

The Sky Is Our Stadium

FAI World Air Games Dubai 2015





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About the FAI

The Fédération Aéronautique Internationale, FAI – The World Air Sports Federation, was founded in 1905. It is a non-governmental and non-profit making international organisation recognised by the IOC with the basic aim of furthering aeronautical and astronautical activities worldwide, ratifying international records and coordinating the organisation of international competitions. After over a century of steady growth, FAI is now an organisation of more than 100 member countries, forming a strong network linking all those who participate in air sports worldwide.

FAI activities include Aerobatics, Aeromodelling, Airships, Amateur-Built and Experimental Aircraft, Balloons, Gliding, Hang Gliding, Helicopters, Manpowered Flying, Microlights, Parachuting, Paragliding, Paramotors, Power Flying and all other Aeronautic and Astronautic sporting activities.

About the FAI World Air Games Dubai 2015

The FAI World Air Games Dubai 2015 was the biggest multi-air sports competition ever organised.

From 1-12 December 2015, 951 athletes from 52 countries competed for the much sought-after title of FAI World Air Games Champion. Eleven sports (and 40 disciplines) were in the competition programme: Aerobatics, Aeromodelling, Aerostats, Amateur-Built Aircraft, General Aviation, Gliding, Microlights, Paramotors, Parachuting, Paragliding and Rotorcraft. Never before were so many athletes from so many air sports given a stage to display their talents.

The Symposium on Medical Challenges in Extreme Air Sports and in Aviation, a side-event at the Games, attracted world-leading health and aviation experts on 4 and 5 December.

The Emirates Aerosports Federation, since being awarded the Games in June 2014, put great effort into making this event an unforgettable success, in close collaboration with FAI and its community of volunteers.

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**“It’s all about training.
Then with a bit of luck
it all works out”**

Tim Alongi, Gold Medal,
Paragliding Aerobatics

▼ ON TOP OF THE WORLD

The Breitling Wingwalkers soar above the city of Dubai and fly past the Burj Khalifa. At 829.8m it is the tallest building in the world.



President's Foreword



The FAI World Air Games Dubai 2015 will go down in history as a fantastic event. With 951 pilots and competitors from across the world it truly was the biggest multi-sport air sports competition ever held.

From the inspirational opening ceremony to the very last day, the Emirates Aerosports Federation welcomed us with open arms and put on a spectacular show. It was something I and everyone who was there, will never forget.

But perhaps more important than the sheer size and scope of these Games, the lasting memories I will take from them was that they were the friendly Games. It was a chance for pilots of all different nationalities and disciplines to come together and share their stories, to inspire others and to be inspired.

Parachutists learned about Paramotoring, Paramotorists learned from Aerobatic Paraglider pilots, those pilots were in turn inspired by Powered Aerobatics, and so on. Because of the closeness of all the venues it was possible to take in numerous different sports in a day. In short, it was unique.

The photographs in this book reflect that. They tell the story of each discipline, and through that they tell the story of the FAI World Air Games as a whole. It is a good story to tell.

As air sports enthusiasts we all share a common feel and passion for the sky and the air. And although our own discipline, be it Ballooning, Aero Modelling, Gliding or Helicopters, may absorb our attention most of the time, it can only be positive that we share these moments with each other across our sports.

Equally, the chance to break bread and make friends with people from so many different countries was

only positive. For every waking hour we absorbed the passions of our fellow pilots and competitors. It meant we left Dubai renewed and revitalised, with a new understanding of our own sports and disciplines, which we will share with others at home. In this way, the story of the FAI World Air Games Dubai 2015 will be told many times.

I want to salute the work accomplished by the host, the head office, the officials, the members and all the volunteers who spent a tremendous amount of energy and time to make the competition happen. The challenges were great, as was the complexity in terms of logistics, but we pulled it through together. Thank you for your hard work.

Let me say too how grateful I am to our hosts for their hospitality and generosity. The Organising Committee, under the leadership of FAI World Air Games President H.E. Saeed Mohammed Harib, Vice President H.E. Nasser Hmouda Al Neyady and Director H.E. Youssif Hassan Al Hammadi, made sure that everything took place in the best possible conditions. The Games would not have been possible without the passion for air sports shared by His Highness Sheikh Hamdan bin Mohammed bin Rashid al Maktoum, Crown Prince of Dubai and Chairman of the Dubai Sport Council. Thank you your Highness!

It is wonderful to have this book to help us remember the Games, I hope you enjoy it. With the success of the Dubai event, we can now look optimistically at the future of the FAI World Air Games, our flagship event. I already look forward to the next edition!

Dr John Grubbström
FAI President

Flame Ceremony



▲ THE ROAD TO THE GAMES

Preceded by a spectacular airshow above Lake Geneva, representatives of the Emirates Aerospors Federation and the FAI met on 28 May 2015 at the Olympic Museum in Lausanne, Switzerland to mark the ceremonial start of the Games.

Left to right: Majed Albastaki, H.E. Mohamed Yousuf Abdulrahmn, H.E. Yousif Hassan Al Hammadi, Dr John Grubbström, Obaid Salim Saeed Al Za'abi, and H.E. Saeed Mohammed Harib.





▲ SHARED IDEALS

Obaid Salim Saeed Al Za'abi, the UAE's representative to the United Nations Office in Geneva; Dr John Grubbström, FAI President; and H.E. Saeed Mohammed Harib, General Secretary Dubai Sports Council.

► AT THE HEART OF IT

Dr John Grubbström, a balloon pilot himself, and representatives of the UAE, the Emirates Aerospors Federation and the FAI.





Opening Ceremony





بطولة العالم للرياضات الجوية

WORLD AIR GAMES

الإمارات العربية المتحدة
2015 United Arab Emirates



◀ THE GAMES BEGIN

The FAI World Air Games Dubai 2015 officially began with a spectacular opening ceremony on the evening of Thursday 3 December. Some 3,000 pilots, competitors, team mates and spectators packed out the specially built arena for an awe-inspiring sound-and-light show.



▲ MEETING OF MINDS

The musical ceremony mixed the new with the old, presenting a fascinating insight into the history, culture and ambition of this unique location. Representatives and competitors from more than 50 countries were in attendance, as was guest of honour, H.H. Sheikh Mansoor bin Mohammed bin Rashid Al Maktoum.

◀ LASER LIGHT

Set against the dramatic backdrop of the city of Dubai, the Games couldn't have got off to a better start. Joao Franciso, who came from Portugal to compete in the Air Navigation Race, was blown away: "On a scale of 1 to 10? I give it 20!" he said.

▼ON TOP OF THE WORLD

The crowd were wowed with an extravaganza of dancing, zip-line performances and fireworks. Dropping in on the open-air stage, performers dressed as skydivers flew over the crowd suspended on wires, taking the audience on a theatrical flight over glorious Dubai.





▲>SOUND AND LIGHT

It didn't stop. Paramotor pilots on wires skimmed above the audience while skydivers took to the stage in a choreographed routine. The message was clear: Welcome to Dubai.

► FIREWORKS AND FRIENDSHIP

The Opening Ceremony set the scene for what was to come. As fireworks lit up the sky H.E. Yousif Hassan Al Hammadi, Director of the FAI World Air Games, told the Games that he hoped they would bring people from around the world together in a spirit of peace.



► THE FLAME UNITES

FAI President Dr John Grubbström, centre, said that he thought the ceremony was "unforgettable". In his address to the crowd on the 40-metre screen he wished all the competitors a safe, fun and enjoyable time.

Heart of the Games





◀SMOKING!

Al Fursan, The Knights in English, is the aerobatics demonstration team of the United Arab Emirates Air Force. It was formed in 2010 with seven Italian-built Aermacchi MB-339NAT jet aircraft. They wowed the crowds each time they flew.



▲ROYAL VISIT

His Highness Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates, and Emir of Dubai, attended the World Air Games on 6 December. He met with FAI President Dr John Grubbström, who extended thanks and appreciation to Sheikh Mohammed for his support of the Games.

►CLOCKWISE, FROM TOP LEFT

H.E. Nasr Al Neyadi, Chairman of the UAE Air Sports Federation and Vice Chairman of the Organising Committee.

H.E. Yousif Hassan Al Hammadi, Director of the World Air Games.

H.E. Saeed Mohammed Harib, President of the FAI World Air Games 2015 and FAI President Dr John Grubbström. At a gala dinner for competitors and pilots held Saturday 5 December at the Jumeirah Beach Hotel, Dubai.

◀SMILE FOR THE CAMERA

The World Air Games camel mascot finds a new fan.







◀HOLD YOUR BREATH...

Zoltán Veres is one of the most colourful names in aviation today. With 19,000 hours in more than 120 aircraft he is amongst the very few pilots in the world authorised to fly surface-level aerobatics. His shows were breathtaking.



◀ **STARTING YOUNG**

Family day at the World Air Games.

▶ **WINGS OVER DUBAI**

Numerous pilots took to the sky in balloons, paramotors and more for the closing ceremony.

▼ **SUNSET SMOKE**

Microlights and aerobatic planes in formation.







◀EYES ON YOU

The unique, and little bit scary, Titan the Robot performed every day for two weeks during the FAI World Air Games.

▼LIVE TV

The media were at the heart of the action in Dubai.





▲CITY SOARING

Klaus Ohlmann and Tilo Holighaus spent the afternoon of 7 December soaring their two-seat Arcus M in front of the skyscrapers of Dubai. The wind against the buildings produced enough lift to fly for hours.

►STRAIGHT TO FACEBOOK

Capturing the action. The Games were a big hit on social media.





◀ **RED, WHITE AND BLUE**

Flying the flag during the Parachuting medal ceremony.

▶ **SMOKE AND MIRRORS**

Towing the flag of the United Arab Emirates by paramotor.

▼ **BREITLING WINGWALKERS**

The Breitling Wingwalkers are the world's only aerobatic formation wingwalking team. They performed display flights several times.





Aeromodelling Combat Model Aircraft



▲ LINE CONTROL

F2D Combat Model Aircraft competitors took centre stage at the Games. The heats and final were flown in front of hundreds of spectators at the Palm Dropzone, winning the discipline many new fans. Competitors fly their control-line model planes at 160km/h and aim to slice off sections of rivals' tail streamers to score points. Models are delicate, and with their fiercely spinning propellers emit a high-pitched whir as they fly.

Above, Latvian Aleksandrs Prokofjevs battles it out in the final heat with Jussi Forss (FN). Kneeling is Circle Manager Vernon Hunt.







▲ LAUNCHING

Latvian Aleksandrs Prokofjevs beat Jussi Forss from Finland to win gold in the F2D Combat Model Aircraft competition. The final was held in stiff wind, which added to the challenge.

► REFLECTED GLORY

Both challengers in the final took one slice out of each other's tails, earning 100 points. But Forss lost out on 'ground time' having spent more seconds of the race crashed out. Here, a 'pit-man' helps prepare the model for flying.



Aeromodelling Helicopters Freestyle



▲ 700RPM

It was a tight race for first in the F3N Helicopter Freestyle/Music Style competition. Nine competitors battled it out across two freestyle rounds and three rounds set to music. Pictured is France's David Souriot with helper Frédéric Theurel.

➤ FINE CONTROL

The aim is to synchronise the helicopter's moves with the music. Control is complex and requires a high degree of motor control, coordination, fast reflexes and quick thinking.





▲BEST FOOT FORWARD

World Champion Eric Weber, pictured with helper Tobias Kern, led the field after two rounds, winning the approval of the judges as he moved through the music rounds. "This is the difference between flying to music, and flying with music in the background," said one of the spectators, wowed by the show.



▲FATHER AND SON

Last to perform was well-respected Italian pilot Luca Pescante, left. The Italian loves the music round, and his passion and sparkle showed through in his routine, combining deft skill on the joysticks with humour in his choice of music. In the end it was enough to boost him into third place. He is pictured with Wayne Osbourn, the father and helper of British competitor Duncan Osbourn.

►POWER AND CONTROL

The models are technically sophisticated, with 10kW of power going through the system. Each helicopter is worth around €1,500.

▼TEAM F3N

In the end, Weber won the day. Speaking after his flight, the 26-year-old modeller shared the secret of his success. "Precision is the most important. When you fly to music, you have to hit the marks on the rhythm."



Aeromodelling Indoor Aerobatics



◀DANCING ON AIR

Carlos Andres Leon's (ITA) F3P model captured mid-flight. Indoor Aeromodelling was the first event to take place in Dubai, and one of the most public as it took place on an ice rink inside the enormous Dubai Mall. Thousands of shoppers stopped to watch, entranced by what they were seeing.

►ALL IN THE MIND

Aeromodelling is an exacting discipline. It's very technical to make the models for a start, and controlling them takes precision and care. To make the plane 'dance' each surface has its own control servo. "You need to put a lot of your mind into it," eventual Gold medallist Donatas Pauzuolis said. Pictured is Dennis Heskamp from Germany.





▲ EYE OF JUDGEMENT

Each competitor has two minutes to show off their routine to the judges, who are looking for accuracy and artistic flair among other things. Donatas led the field throughout the competition, and in his final heat, the fourth of four, he knew he had done enough to win. His routine was beautiful, artistic and entertaining all in the same breath. "That's a whopping 84 points for artistic quality, and rightly so," boomed the commentator.

Pictured are, left to right, judges Harry Ellis, Peter Uhlig and Esa Eirola.

► SPACE AGE

From carbon fibre planes to bespoke control panels, every last detail at this level is thought through. Winner Donatas, who has been flying models since he was 11, said he'd spent the previous two months almost "exclusively" training. "Everything paid off."

▼ GO-FASTER STRIPES

The discipline won lots of new fans, including many pilots from around the world. Head of the USA delegation Troy Bradley, who has set a record for crossing the Pacific in a balloon and is a consultant for Disney, was there. "This is all new to me," he said, "but I'm enjoying it very much."

Pictured is silver medallist Alan Goljevscek (SLO).



Semi-Scale Pylon Racing Model Aircraft



▲HEADS UP

Aeromodelling F3T, or Semi-Scale Pylon Racing, sees two teams of two go head-to-head, racing model planes 10 laps around a pre-set course of pylons. The planes can hit speeds of 315km/h, so it's fast and furious. Pictured is Paolo Mucedola with his daughter Alice acting as his 'caller'.

►ON YOUR MARKS...

Before each race the team must present their plane to the judges. Here, the USA's James Allen gets ready to fly while his caller Tony Lopez holds the model aloft for identification.





▲ GET SET...

Callers Alice Mucedola and Linda Dechastel wait for the start of the race.

◀ GO!

And then it's off! From here on, it's all about speed and precision.



▲ OUT FOR THE COUNT

In the finals, a mid-air collision between Italian Paolo Mucedola and the USA's Jim Allen sent the Italian's plane crashing out of the competition. The American subsequently planed out of the race, having done enough to secure bronze and leaving Australian Bruce de Chastel and German Mario Müller scrapping for gold.

► IN THE PINK

Preparation before the competition. Regular maintenance is essential.





▲ AUSTRALIAN GOLD

Despite his faster speed, Müller's plane clipped a pylon, forcing him to do an extra lap, and de Chastel was able to fend off the attempt to lap him and hold on to the lead. Celebrating with a loop-the-loop in the air and a hug with his wife Linda on the ground, de Chastel said that winning gold was the crowning glory of his 40-year aeromodelling career.

Air Navigation Race



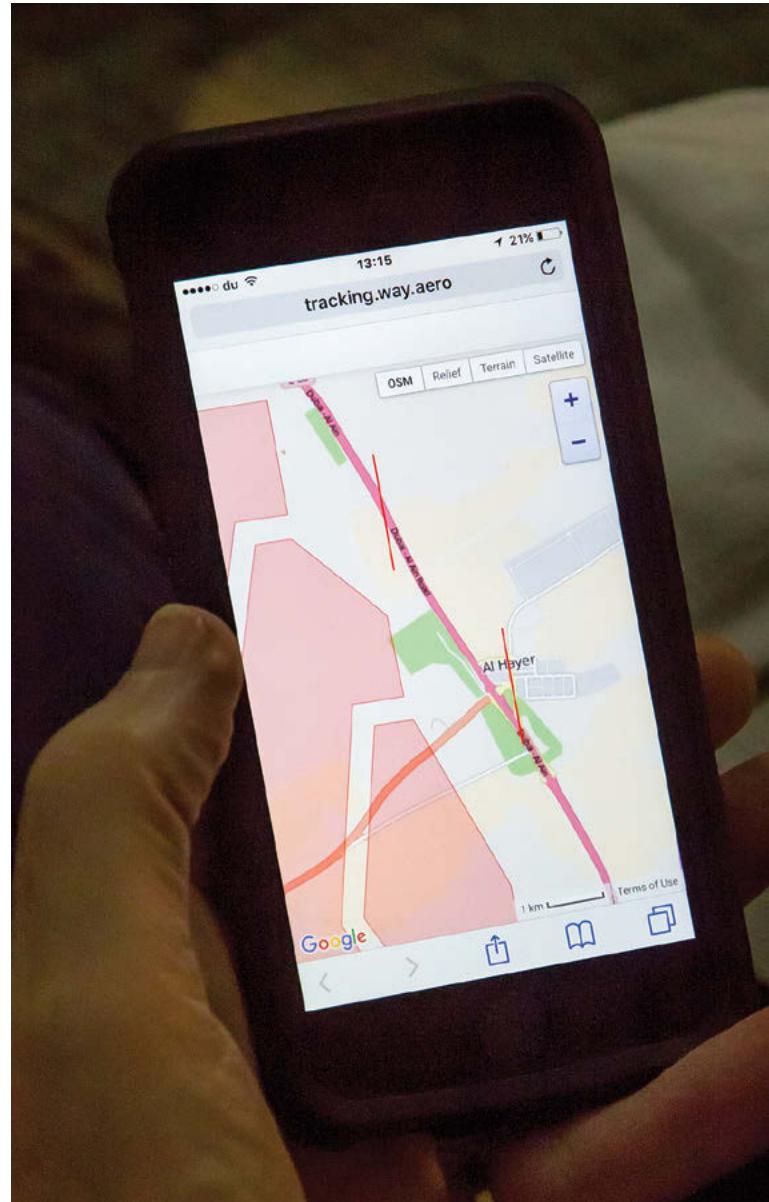
▲ BACK TO BASICS

Fourteen teams competed in this new style of race, designed to test core piloting skills. Pilot and navigator must make their way through a zig-zag course only 360m wide using only map and compass. No GPS allowed!



▼STOP THE CLOCK

Flying without today's usual technology teams must use a stopwatch to time each turn. In the desert, with few key landmarks to help navigation, this was doubly difficult.



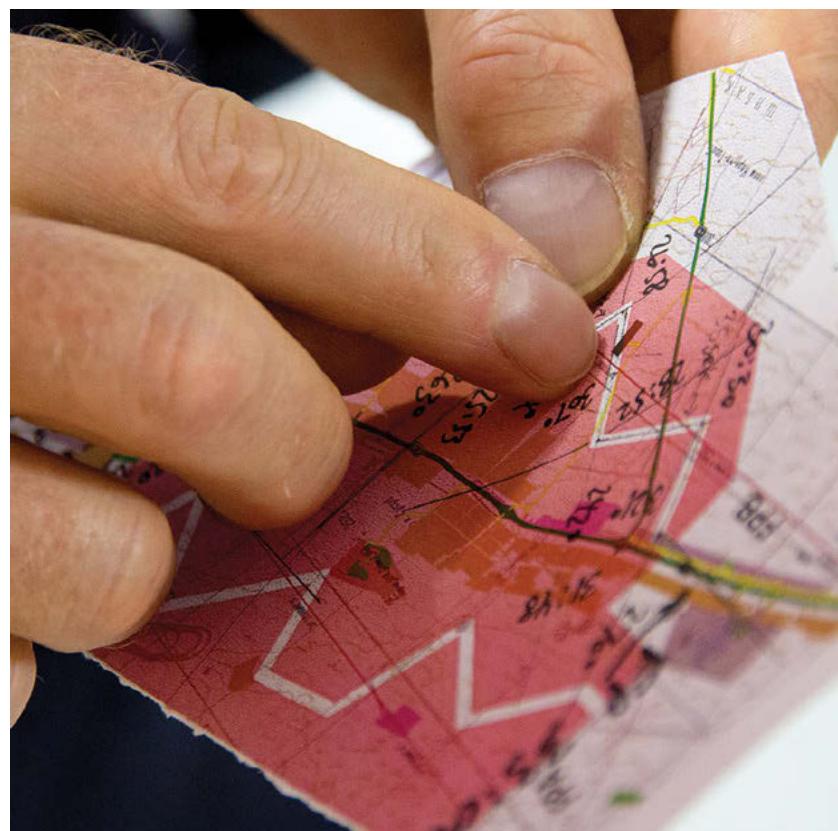


▲ PRE-FLIGHT BRIEFING

Norwegian pilot Kurt Norevik and navigator Petter Strømme won gold. "This task was really difficult," said Norevik about the final. "Two turnpoints were in the middle of nowhere, with no reference points at all."

► THROUGH THE EYE OF A NEEDLE

Miss a gate or go off course and teams pick up penalty points. In the end the winning pair only picked up penalty points in two locations, and hit their start and finish gates with perfect timing.





▲ORIGINAL THINKING

This is the first time this competition format has been used internationally and was widely welcomed by competitors. Spectators could watch via live tracking online. Pictured, Dariusz Lechowski (POL) gets ready to fly.

Aircraft Building



▲ MAN ON A MISSION

Luca Magni was a man on a mission in Dubai. He was building an aircraft against the clock. Next to the spectators' stand at the Palm Dropzone, the Italian turned the contents of three large packing crates into a fully functioning gyrocopter.



▲ TOOLKIT REQUIRED

“The aim is to show people that they can build these kits. It does take a certain level of expertise of course, but it’s quite accessible,” said Magni.

▲ BUSY WEEK

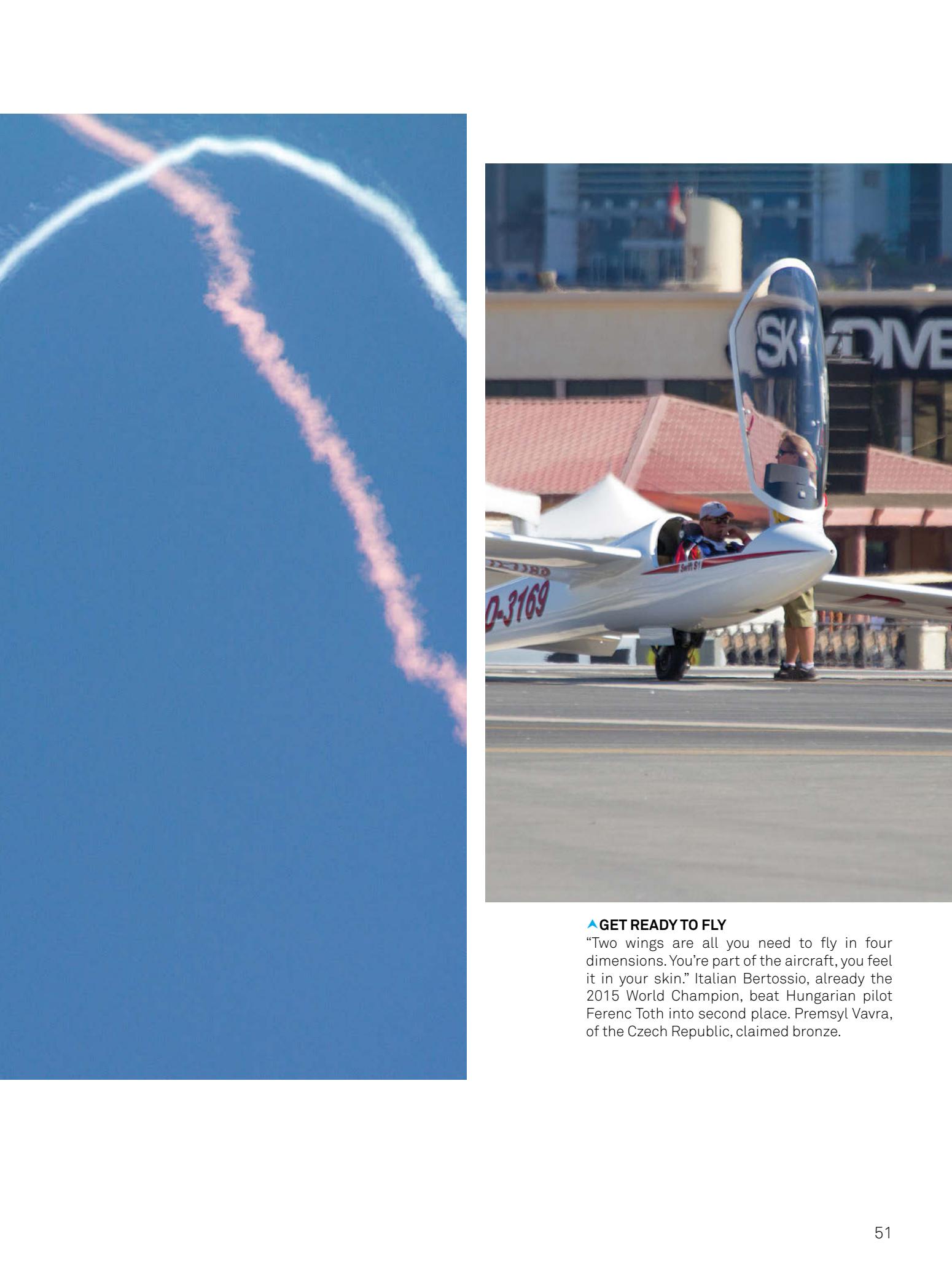
Working with a colleague the aim was to get the aircraft built and flying within four days. Magni was not the only one building his own aircraft. Thomas Hartzdorf was also in Dubai – he built the Airo 1, an aeroplane specially designed in the United Arab Emirates.

Glider Aerobatics



▲ AIMING FOR PERFECTION

"Aerobatics is more than a sport, it's a philosophy for life. It's the pursuit of perfection, and that's a journey that never ends," said gold medal winner Luca Bertossio.



▲GET READY TO FLY

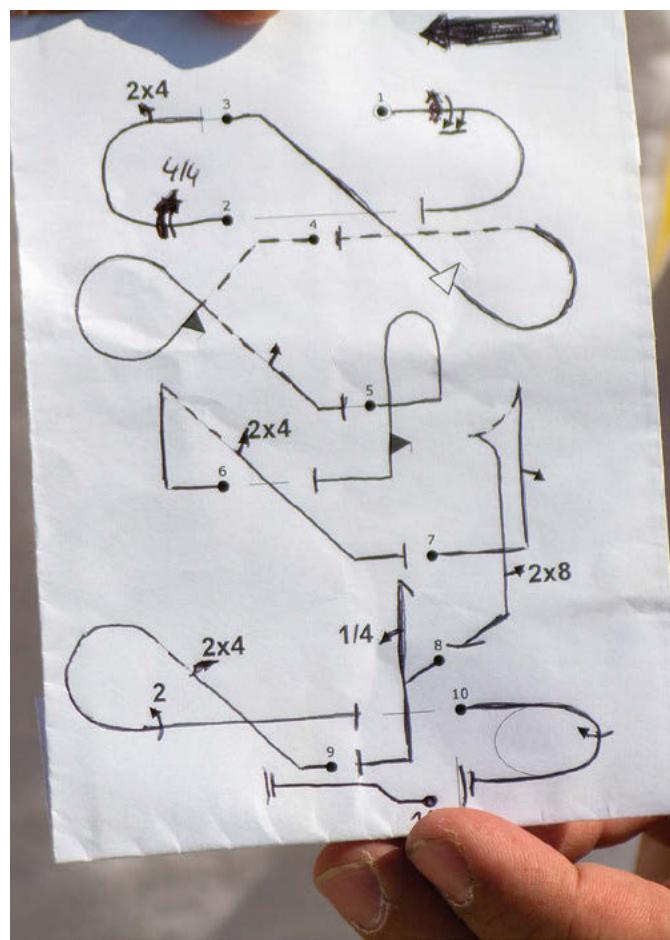
“Two wings are all you need to fly in four dimensions. You’re part of the aircraft, you feel it in your skin.” Italian Bertossio, already the 2015 World Champion, beat Hungarian pilot Ferenc Toth into second place. Premsyl Vavra, of the Czech Republic, claimed bronze.

►ULTIMATE VIEW

“Freestyle is my signature,” said Bertossio, pictured. “It’s a chance to show off your fantasy and imagination. It’s all about the concentration through the effort, G-forces, and speeds. Each heat is only two or three minutes, but your concentration has to be 100% in those two minutes. You prepare for years for those two minutes.”

▼FLIGHT PLAN

Pilots had to impress the judges in three heats. The first round was a free programme, next up was the “unknown programme”, where the judges define which figures have to be flown testing piloting skill. Finally, there was the freestyle round.





Glider Match Racing



▲ HEAD TO HEAD

Glider Match Racing is short-and-sharp glider racing. Two pilots are towed up side-by-side and then released at 1,200m. They then race to a single turnpoint, turn and race back to land. It's fast, low, spectator friendly and all about efficiency in the turn. The winner in Dubai was decided over the best of three flights.



▲ RIVALS IN THE AIR

Long-standing rivals Sebastian Kawa from Poland and Austrian Werner Amann battled it out in the final over the sand dunes of the Desert Dropzone. Both men are famous for their competitive streak and were racing hard from the start, at times with their wings just metres from one another, all the while flying at speeds of 250km/h.



▲TWIST IN THE TAIL

They jockeyed for position just metres apart. And despite Kawa, pictured, dropping as low as he could to try to catch up, he followed Amman over the line after a race that seemed to be decided on the final turn. There was a final twist, though. Neither competitor was sure he'd crossed the final turnpoint.

►STRATEGIC WIN

When the loggers on both planes were checked though, it showed that Amman had turned too early, meaning only Kawa had made a valid flight. Even though he picked up a time penalty for flying too low on the final straight, Kawa claimed overall victory as a result. Famous for his strategic flying, Kawa said, "The biggest advantage was getting the right line."



Microlights Gyrocopters



▲ ON THE SPOT

A radically new approach to gyrocopter competition was launched in Dubai. Instead of tasks such as navigation, the focus was on precision and piloting as pilots had to race around a pylon course and complete accuracy landings.





▲ LINED UP FOR TAKE-OFF

Extra points were available for performing a short take-off and engine-off landing accuracy, as well as for speed, so the competition was a real test of pilot skill.

► IN THE ACTION

The competition format was also designed with spectators in mind – those on the beach in Dubai had an excellent view of all the action as pilots flew low and fast around the courseline.





▲DESERT FLYING

In the final standings, Remco Van Ravenzwaaij from the Netherlands won gold, with Tim Morell from Qatar taking silver and Roy Davis (USA) bronze.

Helicopters

Parallel Precision Tasks



▲ PARALLEL SLALOM

Helicopter competition was all about precision tasks in Dubai, with pilots competing in Parallel Slalom and Parallel Fender tasks over four days. Parallel Slalom sees two helicopters going head-to-head against each other. Each pilot and co-pilot works together to weave their way around a course of gates just one metre wide – all while carrying a full bucket of water below. At the end the pilot must put the bucket on the table, without spilling a drop. Pictured are pilot Hans Wuthrich and crew member Monica Arbenz from Switzerland.



▲DON'T SPILL A DROP

Pilot Thomas Morgenstern and Stefan Seer from Austria work their way through the slalom. The pair won the bronze medal.

◀PARALLEL FENDER

In the Parallel Fender task the crews must guide a boat fender hanging from a rope through a series of gates, dropping it into each of three containers along the way. The pilot can not see the fender and can only respond to instructions given by the co-pilot, which requires exceptional teamwork.



◀▲ IN THE ZONE

Austria's Thomas Morgenstern is no stranger to high level competition. He won three Olympic gold medals in his former career as a ski jumper. Morgenstern started flying helicopters in 2012. "There are some similarities with ski jumping," he said. "To the spectators it doesn't look very physical, but it requires the same psychological strength. You have to stay in the moment, let it run, be focused. Calmness."

► FOCUS

Germany's Martin Eigner and crew member Thorsten Strohmaier.



Hot Air Airships

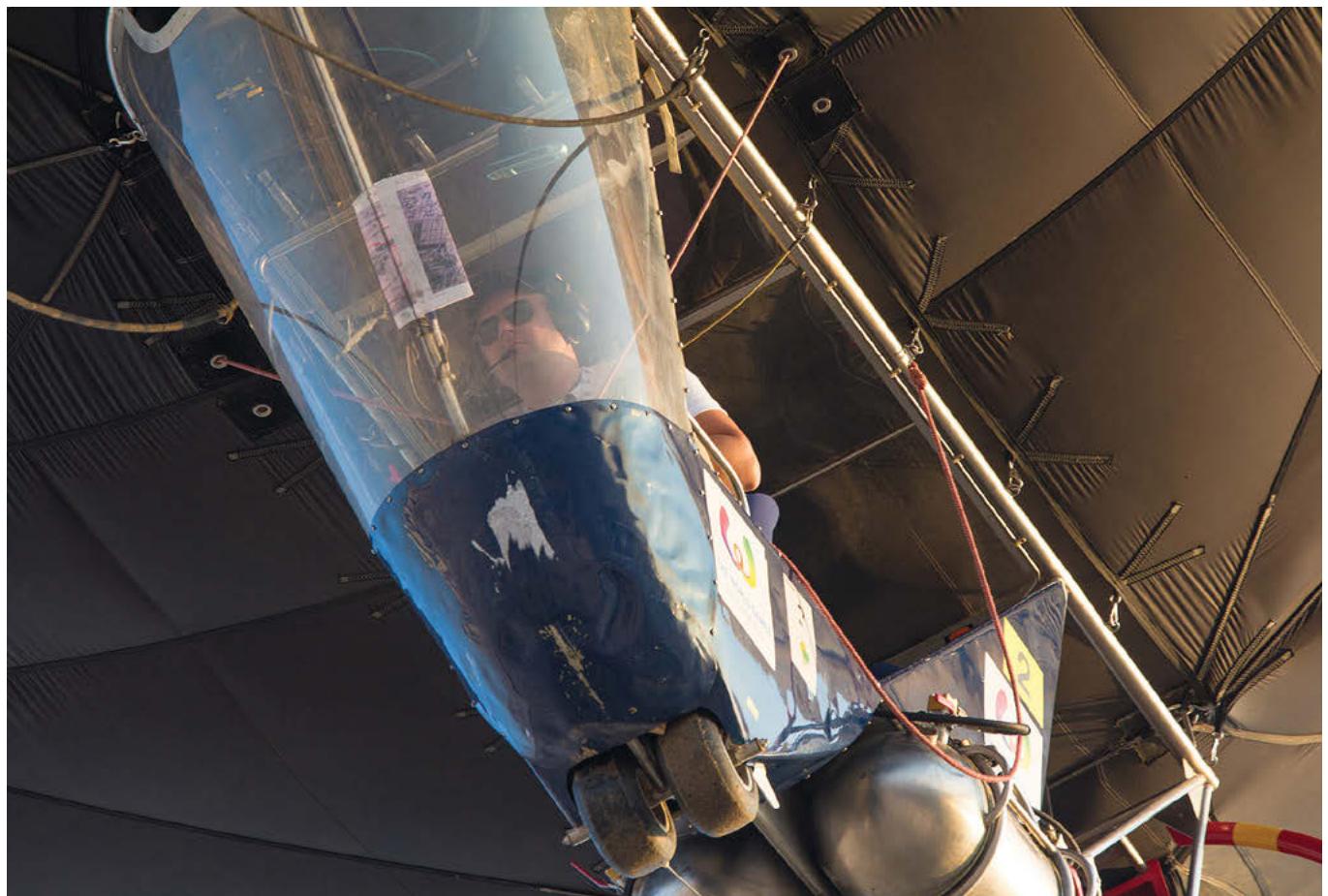


▼CASTLES IN THE AIR

Wojtek Bamberski from Poland (black and yellow) and Rimas Kostouskevicius from Lithuania (white and blue) make their way around the Hot Air Airship slalom course at dawn, as balloons rise above Dubai behind.







▲ PRECISION FLYING

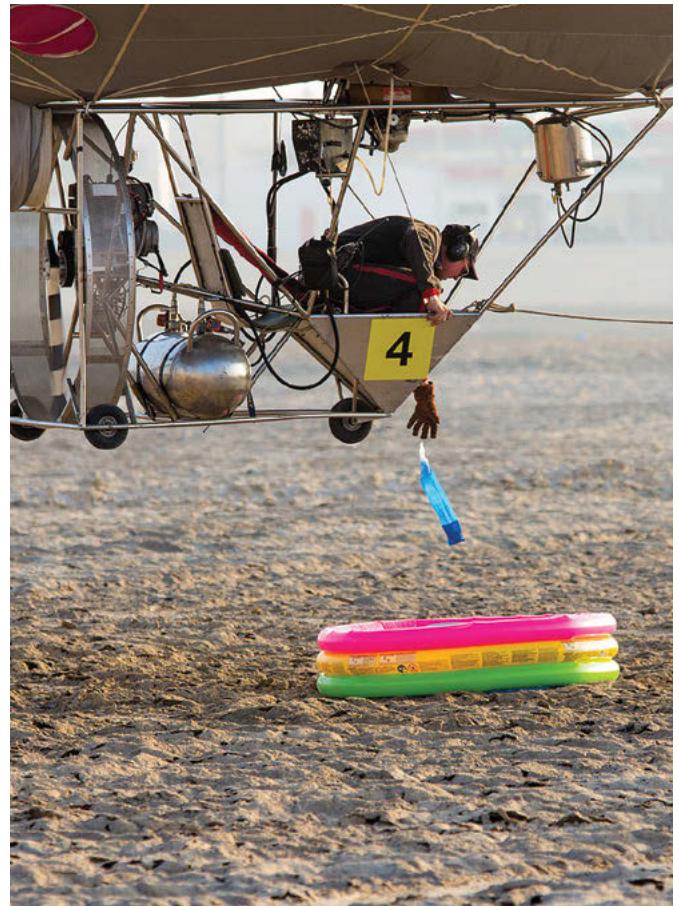
You had to be up early to catch these slow moving giants of the sky in Dubai. Unlike hot air balloons, hot air airships have a propeller, which means they can be flown around slalom and line tasks. They move slowly, but with surprising precision. Left and above, Wojtek Bamberski reaches out from his airship cart to pick up a bottle of water – he has to place it on to another table further down track.

► ON THE MARK

Oscar Lindstrom, Sweden, drops a sandbag marker onto a target in the line task

▼ DAWN START

Rimas Kostouskevicius, Lithuania, ready to take off



Hot Air Balloons



▲ CITY FLYERS

Ballooning in Dubai literally brought traffic to a stop. The sight of dozens of balloons rising above the city each morning was spectacular.







▲ SUNRISE OVER THE CITY

Renee Howard from Team UAE summed it up for all when she said: "You fly with the wind, you navigate with the wind. Ballooning is the simplest form of aviation there is."

◀ FANNING THE FLAMES

While competition pilots fly solo, it takes a team to help get that pilot into the air.



▲ON REFLECTION

Sixty-seven teams competed in the competition, and with two days lost to wind and coastal influences, it wasn't easy. Germany's David Strasmann took home the gold medal. "It was tough because we had this wind changing direction in the afternoon, but we had a good crew, good speed, good wind measurements."

►ON TARGET

At the end of some tasks pilots must fly low and drop a marker onto a target – these pilots hit the mark!

►►BURJ KHALIFA

Flying high above the city of Dubai and the world's tallest building, the 828m Burj Khalifa.





Parachuting Accuracy Landing



▲ READY TO JUMP

Al Matawa Ali Hussein, UAE, contemplates the view from the helicopter on the ride up. More than 500 competitors from six different parachuting disciplines came to Dubai to take part.

➤ HEEL, TOE, HEEL

This competitor is right-footed – in Accuracy the specially shaped heel is used to hit the pad to within a centimetre.

➤➤ ON THE MAT

Hitting the spot on a practice jump.









◀▲ 1,000M BELOW

Al Matawa Ali Hussein exits the helicopter, left, while Tanguy Maheu from France comes in to land, above. Jumping from 1,000m competitors must hit the dead centre of an electronic pad in the dropzone below. Parachutists compete for individual as well as team medals, and in male and female categories.

Parachuting Artistic Events







◀▲ DYNAMIC POSITION

Artistic Events features two disciplines, Freestyle Skydiving and Freeflying. In Freestyle skydivers compete in teams of two: one member performs acrobatic or balletic manoeuvres and the other films their performance. The camerawork counts towards the pair's score. Featured here is France's Freestyle team, Team Flynamic.

▼ STRAIGHT TO THE TOP

Yohann Aby and Will Penny are Team Flynamic. Former World Champions they won gold in Freestyle Skydiving, their third world title in three years. "It is a great honour to be here with the best aviators in the world and to compete in beautiful Dubai," Penny said.



Parachuting Canopy Formation



▲ IN FORMATION

In Canopy Formation parachutists build a formation by flying close to each other and then docking. The competition included two disciplines, 2-Way Sequential and 4-Way Rotations. Here, Team Ilmasirkus from Finland make it look easy.

► FLY BY WIRE

The USA's Canopy Formation 2-Way team.







▲ HOOKING UP IN DUBAI

Germany's Canopy Formation 2-Way Sequential team above Dubai and the Palm Jumeirah.

► ORANGE COUNTY

The USA's Canopy Formation 2-Way team, featuring, left to right, Sharon Shumway, Scott Shumway and Harry Parker.

◀ HEADING DOWNTOWN

Team Ilmasirkus from Finland fly towards the Burj Khalifa, the tallest building in the world, in a heat of the 2-Way Sequential. Jumpers include Teemu Hietakari, Simo Leminen and Jani Lyttinen (video).



Parachuting Canopy Piloting



▲ SWOOPING IN

Canopy Piloting, or Swooping, is spectacular to watch. Parachutists spiral down to the Swooping pond at high speed, then flare and bleed off speed, converting it to distance. There were six disciplines in Canopy Piloting at the Games: Accuracy, Combined, Distance, Freestyle, Speed and Team.

► WATER WINGS

Yuri Garmachov, from Russia, swoops in during the Freestyle round. Competitors hit speeds of up to 160km/h on approach to the water.

►► OASIS IN THE DESERT

Practising at the Skydive Dubai Desert Campus. In Distance parachutists must pass below the top of a pair of 1.5m high entry gates before travelling as far as they can. The world record stands at 169.19m.







▲ SWOOPING POND

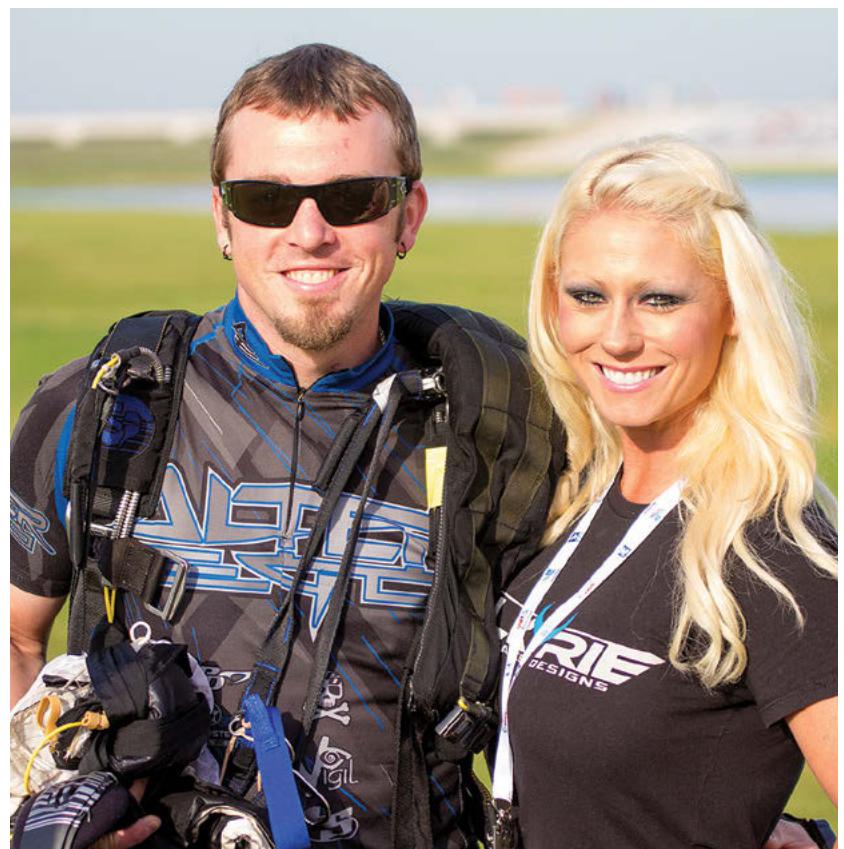
The Swooping Pond at the Palm Dropzone is the largest in the world.

► EXPERIENCE MATTERS

To become an expert Canopy Piloting parachutist, a competent skydiver must typically have at least 1,000 jumps and start a 1-2 year training process to compete. Top level competitors will have been training for four years and have 10,000 jumps. Curt Bartholemew (USA) won gold medals in Accuracy and Combined at the Games. He is pictured with his wife Jeannie, also an expert Canopy Pilot.

►► STYLE POINTS

In Freestyle competition parachutists aim to impress judges with set-piece and improvised moves to win style points from the panel of five judges.





Parachuting Formation Skydiving



▲ HEAD DOWN

Team Belgium during a round of Vertical Formation Skydiving, the famous Burj Al Arab hotel on the coastline below.

► DIRT DIVING

The French Women's 4-Way team go through their routine on the ground

►► PALMS DOWN

Britain's Team Microclim8 in an 8-Way practice jump.









▲MILES HIGH

Team Hayabusa from Belgium above the iconic Palm Jumeirah. Formation Skydiving is the art of building formations or patterns in freefall. The discipline is executed either in the prone position (with belly to earth) or vertically (with either feet or head towards earth), and in teams of either four or eight.

◀FOUR-WAY

Germany's Team Atomix. All teams jump with a photographer, for judging and also for spectators watching below.

Speed Parachuting



▲ GOLD STANDARD

In Speed Skydiving competitors free-fall head-down to accelerate. Exiting the aircraft at 4,000m they are then timed over 1,000m, between 2,700m and 1,700m, before they decelerate and deploy their parachute. They land normally, above. An elite discipline, only 15 competitors were invited to compete in Dubai.

◀ FASTEST MAN IN THE AIR

Switzerland's Marco Wiederkehr won gold. "I hit 533km/h. That's 140 metres a second, or 1,000m in 6.5 seconds." He added, "There are only six people in the world who have gone faster than 500km/h in speed skydiving and they are all here."

► SPEED THRILLS

"Normal speed for a belly-down skydiver is 220km/h," explained Marco. "We change our body position to be as streamlined as possible, like an arrow." Switzerland's Markus Fuchs, right, landing after a jump.



Paragliding Accuracy



▲EYES ON THE PRIZE

Lis Adriana from Indonesia watches closely. The tension built slowly over 12 rounds in Paragliding Accuracy, but by the final, pilots and spectators were on the edge of their seats.

►HIT THE MARK

The ultimate achievement in the discipline is achieving a 'DC' (dead centre), hitting the 2cm diameter centre spot. In this competition, there were only 11 DCs scored in more than 220 flights.

►►TOUCHDOWN

Pilots are towed up and release when they decide. Assessing wind direction and strength is key, as is fine control of the glider. Here, bronze medallist Goran Djurkovic gets close to dead centre.







▲ SAILING IN

The UAE's Helal Al Masouri comes in a little short. Distance from the centre is measured in centimetres from the centre spot, and this is your score.

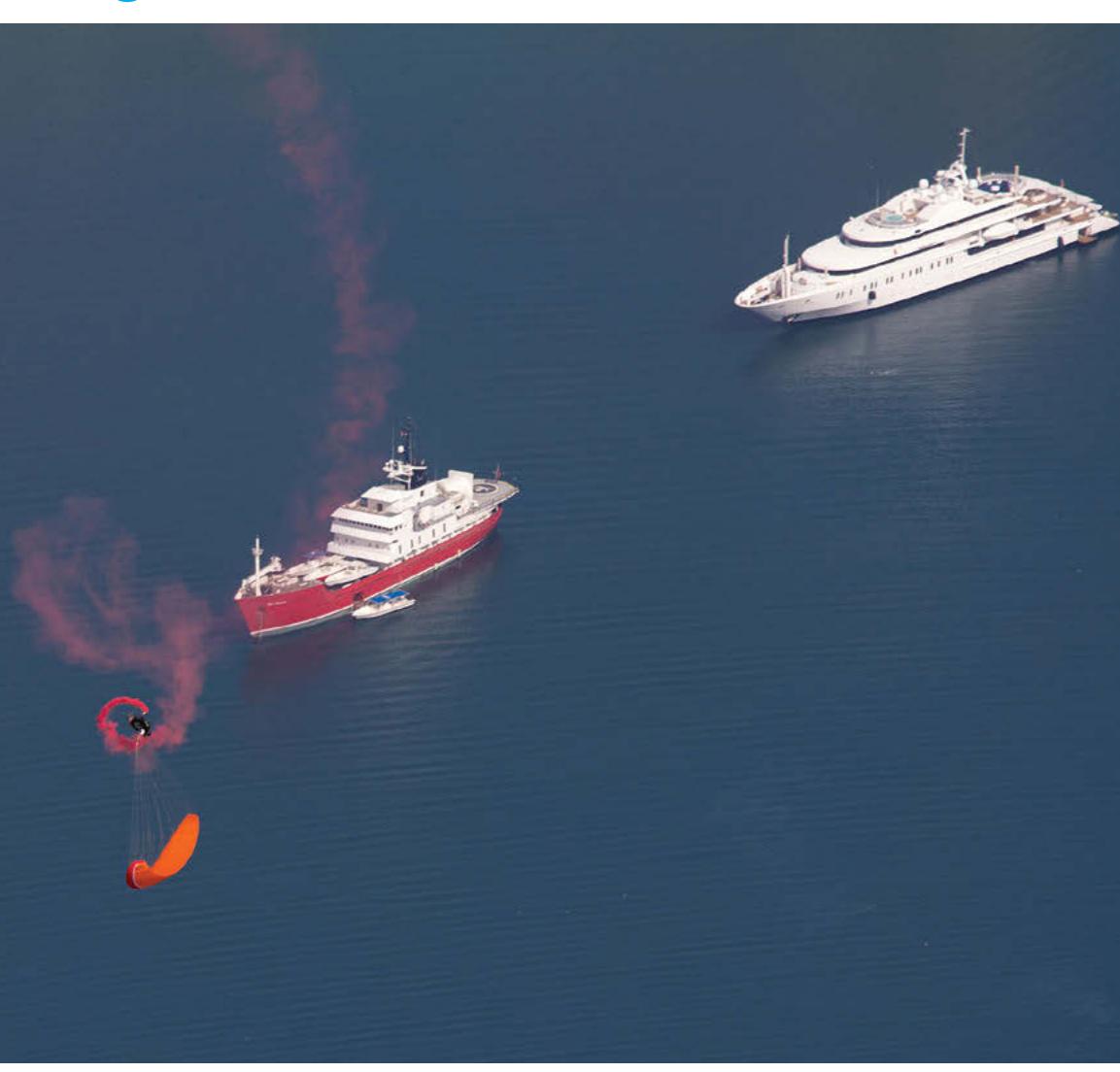
► NAILBITING FINISH

In the final six rounds Matjaz Feraric, pictured, battled it out against George Cotet. A slip by Feraric in the final round saw him tumble out of the rankings, leaving Cotet to grab the gold with an overall score of only 23 over the 12 rounds, including two DCs.





Paragliding Aerobatics



▲ UPSIDE DOWN

Paragliding Aerobatics includes Solo and Synchro disciplines. Pilots execute a pre-planned series of manoeuvres either on their own or with a partner before landing on a raft below. One of the most spectacular tricks is the Infinite Tumble, pictured.

► MIND READERS

Théo de Blic, left, and Horacio Llorens work things out before their run. They won gold in Synchro.

►► SMOKE ON

To be a good Synchro team you need to be in tune with each other, and practise a lot. Both de Blic and Llorens fly more than 500 hours a year.









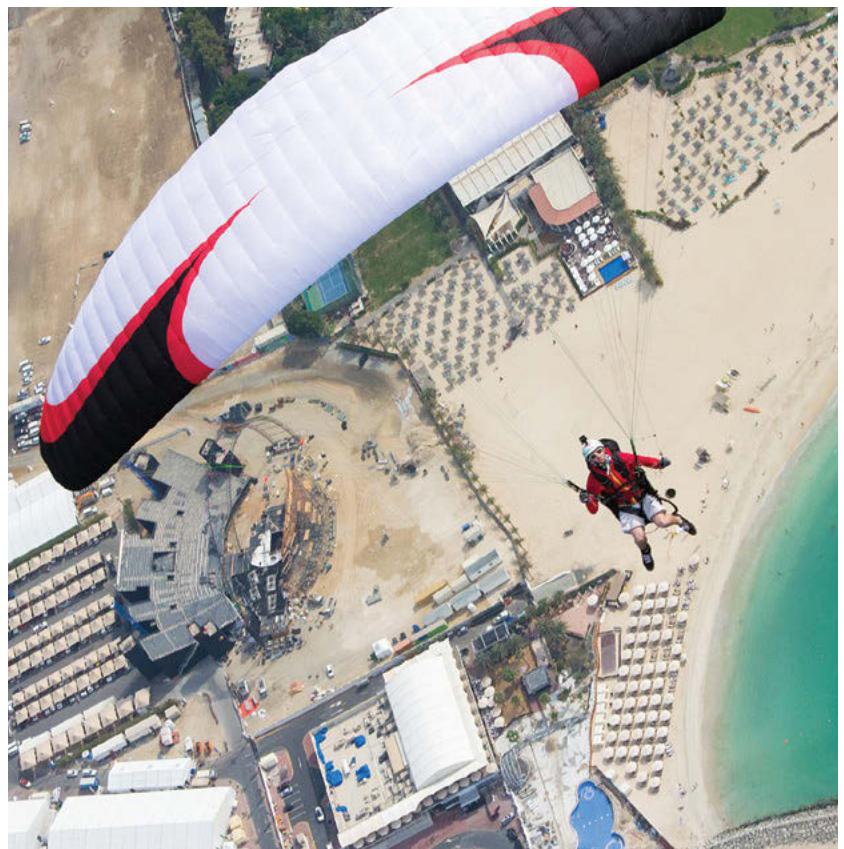


▲>KEEP SMILING!

Pilots in Paragliding Aerobatic competitions usually launch from a hillside, but in Dubai a helicopter was used. The can hanging from pilot Eliot Nochez's harness is smoke.

◀◀D-BAGGING

David Geiser exits the helicopter at the start of his solo aerobatic routine. Below him is construction for the Dubai Eye, a planned 210m Ferris wheel that will be the biggest in the world.



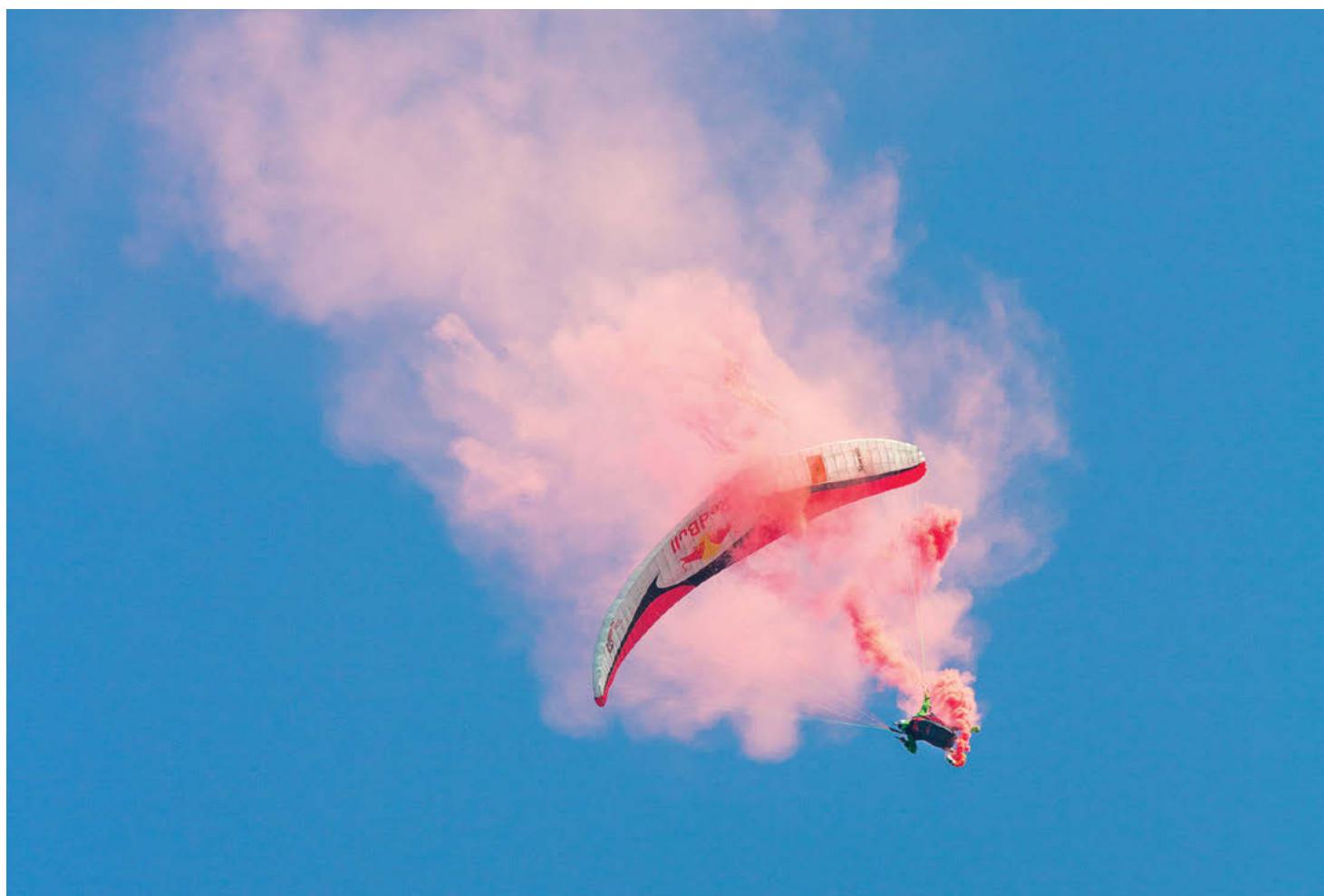


◀ **MIND OF A MASTER**

Gold medal winner Tim Alongi takes a moment before his run.

▼ **EXPLOSIVE ACTION**

Getting caught up in the show smoke is all part of the job.



Paramotors



▲ PARAMOTORING WORLD

There were two elements to the Paramotoring event in Dubai. Slalom saw pilots timed as they completed a circuit around a series of inflatable pylons, while Foot-Dragging saw them flying low over the swooping pond.

► TOO LOW

The aim of Foot-Dragging is to balance power and throttle control so you skim like a swallow over the water. Points are deducted for 'bouncing' and losing contact with the water. Get it wrong and you're in!

►► JUST RIGHT

Marie Liepmann from France gets it spot on







▲ WALKING ON WATER

Nico Aubert from Spain during the final rounds

► PYLON RACING

The pylon racing took place over water. The sport is highly spectator friendly as pilots carve low and fast around each pylon.





Powered Aerobatics



▲ CREME DE LA CREME

Eight so-called 'unlimited pilots', the crème de la crème of the Powered Aerobatics scene, were selected from around the world to compete at the FAI World Air Games.

► AERIAL BATTLE

Their planes, which cost around €400,000 each, were shipped to Dubai specially for the event, and their aerial battle could be seen and heard echoing all along the coast.

►► G-FORCE

Powered Aerobatics pilots perform rolls and dives that put their bodies through positive forces up to nine times the force of gravity. But it's the manoeuvres that create 'negative G-force', driving all the pilots' blood to their brains, that are the most demanding.







▲ DEMANDS OF THE AIR

To perform the prescribed figures in the air, pilots must manage the plane controls while staying oriented to the ground. The mental and physical challenges are so demanding that the four different heats have to be performed on different days. Heats include freestyle, pre-prepared and defined routines.

► AUDE LEMORDANT

"I should go to the gym more often," admitted Breitling sponsored pilot Aude Lemordant, standing by her Extra 330SC as it cooled after her 10-minute competition run. "But really the best training is in the plane. That's where you learn the reflexes to contract your stomach against the G-force."





▲GOLD

France's Olivier Masurel won gold. "When it comes to competing, we all want to come first," he said. "It's a fantastic feeling to win when you're competing against the best pilots in the world."

Microlights Trikes





◀▲ NEW FORMAT

A new type of microlight task was launched at the Games. Pilots had to fly a zig-zag course close to spectators instead of up high and far away. Event director Rob Grimwood said: "It really gives the spectators a great show." Pilots flew a course made up of a series of inflatable pylons in the dunes.



▲ DESERT HEATS

Heats were run at a venue in the desert before pilots moved to the main Palm Dropzone for the finals.

► HOT IN THE CITY

Once there the course was tightened for the final race, encouraging the pilots to fly their crafts right to the edge of their capabilities. "It was a tight competition all the way to the end," said gold medallist David Broom. "It all came down to the final race. I had a six-second lead going into it, but the competition could have been anyone's."





◀▲TEAM GB

David Broom was not the only Brit on the podium – he was followed in the ranking by teammates Paul Dewhurst in second and Rees Keene in third, with the UK's Mark Fowler just missing out on a podium place in fourth. Spaniard Manuel Rey came in fifth.

Venues



▲PALM DROPZONE

Located in the very heart of the city, at the foot of the world famous Palm Jumeirah, the Palm Dropzone is an incredible venue for air sports, offering a runway, swooping pond and acres of wide open space, all set against a unique backdrop – the shimmering skyscrapers of Dubai.





▲ SKYDIVE DUBAI DESERT CAMPUS

Considered one of the best parachute dropzones in the world the Skydive Dubai Desert Campus is a 45-minute drive from Dubai. It can accommodate hundreds of skydivers a day.



Aviation Medicine Symposium



▲ MEDICAL AGENDA

High-adrenaline aerial feats were not the only thing on the agenda at the FAI World Air Games. The event also attracted world-leading health and aviation experts, in Dubai to attend the International Symposium on Air Sport Medicine. More than 100 delegates from around the world were in attendance for the two-day conference, which was part of the Games.

► PILOTS OF THE FUTURE

Dr Melchor Antunano, Director of the Civil Aerospace Medical Institute, gave the inaugural lecture, describing how advances in nanotechnology, genomics, and neurotechnology will influence pilot performance in the future.



► AT THE PODIUM

Dr György Czirják, CEO of Pharma-flight Kft, a research, training and service centre based in Hungary.

▼ HIGH FLYERS

Also present was Dr Thomas Drekonja, flight surgeon and consultant for the Red Bull Air Races, talking about the detailed monitoring programme used to measure the biometrics of pilots performing under high G-forces. Dr Klaus Ohlmann, a glider pilot who holds over 60 world records, and has flown his sailplane up and over Everest, also spoke.



Key Figures

COMPETITION

Sports	11
Medal Events	40
Venues	6

ATHLETES

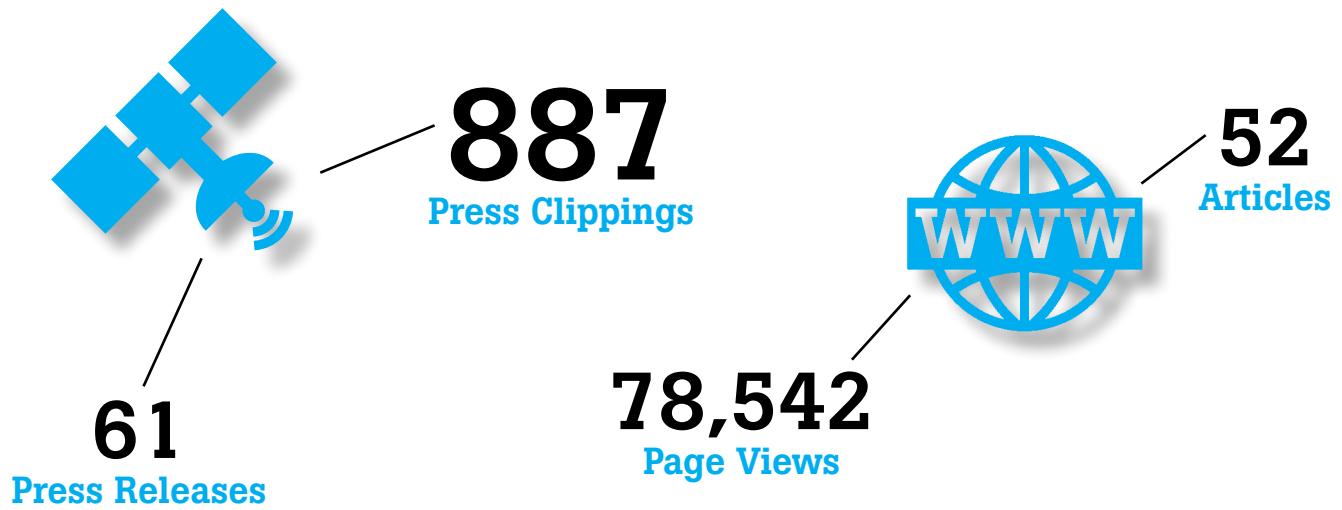
Total	951
Male / Female	837 / 114
Overseas / Domestic	902 / 49
Competing nations	52
Continental reach	6

ATHLETES BY COUNTRY

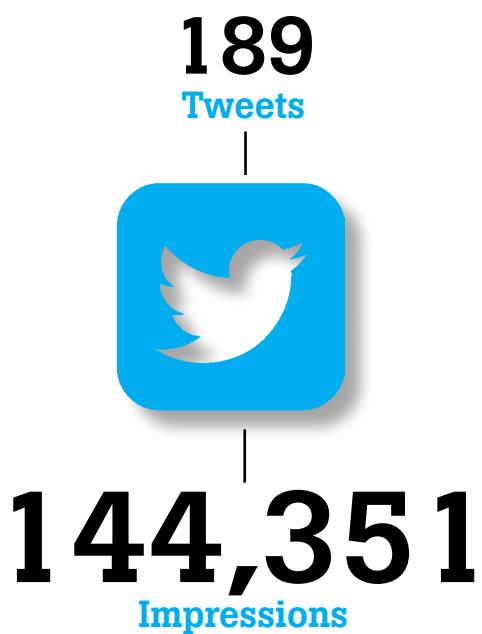
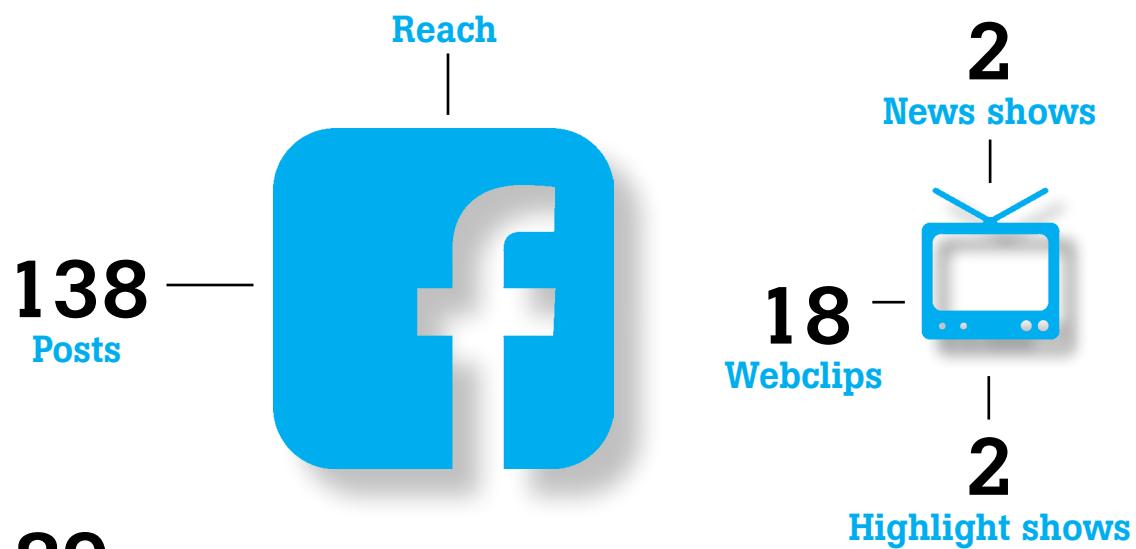
France	104
Great Britain	80
Russia	78
USA	67
UAE	61
Germany	47
Canada	35
Switzerland	27
Austria	26
China	25

ATHLETES BY CONTINENT

Africa	4	0.4%
Asia	117	12.3%
Europe	674	70.9%
North America	104	10.9%
Oceania	25	2.6%
South America	27	2.8%



5,471,375



Medal Winners



▲ HOT AIR BALLOONS

Gold: David Strasmann, GER
Silver: Steven Vlegels, BEL
Bronze: Stefan Zeberli, SUI



▲ HOT AIR AIRSHIPS

Gold: Wojciech Bamberski, POL
Silver: Mikhail Bakanov, RUS
Bronze: Rimas Kostiuskevicius, LTU



▲ AEROMODELLING: HELICOPTERS FREESTYLE

Gold: Eric Weber, GER
Silver: Huan Chen Ko, TPE
Bronze: Luca Pescante, ITA



▲ AEROMODELLING: SEMI-SCALE PYLON-RACING

Gold: Bruce de Chastel, AUS
Silver: Mario Müller, GER
Bronze: James Allen, USA



▲ AEROMODELLING: COMBAT MODEL AIRCRAFT

Gold: Aleksandrs Prokofjevs, LAT
Silver: Jussi Forss, FIN
Bronze: Rudolf Königshofer, AUT



▲ AEROMODELLING: INDOOR AEROBATICS

Gold: Donatas Pauzuolis, LTU
Silver: Alan Goljevscek, SLO
Bronze: Devin McGrath, USA



▲ GLIDING MATCH RACING

Gold: Sebastian Kawa, POL
Silver: Werner Amann, AUT
Bronze: Tilo Holighaus, GER



▲ HELICOPTERS PARALLEL PRECISION TASKS

Gold: Alexander Zhuperin & Nikolay Burov, RUS
Silver: Marcin Szamborski & Michal Szamborski, POL
Bronze: Thomas Morgenstern & Stefan Seer, AUT



▲ MICROLIGHTS TRIKES

Gold: David Broom, GBR
Silver: Paul Dewhurst, GBR
Bronze: Keene Rees, GBR



▲ MICROLIGHTS GYROCOPTERS

Gold: Remco Van Ravenzwaaij, NED
Silver: Tim Morell, QAT
Bronze: Roy Davis, USA



▲ PARAMOTORS

Gold: Alexandre Mateos, FRA
Silver: Piotr Ficek, POL
Bronze: Jérémie Penone, FRA



▲ PARACHUTING FORMATION SKYDIVING: EIGHT WAY

Gold: USA
Silver: Russia
Bronze: France

Medal Winners



▲ PARACHUTING FORMATION SKYDIVING: FOUR WAY OPEN

Gold: Belgium

Silver: USA

Bronze: Russia



▲ PARACHUTING FORMATION SKYDIVING: FOUR WAY FEMALE

Gold: USA

Silver: France

Bronze: Canada



▲ PARACHUTING FORMATION SKYDIVING: FOUR WAY VFS

Gold: Canada

Silver: France

Bronze: Belgium



▲ PARACHUTING ARTISTIC EVENTS: FREEFLYING

Gold: Russia

Silver: France

Bronze: Great Britain



▲ PARACHUTING ARTISTIC EVENTS: FREESTYLE SKYDIVING

Gold: France

Silver: Russia

Bronze: USA



▲ PARACHUTING CANOPY FORMATION: FOUR WAY ROTATION

Gold: Russia

Silver: France

Bronze: Belarus



▲ PARACHUTING CANOPY FORMATION: TWO WAY SEQUENTIAL

Gold: France
Silver: Russia
Bronze: Sweden



▲ PARACHUTING ACCURACY LANDING: TEAM MEN

Gold: Russia
Silver: Czech Republic
Bronze: Belarus



▲ PARACHUTING ACCURACY LANDING: TEAM FEMALE

Gold: Russia
Silver: China
Bronze: Belarus



▲ PARACHUTING ACCURACY LANDING: INDIVIDUAL MALE

Gold: Dmitry Mastafanov, RUS
Silver: Anton Gurinovich, BLR
Bronze: Bin Ge, CHN



▲ PARACHUTING ACCURACY LANDING: INDIVIDUAL FEMALE

Gold: YunFei Zhang, CHN
Silver: Deborah Ferrand, FRA
Bronze: Liubov Ekshikeeva, RUS



▲ PARACHUTING ACCURACY LANDING: JUNIOR MEN

Gold: He Yanan, CHN
Silver: Sebastian Graser, AUT
Bronze: Suhail Al Naqbi, UAE

Medal Winners



▲ PARACHUTING ACCURACY LANDING: JUNIOR FEMALE

Gold: Ling Zhang, CHN
Silver: Diana-Andrea Maris, ROU
Bronze: Marya Chornaya, BLR



▲ PARACHUTING CANOPY PILOTING: SPEED

Gold: Nick Batsch, USA
Silver: Curtis Bartholomew, USA
Bronze: Cornelia Mihai, UAE



▲ PARACHUTING CANOPY PILOTING: DISTANCE

Gold: Cornelia Mihai, UAE
Silver: Guillaume Bernier, FRA
Bronze: Pablo Hernandez Moll, ESP



▲ PARACHUTING CANOPY PILOTING: ACCURACY

Gold: Curt Bartholomew, USA
Silver: Christian Weber Jensen, DEN
Bronze: Nick Batsch, USA



▲ PARACHUTING CANOPY PILOTING: NATIONAL TEAM

Gold: USA
Silver: France
Bronze: Denmark



▲ PARACHUTING CANOPY PILOTING: COMBINED

Gold: Curt Bartholomew, USA
Silver: Nick Batsch, USA
Bronze: Cornelia Mihai, UAE



▲ PARACHUTING: CANOPY PILOTING FREESTYLE

Gold: Nick Batsch, USA
Silver: Gage Galle, USA
Bronze: Abdulbari Qubaisi, UAE



▲ PARACHUTING: SPEED SKYDIVING

Gold: Marco Wiederkehr, SUI
Silver: Christian Labhart, SUI
Bronze: Michael Lovemore, GBR



▲ PARAGLIDING AEROBATICS: SOLO

Gold: Tim Alongi, FRA
Silver: Eliot Nochez, FRA
Bronze: Horacio Llorens, ESP



▲ PARAGLIDING AEROBATICS: SYNCRO

Gold: Théo de Blic, FRA & Horacio Llorens, ESP
Silver: Tim Alongi, FRA & Eliot Nochez, FRA
Bronze: David Geiser, SUI & Jérémie Péclard, SUI



▲ PARAGLIDING ACCURACY

Gold: George Cotet, ROU
Silver: Qiang Ma, CHN
Bronze: Goran Djurkovic, SRB



▲ POWERED AEROBATICS

Gold: Olivier Masurel, FRA
Silver: Artur Kielak, POL
Bronze: Rob Holland, USA

Medal Winners



▲ GLIDER AEROBATICS

Gold: Luca Bertossio, ITA
Silver: Ferenc Toth, HUN
Bronze: Premysl Vavra, CZE



▲ AIR NAVIGATION RACE: LANDING ACCURACY

Gold: Frank Eckard & Cally Eckard, RSA
Silver: Astrid Ciesielski & Marcus Ciesielski, GER
Bronze: Pavel Kalugin & Sergey Bykov, RUS



▲ AIR NAVIGATION RACE

Gold: Kurt Norevik & Petter Strømme, NOR
Silver: Boleslaw Radomski & Dariusz Lechowski, POL
Bronze: Toni Farre & Pablo Manuel, ESP



▲ AIR NAVIGATION RACE OVERALL

Gold: Astrid Ciesielski & Marcus Ciesielski, GER
Silver: Boleslaw Radomski & Dariusz Lechowski, POL
Bronze: Frank Eckard & Cally Eckard, RSA



Medal Table

Country	Gold	Silver	Bronze	Total
United States of America	7	4	6	17
France	6	10	2	18
Russia	6	4	3	13
Germany	3	2	1	6
China	3	2	1	6
Poland	2	5	0	7
Switzerland	1	1	3	5
Great Britain	1	1	3	5
Belgium	1	1	1	3
Romania	1	1	0	2
United Arab Emirates	1	0	4	5
Spain	1	0	3	4
Lithuania	1	0	1	2
South Africa	1	0	1	2
Canada	1	0	1	2
Italy	1	0	1	2
Australia	1	0	0	1
Norway	1	0	0	1
Latvia	1	0	0	1
The Netherlands	1	0	0	1
Austria	0	2	2	4
Belarus	0	1	4	5
Denmark	0	1	1	2
Czech Republic	0	1	1	2
Qatar	0	1	0	1
Hungary	0	1	0	1
Slovenia	0	1	0	1
Finland	0	1	0	1
Chinese Taipei	0	1	0	1
Serbia	0	0	1	1
Sweden	0	0	1	1



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In memoriam

To our friend and colleague in the air, Arend van Randen (NED).
Blue skies.

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Venues
Skydive Dubai

Back cover
Team Czech Republic

Cover photograph
Frank Taesler





The Sky is our Stadium

In December 2015 some 951 pilots and competitors came together for two weeks of competition at the FAI World Air Games Dubai 2015. The city and its people welcomed them with open arms.

This book tells the story of those Games. From Speed Skydiving at 500km/h to Glider Match Racing above the desert, each sport and discipline is captured spectacularly. The book also features all the medal winners, bronze, silver and gold.

“A brilliant record of the biggest multi-discipline air sports competition ever held”
Dr John Grubbström, FAI President

