

GOLF course watering systems are seldom demonstrated in aeroplanes. Mr. Tim Hilton, Managing Director of British Overhead Irrigation Ltd., contrived, nevertheless, to show us the workings of one of his automatic systems last week in a Viscount on the way to Germany.

The "pop-up" sprinkler came apart in five seconds with the aid of a table knife borrowed from Lufthansa, though a screwdriver and pliers are normally recommended. Dismantling is occasionally necessary to clear the built-in filter surrounding the gears. A small screw adjusts the angle of the sector to be watered from 30° to 330°, the radius of throw being about 40 feet. With three or four pop-ups on a ring main round each green, the whole putting area is covered comfortably—all from black plastic cylinders, four inches long, two inches in diameter, weighing under eight ounces.

Next we saw the remote control valve, which can be operated from the club-house through a $\frac{3}{16}$ in hydraulic control tube laid with the mains. The master controller—size again measured in inches—controls nine pairs of greens, watering them in rotation for specified periods at pre-set times, up to a fourteen-day cycle. Thus any quantity of water up to the limit of the supply can be applied daily (or nightly), every other day, weekly and so on up to a fortnight. The cycle then repeats itself. If rain comes, the whole system shuts down.

Draining off in winter can also be arranged automatically in low sections of the mains by valves which open when pressure is shut off.

Incidentally, the additional cost of fully automated green watering when installing a new system can be as low as 20%.

