



The Daedalean

Semper Discens

*Monthly Aerospace Education Publication of the
Connecticut Wing of the Civil Air Patrol*

*Stephen M. Rocketto, Maj., CAP
CTWG Director of Aerospace Education
srocketto@aquilasys.com*

*Art Dammers, Maj. CAP
CTWG Internal Aerospace Education Officer*

Volume VI, Number 04

April, 2013

OUR SIXTH YEAR OF PUBLICATION

SCHEDULE

- 26-27 APR-CTWG Encampment Staff Training
- 18 MAY-Commander's Cup Rocketry Competition
- 7-8 JUN-CTWG Encampment Staff Training
- 21 JUL-03 AUG-NESA-Camp Atterbury, IN
- 27 JUL-CADET Ball-USCGA
- 10 AUG to 17 AUG-CTWG Encampment

SQUADRON AEROSPACE NEWS

*Squadrons are requested to submit monthly notes
on their aerospace activities.*

*Thames River Composite Squadron
Groton*

Cadets and senior members were treated to a special guest speaker, World War II veteran Ernie Treff. Mr. Treff shared many of his wartime stories. He started by explaining his training in

aircraft like the P-40, after which he kept his audience spellbound with stories of operations in Europe flying the P-47 Thunderbolt.

*Maj Neilson
consults with
WWII pilot, Ernie
Treff.*



CTWG STAFF OPENING IN AEROSPACE

The Aerospace Education Section of the CTWG is looking for candidates to fill the post of External Aerospace Education Officer.

Although the position involves working with the AE staff in promoting and assisting aerospace education projects in the greater community, the incumbent will also assist in internal AE activities within the wing. The position will be tailored to the special skills, interests, and available time of the successful candidate.

Ideally, the candidate should have completed the Aerospace Education Program for Senior Members and hold an AE rating of Technician or greater and have some background in aerospace topics and teaching. A state professional educator's certificate would be a plus as would an FAA CFI or ground instructor certificate.

Applicants are invited to submit a resume with a list of qualifications and background experience to: srocketto@aquilasys.com.

CTWG KC-10 O FLIGHT CANCELLED

The KC-10 Orientation Flight from McGuire Air Force Base scheduled for 09 July has been cancelled due to USAF "fiscal budget reductions."

AE REPORT TO WING FOR MARCH

Each month, the DAE submits a report of current AE activities at the CTWG Staff Meeting. What follows is an extract from the February report:

1. The DAE taught two sections at CTWG SLS.
2. The DAE contacted the 143rd Airlift Wing, the 1109th TSMAG, and Survival Systems, Inc. for encampment training sessions.
3. The Connecticut Friends of the NRA and the Quaker Hill Rod and Gun Club will support the CTWG Rifle Safety and Marksmanship Program in the summer. There will be no charge for participants.

COMMANDER'S CUP ROCKETRY COMPETITION

CATO has agreed to support our contest at their monthly meeting, Saturday, 18 May. The rain date is Sunday. A set of rules follow:

Every squadron will supply one judge.

Flight 1: Tyro Cadets will build an Estes Alpha or Quest Astra 1 decorated in a Civil Air Patrol Theme. The entry will be judged on construction, finish, and flight. Each Tyro Cadet in a Squadron may enter one rocket. A Tyro Cadet is a Cadet who has never participated in the Wing contest. (CAVEAT-The Alpha is the model with balsa fins. Do not order the Alpha III with plastic fins.)

Flight 2: Load Bearing or Multistage Rocket

Flight 3: Historic Air Vehicle

Judging will be based on construction and finish. Finish points will be based on sanding, contouring of fins, joins of fins to fuselage, and alignment of fins. Finish will be based upon quality of paint application, neatness of decal or marking application, and appropriate markings and colors.

Squadrons are responsible for purchasing rockets, engines, igniters, and wadding.

NATIONAL AEO SCHOOL

The 12th Annual National AEO School will take place from June 25-29, 2013, at Pensacola NAS, FL. As many of you know, this is a wonderful opportunity for AEOs to learn more about the AE programs, projects, and resources available to them. For more information about the program, go to www.capmembers.com/ae

AEROSPACE CURRENT EVENTS

Small UAVs Used to Study Volcanoes

NASA's Ames Research Laboratory have obtained three Aerovironment Dragon Eye drones to study the ash concentrations and gas outputs of volcanoes. The drones are powered by electric engines so they are not affected by volcanic ash.



*NASA
Technician
Launches a
Dragon Eye
(NASA/Matthew
Fladeland)*

The drones flew over Costa Rica's Turrialba Volcano, measuring the output some 2,000 feet over the mouth of the 10,000 foot volcano. The volcanic plume, made up mostly of carbon dioxide, water vapor, and sulfur dioxide is relatively stable and a good object for the study,

NOAA/NASA Team to Study Hurricane Genesis

Manned aircraft and a UAV have been deployed to the North Atlantic Ocean. The aircraft, a Douglas DC-8, a Martin WB-57 Canberra, and a Northrop Grumman RQ-4 Global Hawk will carry special instrumentation to investigate on wind profiles, water droplet distribution, sea and air temperatures, and other pertinent meteorological data.



*NASA Global Hawk
(NASA/Dryden)*

The scientists will focus on tropical storm formation and hope to use the information to improve the computer models used to predict hurricanes.



The USAF converted a number of B-57s to the WB-57 variant. The wings were extended and some models carried two auxiliary jet engines on underwing pods. They were capable of reaching 60,000 feet. NASA maintains two of these aircraft at Ellington Field in Texas for use in their high altitude research program. The aircraft pictured is a retired AF plane now at Warner-Robins AFB, Georgia.

AEROSPACE HISTORY

Orde C. Wingate

The Eccentric British General and the Genesis of USAF Special Operations

Introduction

Special Operations, a military euphemism for missions carried out by elite forces often using equipment and tactics not found in the doctrine of the conventional military arts and sciences can be traced back as far as the Old Testament. Judges 7.4-7.22 recounts how Gideon selected 300 warriors and used novel equipment in a night attack on a more numerous foe.

Today, Special Forces are widely employed by the military and are the 900 pound gorilla in the struggle for missions and publicity. The US Army has Rangers and "Green Berets," the US Navy has the SEALs, while our Air Force has a Special Operations Command (SOC). Each of these units has a history. The Rangers look to Robert Rogers who fought on the American frontier in the French and Indian Wars. The SEALs look back on World War II's Underwater Demolition Teams who surveyed beaches and destroyed obstacles which hindered amphibious assault. But the USAF SOC has an odd initiator, one of the most eccentric British officers to ever take the King's shilling.

Major General Orde Wingate-Upbringing and Education

Orde Wingate was born into an unorthodox military family in India in 1903. His father, George, served with the British Army in India, fighting the Pathans in Afghanistan and the Nagas on the Burmese border. A member of the Plymouth Brethren, an austere offshoot of Protestantism. He financed missions to convert Muslims and refused to march his men on the Sabbath! As a child, Orde was isolated from other children and raised in an authoritarian and fundamentalist household.

The Wingates were also related to a number of British military and political officials. Sir Reginald Wingate, a retired army general governed The Sudan and had been High Commissioner to Egypt was a cousin. Through his mother's side, he was distantly related to T.E. Lawrence, who, supported by Cousin Reggie, organized the Arab revolt against the Turks in Arabia during World War I.

A rebellious and independent youth, he attended Charterhouse, the same school which sent out to the world such notables such as Isaac Barrow, Newton's mathematics teacher, John Wesley, founder of Methodism, and Lt. Gen. Robert Baden-Powell, founder of the Boy Scouts. Charterhouse did produce three field marshals and three winners of the Victoria Cross but also

lost some 1000 alumni in the two World Wars. Wingate was remembered as unsociable, disdainful of team sports, untidy and academically mediocre.

Wingate then attended the British Military Academy at Woolwich, an institution for training engineers and artillery officers. Some of Woolwich's alumni were Prof Ralph Bagnold, soldier and scholar, expert on the physics of desert sands and dunes and a founder of the Long Range Desert Group, "Mad Mike" Calvert, jungle fighting expert and an officer who would serve under Wingate in Burma, Brigadier John Durnford-Slater who raised the first WW II Commando unit, and Lanoe Hawker, VC, WW I ace, shot down by Manfred von Richthofen. Like Charterhouse, at Woolwich Wingate was remembered as unsociable, disdainful of team sports, untidy and academically mediocre.

Early Military Career

Upon commissioning, for three years Wingate served in England in the Royal Horse Artillery where he demonstrated remarkable skills in equitation, fox hunting, and irritating fellow officers. Cousin Reggie persuaded Orde to study Arabic and visit the Sudan where he was seconded to the Sudan Defence Force, a unit of indigenous troops officered by the British. He chased slavers and poachers and continued to aggravate fellow officers. But importantly, Wingate learned the efficacy of ambush over regular patrolling in carrying out his missions and he hardened himself to the rigors of operations in hostile environments far from supply bases.



Orde Wingate, bearded and wearing his customary pith helmet.

His next posting sent him to the British Mandate of Palestine Orde and the Plymouth Brethren

believed that the covenants which God made with Abraham, Isaac, and Jacob were still binding and that the Jewish people would be restored to their land as The Prophets had predicted. Consequently, Orde held to the Zionist principle that Jews were entitled to Israel. When an Arab revolt threatened British interests, Maj. Gen. Archibald Wavell, commanding British Forces in Palestine and Trans-Jordan gave Wingate permission to organize a Jewish defense force.

Wingate trained "Special Night Squads," small groups of Jewish fighters who provided defense for the Jewish settlements and engaged in retaliatory raids against the Arabs. He promoted mobility, night operations, surprise attacks, and trained future leaders of the Israeli armed forces, notably Moshe Dayan and Yigael Yadin. He became known to the Jews as *ha-yadid*, the friend, and dreamed about one day heading a Jewish army and reclaiming the Holy Land.

Needless to say, in the long run, his activities clashed with British imperial interests and their pro-Arab leanings. His success and his contrariness earned him his first Distinguished Service Order and a trip back to England, carrying a passport forbidding him to re-enter Palestine!

When the Germans invaded Poland, Wingate was cooling his heels in England commanding an anti-aircraft unit. Wavell, now Commander-in-Chief in the Middle East remembered Wingate's talent and experience and called him back. Hitler's ally, Fascist Italy, under Benito Mussolini, had invaded and occupied Ethiopia in 1936.

As a temporary lieutenant colonel Wingate organized Gideon Force, a small, highly mobile unit consisting of British, Ethiopian, and Sudanese soldiers. Gideon Force fought small, sharp engagements, cutting lines of communications, harassing base operations, collecting intelligence, organizing guerillas, and diverting the attention of the Italian army while the main British force met the Italians in pitched battles. Gideon Force then linked up with the main British force and entered the Ethiopian Capital, Addis Ababa, in triumph. Wingate was mentioned in dispatches and received

a second DSO. He also reverted to type and wrote a highly critical report, castigated British officialdom and their conduct of the campaign. He was relieved of command, reverted back to the rank of major, contracted malaria, and attempted suicide.

Wingate had two recognized talents, the ability to wage unconventional war and a penchant for offending his colleagues and superior officers. The first talent earned him recognition by some and the second led to disparagement by many. His odd personal habits also marked him socially. He held interviews while naked, regularly consumed raw onions, carried an alarm clock rather than a watch, and was, to put it delicately, somewhat unhygienic.

In his account of the campaign, *The Road Past Mandalay*, John Masters, one of Wingate's officers who commanded the Chindit's 111 Brigade became a noted novelist says this of Wingate's character:

Wingate was sometimes right and sometimes wrong. It really does not matter. What does matter is that he possessed one of the most unusual personalities of recent history. He had a driving will of tremendous force. His character was a blend of mysticism, anger, love, passion, and dark hatred, or overpowering confidence and deepest depression. He could make all kinds of men believe in him, and he could make all kinds of men distrust him.

Britain faced numerous challenges in waging war and his first talent, tactical genius was recognized, was needed, and once again, called upon. Wavell, now Commander of the Southeast Asian Theatre saw a need for a man of Wingate's spirit.

The First Burma Campaign

Summoned to India, Wingate's colonelcy was restored and he was placed in charge of establishing guerilla units. His fertile mind, calling upon his many past experiences, developed the concept of what he called "long range penetration." Columns of troops would be

inserted behind the Japanese lines to cut supply lines, disrupt communications, and divert enemy resources from the main battle lines. The force adopted the name "Chindits," a corruption of the Burmese word *chinthe*, a lion-like creature said to guard temples and pagodas.



Chindit Shoulder Patch

The first attempt to practice long range penetration was a failure. Wingate trained and led a brigade of Gurkha and Indian troops into Burma in 1943. Faulty intelligence, supply difficulties, and jungle diseases led to huge losses and a return to India after two months in the field. Although the military effects were negligible, some propaganda value was gained, akin to that earned by the Doolittle Raid on Japan.

Wingate critically analyzed what went wrong and wrote one of his usual antagonistic reports which was read and appreciated by none other than Prime Minister Winston Churchill. Churchill had a long history of supporting unconventional military ideas, much to the chagrin and frustration of his professional military advisors. He promoted the Commandos, Special Operations Executive and numerous British "private armies. Churchill recalled Wingate to London and took him to the Quebec Quadrant Conference where Wingate was allowed to present his ideas to the Combined Chiefs of Staff.

The Chiefs bought into Wingate's long range penetration scheme which he had now improved after realizing that air resupply directed by radio communication was the key to success behind the lines operations. But Wingate had a major problem. The Royal Air Force were uncooperative. Uncomfortable with the tactics and persona of Wingate, they cited aircraft shortages. Masters says this of the RAF: "Whatever we asked them to do they declared to be difficult, impossible, or against Air Force policy. Whatever

they offered to do, we didn't need.” The air support problem was resolved when President Roosevelt and General Marshall heard Wingate's proposals and pledged full cooperation with Wingate and his second plan to invade Burma.

Necessity is the Mother of Invention-Birth of the Air Commandos

The difficulties in resupply and evacuation of the wounded led Wingate to the conclusion that the success of The Chindits depended upon having their own organic air arm. Wingate hope to acquire C- 47s for transport, some bombers and fighters for ground attack, and some light aircraft to evacuate the wounded. As happens in the military, The Commander in Chief, President Roosevelt spoke to the Chief of Staff of the Army, General George Marshall, and Marshall spoke to the Commanding General of the Army Air Forces, Hap Arnold, who found two enterprising lieutenant colonels to make it happen. Lt. Col. John Alison and Lt. Col. Philip Cochran went to work.

Cochran and Alison Piece Together a Unique Unit

Arnold appointed them as “co-commanders” but Cochran and Alison unofficially agreed that Cochran would be designated Commanding Officer and Alison serve as Deputy Commander. Together, they assembled the men and equipment necessary to fulfill the needs of Wingate's Chindits: transport of troops and supplies, close air support, and evacuation of the wounded. Cochran and Alison formed a composite “wing,” perhaps the first in Air Force history, equipped with different types of aircraft. The mission was also unique for the Air Force which was committed to daylight precision bombardment. Cochran and Alison's unit was dedicated to direct support of a specific foreign infantry force! The unit inherited the history of the 16th Fighter Group and ran through a number of names: Project 9, the 5318th Provisional Unit (Air), finally settling on the 1st Air Commando Group.

Alison was a seasoned fighter pilot and military professional. He had learned to fly in the pre-war

Air Corps and filled a number of military attaché roles with the British and Russians. His combat career was under General Claire Chennault with the Flying Tigers where he scored six aerial victories and became an ace.



Lt. Col. John Alison and Lt. Col. Philip Cochran
(USAF Photo)

Philip Cochran's career followed a similar pattern; enlistment in the Air Corps in 1935, the same year as Cochran. In the latter part of 1941, Cochran commanded the 65th Pursuit Squadron in Groton. He contacted an old Ohio State Chum, the cartoonist Milt Caniff and asked him to design an insignia for his squadron. Caniff, who often used real people as models, turned Cochran into Flip Corkin, a dashing Air Corps pilot the nationally syndicated comic strip, “Terry and the Pirates.” Cochran left to earn his combat pay in North Africa. He was noted as a determined “press-on” leader and willing to argue strongly for his beliefs when challenged by superior officers.



Milt Caniff designed this insignia for Cochran's squadron, “the fighting Cocks.”

The aircraft were an eclectic collection. The Douglas C-47 Skytrain, known to the British as the Dakota served as transport and glider tow aircraft. The WACO CG-4A, called the Hadrian by the Brits, were the air assault crafts. North American B-25H Mitchells and P-51A Mustangs served in the close air support and air supremacy roles. The

Stinson L-1A and the L-5 Sentinel performed casualty evacuation, and a few Norduyn UC-64 Norsemen performed utility and liaison duties. The Air Commandos also deployed the Sikorsky YR-4B Hoverfly, one of which performed the first ever combat rescue by helicopter!



The C-47D could tow gliders, insert parachutists, drop supplies, or land on the improvised jungle strips



The CG-4A glider could be towed singly or two at a time by the C-47.

Wingate was tasked to launch his second foray into Burma in coordination with Lt. Gen. William Slim's main body of troops. When the main attack was cancelled, the Chindit force found itself without the support of the rest of the British army. Cochran suggested the use of the 150 gliders, originally designated to haul supplies be used as assault gliders. Wingate modified his plan and proposed to use the gliders to establish fortified bases behind the Japanese Lines from which the Chindits would harry the enemy.

Operation Thursday

The Chindits Second Burma Campaign ambitiously planned night glider assaults on three landing grounds code-named Piccadilly, Broadway, and Chowringhee. This was the largest allied airborne attack attempted up to that time. The first troops would prepare airstrips for the C-47s to follow. The first landing, at Piccadilly was cancelled when reconnaissance photos revealed that the field was obstructed by logs which turned out to be a native forestry effort rather than Japanese defensive measures.



Alison, Wingate, and Cochran take time to pose during a planning session. (USAF Photo)

On March 5th, 1944, the commander of the Piccadilly force, Col. Michael Calvert, led his force onto Broadway, the lead glider piloted by Alison. Another pilot was Hollywood star, F/O Jackie Coogan. Each C-47 towed two gliders. Men and equipment were lost on the trip in or on landing but soon 539 men, three mules, and 29,000 pounds of supplies were on hand and within 24 hours, engineers had prepared a strip suitable for the C-47s.



Wingate stands ready to board one of the gliders. (Yank Magazine PD)

The next day, a second force landed at Chowringhee. At the same time, columns of Chindits, supplied by air, were marching into Burma. Within weeks, Wingate had three brigades operating behind enemy lines, supported by the American fliers.

The Death of Wingate and End of the Chindits

Less than three weeks after the successful insertion of the Chindits, disaster occurred. Wingate was aboard a B-25 flying back from a meeting but the aircraft never arrived. The wreckage was found on a mountain along with the burned and unidentifiable bodies of the crewmen and passengers. They were temporarily buried in India but exhumed in 1950 and reburied at Arlington National Cemetery.



This stone at Arlington marks the grave of Wingate, his USAAF crew, a British officer, and two British civilians, lost in the crash.

Upon Wingate's death command of the Chindits fell to Brigadier Walter Lentaigne. Under Lentaigne, the Chindits fought a more conventional war but were faithfully supported by the men of the 1st Air Commando. they honored a pledge made to Wingate, "Anyplace, Anytime, Anywhere," and provided aerial resupply services, evacuated casualties, and flew close air support.

Stinson L-1A and the Stinson L-5 evacuated casualties from rough, hand hewn jungle strips.



The Air Commandos pioneered the use of helicopters in combat. The Sikorsky R-4B Hoverfly flew a number of casualty evacuation missions.



Both the Chindits and the Air Commando units were deactivated at the end of the war but the Chindits remembered the extraordinary services of their attached Yankee airmen. The Chindits Old Comrades Association honored the Americans by opening their membership to any veteran of the 1st Air Commandos. In 1977, The "Old Comrades" presented an ornate vase to the USAF in honor of the services accorded them by the Air Commandos

World War Two ended but a Cold War started, indirectly fought against our former ally, the Soviet Union. Both sides used surrogate nations to carry on a global struggle. The Philippines, Korea, Tibet, the Baltic, the Balkans, Africa, the Middle East, Cuba and the Caribbean, to name some of the places. In most of these places, the USAF was called upon to provide non-conventional support

outside of its principal tasked to the Strategic Air Command, nuclear deterrence. Ultimately, lessons were learned and the improvised and often jury-rigged units were coalesced, reformed, renamed and in 1990, the USAF SOC became a major command, responsible for all special warfare personnel and equipment in not only the USAF but also the Air Force Reserve and the Air National Guard.



The insignia of the First Special Operations Wing alludes to the First Air Commando's pledge, "Any Place, Any time, Any Where."

The heritage of the original Air Commandos of World War Two's China-Burma-India Theater lives on in many of the AFSOC's current missions: supply, close air support, and casualty rescue. And it all started with the ideas of a half-mad narcissistic British officer with a genius for unconventional warfare, the charisma to enchant higher authority, and a few powerful friends in the political and military structure of Great Britain.

SPECIAL OPERATIONS AIRCRAFT

The Air Commando's maintain an aircraft display at Hurlburt Field in Florida. Here are some of the past and present aircraft on display.



This North American B-25J carries the five white diagonal stripes of the First Air Commando.



The Curtiss C-46 Commando, best known for flying the "Hump" missions was a stand of by Air America.

Modified by On Mark, the B-26K was flown by The Nimrods against Viet road traffic in Laos.



AC-47 Spooky gunship sporting three 7.62mm Vulcans at Warner-Robins



AC-119G Shadow gunships were flown by the 434th TCW out of Bakalar, site of CAP mission pilot school.

Calling Card of the Shadow Crews.

