



Missions
for America

*Semper
vigilans!*

*Semper
volans!*

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Squadron
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Issue 13.21

04 June, 2019

SQUADRON CALENDAR

09 JUN-Groton Elks Flag Ceremony

11 JUN-TRCS Commander's Call

Mitchell Ceremony

14 JUN-Niantic VFW Flag Burning

18 JUN-TRCS Meeting

15 JUN-Commander's Cup Rocket Contest

22 JUN-CTWG Annual Conference

25 JUN-TRCS Meeting

29 JUN-LISP

30 JUN-LISP

04 JUL-Groton 4th of July Parade & LISP

10-17 AUG-CTWG Encampment

CADET MEETING

04 June, 2019

The Color Guard practiced for the Groton Elks Flag Ceremony.

Former Cadet Commander Daniel Hollingsworth on a short furlough from West Point dropped by and spoke to some of the CAP cadets about his new and different USMA cadet experience. He will be in town for a few days and then will head to Fort Bragg, North Carolina for Air Assault Training.

SENIOR MEETING

04 June, 2019

Maj Farley polled senior members to assist the cadet leadership program.

Squadron department heads reported on the status of their responsibilities.

Most reported normal operations.

Maj Neilson, Standards-Evaluation is continuing work with Lt Pineau for a mission pilot rating.

Lt Kopycienski, Communications, reported that 80% of the seniors and 55% of the cadets hold ICUT ratings and are qualified to operate the CAP radios. He also noted that we have received a high frequency transceiver and is engaged in placing it into operation.

ACHIEVEMENTS AND TRAINING

Lt Col Doucette has achieved the Technician Rating in the Finance Specialty Track.

Majs Noniewicz and Neilson flew an IFR proficiency flight on Saturday with approaches at Gabreski on Long Island, New Haven, and Groton.

PUBLIC SERVICE

Lt Thornell and six cadets worked with about 100 Pratt and Whitney volunteers to pack boxes of snacks which are being sent to our troops overseas.



In four hours in Pratt's East Hartford hangar, they put together around 3,500 boxes in an event managed by the United Services Organization.



The aptly named Thornell and Trotochaud-Thorns among the Roses.

(Photo Credits: Lt J. Thornell)

Participating cadets were C/2dLt Rhys Thornell, C/SSgt Seth Trotochaud, C/Amn Reuben Minter, C/A1C Mitchell Rathbone, C/A1C Wesley Boudreau, and C/SrA Roan Shafer.

TRCS ROCKET TEAM CONTINUES WORK

01 June, 2019

The humid weather slowed down the drying of the paint but the team of Cadets Thornell, Burton, Alexander, Minter, and Jeznach worked assiduously to finish the rockets for the Commander's Cup competition in two weeks.

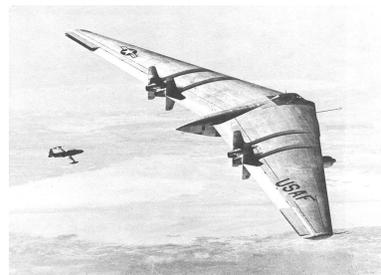
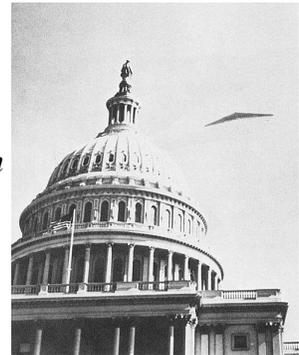
Lt Koycienski led the effort assisted by Lts Thornell and Bradstreet and Mr. Minter who patiently awaits the approval of his membership.

Lt Col Rocketto prepared his demonstration equipment for an external aerospace presentation at Canterbury Middle School on the 5th.

AEROSPACE HISTORY AND CHRONOLOGY

June 5, 1948 – A Northrop YB-49 crashes near Muroc Air Force Base, California after a structural failure during spin recovery. Maj. Daniel Forbes and Capt. Glen Edwards, pilot and co-pilot respectively, are killed along with three other crew members. Topeka Army Airfield is renamed in honors of Forbes and Muroc becomes Edwards AFB.

Maj. Robert Cardenas, chief Air Force test pilot on the YB-49A set a transcontinental record in January of 1949, flying the aircraft from Muroc AFB to Andrews AFB in 4hr 5 min



The "Wing" and a T-33 chase plane over Muroc.

June 6, 1973 – The second production Tupolev Tu-144 supersonic transport crashes during a performance at the Paris Air Show. Fourteen are killed, six on board the aircraft and eight on the ground. Two conflicting theories about the cause of the crash are extant.



The Tu-144LL used by NASA and Russian researchers in a joint project investigating supersonic flight.
(Photo Credit: NASA)

A Tu-144 shows off its canard flight controls.
(Photo Credit: Ruth AS)



The first is that the pilot Mihail Koslov exceeded the aircraft's performance envelope in an attempt to outshine an earlier demonstration by the Aérospatiale/British Aircraft Corporation Concorde. Aviation legend Bob Hoover who observed the crash holds this opinion. He states that Koslov had exhibited some poor flying earlier and had also boasted that he would outfly the Concorde. In attempting to perform a high speed steep climb previously demonstrated earlier by the Concorde. Hoover believed that the aircraft probably stalled, dived, and in the attempt to recover, broke-up.



Crash Sequence

A second story claims that the accident was a result of French efforts to grand-stand the Concorde. First, on short notice, the Tu-144 demonstration flight was shortened. A French Mirage was observed to depart shortly before the Tu-144 take-off, an unusual event at a programmed airshow. The Mirage stayed in the

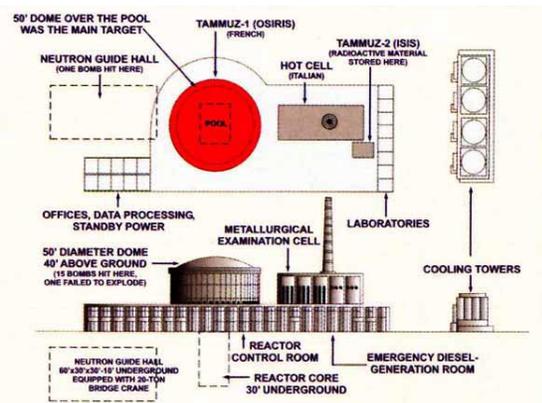
area, possibly to photograph the unique canards. When Kosolov spotted the French jet and attempted an evasive maneuver, the accident occurred. Afterwards the French were reluctant to admit the presence of the Mirage whose pilot had been briefed about the Concorde flight whereas the Russians had been told nothing about the Mirage. They evaded questions about the circumstances of the accident and laid the blame on the Concorde pilot.

June 7, 1981 – Operation Opera. In 1976, Saddam Hussein's Iraq purchased a nuclear reactor from the French and contracted for French advisory services. The initial Iraqi request was for a reactor capable of producing weapons-grade plutonium and the equipment to process it. The French refused but agreed to sell them a “Osiris-class” reactor and supply of uranium for nuclear research after Hussein threatened to suspend their oil shipments.

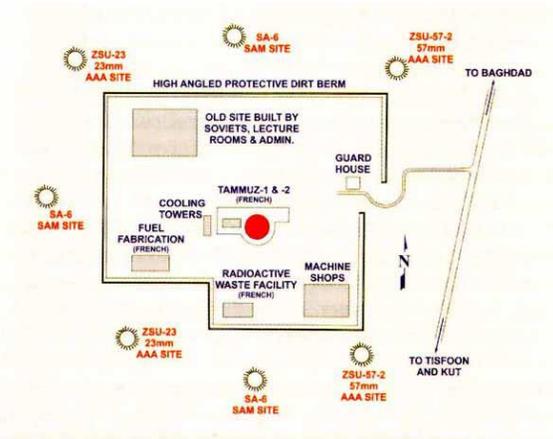
At that time, Iraqi was engaged in a bitter war with Iran, precipitated by the Iraqi invasion of Iran's oil rich southwestern province of Khūzestān. Iran was in disarray after the 1979 Islamic Revolution and the ascension of fundamentalist clerics led by the Grand Ayatollah Ruhollah Khomeini and Hussein took advantage of the opportunity.

An unusual aspect of the war was the Iraq was supported financially by Kuwait and Saudi Arabia and the Israelis provided arms and advisors to Iran. The United States, humiliated after the 444 day crisis in which the US embassy was seized and 52 diplomats and staff were held hostage, facilitated weapons transfers to the Iraqis, provided military planning and intelligence support, and turned a blind eye to Hussein's use of chemical weapons.

The Iranians attempted to bomb the reactor in 1980, which was still under construction but failed. The attack resulted in the strengthening of the anti-aircraft defenses. Israeli intelligence confirmed Saddam's plans to build nuclear weapons and decided to remedy the Iranian failure.



The reactor layout and close-in anti-aircraft defenses



An air attack was planned but needed to occur during the short time available before the reactor went “hot” so as not to endanger the civilian population with radioactive fall-out which would result in a public relations fall-out of nightmarish proportions.

The Israeli Air Force selected their newly acquired F-16s with their excellent computerized bomb sighting system as the attack aircraft. The plane had only been in their inventory for less than a year. Ironically, they had become available after the U.S. government cancelled its shipment to Iran after the revolution which overthrew Mohammad Reza Shah Pahlavi, and installed the Islamic Shī‘ite fundamentalist, Ayatollah Khomeini.

Three other major problems arose. The round trip distance from Israel to Baghdad was over 1300 miles. Intensive training had to be accomplished in the short time remaining. And the raid would have to cross the territory of other hostile nations.

Aerial refueling was a no-go. The tankers and refueling aircraft would be easy targets. The only way to make the trip was to carry more fuel and less ordnance. Each of the eight F-16 would carry two 2,000 pound bombs, a 300-gallon centerline fuel tank, and two 370-gallon wing tanks and a pair of Sidewinder air-to-air missiles.

Six McDonnell-Douglas F-15 Eagles armed with a variety of air-to-air missiles would provide top-cover and electronic suppression of the Iraqi air defense network. Israeli combat search and rescue teams manned Sikorsky CH-53 helicopters in case an aircraft was downed.

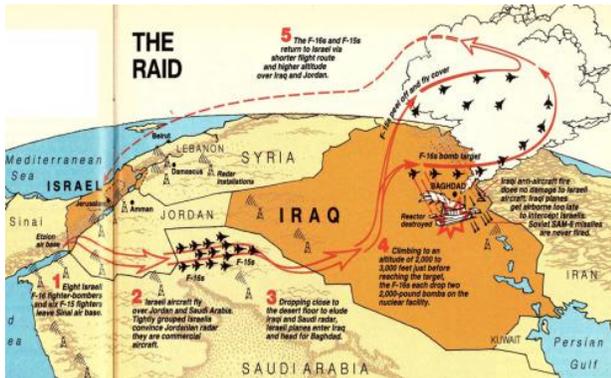


F-16 Readied for Raid
(Credit: Ze'ev Raz)

Aerial reconnaissance and intelligence information gathered by both Israel and Iran and satellite imagery provided a reasonable picture of the Iraqi radar coverage, interceptor bases, and anti-aircraft artillery as well as Jordanian and Saudi radar coverage.

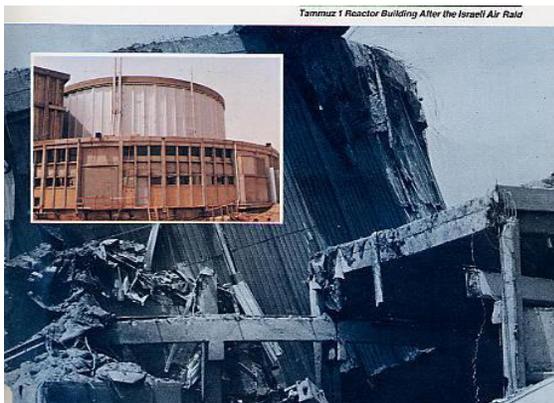
In order to mitigate these dangers, a low altitude terrain following run-in was planned. Just before reaching the target, the F-16s would execute a pop-up to 5,000 feet and the dive to 3,500 feet, the bomb release point. In the short time remaining, the Israelis practiced their tactics over the Mediterranean.

Just after launch, the Israeli strike force passed over the Red Sea and the yacht of Jordan's king, Hussein ben Talal. Hussein sent a warning out but it failed to alert the Iraqis. The raid caught the Iraqis with their dishdashas up and was over in less than two minutes.



(Credit: Jerusalem Post)

Fourteen of the sixteen bombs struck the target. The reactor site was left in ruins. About ten Iraqi soldiers were killed, some by their own wild anti-aircraft fire, and one French technician died. The Israeli government paid compensation to the French family.



Before and After!

Israeli Ace Col. Iftach Spector desperately wanted to participate on the mission. His request was turned down by Maj. Gen. David Ivry, Commander of the Israeli Air Force but Spector used his political influence and Lt. Gen. Rafael Eitan, Chief of Staff of the Israeli armed forces over-ruled Ivry and Spector replaced one of the junior pilots. But he 41 year old Spector had not completed the full training regime and concealed

the fact that he had been experiencing some physical disability. Spector's two bombs were the ones that missed the target. Twenty years later, he admitted of his fatigue on the demanding in-run and of blacking-out on the pop-up maneuver.

Flying fighters is the business of young men. The youngest man on the raid was 27 year old Ilan Ramon, fated to die in the disintegration during re-entry of the orbiter Columbia on February 1st, 2003.



Ilan Ramon's Netz (Hawk) displaying the raid's triangular mission mark.

As might be expected, the attack was condemned by the United Nations Security Council and the usual suspects

The Secretary-General of the United Nations, Kurt Waldheim, a Nazi party member in World War II and a member of units which executed partisans and sent Jews to death camps said that the attack was a "clear contravention of international law. Previously, he had denounced the Israeli raid which rescued the hostages held by Palestinian terrorists in Entebbe, Uganda.

An editorial in the New York Times stated that "Israel's sneak attack on a French-built nuclear reactor near Baghdad was an act of inexcusable and short-sighted aggression."

William Safire commented that:

Israel has done the world two enormous favors: it has denied an aggressive dictator the ability to inflict atomic terror, and it has enabled the rest of the world to indulge in an orgy of hypocrisy.

Iraq has long been proud of the fact of its "state of war" with Israel; it is one Arab

nation that has repeatedly rejected any armistice sought by Israel with its neighbors.

The public face of the world's nations were almost unanimously “outraged” that the Israeli government would dare to act as they did. But there was clear evidence that many nations, including some Arab ones, were relieved that Iraq's nuclear fangs had been pulled.

June 8, 1959 – The submarine *USS Barbero* in collaboration with the US Postal Service use a Regulus cruise missile for a official rocket mail delivery.



Mail delivery by rocket was not a new idea. In 1931, Friedrich Schmiidl used his Experimental Rocket 7 to shift mail between the Austrian towns of Schöckl, St. Radegund, and Kaite Rinne.



Six years later, a rocket was used to cross a 1000 foot frozen lake between Greenwood Lake, N.J. And Hewitt, N.J. The rocket crash-landed on the ice and the mail bags were dragged to the shore by the postmaster.



During the same period of time, Stephen Smith, Secretary of the Indian Airmail Society launched 270 rockets over a ten years span, 80 of which carried mail. None of these efforts were financially successful except for philatelists.



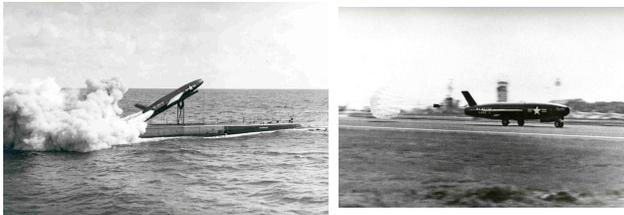
The launch was a cold war stunt to highlight US missile capabilities and provide useful publicity of the post office. Postmaster General Arthur A. Summerfield enthusiastically proclaimed that "Before man reaches the moon, mail will be delivered within hours from New York to California, to England, to India or to Australia by guided missiles."

In the US Post Office experiment, 3,000 pieces of mail, mostly commemorative first day covers addressed to important personages were loaded aboard the *Barbero* in Norfolk, Virginia.



Postmaster General Arthur Summerfield, fourth from left, postal officials and U.S. Navy personnel watch the loading of missile mail into the Navy submarine USS Barbero.

The submarine then sailed to its launch point, 100 miles of the coast of Florida. The missile was launched and the recovered at the Naval Auxiliary Air Station Mayport.



"Neither snow, nor rain, nor heat, nor gloom of night, stays these couriers from the swift completion of their appointed rounds."

-Herodotus (c. 500 B.C.) describing the mounted royal couriers of Persia-

Consider the time involved. Under ideal conditions, the submarine would have taken about 20 hours to sail from Norfolk to Florida so it would have had to leave around noon on June 7th. The mail, destined for Washington, D.C. was then shipped back north by regular postage! Time of transit must have been at least 48 hours for the sub to Washington trip, an average speed of around 12 miles/hour, about the speed of the Pony Express. This gives a whole new meaning to the phrase "snail mail."

June 9, 1928 – A Fokker F.VIIb, the Southern Cross, completes the first flight across the Pacific Ocean. Commanded by Charles Kingsford Smith, the aircraft left Oakland, California on May 31st and hopped via Hawaii and Fiji to Brisbane, Australia in 83 hours



Southern Cross landing in front of 25,000 Aussies at Eagle Farm, Brisbane.



The crew of Southern Cross at Eagle Farm, 9 June 1928. (Left to right) Captain Harry Lyon, navigator; Charles Ulm, co-pilot; Charles Kingsford Smith, pilot; and James Warner, radio operator. (Credit: National Archives of Australia A1200, L36325)

June 10, 1953 – CAP icon A. Scott Crossfield pilots the retirement flight of the #3 Douglas D-558-1 Skystreak.



Skystreak #3 in flight, Scott Crossfield and CAP's Crossfield award ribbon

The Skystreaks were a joint program between the U.S. Navy and the National Advisory Committee on Aeronautics to explore the trans-sonic and supersonic flight regimes. The three aircraft which were built made 228 flights, set a number of speed records, and gathered important data for the aerodynamicists and structures engineers.



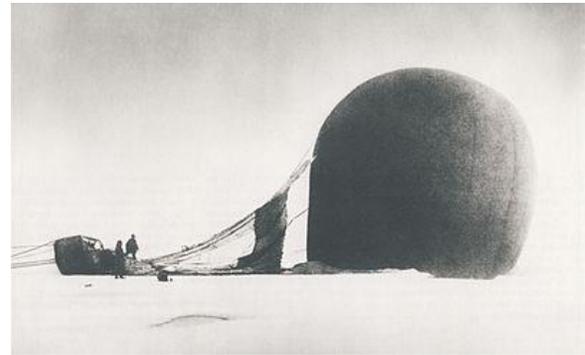
The "Crimson Test Tube" #1 at the original Naval Aviation Museum, circa 1970. The Carolinas Aviation Museum houses #3, painted white to improve optical tracking.

June 11, 1897 – Salomon August Andrée, N. Strindberg and K. Fraenkel attempt to reach the North Pole by balloon.



Örnen (Eagle) Departing Danes Island

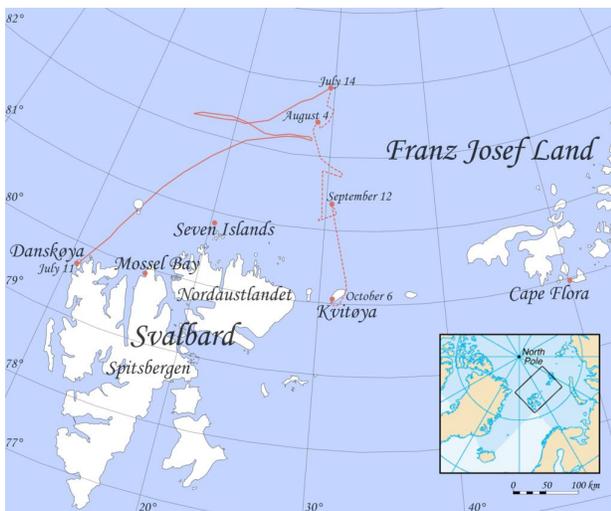
The balloon crashed on the 14th and the crew managed to survive on the pack ice for several months before perishing.



Eagle Down on the Ice
(Photo Credit: Neils Strindberg)



Campsite



This map by Johan Ellison show the path of the flight and the final voyage on foot.



Frænkel (left) and Strindberg with the first polar bear shot by the explorers.

In 1930, their remains were discovered by walrus hunters on White Island and their notes and film recovered.

The Eastman-Kodak film was about 32 years past the recommended use-by date but skilled photographic specialists restored the emulsion to a state which allowed developing and their records provided a relatively accurate account of their travails.

Undercooked polar bear meat may have contributed to their death. A bear carcass found at their last camp contained trichinosis larvae. Another possibility is Hypervitaminosis A poisoning from eating bear livers. There is also some evidence of a polar bear attack.

The ill-conceived attempt by inexperienced men was fore-doomed to a disastrous conclusion. Nonetheless, one can only admire their audacity and courage.

The Swedes honored them as heroes and they were awarded what is equivalent to a state funeral.