATS!

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Appointment of John Rosencrans as Treasurer was made by Board election at the September 28 Board meeting, following Stephen Loeschner's resignation.

DUES ARE DUE -- DUES ARE DUE -- DUES ARE DUE -- DUES ARE DUE -- DUES ARE DUE --

DUES ARE \$7.50 FOR REGULAR AND ASSOCIATE MEMBERS AND \$4.00 FOR NON RESIDENT MEMBERS. HONORARY MEMBERS (RETIRED, OVER 65, 10 OR MORE YEARS AS MEMBERS IN GOOD STANDING, AND LETTER TO FWEC REQUESTING HONORARY -- NO CHARGE).

NOTE: HONORARY MEMBERS HAVE RECEIVED A RENEWAL CARD LIKE ALL OTHER MEMBERS!! CHECK THE ADDRESS, (MAKE ANY CHANGES NEEDED), CUT OFF THE MEMBERSHIP CARD ON THE LEFT, PUT A 14 C STAMP ON REAR WITH TREASURER'S NAME AND ADDRESS AND DROP IN MAIL BOX!

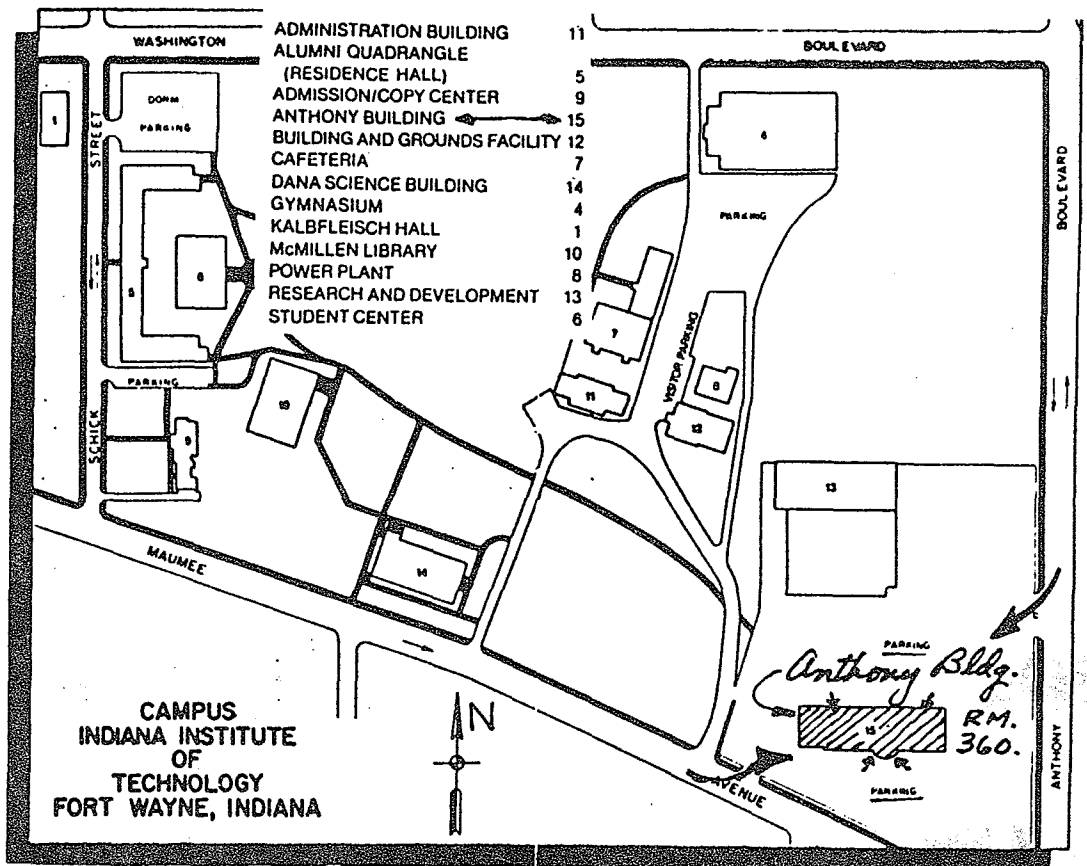


Irving M. Fogel is founder and president of Fogel & Associates, Inc., a New York City-based consulting engineering and project management firm. Fogel & Associates, Inc. has served as consultants to architects, contractors, engineers, government agencies, insurance companies, and owners. In addition, the firm, with branch offices in Detroit, Fort Lauderdale, and Carmel, California, offers project management consulting and related services.

Mr. Fogel is registered as a professional engineer in 21 states, the District of Columbia and the State of Israel.

Mr. Fogel is co-author of McGraw-Hill's *Construction Business Handbook* and Dow-Jones' *Businessman's Guide to Construction* and his articles have appeared in several professional trade publications. He has lectured at Massachusetts Institute of Technology, Harvard University, and the University of Pennsylvania, as well as before leading professional and trade groups across the country.

He is a member of the American Institute of Constructors, the National Society of Professional Engineers, the Society of American Military Engineers, the Project Management Institute and a fellow of the American Society of Civil Engineers.



Engineer's Liability!



**FWEC / JOINT W/ IEEE
2ND THURS. OCT. 8, 7:30**

**FORT WAYNE
ENGINEERS CLUB**

Indiana Institute
of Technology Campus
*Anthony Building
Room 360*

THE FORT WAYNE ENGINEER'S CLUB
4518 Stelhorn Rd., Fort Wayne, In., 46815
Return postage paid. Address correction requested
Mark your calendar for these dates:

! BULK RATE !
! U S POSTAGE !
! PAID !
! FORT WAYNE, IN !
! Permit No. 165 !
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Oct. 8 (2nd. Thurs).....IIT. Engineers Liability
Oct. 22 (4th. Thurs)..... (GM TOUR RESCHEDULED)
Nov. 16.....press date for Engineers News.
and December program.

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