

Exclusive!

AERO GP



Sport of the Future?

GOOD OLD-FASHIONED 'WACKY RACES' OR AN INSPIRED WAY OF PROMOTING AVIATION TO THE MASSES? STEVE BRIDGEWATER WAS INVITED TO SLOVENIA TO DISCOVER IF AERO GP REALLY COULD BECOME THE NEXT MAJOR MOTOR SPORT TO REACH YOUR TV SET.

I imagine the scene, six aircraft racing around a circuit as low as 15ft, wingtip to wingtip," Jeff Zaltman enthused when we met earlier this year. "Oh and did I mention that the course is a figure of eight - with a crossover in the middle?" This was one sport I just had to see for myself!

Jeff is an American-born private pilot who now calls London his home. Formerly the Head of Mergers and Acquisitions for the Ford Motor Company in Europe, he recently gave up life in the city to develop and promote 'Aero GP'.

"I first thought about this in 2000 when I began to wonder why there is so little aviation sport on TV," Jeff told me. "I realised that if we take aerobatics competitions, for instance, which are arguably the pinnacle of motorised aviation sport, they simply do not film well for television and can become repetitive to the 'average Joe' who doesn't understand the intricacies and skill involved. So my idea was to put two aeroplanes in the air - but we needed to make it competitive. Then it occurred to me - the most competitive 'aerobatic' activity in the world - Air

Combat! Then I brought barnstorming and bombing into my concept to help offer viewers more impact."

By 2001 Jeff's idea had grown to include a new format of air racing which he decided seemed the natural way for Aero GP to bridge the gap between aviation and mainstream sports audiences.

"Europe is lagging way behind America in terms of air racing, so we needed to catch up a bit," he says. "Better still, through Aero GP Europe is even going to overtake them, with the event being the first and only true worldwide airborne motor sports league!"

THE CONCEPT

The idea of Aero GP is to create a worldwide series of competitions, not unlike Formula One motor racing, and in order to do this a set of race rules is required. "We try to keep the rules as simple as possible so that the public can follow the event," said Jeff. "However, behind the scenes there are, of course, numerous rules that govern the sport in great detail."

The air race portion of the day's

activities consists of all participating aircraft racing each other simultaneously in a tight 3.5km figure-eight crossover pattern around 40ft-tall pylons. No pilot can descend lower than 15ft and the winner is the first pilot to cross the finish line after ten laps. "All pilots use the same radio frequency during the race," Jeff said. "This allows the referee to speak to them if necessary, and also allows the pilots to 'trash-talk' the opposition!"

The race begins from a standing-start position on the runway, all aircraft taking off together spaced at short intervals determined by a qualifying round. The circuit is made up of two short legs and two long legs (a high level and a low level) forming a figure-eight pattern around four race markers, with an intersection in the middle where aircraft cross in different directions. Points are deducted for aircraft leaving the circuit or cutting inside a race marker and passing must take place on the outside of each turn unless a significant amount of space is available. No over-taking is permitted directly above or below another plane while in the crossover. Championship points are awarded according to finishing position (ten points for first place, eight for second, six for third, four for fourth and two for fifth) and bonus points are awarded for every position gained during the course of the race.

The second segment of Aero GP is the bombing, with aircraft dropping a 'bomb' on a target and flying under or

between obstacles. The bomb weighs 3kg and when accurately dropped within the 20m x 40m target area will trigger a pyrotechnic explosion reaching a height of 20m. There are two heats and the pilot's best drop is scored. The 'bulls-eye' is a vehicle in the centre of the drop zone and the winner is the pilot who drops his bomb nearest that target. Pilots fly one at a time in the reverse order that they finished the air race. One practice run is allowed, and then the pilot must perform the bomb drop and fly through the obstacles. A minimum altitude of 30m is permitted but dive-bombing is allowed! Pilots may also choose to perform more difficult manoeuvres (such as knife-edge or inverted passes) through the obstacles for more points. The points allocation is split the same way as that for the air race.

Finally, pilots fly the air-to-air combat segment of the competition, consisting of a series of single-elimination dogfight heats between two aircraft. Combat takes place within a half-circular 'Battle Zone' with a 750m radius extending from 100ft AGL to 3,300ft AGL.

There are five single-elimination heats - if a pilot loses his fight, he's out of the competition. A kill is classed as three hits in a row and each dogfight lasts four minutes or until a kill is made. The winner of the event is simply the pilot who survives all the battles.

Each heat begins with two aircraft

entering the Battle Zone from opposite directions at an altitude of 100ft, then turning into the centre of the zone trying to gain the best position. Aircraft may only leave the Battle Zone for flight safety reasons. When a hit is made, smoke is released from the target aircraft. Once again, the championship points scored are the same for as the air race but extra points can be awarded for breaking free of an opponent mid-fight.

"At this early stage in the concept, these rules are a living, growing entity that will continue to develop throughout this year in anticipation of next year's full season," emphasised Jeff. "By 2006 we will have the rules pinned down precisely."

A good example of how these rules changed over the first race weekend came about when it became apparent that the Sukhoi Su-29's fuel capacity meant it would be impossible for it to complete the ten laps at the 100% power setting required to race competitively. The answer was simple - reduce the race to eight laps, but this was very much a last-minute change, agreed in the race de-brief during Saturday's practice.

"Throughout the gestation period of Aero GP I have relied heavily on the input, advice and expertise of a number of people," Jeff explained. "I'm just the ring-leader, and I couldn't have done it all by myself. All of the Aero GP pilots involved have also contributed significantly to the shaping of the



Pilots and organisers have extensive briefings and debriefings before, during and after every event, whether in training or competing





sport. Mark Jefferies, in particular, has been a bastion of information and advice for me along the way - he has been contributing to this project for almost two years now. I also depend heavily on my network of contacts in the television, production and finance industries."

INAUGURAL OUTING

All this planning is well and good, but as my dear mother always says, the proof of the pudding is very much in the eating. So it was, on May 21-22 that the Aero GP team moved into Maribor Airport in northeastern Slovenia for the inaugural race weekend.

Maribor is a large airfield, with a limited amount of scheduled airline traffic, but for the race weekend the field was handed over to the Aero GP team. With a beautiful mountainous backdrop, Maribor is a stunning location for an event such as this but I was curious as to why Jeff had chosen Slovenia as host nation for the first race.

"We had considered other locations, but found that while most were interested, it would take a long time for people to take action," he told me. "Slovenia proved to be a very progressive, modern and supportive place to hold the event. Their Civil Aviation Authority also contributed greatly to the development of the competition, while still ensuring the necessary level of safety. The Slovenian CAA was very innovative and I think they set a good example to follow. I also was thrilled with the level of government support for this event. Slovenia saw this as a chance to generate tourism revenues. Everyone was behind it - we had members of Parliament, aviation authorities, municipal councils, the Ministry of Defence and the Slovenian Tourist Board all behind us 100% It proved that Aero GP can offer a great promotion and marketing opportunity to future host countries."

Sadly, one of the participating pilots had to pull out at the last minute, leav-

ing meaning five pilots available to race, but those five represented the pinnacle of aerial prowess. Joining Mark Jefferies was fellow 'Brit' Andy Bickmore, along with Hungarian Zoltan Veres, Sweden's Gabor Varga and Slovenia's Peter Podlunsek.

A local radio DJ kept the crowd occupied before activities started, but they didn't have to wait long for action as shortly after noon the five aircraft burst into life and moved out onto the runway. Taking off in stream, the Laser 200, Sukhoi Su-29, Yak-55 and two Extra 300s soon rounded the first pylon like a swarm of angry bees, their engines rumbling and propellers rasping as they bit into the air at their high power settings. Reaching just 15ft AGL as they levelled out onto the first straight, the machines were a blur as they passed in front of the crowd before pulling up and around the next turn. Over the next few laps, the pack gradually started to spread out, swapping the lead many times and jostling for position throughout.

It was evident that this was 'real' racing - there were no 'team orders', no choreography, just pure adrenaline-fuelled racing. The crowd cheered every time one aircraft overtook another, gasped as they dived for the ground on the low legs, and winced at the 'G' forces being pulled by the pilots as they hauled



their steeds around the tight pylon turns.

Coming into the last few laps, the two Extra pilots extended their lead slightly, while Mark Jefferies in his Laser fended off the Yak and the Sukhoi. In lap eight, the final lap, Andy Bickmore made one final move on Gabor to secure fourth position, but in doing so



allowed Mark to edge away and guarantee third. As the chequered flag was raised, the aircraft whistled past, with Zoltan taking gold, followed by Peter in second and Mark in third - the 'flat'-engined brigade had beaten the 'radicals' this time!

A QUESTION OF IMAGE

Taxiing in, the pilots were greeted with cheers and whistles from a now adoring crowd. The TV cameras had recorded every second of

FAR LEFT With a beautiful and mountainous backdrop, Maribor airfield in Slovenia is a stunning location for an event such as Aero GP. Slovenia also proved to be a very progressive, modern and supportive place to hold the event, with the resident CAA contributing greatly to the development of the competition. (ALL KEY - STEVE FLETCHER)

LEFT Horsepower moves into position behind Shooter in the dogfight section of Aero GP - the radial-powered Sukhoi and Yak certainly seemed to have the edge in the combat sections.

ABOVE The inaugural Aero GP event attracted its fair share of sponsors, including Microsoft, National Car Rental and even Playboy. The Playboy 'Playmates' were a particular highlight, not least with the pilots!

LEFT Wingtip to wingtip - it was evident that this was 'real' racing - there were no 'team orders', no choreography, just pure adrenaline-fuelled racing.

RIGHT Bomb Gone! The second segment of Aero GP was the bombing, with aircraft dropping a 3kg 'bomb' on a target and flying under or between obstacles. Zoltan Veres opts for a straight and level launch technique.



ABOVE Most competitors modified their aircraft to drop the bomb from a release mechanism beneath the fuselage.

ABOVE RIGHT Accurately dropped within the 20m x 40m target area, a bomb will trigger a pyrotechnic explosion reaching a height of 20m. The 'bulls-eye' is a vehicle in the centre of the drop zone and the winner is the pilot who drops his bomb nearest that target.

RIGHT Having dropped his bomb, Gabor Varga makes a pass through the 'gate' inverted, at low level, and with smoke billowing. Bonus points are awarded according to the difficulty of the manoeuvre flown through the gate.

the race and continued to roll as the pilots climbed from their aircraft. In common with so many other sports, it is vital for each member of the public to empathise with a chosen pilot - each one must have a personality, must be loved or loathed, and have that 'something' that raises him above the others. Ultimately there are also plans to run on-line betting on future races via the Aero GP website at www.Aero-GP.com and this pilot popularity will have even more importance.

This is something that Aero GP is well aware of, and consequently each pilot has a nickname, an 'alter ego' and an image to portray. Zoltan is the *Red Phantom*, Peter becomes *Maximum G* when he takes the air for Aero GP, Gabor takes on the persona of *The Wild One*, while Andy's tag line is *Horsepower* and Mark becomes *Shooter*. The commentator makes a point of informing the spectators that that *Shooter* built the Laser himself - thus adding to his mystique, while *The*

Wild One, who flies in 'flip-flop' sandals, tie-die T-shirt and a pony-tail, ensures that the oil streaks on his Yak (dubbed the *Greasy Goose*) go unwashed to add to his image. Conversely *Horsepower*, in his dashing flying suit and expensive-looking Sukhoi, cuts an image not unlike Peter Perfect from the *Wacky Races*.

In fact, this widely-differing bunch of aviators seem to be a modern-day bunch of Wacky Racers - all that is lacking is Penelope Pittstop and Dick Dastardly - though with more pilots expected to join the series in 2006, there is always time...

BOMBS & COMBAT

After a short break it was time for the pilots to take to the Slovenian skies once again, this time to test their target bombing skills. Each had differing theories on how best to aim the 'bomb.' Some, such as Zoltan, considered a straight and level launch to be the most accurate, whereas Gabor opted to drop his from the bottom of a tight loop. Andy's approach was novel, his tactic being to launch at the top of a loop with the bomb flying upwards for



a short time before gravity took over and returned it to the ground - somewhere near the target! Mark, suffering a handicap through not being able to modify his aircraft with the release mechanism, had to resort to 'lobbing' his bomb from the cockpit - but despite this he still chose the most spectacular launch method. Passing over the aiming point, he would pull 4G into the vertical, reaching 1,300ft at the apex before stall-turning and dive-bombing



the target! Yet again Zoltan won this round, earning 12 points and repeating his earlier performance in the air race. Peter came second, Gabor got third position on this occasion while Mark's unique method earned him fourth. Andy, having 'successfully' missed the target area completely - all of his bombs failed to score - came in fifth, though he earned a lot of fans with his special technique! The final 'act' of the day was the combat, and while this was slightly

complex to watch from the ground the commentator kept the crowd informed of who was shooting down who - and more importantly, why! As the commentary was in Slovenian I have to admit to struggling to grasp this element of the day's activities, although it was evident to everyone that Gabor's slow flying and amazing turning capabilities in the Yak meant he was unstoppable. He wiped the floor with all his opponents, earning himself eleven points, first place and the title of 'Deadliest Dogfighter'.

Interestingly, Andy and his Sukhoi came home in second place in this competition. The high drag, radial-engined Russian aircraft may not have the upper hand in the air racing, but when it comes to the tight turning and slow flying which gives the upper hand in aerial combat it certainly seems to be the 'tool of choice'.

While the dogfighting is currently judged from the ground, Jeff told me that he was in Research and Development negotiations with "major well-known technology companies" to help develop systems and technologies to support and enhance this. "For instance, we have looked at a number of conventional methods for determining hits such as lasers, infra-red, radio transponders and other means, but there are huge flaws in those technologies; so we think we've found the right solution using virtual reality and flight simulation environments combined with real-world integration systems that will make the dogfighting as real





as anything that's ever happened in real warfare. We are also building interactive gaming opportunities into the sport."

TARGET AUDIENCE

It is often said that airshows are second largest spectator event in the UK (second only to attending football matches) so with aviation-loving audiences already catered for by the countless events taking place each summer is there really a demand for something new? Well, quite frankly, yes. I've gone on record on a number of occasions within the pages of this magazine to bemoan the lack of originality at air events. I am a great believer that air events are one of our richest resources from which to recruit the next generation of pilots - military, civilian or private - yet year on year the public is offered the same range of 'acts' and aircraft. The organisers of a few smaller events are going out of their way to offer the public something different, and I commend them for that, but so far nobody has found a winning formula for drawing in the general public en masse, time after time, year after year. Aviation as a whole needs to find a way of reaching people who have never previously recognised that they are interested in aircraft - those individuals will form the future of our sport and industry and they are vital to its ongoing success.

As we sat sipping a cold Slovenian beer at Maribor after the Saturday practice session, it became apparent that Jeff shared my strong views on this matter. "It's no secret or surprise that most people at some level have a love of aviation, whether they realise it or not, but at the moment airshows are the only outlet for these people to get their fix," he said. By offering event organisers a thrill-packed afternoon of racing, bombing and combat, Aero GP will, hopefully, allow airshows to evolve and become even more appealing to the masses. But Jeff wants to take Aero GP even further and is negotiat-

ing TV broadcast rights for the entire race series.

"While we see a huge potential for Aero GP as a spectator sport, we are developing the series with a view to take television by storm!" he told me. "There is little or no exposure for aviation sport anywhere, especially on TV - but look at all the other sports that make it to television. Why not aviation? We have a whole third dimension to ourselves! I want to get it out there and develop it - there's a hunger out there for formalised airshows on TV and Aero GP is going to feed it and do our part to develop aviation. The historical - and present - problem with aviation sports is that they simply don't translate well through the camera, but we have developed new techniques in conjunction with our new format that should resolve those issues. Worldwide television is the way to go if we really want to develop aviation sport and Aero GP."



LEFT The entire event in Slovenia was filmed both from the ground and from this MD500 helicopter for eventual release on TV and DVD. Television coverage will play a major role in the future of Aero GP.

It is perhaps inevitable that Aero GP will be likened to the increasingly familiar Red Bull Air Races and the Reno Air Races in Nevada, which Jeff acknowledges are both "fun to watch."

"Red Bull are making an effort to improve upon traditional airshows, too," he added. "They took traditional aerobatics which we see in competitions everywhere, brought it low to the ground and added a timing element to it...this is an interesting new twist to an old sport. But what Aero GP does is to actually revolutionise air racing and to innovate completely new forms of sport.

"Unlike the Red Bull Air Race, Aero GP pilots all race against each other at the same time on the same circuit. No clock, just a chequered flag!

"Furthermore, unlike what you'd see at the Reno Races our racing circuit is a figure-eight around four pylons, which means our pilots will actually cross paths in the centre of the course - but separated by 100 feet of air! Combine that with the air combat and bomb-dropping events and I think we completely blow away most mainstream sports in terms of competitiveness, adrenaline rush and nerve!"

IS IT SAFE?

Seeing these aircraft cavorting at low level and high speed made me wonder how well such an event would be received here in the UK. While I'm sure the public would love the thrills and spills, I have to question how the CAA would see it.

In Slovenia, Jeff says the CAA was "very supportive, yet they were also very clear that there were certain requirements and limits that we couldn't violate". As it happened, they allowed Aero GP to self-monitor the pilots and later commended the team on the safe and effective way it did this. "It was refreshing to see just how open-minded the Slovenian CAA were to new ideas about how to manage safety - without jeopardising safety!" continued Jeff. "Other larger

LEFT Every aircraft is rigged with a series of cameras to capture footage for the TV production company. It is hoped this footage will eventually be shown on screens within the crowds via a live-link.

LEFT Gabor Varga (a.k.a The Wild One) portrays a relaxed image that captured the audience's imagination in Slovenia. He flies in 'flip-flop' sandals, tie-die T-shirt and a pony-tail, and ensures that the oil streaks on his Yak (dubbed the Greasy Goose) go unwashed to add to his image. He built up a large fan-base during the first race meeting.

RIGHT Zoltan Veres not only won the event outright but also collected medals as 'Fastest Racer' and 'Best Barnstormer.'

FAR RIGHT Public image is important to Aero GP and the pilots frequently 'play up' to their personas for the crowd. Gabor runs away after launching a sarcastic put-down towards Zoltan during a debriefing session.

CAAs unfortunately find it difficult to approach things from new angles and with innovative ideas - some CAAs just stick to the easy, old (and outdated) methods.

"A number of exciting venues in the UK have offered to host an Aero GP event - really fantastic locations that would offer Aero GP, and therefore aviation sports - wonderful exposure and credibility, so we hope that the UK Civil Aviation Authority will work with us collaboratively and in a positive manner to help develop British aviation.

"We have approached the UK CAA with a well-prepared proposal for a UK Aero GP event...and have spent many months discussing the details of the plan but were have not received the go-ahead. We have a great deal of respect for the UK CAA in its mandate to ensure safety in



RIGHT Each pilot has an 'alter ego' within the Aero GP 'circus.' From left to right, Mark Jefferies (Shooter), Andy Bickmore (Horsepower), Zoltan Veres (Red Phantom), Peter Podlunsek (Maximum G) and Gabor Varga (The Wild One) share the podium during the awards ceremony.

the skies, but it takes much longer for the CAA here to adapt and approach new things than it does elsewhere in Europe. On the one hand, that's their cautious and thoughtful strategy - but on the other hand that's also the root of the problem that threatens to stifle British general aviation.

"From a marketing standpoint, we want to create a product that 'appears' dangerous and thrilling, but while there is indeed a distinct element of danger in this and all sports, we are very careful NEVER to compromise safety in exchange for effect or 'TV drama'. Not only are the rules tight and safe but we also have extensive briefings and debriefings before, during and after every event, whether during training or competing."

Ultimately, six major Aero GP events



each year are planned, forming a world series that will culminate in an annual Championship Final. The same pilots will compete throughout the year, much as in Formula One car racing, and at the end of the year, one will win the title of World Champion Flying Ace.

"Before each series there will be qualifying rounds and a series of other criteria that will determine the competition roster for that year," said Jeff. "The field of pilots will be as international as possible and we will also invite local pilots from host countries - but only if they also meet the same requirements that the other competitors must. The pilots who compete in Aero GP are among the best in the world. Most people rate the 'best' pilots in the world by how well they do in aerobatics competitions...that's very limiting, but about the only gauge we had - until Aero GP came along...Our pilots have to be masters in a variety of disciplines and skills which makes them superior all-around pilots and athletes."

So far Jeff has received offers and queries from venues and countries all over the globe wanting to hold a leg of the series. While he doesn't wish to be specific at this point, he did confirm to me that he has about eight solid offers and many more at the 'interested' level. "We're always open to new proposals as well, so we are eager to hear from

more venues and potential host countries," he pointed out.

The event also seems to be attracting its fair share of sponsors - Microsoft, National Car Rental and even Playboy (among others) supported the first race meeting. "We're in the process of seeking sponsors for next year's Aero GP series," Jeff said, "and we're always open to offers! The exposure our sponsors receive should be huge as the TV coverage develops. We even had rock star Bruce Dickinson presenting for the TV show and he will likely be doing some flying at our next event - he, of course, is the lead singer of Iron Maiden and also a commercial airline pilot. A DVD is being produced which explains the background to Aero GP and includes full coverage of the Slovenian event. [Check Today's Pilot for the release date as soon as it is known]

So is this Aero GP malarkey just pie-in-the-sky, or has Jeff Zaltman really found his niche market? Well, aviation certainly needs a firm boot up its tail-end to help promote itself to the masses and I'd like to think Jeff's going to make a success of this exciting project. Certainly, if the professionalism he showed in Slovenia is any gauge you could be seeing Aero GP on Sunday Grandstand before you can say "Wacky Races".



FINAL RESULTS - AERO GP SLOVENIA 2005

Place	Pilot	Race Rank	Race Points	Bombing Rank	Bombing Points	Combat Rank	Combat Points	Total Points
1	Red Phantom	1	10	1	12	3	6	28
2	Maximum G	2	10	2	9	4	4	23
3	The Wild One	5	2	3	7	1	11	20
4	Horsepower	4	5	5	0	2	9	14
5	Shooter	3	6	4	5	5	2	13