

Missions for America

Semper vigilans!
Semper volans!



The Coastwatcher

Newsletter of the Thames River Composite Squadron
GON
Connecticut Wing
Civil Air Patrol

<http://capct075.web.officelive.com/default.aspx>

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SCHEDULE OF COMING EVENTS

04 FEB-TRCS SAREX
07 FEB-TRCS Meeting-TRCS Commander's Call
14 FEB-TRCS Meeting-Independent Work
15 FEB-Wing Staff Meeting
21 FEB-TRCS Safety Down Day-Dickinson/Hanke
28 FEB-TRCS Table Top SAREX-Neilson

03 MAR-CTWG Cadet Competition Day
10-11 MAR-Squadron Leader's Course
17-18 MAR-Great Starts-Camp Niantic
17-18 MAR-TLC Course (Seniors)-Camp Niantic
21 APR-CTWG SAREX
21-22 APR-Corporate Leader's Course
04 MAY (FRI)-Ledyard A/S Festival
16 JUN-CTWG SAREX
23-30 JUN-PAWG RCLS Course
21 JUL-04 AUG-Nat'l. Emergency Services Acad.
11 AUG-CTWG SAREX
19-21 OCT-CTWG Guided Training Evaluation

CAP ID CARD PHOTOS

All members must now have a "passport style" photograph on file at NHQ. If you do not have a photo identification card, please prepare to have a photo taken at the next meeting. Uniform may be of your choice but a uniform is required.

CADET MEETING MINUTES

31 January, 2012
by
C/Capt Brendan Flynn

The fifth weekend of the month was devoted to the movie, *Tora, Tora, Tora*, which was shown at the Poquonock Bridge Fire House

SENIOR MEETING MINUTES

31 January, 2012

Maj Neilson presented a program designed to expose squadron members to the issues which are raised in the initial stages of planning a combined ground and air mission.

Once the Wing is tasked, human and material resources must be marshaled according to training and currency in respect to human resources and utility in respect to the equipment and materials available.

The meeting continued with Neilson using the Socratic method, tossing questions out to the audience and eliciting responses which in turn were examined.

Topics covered included decisions about search procedures, communication nets, and a myriad of problems which can arise and must be taken into account.

The meeting closed with a discussion of the necessity of accurate paperwork, completed in a timely manner, and reference to CAP SOPs.

TRAINING MISSION FLOWN

A training mission was flown on the 22nd of January. Capt Farley was mission pilot, Capt Miller served as observer, and Maj Rocketto was the aerial photographer. Maj Noniewicz ran a training session on setting up the CAP VHR radio which Maj Welch operated during the mission. Cadet Welch received flight marshal training from Maj Neilson. At mission's end, the aerial photos were downloaded to a computer, watermarked with location data, and posted on the WIMRS site.



*Cadet Welch signals
“Brakes On!”*

AEROSPACE CURRENT EVENTS

Boeing is planning to run a series of tests on features which are under consideration for the F-15 Silent Eagle aircraft which might compete with the Lockheed-Martin's F-35 for a South Korean contact.

A scale model of the proposed F-15E will be used in wind tunnel tests and it will have conformal weapons bays to reduce its radar profile. Further tests will examine which cant angle for the vertical fins will reduce the radar signature.

The South Korean government is planning on 62 aircraft purchase and deployment in 2016.

AEROSPACE HISTORY

Precision Attacks and Special Operations by the deHavilland DH98 Mosquito

Part I

Precision Guided Munitions and “Dumb” Bombs

STRATEGIC OPERATIONS TRAINING CONFERENCE

Three TRCS members were part of the ten man delegation which attended the Strategic Operations Training Conference at Westover ARB last weekend. Squadron Commander Noniewicz, LtCol Bergey, and Maj Neilson joined Wing Commander Huchko, Col Sturgess, LtCols Kelling Valleau and Vallillo, Maj Heath and Capt Capen and about 40 other representatives from the Northeast Region.

The annual event is designed to review last year's multi-wing exercises, develop plans for upcoming region and multi-wing interoperability exercises, an area command organization, a mobile area command post, and a mission communications network.

Current air to ground doctrine emphasize the use of precision munitions which utilize some form of guidance system. For example, the *Maverick* air-to-ground missile is locked onto a target through an electro-optical video system and then guides itself autonomously, a system known as "fire and forget." The *Redeye* air-to-air missile uses an infrared sensor to detect a heat source such as a jet engine and the missile then homes in on the thermal signal. Another air-to-air missile, the *Sparrow*, uses semi-active radar. The launching aircraft illuminates the target with its main radar and launches the missile. The *Sparrow* uses its on-board radar to acquire the reflection of the aircraft's radar from the target which it then homes on. The *Paveway* air-to-ground bomb is

guided by a laser. The target is illuminated by a laser in an aircraft or operated by personnel on the ground. The bomb, when dropped, uses the reflected energy from the target to guide it in. Another example is a version of the *Tomahawk* land attack missile which uses GPS, inertial navigation, and terrain contour mapping to accomplish its mission.

The GPS uses the signals from special satellites to determine the position of the missile. The Inertial navigation system on board the *Tomahawk* is set to its launch position. After launch, on board acceleration sensors record the speed and direction changes of the missile and use them to update the initial setting. At the same time, a radar altimeter matches the flight of the missile with a pre-programmed data set of the terrain elevations over which the missile should be flying. All the systems are integrated to improve the accuracy. Finally, a version of the *Mark 48* torpedo is wire-guided. After launch, a thin wire spools out from the "fish" and sonar is used to guide it to the target. These weapons are capable of either directly striking the designated target or exploding within a kill zone of a few meters.

The preceding examples are generally categorized as precision guided munitions or "smart" bombs or missiles. But before the advent of precision guidance, the principal air to ground weapon was the gravity bomb. Some form of bomb sight was generally used to establish the point at which the bomb would be released. The determination of the release point depended upon the skill of the bombardier, the quality of the bomb sight, the height of the release, the ability of the aircraft to maintain a stable flight attitude and constant airspeed and altitude and the visibility of the target. After being dropped from an aircraft, the gravity bomb's flight was subject to the vagaries of wind, air density, and the alignment of its fins. Needless to say, the accuracy of such a weapon was less than optimal. The legendary Norden bomb sight was reputed to be able to put a bomb in a pickle barrel from 25,000 feet. More often than not, due to unfavorable conditions, perhaps 25% of the bombs would land within a half mile of

the target. Consequently, the tactics used were to drop large numbers of the biggest bombs possible and allow the laws of probability to assist in damaging or destroying a target. The use of precision munitions now allows for cost effective targeting using fewer missiles with smaller warheads.

However, in World War II, with a few primitive exceptions, the bombardier had to rely on "dumb" gravity bombs, his skill, and a modicum of luck. The most accurate bombing required the aircraft to get as close to the target as possible. The familiar dive bombing was one such method. Low level horizontal attacks were another. The RAF attack on the Ruhr dams are one example. Another is the close air support which US Marine aviators utilized in the Pacific. However, little known in the United States, are the Royal Air Force low level attacks against the notorious *Geheime Staats Polizei*, better known as the *Gestapo*. These raids were carried out by airmen flying another legendary weapon of war, the deHavilland DH98 Mosquito.



The Wooden Wonder B.35 Mosquito converted to a TT.35 target tower at Oshkosh

The Mosquito, sometimes known as the "Wooden Wonder," was an exceptional aircraft with a remarkable history. The design was a private venture by deHavilland and like some more modern aircraft such as the A-10 Thunderbolt II, had to overcome major obstacles in order to gain acceptance. It was initially rejected by the Air Ministry because of its all-wood construction and dogmatic opinions as to what a "proper" fighter or bomber should be. However, it was cheap to build

and repair, used common non-strategic materials, and could be constructed by the host of skilled cabinet makers and carpenters who were available in the labor force. In operations, the twin-engined Mosquito was one of the fastest aircraft in the world and was comparable to a B-17 in range and payload! It served in a multitude of roles: day fighter, night fighter, intruder, bomber, photo reconnaissance, and transport.

British Overseas Air Corporation operated a fleet of Mosquitos between Scotland and neutral Sweden. The aircraft carried Swedish ball bearings, diplomatic mail, and important persons. One such passenger was the Nobel prize winning nuclear physicist Niels Bohr, who after escaping from Nazi occupied Denmark, was carried for Sweden to Great Britain in a Mosquito. He then transited to the Los Alamos, New Mexico to work on the development of the atomic bomb.

Mosquitos were also acquired by Air Vice Marshal Donald Bennett who commanded 8 Group, the Pathfinders. Noting a surplus of Mosquitos, probably due, early on, to a lack of imagination on how to employ them, he managed to augment his Avro Lancaster bomber force with ten squadrons of Mosquitos which flew as the Light Night Strike Force and as guides to Bomber Command's Main Force.

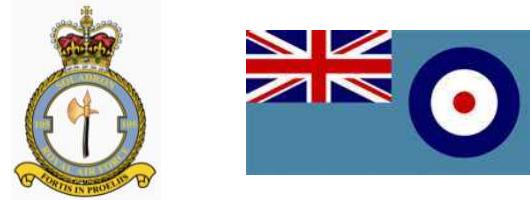
All in all, Mosquitos had the lowest loss rate of any type of aircraft in Bomber Command. They were also adopted by some 20 other air forces in one form or another including the United States. But of all the missions carried out by the Mosquito, what amounted to a private war against the Gestapo deserve mention.

*Part II will appear in the next edition of
The Coastwatcher. Raids on Gestapo units in
Oslo, Norway, Amiens, France, The Hague,
Holland, and Aarhaus, Copenhagen, and Odense,
all in Denmark will be discussed.*

*The squadron insignia which follow are those of
the units which participated in the indicated raids.*

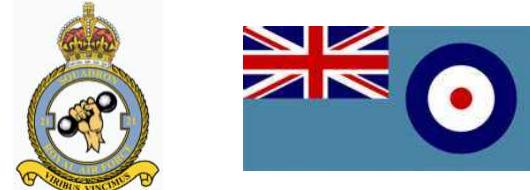
Oslo, Norway-25 September, 1942

No. 105 Squadron-Royal Air Force



*Amiens, France-18 February, 1944
The Hague, Netherlands-11 April, 1944
Aarhaus, Denmark-31 October, 1944
Copenhagen, Denmark-21 March, 1945*

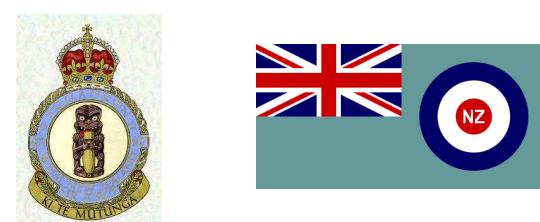
No. 21 Squadron-Royal Air Force



No. 464 Squadron-Royal Australian Air Force



No. 487 Squadron-Royal New Zealand Air Force



Odense, Denmark-17 April, 1945

No. 617 Squadron-Royal Air Force

