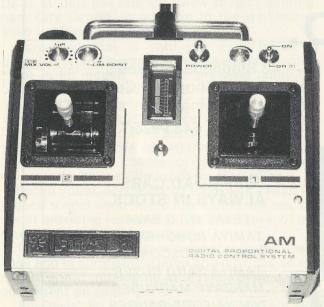
## Futaba 27mHz AM System FP 3EG

by John Watt



Typical of Futaba styling—neat, attractive and functional.

This latest 27mHz boat/car system is, to say the least, a little unusual. To qualify this statement it requires one to go along to the local model shop and handle the equipment in a working situation. However, I shall attempt to describe some of the finer points commencing with the FP T3EG, which is the transmitter.

One could be forgiven for mistaking this unit for a 'sawn off' J series. This is not intended to be an unkind statement, quite the opposite. The transmitter cabinet is beautifully manufactured from a high quality brushed aluminium material with very neatly moulded black plastic and checks. Crystal access is conventional, being situated at the rear of the cabinet in the usual Futaba style with plastic crystal holders. A large battery level meter is situated in the centre top of the cabinet front, this is very easy to read and is neatly finished with a plastic moulded surround. Below the meter centrally positioned is the neck strap eye. At this point I think a very noteworthy feature of the unit is the ease of cleaning, with smooth, flat surfaces an absolute minimum of nooks and crannies where grime always accumulates—cleanliness rules OK!

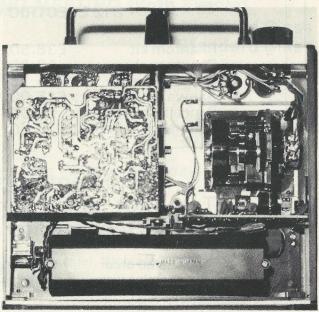
Throttle and rudder sticks are worthy of praise; they have an exceptionally smooth action and the trim levers move in small increments with a good positive stick click ensuring the adjustments stay put. In particular the throttle stick assembly is a shade out of the ordinary—it has an adjustable neutral positin which is variable over almost all of the stick travel. To achieve a new neutral position

a second lever is incorporated on the stick centre gimbal, moving this control lever from neutral to a new position does require a fair bit of effort, but it clicks firmly into it's new situation, moving the stick with it, of course.

Above the power meter, to the top left side are the mixing trimmer and limit point trimmer controls, to the right hand side of the meter is the on/off switch, rudder dual note trimmer and rate on/off switch controls. The on/off switch has to be pulled out and then lifted up to turn the transmitter on, thus making it almost impossible to knock to the off position accidentally. A large knob on the left hand side is the third channel control, this also moves in small increments giving very fine pre-set adjustments (about 44 positionable clicks) as required, the case is clearly marked 0—10 around this control knob to give the user some idea of where to set the servo position.

To explain the extra controls is by no means easy, as mentioned earlier, however they perform the following functions—rudder dual rate switch, adjustable in conjunction with the rudder rate trimmer to give from 40%—100% of servo's travel; switching the rate control off allows normal servo operational throw 45°—45° approximately. A mixing trimmer and limit point trimmer are the clever inclusions on this new design; the mixer control adjusts the amount of movement and direction of the rudder servo when the throttle control is moved from high to low, the limit trimmer sets the point at which the mixing operating line occurs.

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Inside of the 3EG.

Removal of the cabinet rear cover reveals an entirely new electric circuit design consisting of two separate modules. One of these two carries the RF amplifier, Xtal oscillator and modulator and the other consists of the Encoder and mixing circuitry. Servo direction change is possible on both mains channels, throttle and rudder; this is a simple operation consisting of moving the appropriate slide switch to a new position. The swtches are mounted on the left hand panel (encoder/mixing). A charging socket is provided on the nicad version in one and check, near the bottom of the case.

Moving on to the FPR3F receiver, very little need be said other than its manufactured to Futaba's very high standard. Xtal charging is easy, with the socket adjacent to the servo socket

block.

The battery (NR5) pack is a 5 cell 6 volt unit with the usual orange Futaba socket, a grey heat shrink wrap encompasses the cells which are in slab mode (I was going to say 'flat', but that could cause confusion—if you see what I mean!).

Among the accessories is a very nice professional looking black woven neck strap, which clips into the eyelet on the transmitter front; also included are two hefty single servo mountings

c/w hardware.

In conclusion only one very small criticism is to be made, simply as usual, the lack of a charging plug on the switch harness. Range check, etc,

was excellent, of course!

The outfit is, however, very impressive, although a mite expensive at £\*\*\*\*?!! It is beautifully made, very smooth in operation and would be a pleasure to possess. I would suggest a working demonstration will enlighten prospective purchasers further to all the possible uses for the system and to the extra facilities available.