

Peter King – RF Engineer

rfconsult.uk | info@rfconsult.uk | linkedin.com/in/prking/

I am an consultant RF engineer with a PhD (University of Surrey, 2007) and MSc (University of Surrey, 2002) in Satellite and Mobile Communications, and a BSc (University of Essex, 1989) in Electronic Engineering (Telecommunications). Over 35+ years, I have worked on 60+ projects across RF, microwave, mobile and satellite communications.

My experience spans both systems-level engineering and hands-on RF design: from end-to-end modelling (DAC to ADC, antenna to ADC, DAC to antenna), link budgets and propagation, through to transceiver architecture, RF circuits, bring-up, testing and optimisation.

Experience

RF systems engineering

- End-to-end systems modelling (DAC > ADC)
- Link budgets (HF to Q/V band)
- Levels plans (ADC/DAC ↔ antenna)
- Interference, dynamic range and signal integrity analysis
- ADC/DAC levels plans and performance trade-offs
- Channel modelling and emulator programming
- Radio propagation measurement campaigns
- Technical leadership / technical management

Radio transceivers and applications

- Satellite payloads, satcom terminals and gateways
- Commercial airliners
- Inter-satellite links
- Array antennas
- Microwave links
- Mobile UE and base station work (2G/3G/4G/5G-era)
- Channel sounders
- Custom ASIC / RFIC / MMIC / module specification

RF circuit design and implementation

- Discrete RF design (DC to ~20 GHz)
- Receivers and transmitters
- Phase-locked loops
- Power amplifiers and linearisation
- AGC / APC / RSSI / TSSI functions
- Associated control circuitry (SPI, I2C, GPIO)
- PCBA bring-up, test and optimisation

Projects and sectors

- Satcom, mobile, aerospace, microwave and HF/VHF/UHF systems
- Work with primes, SMEs, research organisations and universities
- Experience across product development, prototyping and performance characterisation
- Factory yield analysis and optimisation
- Cost reduction and practical engineering trade-offs

Selected organisations / projects

Examples from previous work include projects with organisations such as AST SpaceMobile, European Space Agency, AAC Clyde Space, Thales, Satellite Applications Catapult, Microsoft Research, Airspan, Nortel, Lucent, Roke, Intellian, Plextek, Samsung, Cambridge Consultants and the University of Surrey, among others.

Feedback received from clients

"Peter has many strengths, including RF systems analysis and architectural design. Pete produced some excellent analyses making difficult things seem simple. I found Pete very approachable and easy to work with. He communicates extremely well and is flexible in his attitude." Senior Director

"I worked with Pete when preparing RFI/RFQ responses for Radio Access Systems. He was always extremely responsive and his input was of an exceptionally high quality under tight timescales. I trusted Pete to interface directly with our strategic OEM partners and customers and this resulted in winning some key accounts." SVP

"Pete is a very talented RF Engineer with expertise at all levels of the RF Design, theoretical and hands on. He is a cool minded Engineer and very easy to get on with." Principal RF Engineer

"Pete is a very competent RF Designer. He was given a high level of design responsibility in his roles. Pete worked for the department several times and was usually the first contractor to be considered if a first role arose, especially if it was a complex task." Project Manager

"On the RFU, I think we are where we are because of you and thanks a million for that, I can't praise you enough for what you're doing! Your great knowledge and understanding of RF and analogue electronics have allowed us to develop the RFU in record time, almost fully matching the requirements first time! This is a real achievement and something to be very proud of!" Senior Director