



Issue 43 Feb18 - Mar18

Contraails

Newsletter of the Christchurch Aviation Society

CAvSoc

The Air Training Corps by Ernie Ball

Our first talk for 2018 started with Ernie Ball asking the audience when they thought the Air Training Corps started. No one guessed that its origins went back to commencement of cadet forces in 1859 when some schools created a uniformed corps of pupils to help protect against attacks from overseas. This progressed to the Combined Cadet Force with an air section wearing armbands to identify them. In 1938 the Air Cadets were formed and became the Air Defence Corps in 1939 and Cadets were used to assist with tasks on RAF camps. The government renamed the ADCC to the Air Training Corps which became official on 05Feb1941 with King George VIth as its Commodore in Chief and in 1980 the ATC became open to girls and joining age for both is between 13 and 17.

With its HQ at Cranwell, the ATC is formed of six Regions, each with six Wings, formed of Sectors holding the Squadrons and altogether there are 900 Squadrons with approximately 25 cadets each – a total of 22,500. For officers the highest rank is Air Commodore and follows the RAF rank structure but with a brass VRT emblem on the sleeve for Wg Cdr and below. The NCO structure is similar to the RAF from Warrant Officer through to Corporal. The cadet structure is different and is formed of Master Air Cadet, Senior Cadet, Leading Cadet, First Class Cadet and Second Class Cadet but these are not ranks as such, but attainment levels. Progression is by passing exams in defined subjects and for the First Class this includes history of flight, the RAF and ATC, the rifle, expedition training, airmanship and music. Leading Cadet introduces principles of flight and basic navigation with Senior adding air navigation, propulsion, aircraft handling, airframes, flying and satellite communications. A brassard worn around the upper arm shows badges reflecting four levels of attainment. Popular activities include shooting, gliding in Volunteer Gliding Schools and air experience with the goal to



achieve Cadet Pilot Wings. One effect of fewer aircrew leaving the RAF (or continuing into civilian careers) is that there is a shortage of instructors and the Corps now has to

Meetings - at Druitt Hall commencing 8pm

Wed 07Mar18 - The Bahrain DC4 Air France Disasters
by Kevin Patience

Wed 02May18 - AGM followed by The Air Transport
Auxiliary by John Webster

Wed 05Sep18 - Battle of Britain 1935 by Steve Robson

train its own. Sports and working towards the Duke of Edinburgh's Awards are encouraged along with the expected drill, education and general training. Cadets are given every opportunity to develop their own self-confidence and leadership qualities with three levels of attainment. The highest is demanding and requires a commitment of nine weekends with a final test and also gives the opportunity to compete with Army and Navy Cadets. The aim of the cadet forces was to nurture and recruit for the armed forces but this is no longer the primary goal although that is always open. The emphasis is to support our nation's youth by helping them to become better citizens and future leaders. Following the peace time contraction of all of our armed forces and successive cuts as part of austerity measures, the government no longer gives considerable funding but the RAF still provides valuable financial assistance to the ATC by providing such things as uniforms, flying activities, squadron buildings and summer camps. The upshot is that squadrons now operate as registered charities run by civilian committees who need to create fund raising events. Most staff, uniformed or civilian, are now unpaid volunteers.



Pay by Bitcoins

The private jet charter market is booming, fuelled by people who want to travel without the hassle of commercial airlines. With innovative new aircraft entering the market and user friendly technology, prices are reducing so it is no longer the preserve of well off senior business people. Aircraft range from the small up to 10 seat twin jets, typically Lear, Pilatus, Embraer and similar but for the more wealthy there are the large Bombardier and GulfStream offerings. One of the specialist firms says that people can now book from their mobile and customers can pay by crypto currency such as Bitcoin. Whatever next!!

Airbus project Vahana

If autonomous vertical take-off and landing electric air taxis sounds the stuff of science fiction – think again, its just round the corner. Airbus A3 is flight testing its Alpha One eVTOL concept which aims to do just that and has just completed a successful tethered hover exercise. Eight rotors in a tilt wing configuration will be tested to see how it performs in various manoeuvres, wind and speed conditions. In 2016, Uber, the on demand taxi company, created a report on its view of the future which outlined this type of vehicle. Needless to say, Boeing are also in the market via a subsidiary, Aurora Flight Sciences, which also uses eight rotors but in a fixed wing configuration. Anyone who has heard an electric powered machine such as a drone will know how noisy they can be so time will tell if that becomes an issue but the economics and emissions appear promising.