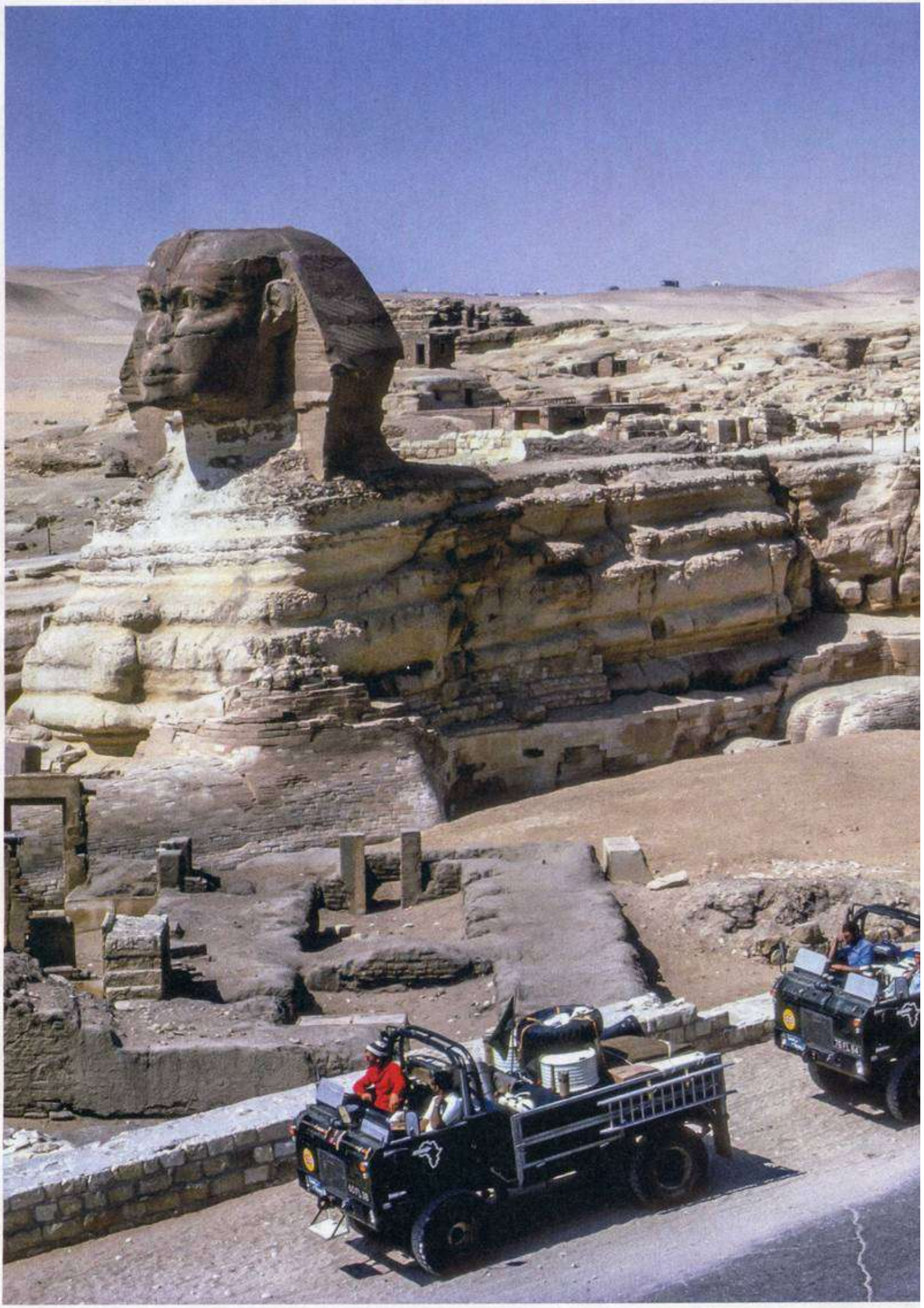
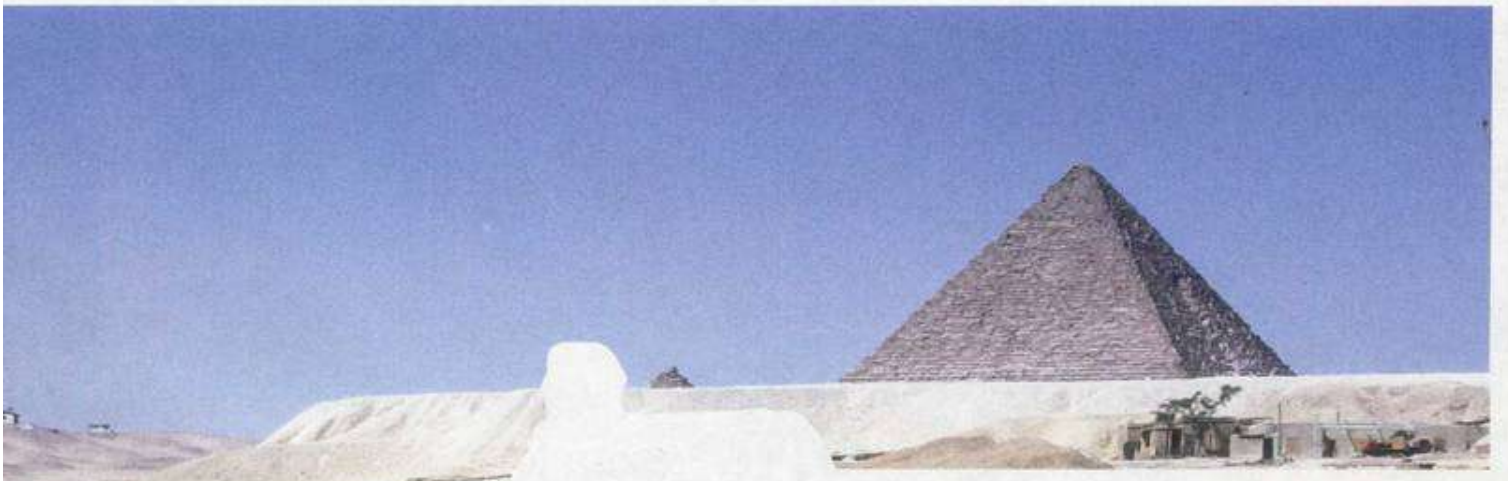




Story: Gary Pusey *Pictures: Alison Cole and Tom Sheppard*

TAIL END CHARLIE

The 1975 crossing of the Sahara by a convoy of 101 Forward Controls is the stuff of legend

This pic: Author Gary Pusey poses proudly next to the latest member of the ever-growing Dunsfold Collection

In November 1974, four 101 One-Tonne Forward Control Land Rovers rolled off the Solihull production line. They were the only 101s built that year and were the first to be assembled on this dedicated new production line, albeit a year before production began in earnest. They are therefore generally considered to be pre-production vehicles.

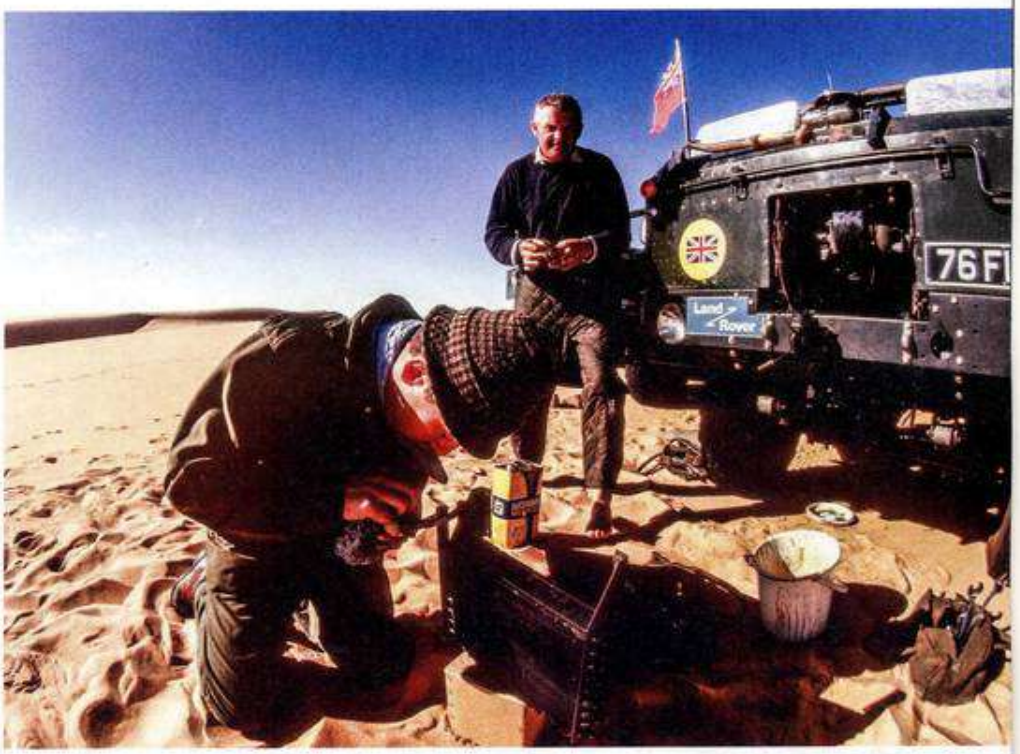
All four were destined to star in a unique and ground-breaking adventure the following year – the Joint Services West East Sahara Expedition – which was the first to cross the Sahara from the Atlantic coast to the Red Sea through the Mauretania-Mali Empty Quarter. The Empty Quarter presented a very real challenge: a trackless journey of some 1600 km (994 miles) without any means of re-supply.

The four built in 1974 were chassis numbers 21 to 24, and Land Rover records show that they were despatched on November 25 to the experimental department at Solihull, where a series of modifications were carried out at the request of experienced desert explorer and traveller, Squadron Leader Tom Sheppard, MBE. Tom, who was a serving RAF officer, had been appointed to lead the Trans-Sahara expedition and had some very clear views on the modifications that needed to be made to the vehicles to ensure their reliable performance.

These included installing belt-driven air compressors and reservoirs for tyre inflation, breather vents in all four corners of the fuel tanks, electric car clocks, speedometers calibrated in kilometres per hour, 9.00x16 Michelin XS tyres, repositioning of the air filters to the battery boxes to help prevent dust ingestion, and the removal of the windscreens, tilts and hood rails to save weight.

Three of the 101s were also equipped with powered trailer

"It brought up the rear of the convoy and was known as Tail End Charlie"



drive, and two Rubery Owen-powered trailers were used on the expedition.

The vehicles were painted standard Bronze Green with a stencil of the African Continent painted in white on each door. They were given the military registrations 60 FL 38, 76 FL 64, 76 FL 65 and 76 FL 66. Once Tom's modifications were complete, the four 101s were delivered to the Central Vehicle Depot at RAF Uxbridge for final preparation.

The vehicle featured here is one of the three equipped with the powered trailer drive and is chassis number 24, registration 76 FL 66. It was destined to bring up the rear of the convoy on the expedition and ever since has been known as Tail End Charlie (a nickname also given to rear gunners in RAF bombers during World War II).

Much has been written about the Trans-Sahara expedition over the years, including Tom's own description of it which was published in The Geographical Journal in July 1976. After consultation with Land Rover, sponsors and various scientific and academic institutions, six objectives were defined for the expedition. The first was to achieve a successful first west-east crossing. Secondly, gravity measurements were to be taken throughout the expedition, under a programme agreed with the Royal Society and Newcastle University. Thirdly, the British Museum was keen to receive sample of rocks, lizards and snails. Fourthly, the team were to try new methods of desert navigation using a combination of sun compass, astro-fixes and dead reckoning. Fifthly, a commercially-viable film for TV and cinema use was to be made. Finally – and most importantly from Land Rover's point of view – an assessment of the new 101 in challenging conditions was to be prepared.

The expedition had been first planned in 1968 but was shelved for political reasons and dusted-off for reconsideration in 1972. During the planning phase, great efforts were made to obtain the support and agreement from the various countries the expedition would cross, and a great deal of work went into preparing detailed contingency plans that covered just about every eventuality. Working through the amount of fuel, water, equipment and provisions required to sustain the vehicles and the team led Tom to decide that the optimum number of vehicles would be four 101s, although the payload was still a problem and the two powered trailers seemed to provide the answer. This allowed capacity for two men per vehicle, and hence the expedition comprised a team of eight.

Under Tom's leadership were team members Barry Doughty, Nick Jasinski, Phil Maye, Mick Pearce, Geoff Renner, Paul Shepherd-Watson, and Kevin Walsh, and it was Mick and Barry who crewed Tail End Charlie.

The expedition set off on January 15, 1975 from Westminster Bridge in London, and the team and their vehicles sailed on the Elder Dempster Line vessel MV Fian, arriving at Dakar in Senegal on January 24. The captain of the ship donated a Red Ensign to the team, which they decided would be flown from Tail End Charlie as a backmarker during the expedition. The team departed the following day, and good tarmac roads meant that they arrived two days later in Nouakchott, in Mauretania, in a violent sandstorm that reduced visibility to 300 metres.

At Nouakchott, contact was made with pilot Jerry Hodgson who, obviously not shy of a challenge, agreed to attempt to land his Piper Comanche light aircraft at one of the team's intended camps in the Empty Quarter. Two days after leaving Nouakchott, Ouadane was reached and this was the last habitation, the end of the track and the final watering point

Far right: The last owner before it was entrusted to Dunsfold aquired a very apt plate

before the traverse of the Empty Quarter. At this point the team had 4170 litres of fuel and 1550 litres of water on board, and they would be regularly measuring the consumption of both to ensure they had enough to complete the traverse.

Departing Ouadane on February 6, once off the track it was soon apparent that there were problems with the powered trailers, and investigation revealed excessive wear on the driveshafts to the wheels and, presumably, the propshafts and UJs, which were causing massive vibration. It was decided not to use the powered trailer drives unless conditions made it absolutely necessary.

About 290 km (180 miles) from Ouadane, a site was located for the planned rendezvous with the Piper Comanche and a runway was marked out with tyre tracks by the 101s. The strip's suitability was tested by the vehicles with tyres set at 19 psi, knowing that the aircraft tyres were 15 psi. With the assistance of a large smoke generator on the ground, the Hodgsons landed successfully at what was christened Sheppard Field and the following morning Tom was taken for a spin in the Comanche to recce the route ahead through the rolling lines of sand dunes that stretched for over 100 km (62 miles).

With the advantage of the aerial reconnaissance courtesy of the Comanche, the 50 lines of dunes – typical height between 10 and 13 metres – were navigated successfully despite the unreliable trailer drive and sand of varying consistency, although what was described as "severe sinkage" occurred 20 to 30 times. The real issue was the fuel consumption being delivered by the V8s. The expedition planning had allowed for a minimum of 2.8 km (1.7 miles) per litre (8 mpg), but measurement showed the team were averaging only 2.5 km (1.5 miles), and one vehicle was returning just 2.0 km (1.2 miles). Further measurements over the subsequent days showed the average dropping to 2.35 km (1.46 miles) which, if it continued, meant the team would not have sufficient fuel to complete the traverse, and would have to turn back. Fortunately, once clear of the dunes the figure improved to 3.1 km (1.9 miles) which meant the expedition could continue on its course.

A brief stop was required to repair an oil cooler on one of the 101s, successfully completed with solder and a petrol stove and, luckily, there was no apparent engine damage. The going was now considerably easier and the team arrived at Tessalit in Mali, and they were well-received by the Malian authorities. From there, they headed south to Gao, leaving there for Niamey in Niger on February 26. From Niamey, the route went to Kano in Nigeria, Fotokol in Cameroon, N'Djamena, Fort Lamy and Abéché in Chad, and El Geneina and El Fasher in Sudan.

There was still a significant amount of anti-government rebel activity in Chad and the expedition was provided with an

"The expedition was provided with 12 soldiers armed with rifles and a machine gun"

This pic: Trailer and 101 together again for the first time since the 1975 expedition

"The 101 had proved itself to be a most capable vehicle"

escort of 12 Chadian soldiers armed with rifles and a machine gun. Similarly, the team were escorted across the Sudan by a Sudanese army contingent. After El Fasher the route was all but unmapped, and further aerial reconnaissance was provided by a Paracommander parachute towed behind one of the Land Rovers, the chap dangling beneath using a Polaroid camera to take instant snaps of the route ahead. The team's luck held and a route was found, despite some anxious moments.

On April 16, the expedition sighted the Red Sea and reached it at Port Sudan, 81 days after leaving Dakar. Four days were spent there replenishing and checking the vehicles before the team headed home via Bir Shalatein with a final campsite within sight of the Pyramids at Giza. The expedition finally reached Cairo on 2 May, and a total of 12,054 km (7494 miles) had been driven since leaving Dakar. The expedition was considered to have been resoundingly successful on all counts, and not least because the 101 had proved itself to be a most capable vehicle.

Tail End Charlie continued its service career for another 20 years and was eventually de-mobbed in 1994. It was purchased at the Newmans auction on September 1, 1994 by Jim Burns for the princely sum of £2232.50 and subsequently given the civilian registration number NDS 771N. Jim completed the initial recommissioning, removing the cab, dismantling the interior and repainting, and the vehicle appeared at a number of events on the Forward Control Club and Register stand. Sadly, Jim was killed in a motor cycle accident in 2011 and close family friend, Charles Young, acquired the vehicle from Jim's estate in January 2012. In September that year, Tail End Charlie was purchased by Land Rover collector and enthusiast, David Olliver, who set about completing the renovation and also acquired the highly-appropriate registration number TEC 101.

The renovation work was entrusted to Dunsfold Land Rovers, and involved fitting a new chassis rear cross member, rebuilding the axles, and repainting the chassis and underside. The PTO drive to the rear was also reinstated. GC Engineering made two chains and trailer housings copied from the Alan Armstrong originals for the trailer drive. The internals for the trailer coupling still need to be remade, and a vacuum tank is needed for the trailer brakes. After the work was completed, David exhibited Tail End Charlie at the Dunsfold Collection Open Weekend in 2013 and it also participated in the London to Brighton Land Rover run in 2015.

In January this year, David very generously donated Tail End Charlie, complete with its powered Rubery Owen trailer, to The Dunsfold Collection. An honourable and fitting resting-place for a very special 101.