**Microsoft Enters** Mkt for Wearable **Fitness Technology** 



TON: The company has created a wrist-worn fitness device. Microsoft Band, and a related online service, Microsoft Health, that will analyse the data from the band and other devices to help people with their fitness goals. Microsoft is joining a stampede of companies creating wearable technology products for collecting personal health and exercise data. Technology companies see wearables as a way into the huge wellness business without all the red tape that comes from being a true medical company. Microsoft's black rubber bracelet resembles other products that have come before it. It contains a display that will show text messages from a cellphone, Facebook alerts and even bar codes that allow people to pay for coffee at a Starbucks from their wrists. Sensors in the device will continuously track heart rate, sleep quality and calories burned. The band is a departure for Microsoft in many respects. though, brimming with technologies often available only in more expensive products. For instance, the band includes GPS satellite tracking. The inclusion of GPS means runners who want to track distance only need to wear the

band – they do not need

to carry their cellphones.

What is more, Microsoft

is charging \$199 for the

device. Apple's Apple

Watch, due out some-

at \$349 and require a

watch with GPS called

Surge, available early

next year, that will cost

Fitbit announced a

\$250 NYT

phone for GPS tracking.

time next year, will start

Rockets Go Boom. SURPRISED?

> Nobody should forget that space exploration entails risks that can never be entirely eliminated, and America's future in space is largely dependent upon how willing it is to accept that difficult fact, writes Adam Minter

here's no risk-free way to launch 5,000 pounds of food, science experiments and equipment to the International Space Station.

Some ways, it turns out, are far more dangerous than others. For example, before 2011, the space shuttle was the primary way the US delivered such cargo, even though two of the 135 missions ended up in catastrophic failures — a rate that far exceeds what's acceptable for Earth-bound logistics businesses.

After the shuttle was retired, reliable Russian Progress modules carried such cargo. But even the Ford truck of the orbital set has its off days: In 2011. a Progress mission to the space station failed when the third stage of a rocket didn't ignite, stranding the cargo in low Earth orbit. Remarkably, it was the first failure of a Progress mission since its origins in 1978—but it was still a failure, and an expensive one at that.

Which brings us to Tuesday night's spectacular failure of Orbital Science's Antares rocket over Virginia. Orbital Science is not the National Aeronautics and Space Administration or the Russian government. It is one of two private companies (the other being Elon Musk's SpaceX) to have a contract with NASA to provide commercial cargo services to the International Space Station.



retired shuttle and Russian launch services, and was keen to spur the development of a US commercial space services sector. Thus, NASA funded and supervised the launch providers development, ensuring that technical and safety measures met the agency's standards. Yet, in the interest of speed ing up the process and saving money, NASA allowed the commercial providers to develop their programmes without having to fulfill the extreme paperwork requirements that typically engulf NASA programmes (but which, traditionalists argue, contribute to a culture of safety). Will NASA's commercial launch providers sacrifice profit

for safety? Fireballs over Virginia suggest that they have. Yet, according to NASA's internal history of the Commercial Orbital Transportation Program published in February, they never had the chance, SpaceX and Orbital Sciences had the right to ignore the NASA advisers on all matters

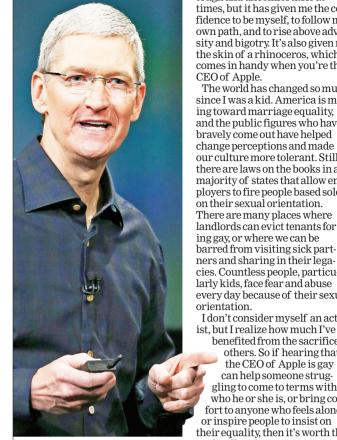
decades-old Russian engines that—with NASA supervision—it bought and rescued from corrosion and neglect. Not everyone was impressed. In 2012, Musk referred to the Antares as the "punch line to a joke" and noted that these engines "were literally made in the '60s and, like, packed away in Siberia somewhere." Even NASA, in its internal history of the programme, referred to the engines as "cantankerous." And in May, an en-

gine—slated for launch in 2015was destroyed during a test in Colorado. But it's also widely accept ed that newer rockets fail more often than older, well-tested ones, especial ly if they're involved in complex missions, Indeed, SpaceX and its Falcon 9 rocket experienced a catastrophic failure in a test in August.

Whatever the cause of the Antares failure, it's clear that NASA and Orbital Services missed a flaw in the new rocket, despite decades of experi ence on both sides, and extensive careful testing of the Russian engines And that was to be expected. "NASA knows all too well there will be failures and setbacks ahead," Alan Lindenmoyer, manager of the Commercial Orbital Transportation Program, explained in the NASA his tory. "But we also know that through the trusted partnerships we have forged with our industry colleagues, problems will be solved and a new era n commercial space will begin.'

Of course, that doesn't make an expensive, catastrophic rocket failure OK. The cause of the Antares rocket explosion needs to be found. and a solution created so that it won't happen again. If responsibility can be assigned, it should be. But at the same time, nobody should forget that space explora decades of experience tion entails risks that can never be on both sides, and entirely eliminated, and America's future in space is largely dependent upon testing of the how willing it is to accept Russian engines that difficult fact. Bloomberg

# **Apple's Tim Cook** Speaks Up: iGay



Apple CEO Tim Cook publiclly addresses his sexuality for the first time in a powerful essay for the Bloomberg Businessweek.

Throughout my professional life, I've tried to maintain a basic level of privacy. I come from humble roots, and I don't seek to draw attention to myself. Apple is already one of the most closely watched companies in the world, and I like keeping the focus on our products and the incredible things our customers achieve with them.

At the same time, I believe deep ly in the words of Dr. Martin Luther King, who said: "Life's most persistent and urgent ques tion is, 'What are you doing for others?"" I often challenge myself with that question, and I've come to realize that my desire for personal privacy has been holding me back from doing something more important. That's what has led me to today.

For years, I've been open with many people about my sexual orientation. Plenty of colleagues at Apple know I'm gay, and it doesn't seem to make a difference in the way they treat me. Of course, I've had the good fortune to work at a company that loves creativity and innovation and knows it can only flourish when you embrace people's differences. Not everyone is so lucky. While I have never denied my sexuality, I haven't publicly acknowledged it either, until now. So let me be clear: I'm proud to be gay, and I consider being gay among the greatest gifts God has given me.

Being gay has given me a deeper understanding of what it means to be in the minority and provided a window into the challenges that people in other minority groups deal with every day. It's made me more empathetic, which has led to a richer life. It's been

tough and uncomfortable at times, but it has given me the confidence to be myself, to follow my own path, and to rise above adver sity and bigotry. It's also given me the skin of a rhinoceros, which comes in handy when you're the

CEO of Apple. The world has changed so much since I was a kid. America is mov ing toward marriage equality, and the public figures who have bravely come out have helped change perceptions and made our culture more tolerant. Still, there are laws on the books in a majority of states that allow employers to fire people based solely on their sexual orientation. There are many places where landlords can evict tenants for being gay, or where we can be barred from visiting sick partners and sharing in their legacies. Countless people, particularly kids, face fear and abuse every day because of their sexual orientation. Idon't consider myself an activ-

benefited from the sacrifice of

others. So if hearing that

the CEO of Apple is gay can help someone struggling to come to terms with who he or she is, or bring com fort to anyone who feels alone, or inspire people to insist on their equality, then it's worth the trade-off with my own privacy. I'll admit that this wasn't an easy choice. Privacy remains im portant to me, and I'd like to hold on to a small amount of it. I've made Apple my life's work, and I will continue to spend virtually all of my waking time focused on being the best CEOI can be. That's what our employees deserve-and our customers, devel opers, shareholders, and supplier partners deserve it, too. Part of social progress is understanding that a person is not defined only by one's sexuality, race, or gender I'm an engineer, an uncle, a nature lover, a fitness nut, a son of

the South, a sports fanatic, and

many other things. I hope that

people will respect my desire to

for and the work that brings me

focus on the things I'm best suited

The company I am so fortunate to lead has long advocated for human rights and equality for all. We've taken a strong stand in sup port of a workplace equality bill before Congress, just as we stood for marriage equality in our home state of California, And we spoke up in Arizona when that state's legislature passed a discriminatory bill targeting the gay community. We'll continue to fight for our values, and I believe that any CEO of this incredible company, regardless of race, gen der, or sexual orientation, would do the same. And I will personally continue to advocate for equality for all people until my toes point

morning, I'm greeted by framed photos of Dr. King and Robert E Kennedy I don't pretend that writ ing this puts me in their league All it does is allow me to look at those pictures and know that I'm doing my part, however small, to help others. We pave the sunlit path toward justice together, brick by brick. This is my brick.

When I arrive in my office each

### Give Us This Day Our Dual Citizenship Indian heritage with full rights in-

There are an estimated 25 million non-resident Indians (NRIs), people of Indian origin (PIOs) and overseas citizens of India (OCIs) spread across more than 200 countries. Cumulatively, they contributed about \$70 billion in remittances to India in 2013-14

The recent changes in the PIO and OCI cards announced by Prime Minister Narendra Modi are welcome. But they do not meet the long-term demand of dual citizenship by overseas Indians. The overseas citizenship card (OCC) falls well short of genuine dual citizen-

been demanding genuine dual citizenship, with full political and economic rights in India on par with the rights enjoyed by Indian citizens. Former attornev general Soli Sorabiee was right in stating in 2005: "If we want to involve the diaspora, then we can't deny them the right to vote or the right to occupy

important office. Overseas Indians, whether they hold Indian passports or have foreign passports, have an emotional bond with India. That holds true for a majority of people of Indian heritage. When major democratic and developed countries have no issue with dual citizenship, there can't be Many of us overseas Indians have a real justification for India to treat citizenship) to overseas citizens of

its own people unfavourably.

The promise of dual citizenship was made by former Prime Minister Atal Behari Vajpayee in 2003. Since then

"except those related to safety." In those cases, they

mercurial, independent-

minded Musk—had to

take orders. That's no guar-

antee that corners weren't

cut, but it does suggest that

wasn't completely absent dur-

ing the Antares' development.

For now, speculation over the

Whatever the cause

it's clear that NASA

and Orbital Services

missed a flaw in the

new rocket, despite

extensive, careful

there have been

statements from

senior politicians

of the Antares failure.

cause of the accident centres

on Orbital Science's use of

NASA's culture of safety

-including the famously

Overseas Indians, whether they hold indian passports or have foreign passports, have an emotional

about them favouring dual citizenship. But the matter has not progressed fur-

ther. Statements are not enough. The following actions should be taken:

1. Granting Indian passports (dual

cluding voting and political rights. 2. Granting of convenient voting rights to such dual passport-holding overseas Indians as well as overseas Indians with Indian passports (NRIs), which can be exercised either at the consulate, high commission or embassy premises in their country of residence and through postal or online facilities. India should consider taking a cue from Australia's repeal of Section 17 of the Australian Citizenship Act 1948 that took effect from April 2002 permitting dual citizenship.

> The author is a resident of Sydney, Australia

#### TIPS. TRIVIA & TRENDS YOUR DAILY DIET OF FUN AND FACTS \*\*\*\*

#### Osama bin Laden's **Shooter Set to Reveal Identity**

The Navy SEAL who shot dead Osama bin Laden has reportedly agreed to reveal his identity in a Fox News Channel documentary. Known to the world as 'The Shooter', the Navy SEAL will feature in a two-part show entitled "The Man Who Killed Osama Bin Laden" on November 11 and 12, The Mirrol reports. For the first time since the killing of Osama on May 1, 2011 in the Abbottabad mission,



to provide details on the al-Qaida chief's final moments and talk about the training, mishaps and secretive facts of the operation in Pakistan. The documentary will also provide an extensive, first-hand account of the mission, including the unexpected crash of one of the helicopters that night and why SEAL Team 6 feared for their

lives, the report said.

## **Nations at Risk of Climate Change**

Bangladesh has topped a list of 32 countries that face extreme risks because of climate change. According to a study by UK researcher Maplecroft, 32 countries out of 196 surveyed face that level of threat based on population, physical exposure and governmental capacity to adapt to climate change over the next 30 years:



#### **Driverless Cars for All Within a Decade**

Driverless cars could be within the price range of the average person in just 10 years, researchers claim. This will be made possible by a new 'eyes and ears' technology developed by researchers from Curtin University in Perth. The technology comprises a dozen different sensors installed in an average car, paired with an algorithm that processes the large amount of data received. This creates meaningful information which tells the car the

nature and location of obstacles, researchers said. Associate professor Dr Ba Tuong Vo from the department of electrical and computer engineering said this autonomous car, created through a joint project between Curtin, Daimler (the research arm of Mercedes Benz) and Ulm University in Germany, would be commercially viable because it does not need to be connected to the internet and can be produced at a low cost.



#### **Malala Donates** \$50,000 to Rebuild **UN Schools in Gaza**

Pakistani teenage rights activist and Nobel Peace Prize winner Malala Yousafzai has donated \$50,000 to help rebuild UN schools in Gaza that have been damaged during the recent fighting in the enclave. "We must all work to ensure Palestinian boys and girls, and all children everywhere, receive a quality education in a safe environment. Because without education, there will never be peace," Malala said in Stockholm as she received the prestigious World Children's Prize. Malala, 17, said the money would be channelled through the United Nations Relief and Works Agency (UNRWA) to help rebuild 65 schools in the Palestinian territory. The money would help children get "quality education" and continue their life, knowing they were not alone and that people were supporting them, she said.