

Stephen Hickmott

*FeatPlus Ltd, 10, The Quadrant, Westbury Park, Bristol BS6 1QH
telephone: 0117 973 3612 email: stephen@featplus.co.uk*

Profile

Over thirty years experience of developing and supporting the general purpose code FEAT, to the quality required for nuclear safety-cases.

Over thirty years experience of providing consultancy and verification of particularly difficult problems in the area of thermal hydraulics modelling support for nuclear safety cases..

Expertise

- Computational Fluid Dynamics, Thermal Analysis and Stress Analysis for Nuclear Safety
- FEAT code development, maintenance and user support
- UNIX, Linux, shell programming, system design and support.
- FORTRAN code design for high performance computing

Professional Career

Research Officer, CEGB/Nuclear Electric, Berkeley Nuclear Labs, 1981 - 1995.

Senior Engineer, British Energy Generation Ltd, Gloucester, 1995 - 2000.

Joint Owner and Director of FeatPlus Ltd., 2000 – present

Selected Publications

1. S Hickmott et al., 1984, "A Mathematical Model of Temperature Distributions within AGR Boiler Penetrations", CEGB Report TPRD/L/2688/N84.
2. S Hickmott, 1988, "Computational Fluid Mechanics – An Analysis of Cost Versus Accuracy", CEGB Report RD/B/6013/R88.
3. A G Hutton, R M Smith and S Hickmott, 1987, "The Computation of Turbulent Flows of Industrial Complexity by the Finite Elements Method - Progress and Prospects", Int.J.Num.Meth.Fluids, 7, pp 1277-1298.
4. S Hickmott and R M Smith, 2003 "Development of FEAT for Jet-Pipe Thermofluid Analysis - Part 1 Compressible Flow and Radiation Model Requirements", FeatPlus Limited Report FP/CR/0009/02 issue 2.
5. S Hickmott and R M Smith, 2003 "Development of FEAT for Jet-Pipe Thermofluid Analysis - Part 2. Turbulence Modelling and Verification Examples", FeatPlus Limited Report FP/CR/0010/03
6. Hickmott, S, 2007, "Blackstone Project - Independent Review of Petten Capsule Design", FeatPlus Limited Report FP/CR/0024/07
7. Hickmott, S. and Smith, R.M., 2023, "FEAT User Guide", Versions 3.1.0 - 3.25.0, 987 pages,

- FeatPlus Limited, Bristol, 2000 – 2023.
8. Smith, R.M. and Hickmott, S., 2023, "FEAT Course Notes", Versions 3.1.0 - 3.25.0, 738 pages. FeatPlus Limited, Bristol, 2000 – 2023.
 9. Hickmott, S., Smith, R.M. and Rabbitt, M.J., 2023, "FEAT Validation Guide", Versions 3.1.0 - 3.25.0, 779 pages, FeatPlus Limited, Bristol, 2000 – 2023.
 10. S Hickmott, R M Smith, M J Rabbitt, M Probyn-Skoufa, R Patel and S Pullin, 2022, "FEAT-GRAPHITE: Graphite Weight Loss and Stress Prediction, Theory Manual and User Guide", 364 pages, FeatPlus Ltd Report FP/CR/0030/22.
 11. S Hickmott, R M Smith, M J Rabbitt, M Probyn-Skoufa, R Patel and S Pullin, 2003, "FEAT-GRAPHITE: Test-Set Guide", 186 pages, EDF Engineering Report E/REP/BCFB/0015/AGR/22/03.