

# R/C REPORT

John Griffiths describes a visit to the Tokyo Toy and Hobby Fair and the All-Japanese helicopter champs.

FROM 35,000ft. over Japan we were given a panoramic view of a vast storm-tossed sea with bleak grey islands just appearing through the mist and spray. As the 747 lost height so the view evolved into low cloud formation with the tops of Japan's many mountain areas just peaking through. I could see that there were some small settlements above the cloud layer and wondered what it must be like to live in such a crisp bright environment.

We descended through the cloud and landed at Tokyo's Narita Airport in the late afternoon. I had been flying for about 20 hours and badly wanted to find a bed that was not moving up and down, and assumed in my ignorance that the journey was virtually over as I was booked into a hotel near the model show in Tokyo. However, the airport is so far away from the city and the traffic so bad that I finally arrived at my hotel nearly three and a half hours later.

I was then greeted warmly by the *Kalt* helicopter people who insisted on hearing all the news from the U.K. and drinking coffee until the early hours. When I finally found my bed I was almost in a state of collapse.

The next morning, you guessed it — bright and early — we all went to the 'Sunshine City' trade complex where the show was being held. This is a multi-storey building (I counted about 35) with a shopping complex, hotels, entertainments centre, theatres, etc. which also has facilities for large trade exhibitions. They also have a very good integral car parking system below the complex which is unbelievably expensive. It costs about £24.00/day to park one car, which is more than the cost of a single room in the luxury hotel above!

The model show was smaller than in previous years because some of the usual exhibitors had cancelled out, but all the main Japanese manufacturers were present, plus enough smaller contributors to keep it interesting.

The *Futaba* display was the largest with great emphasis on PCM (Pulse Code Modu-

lation) equipment. They were showing their latest 8-channel PCM system for both fixed wing and helicopters complete with rev counter/timer. In Japan this system is fairly expensive, but can be obtained without the counter/timer accessory at about a 30% saving and I think this will be good value when it arrives here. However, *Futaba* have also produced a much cheaper PCM radio at about half the price. Why it is so much cheaper I was unable to find out as it looked very similar to the others, but it obviously should be a very competitive price when it reaches the UK.

*J.R.* also had an excellent stand and were displaying their new 9-channel PCM system which I believe only became available at the show and then only as samples to their distributors and competition flyers. This system also looked very good, but I was unable to find out where it stood in the pricing structure at present.

*Kyosho* were showing a new ready-to-fly Cessna for 4-stroke engines which was so good I nearly bought one, but resisted due to my inability to carry it back on the plane.

*Kalt* were displaying their new 'Long Ranger' kit which also came first in the all Japan helicopter contest — more about that later. Also they were showing their new fibreglass rotor blades which were available in any size to fit most types of machines. These are extremely well finished and are also balanced ready to fit. Washed-out versions will be available within a few weeks. The blades are available in various weights for aerobatics/scale and flybarless applications.

*Hirobo* did not seem to have any new helicopter items except their currently available range including their latest petrol *Bell 'Iroquois'*. However, the manufacturers were friendly and helpful and pleased to talk to you regardless of which type of helicopter you support.

*Kobe-Kiko* were only displaying their new *Robinson*, now in two versions — petrol and glow — with flybarless two-bladed head and weighted washout blades. This is an interesting machine and it will be exciting to see it fly in the UK.

*O.S.* had the largest engine display with a vast array of products, in fact so many that it was difficult at first glance to tell which were the new ones. Their latest 90 4-stroke and

18cc two-stroke were prominently displayed and should be available here soon.

*Enya* by comparison had a much smaller stand, although this in no way negates the product, and it was more difficult to find out what was happening. However I am sure that their UK distributors will put us in the picture as soon as new items such as the 120 4-stroke on show are available.

There was also emphasis on 4-wheel drive electric cars and some interest in electric aircraft with new types of motors soon to be available which are going to be more powerful and economic in current consumption than anything so far. I hope we will see some of this new motor technology distributed here next year.

After the show I spent some days with *Kalt* flying helicopters and looking at all their new ideas currently in the prototype and testing stages.

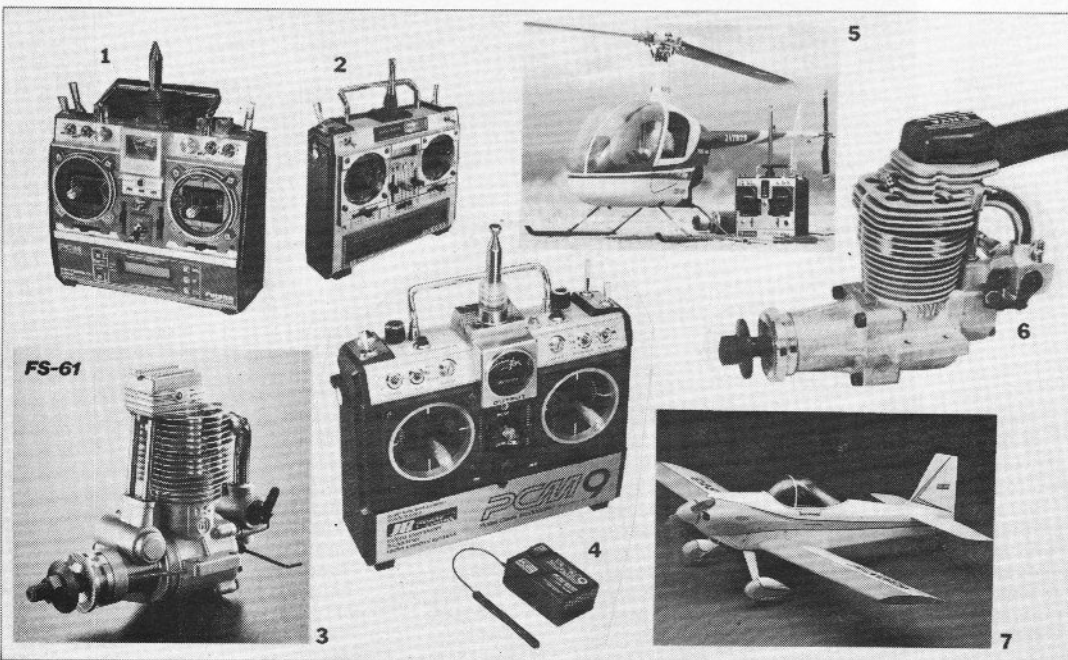
At the end of the week we drove to watch the all Japan helicopter contest which is similar to our Nationals.

The weather was terrible, showers and a cold intermittent wind — yes, it felt just like home.

The competition itself was to the FAI schedule and followed the same pattern that we are used to in Europe. This contest was the finals as there are so many entrants that semi-finals are held during the year to pick out the best. The total entrants numbered approx. 37 with model distribution being about 60% *Kalt* and 40% *Hirobo*. No other types were in evidence. On the first day there were two rounds for all entrants and on the second day a final round. This produced five top place flyers who were well in front of the rest. The general standard is extremely good with all flyers being competent at aerobatics and hovering manoeuvres.

However, apparently the judges do not like to see the bubble and boom type of machine, so all entrants had their helicopters fitted with fuselages to gain maximum points. Also it is necessary to carry out the hovering sections with a steady rotor speed and only wind up your machine for the aerobatics.

Well, with the above problems and the weather, I thought they had done extremely well by the third round, but the judges did not share my opinion and set a sequence of



New at the Tokyo Fair.  
1. *Futaba's* latest PCM R/C system, seems that all Japanese manufacturers are now following the European trend! 2. *Sanwa's* 'Module FM,' no doubt this will soon be available in PCM form. 3. New look *O.S.* four strokes such as this *FS-61* soon to be available in the UK. 4. *JR* have a PCM system that uses nine bit logic instead of the more common eight bit, gives improved resolution and does not need special servos. 5. *KKK Helicopters' 'Robinson'* is by now already on sale in the UK. 6. *Enya* 120/90 four stroke, a scaled up 60/90 in appearance, a handsome motor. 7. One of the *Kyosho* kits that caught John's fancy and we can see why.

manoeuvres that the first five competitors had to complete twice before making their final decision.

The fly-off requirements were as follows:

- (1) Hovering Figure Eight.
- (2) Top Hat
- (3) Observation
- (4) Shovel
- (5) Loop
- (6) Roll
- (7) Reversal
- (8) Auto-Rotation

I think that by this time many of the competitors were tired and cold, but they performed the fly-off rounds well, although some of them were making mistakes by this time. Auto-rotations were good with many of the competitors hitting the centre of the square exactly.

Hovering manoeuvres were also good with some of the best observations I have seen, especially as many of them seemed to prefer to carry out this manoeuvre up-wind.

Aerobatics were as you would expect excellent with any mistakes being down marked very badly.

**Results:**

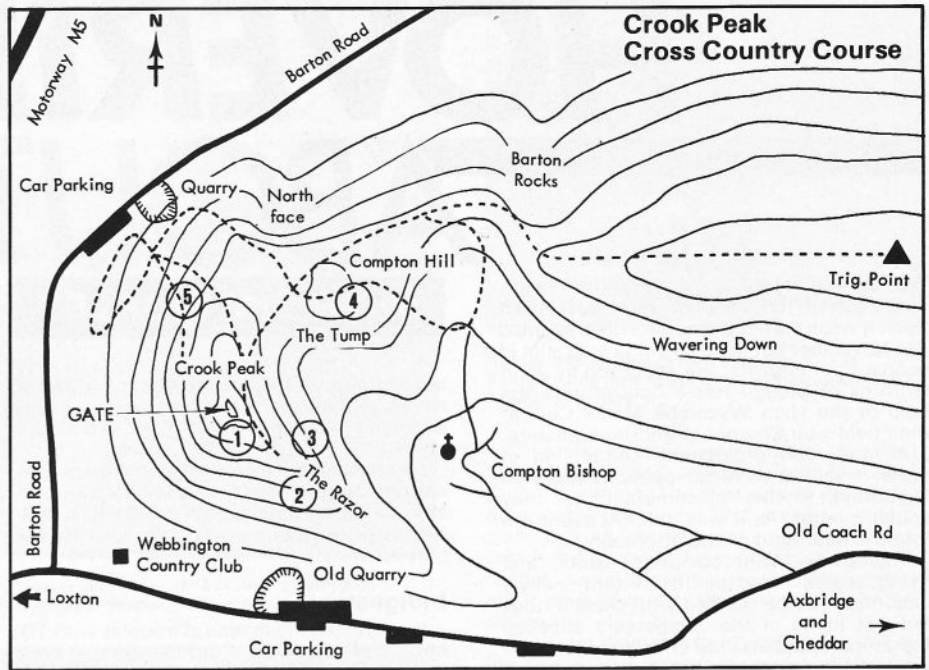
- (1) Mr. Taya — Kalt Baron .60 'Long Ranger'
- (2) Mr. Takayagi — Kalt Baron .50 'Jet Ranger'
- (3) Mr. Hagase — Hirobo 'Corvette'
- (4) Mr. Ecashikawa — Kalt Baron .60 'Jet Ranger'
- (5) Mr. Nagatska — Kalt Baron .50 'Jet Ranger'

Generally I thought the standard was very good as it is not easy to perform some of those manoeuvres in wind with a fuselage helicopter but the top flyers were about on a par with our top European flyers including our own English champion Len Mount. It would be very interesting to arrange a competition between the two. So ended a memorable trip.

**Sean Bannister reports on West Mendip Soaring Association Cross-Country, Crook Peak, 16th October, 1983**

Force 6-8 south-westerly winds with force 10 over adjacent coastal waters and frequent showers punctuated by sunny periods, greeted participants to the last cross-country event of the 1983 soaring season. By 10.00a.m. the stalwart West Mendip S.A. competition organisers had completed the 20-minute hike from car park to Peak and set a well graded course with recently purchased tents marking the more remote turn points. An anti-clockwise course with 5 turns was set to be completed within 40 minutes. Each turn became progressively more difficult, being graded further from the lift area up to turn No. 4 looked possible but with very little chance of returning to the lift area and attempt turn No. 5. Each turn was completed by crossing a line extended from Crook Peak through the turn point and away from the Crook Peak side of the turn. A common start/finish gate had to be crossed at commencement and completion of the course.

For an event which is normally well subscribed, only 14 competitors were ready to fly by 11.00a.m. Presumably others chose to be sensible and save travelling costs in the adverse weather conditions by staying in dry, warm beds. However, by 1.00p.m. a total of 22 competitors had signed on, the late-comers being encouraged by a lengthy break in the rain. Only two light showers curtailed flying thereafter with a heavy shower finishing the fly off. In winds measured between 35 and 55mph in strength, launching was a team effort with three people launching the larger machines. Only one trim criteria was important — ballast and as much as could be carried. The lighter wing loadings were 20oz./ft.<sup>2</sup> with some models up to a loading of 30oz./ft.<sup>2</sup> Generally the smaller models were at an advantage, needing similar ballast additions to the larger models, to achieve a higher wing loading. Sensibly, the competitors who had pylon



racers capable of ballasting to 30oz./ft.<sup>2</sup> chose to use these machines rather than larger soaring machines at lighter loadings. These racing machines have grown in size from 50/60in. span up to a span of 80/90in. as a direct influence of the large efficient American racers seen at the Peak in 1980. At 30oz./ft.<sup>2</sup> the efficiency of these machines is most impressive.

Completion of the course as far as turn No. 4 was necessary to qualify for the fly-off. Only Ken Woodhouse flying his own design heavy racer completed all five turns and after crossing the finishing gate enquired what he had to do next. Having made it look so easy he was told to go around again! An additional 8 competitors completed turn No. 4 to give a total of 9 competitors for the fly-off. Unfortunately Martin Lucas and Sean Bannister damaged their machines attempting a return to the lift area from turn No. 4 through the low level turbulence and were unable to contest the fly-off.

As turn No. 4 had been decisive in qualifying for the fly-off the contest director decided to move this turn point another 150m further away from the lift area for the fly-off. Pilots were advised at the fly-off briefing that, should they land, having completed turn No. 4 while attempting a return trip to the lift area, then placings would be decided on who landed closest to turn No. 5. However, if the course was completed then a second lap would follow with further laps until a flying time of 1 hour had elapsed. Survivors John Hathaway, Ken and Bob Merritt, Don Cherry, Fred Lacey, Mark Parringham and Ken Woodhouse made a simultaneous launch for the fly-off. Bob Merritt, Ken Woodhouse and Fred Lacey led a tightly bunched field through the first two turns.

All seven completed turn No. 3 but Ken Merritt was unable to get back into lift and was the first to land. An attempt at decisive turn No. 4 became a test of nerve as each pilot steadily climbed to the best of his ability. If an early attempt failed the initiative would

pass to the remaining pilots, whereas a successful return to lift would put pressure on those following in the race. Ken Woodhouse was first to try and momentarily lost sight of his model and, although completing the turn, was unsuccessful in returning to lift. Bob Merritt tried next with a spectacular dive out of turn 4, to give him speed through the low level turbulence, but although flying further than Ken he was also unsuccessful in returning to the lift. Meanwhile John Hathaway suffered a spectacular structural failure while diving through a patch of turbulence. Mark Parringham in his unhurried style completed No. 4 and skilfully edged around the side of the Peak back into lift at low level. Mark next completed No. 5 and the finish gate forcing both Fred Lacey and Don Cherry to attempt No. 4. As Mark was completing No. 1 for the second time, both Fred and Don completed No. 4 but landed before their return to the lift area was complete. Both Mark and a large black cloud were now approaching No. 2. Mark arrived first and being advised that he had won with all the others now landed, he also elected to land with an elapsed time of 40 min. and avoid a wetting. As this was Mark's second consecutive cross-country victory this season, careful examination of his unhurried and cool approach may be appropriate by those wishing to succeed next season. Congratulations to Mark and all the West Mendip marshalls and other competitors who braved difficult conditions to produce a good day's sport.

Contest director Peter Bradshaw set a challenging course with a definite accent on the flying difficulty rather than physical fitness with the result that a running ban was not necessary. All who flew agreed that he got the balance right and thus avoided the walking versus running controversy. Communications were maintained between all turns through to a base control with C.B. radios purchased by the association specifically for competitions. We look forward to the 1984 season.

**Results:**

1st Mark Passingham	Mear Valley S.A.	O.D. Racer	30oz./ft. <sup>2</sup>
2nd Bob Merritt	W. Mendip S.A.	O.D. Racer	20oz./ft. <sup>2</sup>
3rd Ken Woodhouse	Mear Valley S.A.	O.D. Racer	30oz./ft. <sup>2</sup>
4th Fred Lacey	Dartmoor S.A.	Alpina	20oz./ft. <sup>2</sup>
5th Don Cherry	Dartmoor S.A.	Flamingo	16oz./ft. <sup>2</sup>
6th John Hathaway	Mear Valley S.A.	Algebra	22oz./ft. <sup>2</sup>
7th Ken Merritt	W. Mendip S.A.	O.D. Racer	16oz./ft. <sup>2</sup>