

Resume

BETTY LOU BAILLY

Experience Summary

~~Eighteen~~ ^{Twenty} years of experience as a mechanical engineer with a varied background in the following areas:

1. Conceptual design (one patent)
2. System integration and engineering
3. Mechanism design
4. Manufacturing, inspection, and assembly problems for both machined and sheet metal parts
5. Analysis: stress, heat transfer, vibration, buckling, gyroscopic and flight maneuver loading, statistics
6. Testing procedures and equipment
7. Administration of engineering subcontracts
8. Metallurgy of a wide variety of metals

Type of Work Desired

~~System design or system integration work. Prefer contract work but proposal work would be acceptable. The associated technical problems need to be challenging. Jobs which would be solely analytical work are unsuitable. There should be apparent opportunities for promotion.~~

Academic Background

Basic Degree

BSME, Design option, University of Illinois - 1950
University Honors (top 3% of class)
Numerous activities including associate editor of a 700 page yearbook

Graduate Degree

M. Eng., Engineering Science major, Pennsylvania State University (King of Prussia Graduate Center), 1967, A- average

Individual Courses since BSME

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|--------------------------|--------------------------|
| "A" Course | Electronic Circuits |
| Gas Turbine Fundamentals | Accounting |
| Effective presentation | Reliability |
| Human Relations | Reactor Plant Technology |

1. Cooling System Engineer, Gas Turbine Dept., General Electric Co. Schenectady, N.Y. Responsible for turbine wheel cooling design for new models of gas turbines. 9/68 to now

Job Chronology

21. System Integration Engineer, Manned Orbiting Lab Dept., General Electric Co., King of Prussia, Pa. May 1967 to present. 9/69
Preparation and negotiation of certain interface specifications and subsequent changes. Preparation of system requirements for GE Lab Module Structure. Resolution of orbiting vehicle problems in dynamics, torque disturbances and environmental areas and mechanical integration of the Lab Module equipment.
32. Mechanical System Engineer, Spacecraft Dept., GE, King of Prussia, Pa. Aug. 1965 to May 1967. Spacecraft configuration, mechanical compatibility of spacecraft design, and integration of subsystems for Nimbus III, an R & D weather satellite.
43. Engineer, Vehicle Design, Spacecraft Dept., GE, King of Prussia, May 1961 to August 1965. Main responsibility was for Nimbus adapter and satellite separation subsystem, whose design and testing were subcontracted to Douglas Aircraft. Also was a design engineer on the HOPE satellite and briefly on some others.
54. Engineer - Control Drive Mechanisms, Knolls Atomic Power Laboratory, GE, Schenectady, N.Y. February 1960 to May 1961. Main responsibility was design review and integration of control rod drive mechanisms for the reactor for the destroyer Bainbridge.
68. Technical Engineer - Exhaust Nozzle Mechanical Design Specialist, Large Jet Engine Dept., GE, Evendale, Ohio, March 1956 to February 1960. Preliminary design studies and technical supervision of actual designs gave experience in creative design of mechanisms and required technical breadth for direction of personnel performing analysis. Testing included a major test program at Tullahoma, Tenn. to reveal operational, heat transfer or structural problems.
78. Technical Engineer - Compressor Design, Large Jet Engine Dept., GE, Evendale, Ohio, September 1961 to March 1956. Work on four different compressors gave a variety of experiences in component design, development of new analytical methods, production problems, and testing.
87. Test Engineer (GE's old program for new engineers), August 1950 to September 1951. Assignments were:
a. Aeronautics and Ordnance Systems, Schenectady, N.Y., testing gyroscopic gunsights
b. Large Steam Turbines, Schenectady, testing large steam turbines and generators
c. Refrigerators, Erie, Pa., engineering design for cost reduction
d. Switchgear, Philadelphia, Pa., testing of production panels and equipment
98. Summer jobs:
1949 - Laboratory assistant, Holley Carburetor Co., Detroit
1945 - File clerk, Chicago bridge & Iron Co., Chicago

Miscellaneous Data

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U. S. Citizen by birth *in Chicago, Ill* *Raised in Chicago*

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Single, age 40

Registered Professional Engineer in Ohio and New York

Member, American Society of Mechanical Engineers

Member, American Institute of Aeronautics and Astronautics

Member, American Society for Engineering Education (1968-69
Chairman of Continuing Engineering Studies for the Mid-Atlantic Section)

~~Engineers Joint Council - Committee on Continuing Engineering Education~~ *Formerly*

Senior Member, Society of Women Engineers (Various offices, 1969-70 member of national Executive Committee)

Member, National Society of Professional Engineers (~~member of national Committee on Engineering Preparation~~) *former*

as former member of Engineering Society of Cincinnati, initiated and was chairman of first annual Mathematics Tournament for high school students in 1959

Contact

Home address: ~~Apt. H-4, Tanglewood Lane
King of Prussia, Pa. 19106~~ *Schuyler 16
Netherlands Village
Schenectady, N.Y. 12308*

Home telephone: ~~215-265-3150~~ 518-372-7946

Business telephone: ~~215-962-6185 or 962-6806~~
518-374-2211, ext. 55614 or 55775