



# The Cog

Newsletter of the Rotary Club of Lutterworth



**Issue No: 175**

**Driving the wheel of fellowship**

## October '19 Newsletter

**Programme for the next two months.**

**Speaker Finder Grace & Thanks**

### **October**

Monday	7th	Normal Meeting	Elaine Turner	Zelda Taylor
Thursday	10th	Council	7-30 p.m.	
Monday	14th	Business Meeting		
Monday	21st	Normal Meeting	Susan Sharp	Steve Tallis
Monday	28th	Normal Meeting	Martin Iliffe	Brenda Burton

### **November**

Monday	4th	Normal Meeting	Zelda Taylor	David Toone
Monday	11th	District Gov.	Rodney Spokes	Bernard Johnson
Thursday	14th	Council	7-30 p.m.	
Monday	18th	Business Meeting		
Monday	25th	Normal Meeting	David Haynes	Philip Duncan

If you are unable to carry out your duty please find a substitute and tell  
**John Howell** Tel 01455 553209 email [sheila.m.howell@hotmail.co.uk](mailto:sheila.m.howell@hotmail.co.uk)

***PS to last months report on The Big Ride taken from  
the Lutterworth Journal***

***Why not try using a Bike***

*Why not try using a bike?  
It is quicker than a hike  
A cycle will keep you fit  
There is no problem parking it  
Cycles are so much fun  
They are often quicker than a run  
With a cycle there are plenty of thrills  
It isn't too difficult going up most hills  
Pedalling will get you there  
You save on bus fare  
Country cycling, what a beautiful scene  
You'll feel relaxed and glad you've been  
With a cycle you'll feel free  
There is no parking fee!*

**Dementia Support—19th August**

Our speaker Graham Thompson President from Kibworth and Fleckney Rotary Club came and spoke to us about Dementia Support in District 1070.

As a retired Dental Surgeon in Market Harborough he had witnessed a dear friend of his develop the early onset of dementia before she was 60 - dying only last year.

As he said with feeling - "it's a bummer of a diagnosis" to quote Wendy Mitchell a health care worker who has written a book on the subject "Somebody I used to know".

He became a Dementia Friend in 2018 which is an Alzheimer Society initiative and they now have a membership of 2½ million.

A small group of friends decided to introduce Community Admiral Nurses to Leicestershire (*an Admiral Nurse is a Specialist Dementia Nurse*).

It is predicted that by 2050 there will be 2 million people with dementia ie. one in three children born today are likely to experience dementia in their lifetime.

Should a member be interested in becoming a Dementia Friend

Contact Rtn David Hayes from Shepshed Charnwood who would be happy to pass on information about setting up a "Memory Café Tel: 01509 569893  
Email [davidhayes @ Hotmail.com](mailto:davidhayes@Hotmail.com)

## Books on the subject

- |                |                                       |              |
|----------------|---------------------------------------|--------------|
| Wendy Mitchell | "Somebody I used to know"             | Amazon books |
| Nicci Gerrard  | "What Dementia teaches us about love" |              |
| Joseph Jebelli | "In Pursuit of Memory"                |              |
| Sally Magnuson | "Where Memories Go"                   |              |
| Lisa Genova    | "Still Alice"                         |              |

## Aluminium Cans for Hospital Helicopter Pads



At a recent meeting Lutterworth's Rotary speaker spoke about the need for local hospital Helicopter Pads. These could and would be used by the Air Ambulance Service to transport badly injured and traumatised

people to major hospitals so lives could be saved. Now most of these patients are transported by road where it takes precious time to get the patient to the appropriate hospital. Time is often the



most important fact where congested roads play a major part in creating a problem. Speed is needed to get the patient to hospital and deal with their injuries to help improve their recovery. We were told by our speaker that there was a need for struts to carry the helicopter platform which are made from aluminium which is strong but expensive. In some areas of the country aluminium cans are collected and melted down to make these struts. His talk inspired members to take up the challenge and headed by Graham Johnson a collection of cans was started. Graham offering his wide driveway in Bitteswell as an initial collecting point for such a purpose. As you will see from the pictures overleaf the public have already responded more quickly than expected. (*this is the second load ready for collection*).

With your help this could be and should be a worthwhile charity fully supported by Rotary.

The Emergency Department at the LRI is capable of helping these badly injured patients and with a helicopter pad in use it could minimise the time getting patients to the hospital. Hopefully saving lives and aiding recovery.

Graham's collecting point is at the entrance of his driveway  
**"Field House" Ashby Lane, Bitteswell, Lutterworth,  
Leics. LE17 4SQ**

## **Our Speaker on Monday 2nd September was Bob Titterton who spoke on Space Craft**

His talk was both interesting and complex so I make no apology in extracting a piece from Google to cover his talk.

### **The History of Rockets**

The principles of rocketry were first tested more than 2,000 years ago, but it's really only been in the past 70 years or so that these machines have



been used for applications in space exploration. Today rockets routinely take spacecraft to other planets in our solar system. Closer to Earth, rockets carrying supplies up to the International Space Station can return to Earth, land on their own and be used again.

**Early rocketry** There are tales of rocket technology being used thousands of years ago. For example, around 400 B.C. Archytas, a Greek philosopher and mathematician, showed off a wooden pigeon that was suspended on wires. The pigeon was then pushed around by escaping steam, according to NASA. Around 300 years after the pigeon experiment, Hero of Alexandria is said to have invented the aeolipile (also called Hero's engine), NASA added. The sphere-shaped device sat on top of a boiling pool of water. Gas from the steaming water went inside of the sphere and escaped through two L-shaped tubes on opposite sides. The thrust created by the escaping steam made the sphere rotate.

Historians believe the Chinese developed the first real rockets around the first century A.D. They were used for colourful displays during religious festivals, similar to modern fireworks. For the next few hundred years, rockets were mainly used as military weapons, including a version called the Congreve rocket, developed by the British military in the early 1800s.

### **Fathers of rocketry**

In the modern era, those who work in spaceflight today often acknowledge three "fathers of rocketry" who helped push the first rockets into space. Only one of the three survived long enough to see rockets being used for space exploration.

**Russian Konstantin E. Tsiolkovsky (1857-1935)** published what is now known as the "rocket equation" in 1903, in a Russian aviation magazine, according to NASA. The equation concerns relationships between rocket speed and mass, as well as how fast the gas is leaving when it exits the propellant system's exhaust and how much propellant there is. Tsiolkovsky also published a theory of multistage rockets in 1929.

**Robert Goddard (1882-1945)** was an American physicist who sent the first liquid-fueled rocket aloft in Auburn, Massachusetts, on March 16, 1926. He had two U.S. patents for using a liquid-fueled rocket and also for a two- or three-stage rocket using solid fuel, according to NASA.

**Hermann Oberth (1894-1989)** was born in Romania and later moved to Germany. According to NASA, he became interested in rocketry at an early age, and at age 14 he imagined a "recoil rocket" that could move through space using nothing but its own exhaust. As an adult, his studies included multistage rockets and how to use a rocket to escape Earth's gravity. His legacy is tainted by the fact that he helped develop the V-2 rocket for Nazi Germany during World War II; the rocket was used for devastating bombings on London. Oberth lived for decades after space exploration began and saw rockets bring

people all the way to the moon and watched the reusable space shuttle lift crews into space again and again.

## Rockets in spaceflight

Following World War II, several German rocket scientists emigrated to both the Soviet Union and the United States, assisting those countries in the Space Race of the 1960s. In that contest both countries vied to demonstrate technological and military superiority, using space as the frontier.

Rockets were also used to take measurements of radiation in the upper atmosphere after nuclear tests. The nuclear explosions mostly ceased after 1963's Limited Nuclear Test Ban Treaty.

While rockets worked well within Earth's atmosphere, figuring out how to send them into space was difficult. Rocket engineering was in its infancy and computers weren't powerful enough to perform simulations. This meant that numerous flight tests ended with the rockets dramatically exploding seconds or minutes after leaving the launchpad.

With time and experience, however, progress was made. A rocket was used for the first time to send something into space on the Sputnik mission, which launched a Soviet satellite on Oct. 4, 1957. After a few failed attempts, the United States used a Jupiter-C rocket to heft its Explorer 1 satellite into space on Feb. 1, 1958.

It took several more years before either country felt confident enough to use rockets to send people into space; both countries started with animals (monkeys and dogs, for example).

Russian cosmonaut Yuri Gagarin was the first human in space, leaving Earth on April 12, 1961, aboard a Vostok-K rocket for a multiorbit flight. About three weeks later, Alan Shepard made the first American suborbital flight on a Redstone rocket. A few years later in NASA's Mercury program, the agency switched to Atlas rockets to achieve orbit, and in 1963, John Glenn became the first American to orbit Earth.

When aiming for the moon, NASA used the Saturn V rocket, which, at 363 feet tall, included three stages — the last one designed to be powerful enough to break away from Earth's gravity. The rocket successfully launched six moon-landing missions between 1969 and 1972. The Soviet Union developed a moon rocket called N-1, but its program was permanently suspended after multiple delays and problems, including a deadly explosion.

NASA's space-shuttle program (1981 to 2011) used solid fuel rockets for the first time to boost humans into space, which is notable, because unlike liquid fuelled rockets, they cannot be turned off. The shuttle itself had three liquid fuel engines, with two solid rocket boosters strapped on the sides. In 1986, a solid rocket booster's O-ring failed and caused a catastrophic explosion, killing seven astronauts aboard the space shuttle Challenger. The solid rocket boosters were redesigned after the incident.

Rockets have since been used to send spacecraft farther into our solar system: past the moon, Venus and Mars in the early 1960s, which later expanded into the exploration of dozens of moons and planets. Rockets have carried spacecraft throughout the solar system so that astronomers now have imagery of every planet (as well as the dwarf planet Pluto), many moons, comets, asteroids and smaller objects. And, because of powerful and advanced rockets, the Voyager 1 spacecraft was able to leave our solar system and reach interstellar space.

### **Rockets of the future**

Several companies in many countries now manufacture uncrewed rockets — the United States, India, Europe and Russia, to name a few — and routinely send military and civilian payloads into space.

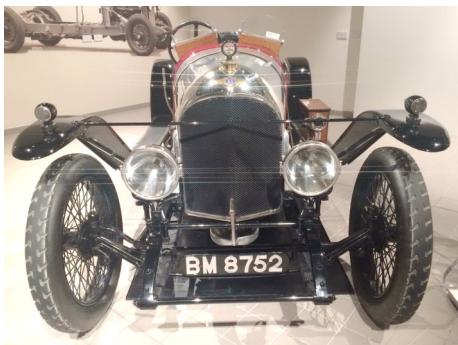
Scientists and engineers are continually working toward developing even more sophisticated rockets. Stratolaunch, the aerospace design company backed by Paul Allen and Burt Rutan, aims to launch satellites using civilian aircraft. SpaceX and Blue Origin have also developed reusable first-stage rockets; SpaceX now has reusable Falcon 9 rockets that routinely make cargo runs to the International Space Station.

Experts predict that rockets of the future will be able to carry bigger satellites into space and may be able to carry multiple satellites at the same time, the Los Angeles Times reported. These rockets could use new composite materials, advances in electronics or even artificial intelligence to perform their work. Future rockets may also use different fuels - such as methane that are healthier for the environment than the more traditional kerosene that is used in rockets today.

## **100 Club August/September Winners**

David Ayres No 31 £25  
Martin Iliffe No 78 £15  
Martin Iliffe No 92 £10

### **Bentley Visit—20th September**



### **Racing 3 litre 2 seater Tourer 1919**

Twenty one Rotary members and guests set off at 7am in a very comfortable coach, supplied by Swift Valley coaches, with Paul an excellent driver. We arrived at the Bentley venue right on time for a delicious coffee, before setting off on our tour of the factory which was amazing. We had excellent guides with all the information we needed. The cars are pre-ordered and built to the customer's requirements

We then went on to the White Lion a lovely pub nearby for an excellent lunch, returning to Lutterworth at 4 pm.

The 1919 3-Litre EXP 2 is the oldest surviving Bentley and the first ever Bentley to win a race. It is the prize of the Bentley Heritage collection. Back in 1919 a young W.O. Bentley used his experience in designing aircraft engines to create a highly advanced 3 litre automobile engine. Featuring four valves and two spark plugs for each cylinder it was made with a high percentage of aluminium and magnesium, the winning engine design.