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APPENDIX 1.

RECOMMENDED SCHEDULE OF ACTIVITIES FOR UKAYROC 2007 TEAMS

Week 1-11 below refers to the elapsed time since team entry forms and payment were received and accepted by Space Connections.

WEEK 1

- Ensure all team data (names, e-mail, etc.) on file with SPACE CONNECTIONS is correct
- Join UKRA to obtain insurance (through Space Connections)

WEEK 2

- Assign team responsibilities (such as project manager, airframe, propulsion & ignition, launch system, fundraising etc.)
- Get a mentor (see the list of available UKRA mentors at www.ukra.org.uk)
- Watch the instructional DVD provided as part of your registration materials
- Download the Team Handbook & Rules and the Frequently Asked Questions from the UKAYROC website – www.UKAYRoC.org.uk and have all team members read both
- Begin research on rocket parts supply sources (starting with the suppliers listed in the UKAYROC Handbook)

WEEK 3

- Purchase inexpensive one-stage rocket kit to familiarize team with rocket building & flying, and build it.
- Locate a place to fly rockets or a nearby UKRA launch to attend and fly at. Participating rocketry clubs are listed on www.ukra.org.uk.
- Develop a plan to raise required funds for purchase of rocket supplies (and hopefully for later travel to the fly-offs), covering at least 2-3 rockets and motors for 6-10 test and qualification flights.

WEEK 4

- Obtain a comprehensive book on model rocketry, such as G. Harry Stine's "Handbook of Model Rocketry" from Amazon or your local bookshop. Have all team members read it.
- Obtain either SpaceCAD or Rocksim rocket design and flight simulation computer programs and have team members learn to use it

WEEK 5

- Fly a basic one-stage model rocket

WEEK 6

- Using SpaceCAD or Rocksim and the knowledge gained from reading and from building basic rockets, develop a first design for UKAYROC entry.

WEEK 7

- Using SpaceCAD or Rocksim, conduct flight simulations of your design with various rocket motors on the UKAYROC approved motor list, to determine the best motor(s) to use
- Locate and obtain the materials needed to build your prototype UKAYROC rocket, purchase required parts and rocket motors.



UK Aerospace Youth Rocketry Challenge
www.UKAYRoC.org.uk

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- Obtain two stop-watches for your test-flight program.

WEEK 8

- Design and build the electrical launch system and the launch pad (rod or rail) to be used with your UKAYROC entry, if you do not have a local rocket club's system available for your use

WEEK 9

- Begin construction of your initial design for your UKAYROC entry
- Locate a UKRA Senior (adult) member who can serve as your official observer for your qualification flight(s). This may be through the local UKRA-affiliated rocketry club.

WEEK 10

- Develop a pre-flight checklist for your UKAYROC flight and assign responsibility for each of the duties to a member of the flight team
- Test your launch system by test-firing igniters without installing them in rocket motors

WEEK 11

- Weigh your completed UKAYROC rocket and re-run computer flight simulations with actual rocket weights
- Arrange NOTAMs for your test flights unless you are flying with an UKRA club that already does this for their launches. See the Team Handbook for how to arrange NOTAMs

NO LATER THAN February 1

- Test-fly your initial UKAYROC design (without altimeter), making sure that you leave time to redesign, rebuild, and re-fly if this initial flight/design is not successful!
- If your first flight is fully successful, test-fly again with stopwatch timing and the altimeter installed. Repeat test flights until you hit the design targets.
- If your first flight is not successful, do post-flight failure analysis and re-design.

NO LATER THAN 25 March

- Make your two official qualification flight attempts in front of an UKRA senior member observer

NO LATER THAN 26 March

- Submit (fax) your qualification flight report to be received by SPACE CONNECTIONS no later than this date

On 30th March

- If notified of selection to attend the fly-offs, make reservations for accommodation at the fly-off and conduct fund-raising to cover travel and lodging
- Continue test-flying to "tune" rocket design to target altitude
- If you plan to travel to the fly-off by airline, order rocket motors for fly-off to be shipped to UKAYROC receiving point or delivered on-site by fly-off vendor (Congreve, Rockets & Things)

NO LATER THAN April 2

- Complete and test-fly the actual rocket to be used in the final flyoff (this rocket must have been test-flown before arrival at the flyoff)