



3DX SPAIN



AS 3D COMPETITION BECOMES A GLOBAL PHENOMENON, RICHARD BUDD GOES TO SPAIN TO SEE HOW THE NEW 3DX STANDARD IS WORKING



I consider myself fortunate to have had the opportunity to attend the world's first

3DX competition, which was held just outside Seville, Spain over the weekend of 28 - 29 May 2007.

Arriving at the field on the Saturday morning, I was met by a sight that most UK fliers can only dream about. No, I am not talking about the blue skies - it was the purposely designed field, complete with sheltered pits area and tables, plus a tall safety fence between the flying area and the pits. The flying area was very large indeed, the only drawback being a lack of grass, and inadequate toilet facilities.

GUEST STARS

The Saturday was a fly-in, with the Sunday being reserved for competition. As the morning passed, more and more fliers turned up, including two special guests: Lukas Riva from Switzerland, and Chen Zarfati from Israel. For

those who cannot quite place the names, Lukas came third in the Sportsman's category at the 2006 3D Masters, and Chen won the Masters category. Both were flying JR Vibe's, and Lukas also demonstrated Align's T-Rex 600. As well as putting on some stunning demonstrations throughout the day, they were also much in demand for pictures and autographs. To their credit, they never failed to oblige and maintained a constant smile throughout the weekend. During some stunning routines, the boys could be seen cutting the branches on a tree in the next field - their synchronised take-off's were spectacular, and Lukas was flying with such aggression that he managed to bend his mainshaft during his flight!

One thing that did grab my attention during the day was the quality of the flying by the Spaniards. I was not sure what to expect before I made the trip, having heard from the organiser that this was only their second ever 3D competition - he thought that the standard would



A rare sight - female 3D pilot Raquel Belloq, who flew demonstrations at 3DX Spain.



Crowded pits area, which gives an idea of how many competitors had a go at the new Spanish 3DX competition.



This is Russian competitor Vladimir, who made friends with Richard during the weekend. Flew a T-Rex 600.



Water was sprayed on the flightline to damp things down a bit - something we never see in 3D Masters!

improve in the coming years but, having sat back and watched the flying all day, I have to admit I was impressed by what they can achieve now. Even the gusty 15mph winds did not seem to affect their flying, although it did mean that proceedings temporarily ceased whilst the runway was watered in order to keep the dust down.

Saturday's highlight for me was the demo flights by Lukas and Chen, and watching the Russian pilot Vladimir Golubev really push his T-Rex 600, fitted with the CSM flybarless system, through a very entertaining flight. Later on in the afternoon, Vladamir persuaded Lukas to have a go and despite having not flown that machine before, he put on an astounding flight, showing that the

flybarless system was just as capable as the more usual machines.

Around 10.00pm, the night flying started up and this rounded off a very happy day's flying for all those in attendance.

ON TO COMPETITION

Sunday dawned warm, bright and clear. The gusty wind had died down, and only a slight breeze was evident. The pilots briefing was at 9.30; twenty pilots attended.

This was the first event running to the 3DX schedule, with two rounds to be flown. The first consisted of five manoeuvres chosen from the 3DX list (see table), with a second round of three-minute freestyle flights, which could be performed to music if required.



Star demo pilots Chen Zafarti and Lukas Riva chill-out in the pit area.



The organisers did an excellent job with their first event. Note the safety netting that goes right across to the pit area roofs.

> 3DX SET MANOEUVRES

>>> No	'K'	MANOEUVRES	JUDGES NOTES
1	1	Travelling Backwards Flip	With the aircraft travelling forwards along the flightline, a backwards flip is performed. The manoeuvre will be flown at medium speed maintaining constant height, direction and speed throughout.
2	1	2 x 4-point Backward Roll	With the model moving backwards at medium pace, the model will be aileron-rolled twice, each roll being clearly delineated by four hesitation points.
3	1	540 Bounce	This manoeuvre consists of two inverted stationary 540° pirouettes, one in each direction with the minimum hesitation at direction reversal. The manoeuvre will be entered from a stationary hover and should start and finish nose-in.
4	1	Stationary Metronomes	This manoeuvre consists of a repetitive metronome with six pitch-reversals. The manoeuvre will be symmetrical about the centre-line and of consistent height and speed. The manoeuvre may be performed tailboom vertical or horizontal.
5	1	Pie Dish	The helicopter will prescribe remote circuits centred on the contest centreline. The model will maintain an acute angle while flying sideways at constant speed, altitude and attitude. There will be at least four complete revolutions, skids in, skids out, nose up or nose-down.
6	1	Figure 8 Inverted Circuit	The model should describe a uniform figure-eight at a slow pace, with consistent height and correctly centered.
7	1.5	Coronet	The coronet is a series of tail-low Rainbows* each finishing with a 90° pirouette before moving on to the next Rainbow. In this way, a square circuit is flown. There will be minimal hesitation at the pirouettes.
8	1.5	Tumbling Loop	The model will perform continuous forward or backward tumbles while it describes a forward or backward Loop in the sky. The loop will be centred, and the rate of tumbling will be uniform.
9	1.5	K 1.5 Auto*	The K1.5 auto consists of an auto-rotational landing with a 360° aileron roll. The manoeuvre will show consistent height loss, uniform forward speed and land as close as possible to a marker positioned 3m in front of the pilot, on the field centreline.
10	1.5	Inverted Nose-in Circuit	The circuit will be flat and slow, with consistent height and properly centred on the pilot and judges.
11	1.5	Inverted Backward Loops	This manoeuvre consists of two consecutive inverted backward loops entered from backward inverted flight.
12	1.5	Sustained Chaos	The chaos should be sustained for a minimum of 10 seconds, up to a maximum of 30 seconds. The Manoeuvre will be stationary, in front of the pilot and accurately centred.
13	1.5	Pirouetting Roll / Flip (2)	The two pirouetting rolls / flips will be executed as a travelling manoeuvre, continuously with no hesitation.
14	1.5	Snake	This snake-like manoeuvre should be performed along the flight line and consist of at least four joined crescents, tailboom-horizontal, switching skids-in to skids-out and vice-versa between crescents.
15	2	Slapper	This manoeuvre consists of a series of tailboom-vertical metronomes with a half aileron roll between the metronome stop points. Six pitch reversals are required, and the model will retain constant tailboom orientation. The roll will be centred at the mid-point of the arc.
16	2	Inverted Pirouetting Figure 8	The inverted pirouetting figure-eight can be performed at any pirouette rate. The model will describe a symmetrical Figure-eight, with a consistent rate of rotation.
17	2	Pirouetting Loop	The pirouetting loop will be positioned symmetrically, with a constant rate of rotation.
18	2	Pirouetting Outside Loop	The pirouetting outside loop can be entered from either the top or bottom of the manoeuvre. It will be positioned symmetrically, with a constant rate of rotation.
19	2	Pirouetting Metronome	The helicopter must metronome back and forth approximately 45° either side of vertical, with at least six pitch reversals and at least one complete pirouette during each traversal. The manoeuvre will be 'stationary' and consistent in height, pirouette rate and reversal rate.
20	2	Tumbling Circuit	The tumbling circuit can be performed with either forward or backward tumbles. The manoeuvre will exhibit accurate positioning and height control, with a consistent rate of tumbling.
21	2	Waltzer - Pie-Dish with	A 'pie-dish' is a remote circuit flown with the tailboom of the helicopter Multiple Aileron Rolls vertical (or near-vertical), skids in or out. In the Waltzer, the model should perform at least two revolutions while continuously aileron-rolling.
22	2	K2 Auto*	The K2 auto consists of an auto-rotational landing beginning with a 360° aileron roll, followed by a further half roll to inverted, and ending with a forward elevator flip. The manoeuvre will show consistent height loss, uniform forward speed and land as close as possible to a marker positioned 3m in front of the pilot on the field centreline.
23	2.5	London Eye	A vertical circle in front of the pilot / judges prescribed by a succession of sustained pirouetting metronomes, with the full rotor disc at all times visible to the pilot / judges.
24	2.5	Pirouetting Vertical Eight	The helicopter will prescribe a vertical-eight while executing a continuous series of pirouettes, in effect two pirouetting loops, one inside, the other outside.
25	2.5	Pirouetting Wall of Death	The model will be made to prescribe at least two remote knife-edge circles while pirouetting continuously.
26	2.5	K 2.5 Auto*	The K2.5 auto consists of an auto-rotational landing beginning with a pirouetting flip, followed by a 360° aileron roll, a further half roll to inverted, and ending with a forward elevator flip. The manoeuvre will show consistent height loss, uniform forward speed and land as close as possible to a marker positioned 3m in front of the pilot on the field centreline.
27	3	Haymaker	Backwards horizontal eight, with multiple consecutive four-point hesitation rolls and 360° pirouettes at every knife edge, the pirouette direction reversing each time.
28	3	Rainbow** Twister (Bouncy Castle)	The Rainbow Twister or Bouncy Castle is a succession of rainbows alternating nose-up, nose-down, each with an aileron half-roll in the centre and then a 90° pirouette at the stop point, joined to produce a square circuit. Two complete circuits will be flown.
29	3	Big Ben - Metronoming Clock Face	The model will be held in a sustained metronome directly in front of the judges with its nose vertical, the Judges viewing the rotor disk as a clock face. The model will then be made to rotate, yawing clockwise, prescribing the twelve points of a clock-face, each point defined by a 'tick' of the metronome. Start and finish of the manoeuvre are the two 12 o'clock points.
30	3	Pirouetting Globe	This is a succession of pirouetting loops, but with the axis of the loop rotating by degrees for each loop until an imaginary globe in the sky has been prescribed. Exit from the manoeuvre should be the same as the point of entry, but with the model moving in the opposite direction. The manoeuvre will consist of at least four loops.

* In this context, an 'auto' is an auto-rotation with drive disengaged.

** In this context, a 'rainbow' is an arcing forward or backward half-flip.



A trip around the pits revealed a large number of JR Vibes, with a few X-Cell Fury's, Raptor 90's, a Hirobo (don't ask me which one as my Spanish is non-existent and I couldn't ask!), a Synergy or two, a handful of Raptor 50's and a couple of Hurrican's. Radio systems seemed to be Futaba biased, with the remainder being JR's. I did notice that a large proportion of the competitors were using transmitter trays, something that I don't see a lot of in the UK.

I would love to give you a full breakdown of each pilot's manoeuvres and machine details, but in truth my language skills did not allow me to work out what was being said over the PA system - and, we don't really have enough space for that. What I can tell you is, you could spot the pilots who had practiced their set manoeuvres, and that nerves were taking their toll on quite a few competitors, who stayed more than one mistake high during that section of the event. I personally picked out three pilots who stood head and shoulders above the rest at this stage: Nacho Somoza, Teodoro Sanchidrian and my new Russian friend (possibly because he could speak English!) Vladimir Golubev. I was impressed that these pilots topped the standings after the first round.

FREESTYLE

After the lunchtime demos, which included a 3D flight by a young Spanish lady (see photo), the competition resumed with the freestyle round. There were a few pilots who decided to fly with music, but the majority preferred the sound of a two-stroke engine instead. Some pushed it too far and failed to complete the full three minutes! Amongst them was my Moscow mate Vladimir, who succumbed to the crowd chants of "lower!" and clipped HIS tail on the ground, losing control in the process. I thought that he'd scored high enough in the first two minutes to achieve a good score, but was surprised to see on the final score sheet that he, along with the other pilots who crashed, were all given a zero for that round. I have to admit that I've not read the full 3DX rules, but I am surprised that a crash results in a zero score as this may make some pilots fly more carefully in future competitions.

Again, Nacho Somoza was head and shoulders above the rest - he won the freestyle round quite convincingly, with Teodoro Sanchidrian coming second. The final results are shown in the adjoining table - note that the scores are 'normalised'. There were 20 competitors in all, but we're just showing the first five placings here. ←



Nacho Somoza moves forward to collect his prize for winning the event. See you at Northampton, Nacho!

Chen Zafarti shows the competitors what they should be aspiring to in one of his demo slots.



FINAL THOUGHTS

All in all, I had a very enjoyable weekend and watched some fabulous flying in Spain. The event ran very smoothly, which was a credit to the organising team. The standard for 3DX has now been set - and set at a very high level. It will be interesting to see if the other competitions can match this level. One final point: The Spanish have also set the standard on 3DX organisation and flying, but they have also laid down the gauntlet as far as spectators go! Let's see if the UK competitions can attract that kind of support.

Richard Budd

>H3D 2007 COMPETITION RESULTS

>>> PILOT	SET MANOEUVRES	FREESTYLE	TOTAL
> NACHO SOMOZA	1000	1000	2000
> TEODORO SANCHIDRIAN	993,2088	883,4951	1876,704
> LUIS A. MIRAVALLES	601,0187	805,8252	1406,844
> FRANCISCO ROPERO	662,1392	708,7379	1370,877
> RAMON MARTINEZ MUOZ	752,1222	553,3981	1305,520