



A YEAR IN ROCKETRY

The Black Knights are based in the Redditch/Worcester area of the West Midlands and have been flying rockets for just over a year now. So what does a rocket club get upto.

January 2001

We held the first of our bi-monthly Committee/organising Meetings for 2001. At these meetings we also offer UKRA members the opportunity to take the Level II Flyer Certification /Range Safety Officer (RSO) Examination.

I can hear readers saying what's he talking about so

To fly rockets powered by a Rocket Motor over 640Newton seconds total impulse a UKRA member needs to be certified Level II. This entails sitting the Level II exam, which helps ensure that the flyer has a reasonable knowledge of rocket flying. After passing the exam, the flyer must, at a flying event prepare a rocket, that belongs to the individual for flight including the rocket motor. All this has to be done in front of a Range Safety Officer (Certifying Officer). The rocket must then be flown successfully and verified by the RSO. To become a Range Safety Officer a UKRA member must pass the Level II exam and pass an interview with members of UKRA Safety and Technical/existing RSO's. The interview helps ensure that RSO's have the necessary experience/knowledge. For full details of the UKRA flyers certification scheme contact UKRA or see the UKRA website.

The weather was not kind to us for our first planned flying session of the year. The rain poured the wind howled we even had some snow. A few of us sat in our cars hoping for better weather but eventually admitted defeat. All was not lost as we retired from the farm for coffee hot mince pies and rocket videos.

February

After January's rain and wind Feb.'s launch was dogged by thick Fog. This was particularly annoying as a No of people came a good way to fly and reported that there had been patchy light fog on there journeys to the site but that the thickest fog by far was at the launch site. The only rockets launched were a few Apogee Micro Rockets, which went all of 20 feet. However we had a good turnout and spent the time drinking soup munching through sandwiches etc and talking about rockets and rocket flying.

March

Due to the Foot and Mouth outbreak the farmer, who owns the land we were flying from, told us we would not be able to fly. (Thankfully the animals on the farm were not infected during the outbreak. Other farms animals in the surrounding area were and even now, Jan 02, MAF has advised the farmer not to let the club back on to his land.) Club members started looking for alternate Black Knight's launch sites.

April

An interesting Month I attended the British Rocketry Oral History Programme Annual Conference at Charterhouse School. Although the conference was concerned with real rockets I took the opportunity, with the organiser's permission, to take along a couple of larger toy rockets and display materials advertising hobby rocket flying and the Black Knights in particular. The display generated some interest and lots of questions.

Luckily for the Black Knights we have a number of teachers as members and one of them came up trumps getting us permission to fly from some playing fields at Bridley Moor school in Redditch. This arrangement with Bridley Moor school enabled us to fly right through the height of the Foot and Mouth outbreak and continues to the present time. The obtaining of permission to fly from Bridley Moor came not a moment too soon as the Black Knights were hosting and providing Range Management as part of the April club flying day for the first ever BAE SYSTEMS Rocket Challenge.

The BAE SYSTEMS Rocket Challenge is open to school and youth groups and has three competitions Egg lofting duration – where a standard hens egg is flown and recovered intact. The team with the longest flight time is the winner. Egg lofting is split into two competitions dependant on age. The other competition was a science experiment involving air sampling of pollen/dust, which unfortunately no teams were entered for.

The flying day was slightly overcast with a continual breeze and occasional sunny spells. Black Knights members got in some nice flights and the teams for the Rocket Challenge were very keen and enthusiastic. The results of the competitions were wins for the Abbey High school of Redditch in both age classes. The organisers from BAE SYSTEMS were pleased with the running of the event and have asked the Black Knights to host the event again in 2002 (For 2002 the competition will be run as part of the June flying day).

May

Another overcast day at Bridley Moor with plenty of vehicles powered by A-D class motors flown. The notable achievement of the day was Mike Lynochs model SR71 flight, which landed gently under its parachute on the RSO gazebo to much cheering and laughter.

June

UKRA 2001 was held at Heckington in Lincolnshire between the 15th and 17th of June with a number of club members not only attending as flyers but helping out with

the organising and supplying equipment. The rocket gods were unhappy and the weekend's weather was not good with quite strong winds and some rain. Most of the Black Knight members present only flew model rockets as they judged the weather to be marginal for the larger rockets. Black Knights member Malcolm Ingram and I took turns as RSO's on Saturday and Sunday in the model rocket launch area and thanks to Black Knights members Mel Sharpe and John Davis for the loan of there launchers and controllers for model launching.

Having said that some people considered the weather to be marginal many people did fly larger rockets to the great pleasure of the attendees.

The Sunday after UKRA 2001 was a club flying day and the weather could not have been more different. However the flyer turnout was down due probably to UKRA the previous weekend.

July

On Sunday 15th July Franche First School held their annual fete and the Black Knights held a rocket building and flying workshop for some of the older children. The fete was a great success with around 2000 people attending. The rocket workshop attendees built their rockets under the supervision of club members and then at around 15.00 flew them, to the delight of their friends and parents.

Rockets Flown

Flying Munster by John Tissiman

Karang by Andrew Deakin

Soaring Eagle by Harriet Cook

Aquarius 3 by Anita Quinn

The X by Ben Hodgkinson

Satellite 2000 by Emily White

High Flyer by Chloe Hodgkinson

Ace 7 by Sam Barnsley

All the rockets flew and recovered successfully (No pictures of the rocket workshop, flat batteries in the digital camera – The marvels of modern technology and yes I do now carry spare batteries). Club members then put on a short rocket flying display, which culminated in “MARS attacks” a mass flying saucer launch, which was much appreciated by the onlookers.

Thanks to BAE SYSTEMS, Royal Ordnance Rocket Motors at Summerfield and the Abbey High School Redditch for sponsoring the Rocket Workshop.

The following weekend the club was flying again. A good turn out on an overcast day. Alan Merideth turned up with a couple of his “scary” water rockets and Dave Beeton suffered a motor failure, which by a small miracle I managed to capture in a photo.

August

The BSMA/Rockets and Things Canterbury Cup was held in early August. The flying site is a long way from the Midlands so the only club member flying the flag was myself. We have relations in London so popped in for a visit and then was dropped off at the flying site on the Saturday while the rest of the family visited Canterbury. I spent a pleasant afternoon flying a few rockets, meeting old friends and looking around the vendor's tents.

International Rocket Week (IRW)

There was no club meeting in August as a good number of club members were going up to the International Rocket Week, held at Kelburn Country Centre, Largs in Scotland 20-27 August. Kelburn Country Centre provides camping, pavilion/workshop facilities and a launch site for rockets upto G class as well as all the normal country centre facilities. However for the launch of the larger rockets a larger area is required and for a number of years those wishing to fly the larger rockets have been travelling around 5 miles to a farm. Unfortunately due to the Foot and Mouth outbreak the farm was off limits. So for launching the larger rockets it was a trek to the reserve launch site, more of which later.

The pavilion makes for an excellent workshop. So one of the most interesting things that goes on at the IRW is the amount of rocket construction (frequently going on until the early hours of the morning helped of course by alcoholic refreshments and socialising). The Black Knights had sufficient members at the event to take over a complete section of the pavilion even spreading out into a separate marquee.

Model flying started on the Monday and carried right on through the week. Thursday was the first scheduled day for the larger HPR rockets. The organisers held a briefing and warned those of us who wanted to go up to the large flying site that vehicles would only be able to get part way to the site and that there was some hill walking involved. A convoy of cars was duly organised all of which were packed to the gunnels with eager rocketers and their equipment. The convoy duly set out led by a Landrover and wound its way up single-track roads into the countryside above the Country centre. After about 15 mins. we came out of the woods onto a hillside and were directed to park in a field. The organisers then got all the heavy equipment such as car batteries, launchers and some of the larger rockets into the Landrover which set off along the field with the rest of us walking along behind. After 10 minutes we started up a steep section of the hill and shortly after the Landrover had to stop as the hillside was too steep and ground too uneven for it to continue. Now the going became quite tough (For those of us used to desk jobs and flat countryside) after what seemed like ages, probably only 15mins, we reached a flat section on the hillside where we could set up the launch equipment. Just above this small plateau the hillside was not quite as steep and ground not quite as broken making it a good point for spectators and those wishing to prepare their rockets all at a safe distance from the launch area. Once we got our breath back we had time to appreciate the view. We were now high above the Country centre with magnificent views out over Largs marina to Great and Little Cumbrae and Bute. While the launch and spectator areas were being sorted out. A group of us headed back down to the Landrover and brought back up all the heavy equipment and rockets. Mike Crewe of the North Star Rocketry Group was the RSO for the day, which was warm and sunny with a few clouds. It was a great day flying, with lots of different rockets being launched.

Black Knights members had some notable flights Chris Key launched and had a very long walk, his rocket drifted clear across the valley. Luckily it had a location transmitter on board and was eventually recovered. Alex Bevan certified Level I with a scratch built rocket powered by an I motor. This was a stunning flight Alex's rocket was large but very light being constructed along model aircraft lines rather than the normal rocketry practice of a heavy card or composite tube. The large I class motor accelerated the vehicle of the pad very quickly. After motor burn out the vehicle slowed down relatively quickly due to drag on the large cross section, a great flight and Level I to boot. Most of us could not face the thought of carrying the heavy equipment down and back up the next day so at the end of the day we decided to leave the heavier launchers and batteries on the hill ready for the next days flying.

Friday the 24th saw a much-reduced turnout for the hill. It was another fine day and I was RSO and certification officer all day. Again lots of nice flights and I am glad to say that another Black Knights member Ian Fowler achieved Level I with a successful flight of a scratch built rocket (on an H class motor).

Saturday the 25th was again going to be a High Power flying day but unfortunately the weather in the morning was not good. The weather forecast for the afternoon was poor so the organisers postponed the High Power flying to Sunday.

Sunday the 25th Pete Davy of Pete's Rockets was RSO for part of the day, can't remember who the other RSO was. The weather was not so kind we had a few light showers and it was a little colder. Pete got in a spectacular flight of his large red rocket on a K class motor. Around 16.00 we called it a day and carried all the equipment back off the hill to the Landrover and cars. An enjoyable day if rather hard work. We arrived back at the pavilion around 17.00 to catch the end of the days model rocket competition flying. During Sunday at the main site the model rocket competition flying had been going on apace with such events as water rockets (a highly competitive and wet making team event), Parachute duration and boost glider duration.

Monday the 26th saw the final model rocket competition flying including a new class, the Beer can rocket which looks as if it could become as keenly fought as the water rocket competition. By the middle of the afternoon the pavilion had been cleared up And most people had left for their journeys home. Another successful enjoyable IRW and a good showing for the Black Knights.

September

Despite having four qualified RSO's in the club, between holidays, illness and other commitments we could not find an available RSO so we had no choice but to cancel the launch.

October

We tried out a new slightly larger launch site, a sports centre. The negotiations to get us on to this site had been going on for some time and we finally got permission to fly from the site management. However when we got to the centre we found that the

management had double booked the fields! So instead of having the entire set of fields we found ourselves being tucked into a corner. If this was not bad enough the weather got steadily worse starting with the occasional shower and developing into heavy rain. We flew until around 14.00. Further discussions took place with the centre management but it became obvious that the site was not suitable as a new home for the Black Knights.

November

A number of club members were down at the East Anglian Rocket Societies (EARS) November launch. EARS were hosting the National Rocketry Championships, a competition for Universities the idea being for teams to design, build and fly a payload carrying rocket (i.e. a small Sounding Rocket). The EARS site is huge and ideal for the larger rockets. My wife Liz flew one of our 75mm dia. Rockets (flown last at Largs) to around 2,500 feet on an I motor while fellow club member Alex Bevan flew the rocket he certified level I on at Largs.

Back at Bridley Moor on a chilly November day.

December

Not quite as cold as November and a small turnout, but lots of rockets flown. After the flying we held our AGM.

Bits and pieces

Club members flew at other events such as K-Lob in Lincolnshire, down at EARS and also participated in the BBC 2 Techno-Games rocket flying competitions. We also organised a few social meetings in a local pub.

As for the committee meetings the biggest topic was of course trying to find an alternative large launch site. Club members have talked to local landowners, councils and other organisations. We have even visited sites and had to rule them out as unsuitable for various reasons. So the search continues (If you know of a potential rocket flying site in the Worcester/Redditch area please do contact the Black Knights at info@blackknights.org.uk)

Black Knights - The Future

At the time of writing we have flying dates set through until June. We will be hosting the BAE SYSTEMS Rocket Challenge and no doubt will be putting in appearances at other Rocket flying events.

Keep an eye on our website (<http://www.blackknights.org.uk/>) for more details.

Thanks to our sponsors and supporters for there help throughout the year.

BAE SYSTEMS, Royal Ordnance Rocket Motors, Summerfield (Conference/Meeting room, sponsorship)
Bridley Moor School, Redditch

Abbey High School, Redditch

Franché First School, Kidderminster

Brookhouse Farm, Redditch

Pete's Rockets (all types of rocketry supplies)

Antics of Worcester (for model rockets motors and scratchbuilding supplies)

JAS Corporate Embroidery