NO LIMITS

By James Temperton
Photography: Aorta

In 1999, Bertrand Piccard flew non-stop around the world in a hot-air balloon. In 2016, he circumnavigated the globe in a plane powered only by sunlight. His aim? To prove that the future of aviation lies with clean technologies.
ON JULY 26, 2016
AT 4:05AM,
A PLANE TOUCHED
DOWN AT AL
BATEEN EXECUTIVE
AIRPORT IN ABU
DHABI. IT CAME IN
SLOWLY, NUDGING
50KPH AS ITS
INSECT-LIKE
FRAME DESCENDED
OUT OF THE
PRE-DAWN SKY
AND EASED ON TO
THE RUNWAY.

The aircraft, called Solar Impulse 2, had flown 42,434km in 558 hours and seven months, becoming the first manned solar-powered plane to circumnavigate the globe. In pilot, Bertrand, more efficient power plant; Jacques found life where he thought to be impossible at the time, forcing governments to stop dumping radioactive waste into the oceans, depth. For Bertrand, the achievements of his family had a profound effect: “That was the type of education I had: scientific exploration to protect the environment.”

The inspiration for Solar Impulse came from one of his own adventures. On March 1, 1999, along with British aeronaut Brian Jones, Picard completed the first successful non-stop balloon circumnavigation of the globe. The journey lasted 10 days, 31 hours and 47 minutes. When the pair took off, they had 3.7 tonnes of liquid propane – they landed with just 40 kilograms. “I was afraid every day that we would run out of fuel,” Picard says. “That’s why I created Solar Impulse. The sky is not the limit, the fuel is the limit.”

Solar Impulse was there to see a new system in the world: we could fly as long as we wanted.
Picard’s belief in clean technologies took off with the Solar Impulse mission: “In the team, it was important to have André explaining how to do the things and me explaining why to do the things,” he says. “Because people need to know how to do it, but they need the motivation, the logic for why they do it.” Then there are the facts: Global

sea levels have risen 17cm in the last decade, double the rate of the last century. Twenty of the warmest years have occurred since 1981 with all of the ten warmest years occurring in the past 12 years. “We are wasting time, we are wasting money with old technologies and we should now work a little bit more and move towards the future.”

There are several sides to Picard: the romantic adventurer, the reasoned diplomat and the passionate communicator. He describes flying Solar Impulse as a “fairytale”. “I loved the take-off,” he says, suddenly excited by the memory, the sensation of the aircraft silently lifting into the skies. “Warp full throttle, you have no noise, no noise, you start to move and you get in the air and then you say: ‘Wow, I’m flying right now for several days, several nights, I make no pollution, I have no feel. Just do something for the first time ever.’ It’s a fantastic moment.”

The landing? Not so much. “When you land you go back in the past. You go back into a world that hurts one million tonnes of oil every hour, you land in a world that is polluting the environment, that leaves incredibly high deficits for the next generation who are never going to be able to pay it back, back into a world where we have violence and wars, and you come from a world of fairytale. And the contrast is really, really hard. It’s really hard. I hate to land.”

Before his announcement struck over, Picard was a psychiatrist. In an industry of engineers, physicists and architects, it offered him an unusual perspective. “I’ve noticed how many people are reluctant to change if they are not in a crisis or if they are not obliged to change,” he says. “The crisis will soon happen if we continue with climate change, but it will be too late.”

The debate around climate change, he continues, has been getting it all wrong. Yes, it is crisis, but it is also a huge opportunity. “This is where we have to work, and here the solutions are clearly in the field of clean technologies. So let’s try now to really push people to change. Show them that it’s in their personal interest to do it.”

Picard is impatient, frustrated by pessimists and those in government and business whose perceived lack of action is blocking solutions to climate change. “He just spent the morning at the Swiss parliament ahead of a vote on the country implementing a so-called green-economy ballot. The proposed law, rejected by two-thirds of Swiss voters, would have required greater resource efficiency in the country. “You cannot imagine how many times I’m saying ‘we have a valid solution’,” Picard says, a visibly disheartened Picard. “They say: ‘Oh, we don’t want any more regulations, Oh, it will be too expensive.’ Oh, it will be too complicated. Oh, we don’t want to do it.”

Look, we have all the solutions, they are profitable, just go for it. It’s an obvious solution.”

Politicians, he continues, entranch themselves in failed ways of thinking. “The president of a country has advisers from the same political party, the same religions and the same geographic region, he is thinking from his own political party, from other religions and from other geographical regions,” he says. “So they would tell me: ‘Hey, Bertrand, stop, you’re wrong. Don’t do that, try to understand the dilemma of the world the other side.’ The only thing you can learn in life...
It is the era of change that most, in Piccard. The internal combustion engine has been around for over a century, and in the early 19th century, inventors like Charles Lindbergh, the first to fly solo across the Atlantic. His 1927 flight from New Island, New York to Paris broke the speed record. It was a remarkable achievement. But Piccard's flights were not just for show; they were a step towards a new era of aviation. The internal combustion engine was replaced by the electric engine, which was more efficient. Piccard was one of the pioneers of solar impulse, which is a project to fly around the world using solar energy. This is a significant step towards reducing our carbon footprint.

The electric engine is the future. It is not only more efficient but also cleaner. The electric engine is the answer to the problem of air pollution. It is the answer to the problem of climate change. It is the answer to the problem of resource depletion. It is the answer to the problem of energy security. It is the answer to the problem of energy efficiency. It is the answer to the problem of energy costs. It is the answer to the problem of energy access. It is the answer to the problem of energy affordability. It is the answer to the problem of energy reliability. It is the answer to the problem of energy sustainability. It is the answer to the problem of energy diversity. It is the answer to the problem of energy independence. It is the answer to the problem of energy resilience. It is the answer to the problem of energy innovation. It is the answer to the problem of energy financing. It is the answer to the problem of energy policy. It is the answer to the problem of energy governance. It is the answer to the problem of energy technology. It is the answer to the problem of energy education. It is the answer to the problem of energy advocacy. It is the answer to the problem of energy empowerment. It is the answer to the problem of energy engagement. It is the answer to the problem of energy entrepreneurship. It is the answer to the problem of energy investment. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships. It is the answer to the problem of energy partnerships.