**Clifford Litton - 26.10.1947 - 31.12.2018**

The second child of Nancye and Leonard, and younger brother of Diana, Clifford David Litton came into the world on October 26th 1947. He was a bright but sickly boy who, before the age of five, had endured double pneumonia and the removal of his adenoids and tonsils. He remembered spending the time confined to bed practising his sums and when a visiting doctor found him playing Clock Patience he declared that Cliff was obviously university material. Other childhood memories included caravan holidays at Hayle Towans, which Cliff described as being the 'lower class end' of St. Ives, ice creams costing sixpence, Bank Holidays at Woolacombe, Braunton and Saunton, walking a round trip of five miles to school each day through narrow Devon country lanes and the excitement of being shown a cuckoo's nest by some of the bigger boys on one of these trips. Cliff passed the 11 plus to join the elite pupils at Exeter School and he recalled struggling to get there through the snow, blizzards and floods of the terrible winter of 62/63. It was at Exeter School that Cliff came into contact with people who inspired his interest in mathematics, which led to him reading mathematical statistics at Birmingham, then completing a research degree in Lancaster, before joining the Maths Department at Nottingham in October 1972, where he stayed until his retirement 40 years later.

For Cliff, a highlight of his career was being sent on recruitment missions to Hong Kong, Malaysia and Borneo. He described his most significant lecture as the one when he covered for Edward Armour while his son was having a transplant, and said that his best lecture was his last!

Post -retirement he enjoyed the U3A's Wine Appreciation group - especially if a glass or two of Southern Rhone was on offer - and he also joined Art History, although sometimes found himself 'resting his eyes' during the talks. Along with Lindsay, Cliff was a keen walker. He particularly enjoyed canalside walks such as the Erewash Canal around Hickling with the Probus group and the Nottingham to Grantham Canal with Lindsay and Chris. Among the Probus heritage walks, he thought that The Holocaust Centre, St. Anne's allotments and - despite the cold - Papplewick Pumping Station were all especially memorable. A lifelong football fan - and a qualified referee - Cliff travelled all over England to watch matches and, further afield, following their first holiday together in Scotland in 1973, he and Lindsay enjoyed holidaying in South West America, the Isle of Wight and Central Europe by train. These are all memories that Cliff treasured, but what will others remember about him?

With his methodical, mathematician's approach to life, he was of course a brilliant organiser, but perhaps Cliff will best be remembered as an intelligent, thoughtful, unassuming, dependable, loving and considerate family man; a man who - even during the final stages of his illness - delighted in the company of his loved ones, and never stopped being concerned about their wellbeing. What better legacy could there be?

We will now hear from Cliff's good friend and colleague, Johnston Anderson, from his sons, Jonathan and Paul and finally from Lindsay.

Johnston....

*I first met Cliff when he joined Nottingham's Maths Department in autumn 1972. He would stay for 40 years. Attending some early lecture courses he gave was a young joint honours maths/psychology student called Lindsay Martin, then in her second year. When she sat finals a couple of years later, Cliff, showing scrupulous impartiality, refused to mark his fiancée's scripts and recused himself from the discussion of her degree class.*

*Also in those early years, before the twins arrived, Cliff was the star goalkeeper for our very successful staff/postgraduate 5-a-side team: there's probably a drawer somewhere in Woodland Grove full of shields and medals. 5-a-side football's loss was basketball's gain, I believe.*

*A tipping point came when Cliff began a long association with Bob Laxton, doing research in the fields of dendrochronology and archaeology (I believe this all started with the discovery of old timbers in Colwick gravel pits.) Radiocarbon methods and tree-ring analysis were already used to date timbers. What Cliff did was to bring statistical and computational techniques to bear which transformed this area. He and Bob produced master-sequences of tree rings for both the East Midlands (1459 - 1973) and Kent (1158 - 1540) so that new discoveries in these areas could be matched against them.*

*Cliff published over 40 articles and books, with many co-authors, and with nearly 800 citations:*

*Just 4 examples: Timber dating at Lincoln Cathedral, Cumbrian Mud-Walled Buildings, Prehistoric Corbelled Tombs in Crete and, slightly different, "Bayesian Analysis of Human Movement Curves."*

*Cliff was also fully engaged in teaching and administration. Everything was done in his quiet, efficient and effective way. When the university wanted to recruit more overseas students in the 1980s, Cliff joined a group of admissions tutors who for several years made visits to Singapore, Hong Kong and Borneo.*

*One of the attributes we will remember Cliff best for was his capacity to get on with people and to treat everyone, whether academic colleagues, students and personal tutees, or, more importantly, all the support staff, with friendship, respect and as human beings.*

*After retirement in 2012, he took up lots of activities. I persuaded him to join me at the Hemlockstone Probus Club, where he was an enthusiastic member, and secretary 2015-2018. Recently, he and I took over organising our 'Long walks', which involves reconnoitering 5 or 6 mile circular walks in Notts., Leicestershire or Derbyshire. These walks must begin, and end, at a pub, with lunch and a beer. By doing the recce, we got to go twice. Wandering along, chewing the fat, occasionally finding ourselves ankle-deep in some paddy field in Leicestershire. That is what I'll miss most. Farewell, my friend.*

Jonathan....

*Dad, my very first memory is of you and your tickly b**eard. You used to playfully wrestle me, saying “You’re a two-stone weakling!” and I’d beg for mercy. But as soon as you stopped, I’d be begging for more, as I loved it so much. And that beard was so prickly and tickly and wonderful – better than any toys!*

*When I was about four, you took the family (of four, then) to Sherwood Forest for a walk. Paul and I asked if we could run off the path over a mound of earth. (This is something you and Mum contest, but that’s how I remember it!) We ran over the earth, and ran and ran as far and as fast as our little legs could carry us. Mum and Dad contacted the rangers to search for us.*

*When we were eventually reunited, the ranger said, “Here’s your Mummy and Daddy.” Family legend says that one of the boys replied, “Which one’s Daddy?” and the other said, “Can we have our picnic?”*

*Of course we knew which one Daddy was. Daddy was the one who drove us around. Daddy was the one who cooked Sunday lunch. (He did a lot of nappy changing too – he was a modern man.) Daddy was the one who travelled abroad with work. I missed you when you were gone, but you always sent me a postcard with a message such as ‘Singapore is hot’ and brought back exotic presents. I wore my silk pyjamas from the Far East well beyond the time when they fitted me. I’ll miss those wonderfully short messages too. They continued in the time of texting. In a world full of people who talk too much, you could make every word count.*

*Daddy helped me learn to ride a bike. Poor him chasing after two twins with a mallet and bashing the stabilisers back into place every time they went out of position! I don’t remember even a hint of frustration; just love.*

*Dad was a football lover. He supported Exeter City and his adopted team of Nottingham Forest, so he perhaps suffered many a poor result. Among the photos on the visual tribute there’s one of Dad with a cup, awarded for the Most Promising Referee in the Lancashire League. Dad once refereed a Blackburn Rovers game. I’m sure he’d have loved for me to be a football lover too and share in this passion, but he never pushed me onto a pitch. Instead I came to love basketball, and Dad supported this wholeheartedly. He drove me up and down the county and country for training and games, and became a coach of my school and club teams too. He was an outstanding coach.*

*I remember asking Dad to teach me how to shave. I couldn’t have picked a worse time – Dad was up a ladder doing some painting. Did he make me wait? Of course not. Down the ladder he came, and my shaving lesson probably involved a 50/50 mix of paint and soap as shaving foam! You always had time for me, Dad. That continued through adulthood – driving me to and from university, helping with countless house moves, visiting me in Japan, walking together, and bringing all branches of the family together for some wonderful family holidays.*

*As part of his work as a statistician, Dad studied queueing theory – how the sequences of elevators and traffic lights could be optimised. I sometimes privately wondered if he could apply optimisation to his family’s queueing time, as we always arrived at a ferry port, airport or train station hours in advance. However, as I’ve grown older and wiser, I’ve learnt that Dad’s methods were correct and his planning allowed us to all enjoy many an experience. If I hadn’t arrived at the airport hours in advance before Christmas, a long line of talkative Americans would have prevented me from checking in to the flight that got my family home in time to see Grandad.*

*Thank you, Grandad for staying strong to meet Eiji. He loved his Christmas cuddles with you. Whenever we show him photos of the two of you together he squeals with delight.*

*Dad, Grandad, you were so kind, thoughtful, strong, fair, sincere, funny, amazing, wonderful, charming, interesting, inspiring, exciting, wise, playful, amazing, magnificent.*

*Your spirit lives on in your children and grandchildren, and you’ve touched so many lives.*

Paul....

*For those of you who don´t know me, I'm Paul, one of Cliff´s sons. Thank you for being here to celebrate the life of my father.*

*He was a wonderful hands-on dad. I have fond memories of him playing with us on the playground, and on one occasion he even kindly drove me to hospital afterwards!*

*As we grew older, he selflessly devoted much of his spare time driving us to various sports clubs, and also became involved with coaching our basketball teams.*

*Once we flew the nest, he was still a key figure in our lives. Whenever faced with a difficult decision, I could always count on Dad for sound advice.*

*Cliff was a mastermind and planned everything extremely thoroughly. He was the wisest person I have ever met, and was extremely reliable. His Christmas dinners were legendary. The roast potatoes and parsnips in particular were simply unsurpassable.*

*Driving through France on our summer holidays, Cliff would have an almost photographic memory of villages he´d travelled through years beforehand. But when he did need navigational assistance, he would tell Lindsay to stop pronouncing the place names "too Frenchly“.*

*One time we were watching a football game as a family. Cliff would be able to name the teams, score and date. A controversial goal was awarded that confused the players, commentators and fans. Cliff immediately knew what had happened. It took countless replays before the analysts finally reached the same conclusion. He was always one step ahead of the rest of us.*

*We are privileged that Cliff lived to see all three of his sons getting married and starting families of their own. Lara, Leon, Sophie and Eiji will all dearly miss Grandad.*

*Leon says that he treasured playing cards with Grandad, while Lara (apparently) will miss raiding the biscuit tin with him – they both kept that quiet!*

*It is a great tradition in Germany to set off vast quantities of fireworks on 31st December. For me, this amazing spectacle will always be a tribute to Cliff.*

Lindsay....

*We’ve always been a team, Cliff and I.*

*Way back, when planning our wedding, Cliff dealt with the big stuff: the bookings, the schedule, the honeymoon , … while I fiddled around with the smaller stuff like dipping the orders of service in gravy browning and rolling them up to make them look like ancient scrolls. How tolerant he was!*

*During our early years together, Cliff was incredibly supportive and understanding as the much wanted family wasn’t happening and I threw myself into teaching by way of compensation.*

*When the miracle did happen and Jonathan and Paul were born, Cliff was totally involved from the very beginning: dealing with nappies, bottles, playtime, bathtime … and how many dads (especially back then) would have taken four year old twins round Sainsburys on a Saturday morning to do the big weekly shop?*

*When Chris arrived and we no longer had just one child each, we seemed to operate even more as a team and shared the care without ever needing to discuss it. We always reckoned we had a fixed amount of patience between us, so that if one of us was at a low ebb, the other would find extra reserves.*

*As the years rolled by, we enjoyed a wealth of family outings, trips to Devon and London to visit grandparents and very many memorable holidays. Again, Cliff naturally took on the big things: the booking, the budgeting, the route-planning while I looked after the packing, the catering and the in-car entertainment.*

*Cliff was never a pushy parent, but always encouraging and supportive as reflected by his becoming Chair of Governors at the boys’ secondary school and a key member of the coaching staff for their basketball teams.*

*As the boys left home for university, the world of work and eventually married life, Cliff was delighted to welcome our three daughters-in-law into the family and was thrilled to become a grandad. He loved getting the whole family together and masterminded three wonderful family holidays whose great success was due to him hunting down and booking the perfect location and accommodation for the ever-increasing Litton clan.*

*Without the children around, we rediscovered our team of two and Cliff relished arranging week-ends away, day trips and numerous visits to National Trust properties. We enjoyed some amazing holidays, sometimes walking, sometimes touring by ourselves and sometimes in a group. He would spend hours researching both the route and the destination so that we would get the most out of the trip, often visiting places of interest on the way and always factoring in comfort breaks …. and then would thank me for enjoying it so much!*

*I know I was the envy of family and friends when describing the very inventive Birthday and Christmas surprises he planned – often themed or combining several treats in one: A Magical Mystery Tour in the Liverpool area including Speke Hall, The Beatles Experience and much more besides. And recently he arranged a “Safari”: tickets to watch the Panthers play ice hockey, the Tigers play rugby and the Lionesses play international netball.*

*At the beginning of the year, Cliff had drawn up a mammoth list of maintenance jobs and projects around the house and garden. But as we worked through the list, so his medical problems began to increase. When eventually we were given the diagnosis in September, his main reaction was to give me a series of tutorials … on the finances, the car, the central heating and the lawn mower.*

*As Christmas loomed, Cliff was determined to have some input and instructed me as to what he wanted to order for the boys and which people I should send cards to, which I then wrote and he signed.*

*On Christmas Day, when Chris and Jonathan had volunteered to cook the meal (always Cliff’s domain), there he still was, dispensing advice on preparation, timings and how to achieve the perfect roast potato and he was most particular about which wines we should serve. How grateful we are that he was able to participate in and enjoy the day.*

*It is so typical of Cliff not to want to spoil Christmas but to wait until the excitement had subsided before slipping away. Although he’s no longer with us, he’s still very much part of the team. He has given me the strength and confidence to face whatever the future might hold and has already passed on his splendid planning and hands on parenting skills to the next generation.*

*We will all miss you Cliff, but your spirit lives on.*