

# P5 – The power of television

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What do you do at a television outside broadcast (OB) when you're miles from the nearest mains supply? Or you have mains but nowhere near enough current for the heavy demands of an OB? The answer is a mobile generator.



P5 in use at Aintree race course in 1987, its last known appearance in service. (Photo: Harwood Hilly)

From the start of BBC TV OBs in 1937, the BBC bought and operated a number of Power Vans. This continued until the 1980s when it became easy to hire mobile generators. This article is the story of P5; the BBC used this Power Van for over 35 years, the longest service life of any OB vehicle in the UK.

The Broadcast Engineering Conservation Group (BECG) is now the proud owner of P5. We plan to restore it to its former glory. It's about the same age as our Vivat OB truck (Bulletin Winter 2020, pp40-45). P5 will be able to provide power for Vivat; the two vehicles will look great together.

## Power Van P5

The chassis was made in 1952 and went into BBC service in 1953 with registration number NGF 728. P5 was built on the popular Bedford ML chassis which was used for many purposes from 1939 until the early 1950s.

We know that P5 stayed in service until at least 1987, lovingly maintained by the BBC's Manchester workshops.

It's a curious hybrid. The vehicle itself has a 6 cylinder petrol engine but the generator is driven by a Perkins 6 cylinder diesel. We think the maximum power output is 27kVA single phase, which is over 110A at 240V.

## How did we buy it?

CVA Auctions contacted us because they had seen an article about the BECG's trucks in Commercial Motor magazine. By coincidence P5 was advertised in the same issue.

Because of Covid restrictions we couldn't see P5 until we collected it after purchase. A regular customer of CVA bought the vehicle on our behalf which was very convenient. The trustees managed to scrape together enough money at short notice.

P5 is not currently driveable. The engine works well but there's no petrol tank! Sam, our regular driver, arranged transport to a dry store not far from our base near Lincoln.

V5 registration document (logbook) showing P5 first registered on 2nd November 1953



1952 BEDFORD ML  
FORMER BBC OUTSIDE BROADCAST VEHICLE, 6CYL PERKINS T6 BLOCK  
COMPLETE WITH DIESEL GENERATOR





Can't drive P5 very far without a petrol tank!



P5 safely stored near Lincoln

### Next steps

There is a lot to find out about P5. Where has it been since 1987? What happened to the roof rigging rails and when? Why have the front access doors been panelled over? What is the condition of the generator – it looks complete, but that's all we know.

We've tried to contact the last owner but without success.

This spring we hope to transport P5 to our local HGV mechanical workshop. In addition to the new fuel tank and a general service, the brakes will need a thorough overhaul to make P5 safe to drive.

The bodywork needs extensive attention at a specialist bodyshop. This will certainly include fitting new rigging rails (visible in the 1987 photo), investigation of the front doors and repair or replacement of the front wings. Then it will need repainting. We plan to do the signwriting in original 1950s BBC style; it's currently a 1970s version.

The generator's Perkins diesel engine

is known to be tough and reliable but will certainly need a service. The generator itself is quite sophisticated. It has a magnetic amplifier stabiliser which controls both frequency and voltage to close tolerances. We don't yet know if the 50Hz output can be synchronised to TV field rate.

### An unusual Bedford ML

You may think you've seen P5 before at a vintage vehicle rally. A somewhat similar Austin truck, P4, has been restored by others as a mobile home.

P5 will be restored as a unique working example of a BBC Power Van. To do this we need funds, by donation or sponsorship.

We plan to use P5 to power our historic OB vehicles when on display.

### Further reading

BBC Power Generators by Richard Harris: <https://becg.org.uk/2020/11/12/bbc-power-generators-article/>



The generator



### Broadcast Engineering Conservation Group

We are a small association of experienced and motivated professionals dedicated to the survival and interpretation of television history. We have come together to put elements that individuals have collected into the BECG. Whilst we are currently privately funded, this has not been a bar to achieving many successes in this field.

We have many cameras, monitors, video tape recorders and all the less visible paraphernalia that are needed to make TV programmes. The biggest and most visible parts of our equipment are several outside broadcast trucks.

Promoting and demonstrating vintage television is the main purpose of the group.

The authors are both founding trustees of the BECG.

The BECG is a registered Charitable Incorporated Organisation (CIO), number 1189469. The BECG is financed entirely by the founders and by private donations. If you would like to learn more about us, or help us in any way please email: [contactus@becg.org.uk](mailto:contactus@becg.org.uk)

More information on the trucks, their equipment and other BECG activities can be found at: <https://becg.tv>

Much of the BECG's equipment is available to hire for film and TV production.