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Philip R. Kaluza

EXPERIENCE:

State Energy Program Manager

Alaska Housing Finance Corporation

1994 –2000 State Energy Program Manager: Responsibilities include prepare and manage state and federal grants and budgets, quarterly reports, develop and manage training and research contracts. Other Program Manager duties include: supervise the AHFC Home Energy Rating Program, provide technical assistance to the Low-Income Weatherization Providers and AHFC Public Housing Division, builder and consumer energy education training, and review of the Alaska Building Energy Efficiency Standards. Special projects include the development of AkWarm rating software, and indoor air quality monitoring.

Self Employed

Arctic Energy Systems

1980 – Present Owner/operator of Arctic Energy Systems, providing consulting, training, technical assistance, research, sales & service to a wide range of clients throughout Alaska. Summary of activities:

Sales & Service. Included design, installation, of heating and heat recovery ventilation systems, lighting and alternative energy products.

Consulting & Research Projects:

- Design, develop and field test the AN1000 Energy Monitoring System. This data acquisition system was developed as a joint venture with Analysis North for measuring thermal performance of buildings. Equipment was used in the Fair House monitoring project described below.
- City of Noorvik Energy Use monitoring: Design and install monitoring equipment for the Noorvik Community building to evaluate retrofit savings. Report on file at AHFC Research and Information Library
- ACHP Fair House Monitoring Project: Utilized short-term energy use testing protocols and CO2 tracer gas testing to determine energy use profiles and air leakage and ventilation rates. Report on file at AHFC Research and Information Library.

- AVCP Housing Authority Ventilation Monitoring Project: Indoor air quality monitoring for four rural houses in the village of Quinhagak. Monitoring included pre and post results of installing several different ventilation systems. CO2 tracer gas tests, blower door tests, data logging of outdoor air temperature and wind speed, indoor air temperature, relative humidity, and CO2 levels. Report on file at AHFC Research and Information Library
- Village of St. Michael Energy Efficient Lighting Demonstration Project: through a grant from the Alaska Department of Community and Regional Affairs current lighting technologies were evaluated. A lighting retrofit on the school and many of the homes was undertaken and energy savings were evaluated. Report on file at AHFC Research and Information Library
- Home Energy Rater 1990 – 1994. Certified energy rater for the State of Alaska.
- Building Inspections for Bering Straits Regional Housing Authority and Alaska Legal Services. Inspections included energy efficiency improvements, ventilation issues, along with various design and construction deficiency complaints.
- Alaska Craftsman Home Program Trainer 1987-1994. Provided one and two day training statewide on Building Science, Air Tightness & Blower Door certification, Ventilation, and HOT200 computer analysis.
- Presenter at Affordable Comfort Conference 1998, Energy Northwest 2000, Alaska State Homebuilders Association Annual Meeting 1999

Design and Construction Experience:

- Constructed a 5 Star plus Healthy Home in Anchorage in 1997. House incorporated many of the American Lung Association “Healthy Home” criteria: Air-tight construction, filtered whole house heat recovery ventilation, high insulation levels, energy efficient windows and appliances, smooth surface flooring, low VOC paints and finishes..
- Design and construction management for the Bering Straits Regional Housing Authority’s Super-insulated Model home constructed in St. Michael Alaska. Home was favorably featured in the Anchorage Daily News article.
- CIAP Coordinator/Project Specialist
Bering Straits Regional Housing Authority
5/91 – 7/92 Coordinate Comprehensive Improvement Assessment Program. Handle assessments, grant applications, material bidding and procurement. Conduct energy saving economic analysis. Coordinate force account work crews and inspection. Annual budget \$1,000,000. As project specialist, assist executive director in design and submittal review, change orders, site inspections for new housing projects in eight villages.

- On-Site Inspector
Design Lab Inc.
7/90 – 1/91 Provide on-site inspections for Indian Housing Projects in White Mountain and Koyuk. Develop daily reports, video and still camera recordings. Schedule inspections as needed.
- Design, training, and construction assistance for the City of Koyuk health clinic building. Super-insulated construction techniques, heat recovery ventilation, high efficiency windows and heating system were incorporated into the design. Plans available at AHFC Research and Information Library.
- Constructed the first super-insulated home in NW Alaska 1982. House uses less than 250 gallons of oil per year for heat. Two additional super-insulated homes were designed and constructed in Nome. Construction techniques used included: double wall, larson truss, TJI wall system, site built plywood box beam and floor joists. Homes received recognition by the Alaska Craftsman Home Program and the State of Alaska.
- Energy efficient retrofit on two existing older homes in Nome. Reduced energy use by 50% in both homes.

BOARDS AND COMMITTEES:

Alaska Public Interest Research Group Board	2000- Present
ALAA – Health House Technical Advisory Committee	2000 – Present
Cold Climate Housing Research Center Advisory Comm.	2000 - Present
Alaska Craftsman Home Program – Board of Directors	1992-1993
Alaska Thermal Standards Advisory Committee	1991-1992
Alaska Weatherization Policy Advisory Board	1990-1995
Governor’s Energy Policy Task Force	1986-1987

EDUCATION ,CERTIFICATION & TRAINING

Bemidji State University, B.S. Environmental Studies 1977
 Indoor Air Quality Assessment Training 1999
 Alaska Craftsman Home Program – Certified Trainer 1987
 Energy Rated Homes certified rater 1989
 Alaska Business Energy Auditor 1990
 ALAA Health House Training 1999
 Advanced Radiant Floor Heating 2000