



AMA #1256
2013 Club Officers
 President: Ron Becker
 VP: Ron Abel
 Treasurer: John Gardiner
 Secretary: Mike Hunter
 Editor: Tim Mihalski
 District IV AVP: John Kirchstein
Volume 40 Issue 5



Official Newsletter of the
FIRST STATE R/C CLUB
 Established 1973 – An AMA Gold Leader Club
<http://www.firststaterc.org>



MAY 2013

UNOFFICIAL APRIL MEETING MINUTES

Members in Attendance: John Gardiner, Mike Hunter, Joe Berry, Ron Becker, Tim Mihalski, Jack Springer
Show and Tells: There were no shows or tells

MINUTES:

Call to Order:

- President Ron Becker called the meeting to order at 7:32 P.M.

Reading of the Minutes:

- Mike Hunter summarized the minutes from March's meeting. They were accepted as summarized.

COMMITTEE Reports:

Treasury Report: John Gardiner gave the following report

Cash Balances:

Editor's Note: Contact Club Treasurer for details.

	3-31-2013	12-31-2012	3-31-2012
Checking	xx.xx	xx.xx	xx.xx
Savings	xx.xx	xx.xx	xx.xx
Total	xx.xx	xx.xx	xx.xx

The only receipt during the month of March was \$0.17 for interest on the savings account.

No disbursements were made during the month of March 2013.

Upon the budget presentation for 2013, the recommendation was made and approved to transfer \$200.00 (each) from the checking account to the savings account for lawn mower replacement, demonstration equipment and field equipment. The above cash balances reflect the transfer of \$200.00 to the lawn mower reserve.

Recap of Club membership:

	3-31-2013	Budget	Delta	12-31-2012
Regular Members	25	28	-3	28
Senior Members	13	13	0	15
Junior Members	3	3	0	3
Complementary Members	1	1	0	1
Total	42	45	-3	47

MEETING MINUTES CONTINUED....

The above reflects the loss of –

- Carols Fernandez
- Anthony Gambacorta
- Steve Nowak
- Carl Witt

And the gain of –

- Ron Abel
- Nicky Wyeth

The report was accepted as given.

- **Safety Report:** There was no safety report.
- **Field Report:** Club members cleared brush, removed some stumps, cut grass, and changed the oil on the lawn mowers at the Field Clean-up held Saturday. They also removed the wood tie that was at the main entrance to the pits from the parking area.

OLD Business

- **Schedule of Events:** Ron Becker will coordinate the Fun Fly this Year.

NEW Business

- **Fuel Order:** The club will make a fuel purchase this year. The price will not be known until we make the order. Anyone that wants fuel please let John Gardiner know.
- **Entrance:** We had another break in at the entrance. The cable clips were removed and the cable was left on the ground. The people also destroyed the PVC pipe that was on the cable. As a result, the entrance barrier will be upgraded to chain and locks. The same lock will be used for entry but the configuration may be different (lock in center). Look for this change to be made sometime this month.
- **Marine Battery:** Carl Carasino will purchase a new battery for the charging station.
- **Field Cutting:** There will be no field cutting schedule this year. Retired members and others can cut the grass as required during the summer as has been done the previous two years.
- **Club Meetings:** Because of the decrease in members attending meetings, the May, June and September meetings will be moved to a Saturday at the field. The May meeting will be held Saturday May 11th at 11:00 pm. All flying will cease at the field during the meeting. The date and times of the

MEETING MINUTES CONTINUED....

June and September meetings will be determined at the May meeting.

Thank You

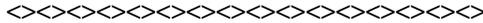
A **Thank You** goes out to Carl Carasino for donating oil and parts for the lawn mowers.

Adjournment

The meeting adjourned at 8:02 pm.



Respectfully Submitted,
Mike Hunter
Secretary
First State R/C Club



APRIL'S MYSTERY AIRCRAFT



Ilyushin IL-28 (Beagle)

The Ilyushin Il-28 (Russian: Ильюшин Ил-28 NATO reporting name: Beagle) is a jet bomber aircraft of the immediate postwar period that was originally manufactured for the Soviet Air Force. It was the USSR's first such aircraft to enter large-scale production. It was also license-built in China as the Harbin H-5. Total production in the USSR was 6,316 aircraft, and over 319 H-5s were built. Only 187 examples of the HJ-5 training variant were manufactured. In the 1990s hundreds remained in service with various air forces over 60 years after the Il-28 first appeared.

The Il-28 has the USAF/DoD reporting name "Type 27" and NATO reporting name "Beagle", while the Il-28U trainer variant has the USAF/DoD reporting name "Type 30" and NATO reporting name Mascot.

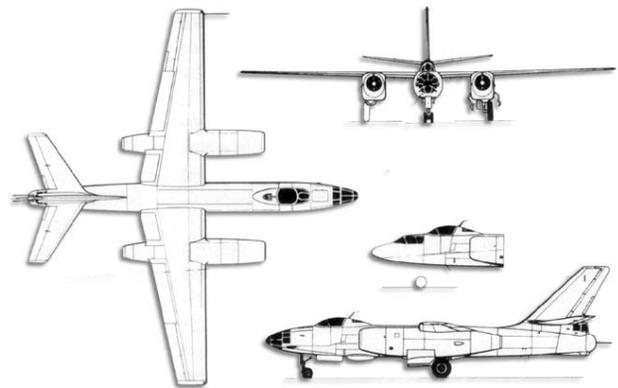
Design and development: After a number of attempts at a four-engine bomber (the Lyulka TR-1 powered Ilyushin Il-22 and the unbuilt Rolls-Royce Derwent powered Ilyushin Il-24), the Ilyushin Design Bureau began development of a new jet-powered tactical bomber in late 1947. Western Intelligence focused on the four-engine developments while the twin-engine Ilyushin Il-28 was created to meet a requirement for a bomber to carry a 3,000 kilograms (6,600 lb) bomb load at 800 kilometres per hour (500 mph). The new design took advantage of the sale of a number of Rolls-Royce Nene jet engines by Great Britain to the Soviet Union, which allowed Soviet engineers to quickly produce an unlicensed copy of the Nene, the RD-45, with Ilyushin designing the new bomber around two RD-45s.

APRIL'S MYSTERY AIRCRAFT

The Il-28 was smaller than the previous designs and carried a crew of only three (pilot, navigator and gunner). It was also smaller than the competing design from the Tupolev design bureau, the three-engined (i.e. two Nenes and a Rolls-Royce Derwent) Tupolev Tu-73, which had been started long before the Ilyushin project, and flew before the design of the Il-28 was approved.

The Il-28 design was conventional in layout, with high, unswept wings and a swept horizontal tail and fin. The engines were carried in bulky engine nacelles slung directly under the wings. The nosewheel retracted rearwards, while the mainwheels retracted forwards into the engine nacelles. The crew of three were accommodated in separate, pressurized compartments. The navigator, who also acted as bombardier was accommodated in the glazed nose compartment and was provided with an OPB-5 bombsight based on the American Norden bombsight of the Second World War, while the pilot sat under a sideways opening bubble canopy with an armoured windscreen. The gunner sat in a separate compartment at the rear of the fuselage, operating a power driven turret armed with two Nudelman-Suranov NS-23 23 mm cannons with 250 rounds each. In service, the turret was sometimes removed as a weight saving measure. While the pilot and navigator sat on ejector seats, the gunner had to parachute out of a hatch in the floor in the event of an emergency. Two more fixed, forward-firing 23 mm cannon with 100 rounds each were mounted under the nose and fired by the pilot, while a bomb bay was located under the wing, capable of holding four 100 kg (220 lb) bombs in individual containers, or single large bombs of up to 3,000 kg (6,600 lb) slung from a beam in the bomb bay.

One unusual design feature of the Il-28 was that the wings and tail were split horizontally through the centre of the wing, while the fuselage was split vertically at the centreline, allowing the separate parts to be built individually and fitted out with systems before being bolted together to complete assembly of the aircraft. This slightly increased the weight of the aircraft structure, but eased manufacture and proved to be more economical.



The first prototype, powered by two imported Nenes, made its maiden flight on 8 July 1948, with Vladimir Kokkinaki at the controls. Testing was successful, with the Il-28 demonstrating good handling and reaching a speed of 833 km/h (518 mph). It was followed on 30 December 1948 by the second prototype, with Soviet built RD-45 engines replacing

APRIL'S MYSTERY AIRCRAFT

the Nenes. After the completion of state tests in early 1949 the aircraft was ordered into large scale production on 14 May 1949, with the Klimov VK-1, an improved version of the RD-45 to be used in order to improve the aircraft's performance. The first pre-production aircraft with VK-1 engines flew on 8 August 1949, and featured reshaped engine nacelles to reduce drag, while the radome for the navigation radar was moved from the rear fuselage to just aft of the nosewheel.

Full production in three factories started in September 1949, with service deliveries starting in early 1950, allowing 25 Il-28s to be displayed at the Moscow May Day parade of 1950 (as ordered by Joseph Stalin when it was ordered into production in 1949). The Il-28 soon became the standard tactical bomber in the Soviet forces and was widely exported.



Operational history :

The Il-28 was widely exported, serving in the air arms of some 20 nations ranging from the Warsaw Pact to various Middle-Eastern and African air forces. Egypt was an early customer, and targeting Egyptian Il-28s on the ground was a priority for the Israeli Air Force during the Suez Crisis, Six Day War, and Yom Kippur War. The Soviet Union was in the process of providing the type for local assembly in Cuba when this was halted by the Cuban Missile Crisis, after which Nikita Khrushchev agreed to remove them. The type also saw limited use in Vietnam and with the Afghan forces in Afghanistan. Four ex-Egyptian and two ex-Soviet Il-28s (all with Egyptian crews) were operated by the Nigerian Air Force in the Biafra Wars. Yemeni Il-28s took part in the civil war in that country. Finland also had four examples of this type delivered between 1961 and 1966 for target-towing duties. They remained in service until the 1980s.

The Soviet Union withdrew the type in the 1980s, while the last Soviet-built examples were still flying in Egypt into the 1990s.

The People's Republic of China received over 250 Soviet built Il-28s from 1952, and when the Sino-Soviet split occurred in the late 1950s, it decided to place the Il-28 into production, despite no manufacturing license being obtained. Chinese built aircraft differed from the original Soviet aircraft in that they have a redesigned wing structure, abandoning the horizontal manufacturing break, saving 110 kilograms (240 lb) and the cost of more difficult construction. Chinese aircraft also used a different tail turret based on that of the Tupolev Tu-16, and fitted with faster firing AM-23 cannon.

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Chinese-built Il-28s designated H-5 and built by HAMC were also flying in the 1990s with several hundred in China itself, and a smaller number in North Korea and Romania. The three main Chinese versions are the H-5 bomber, followed by the HJ-5 trainer, and the H-5R (HZ-5) long range (in comparison to the reconnaissance version of Shenyang J-6) reconnaissance aircraft, and later, the HD-5 ECM/ESM version. The latter two types have been phased out.

The type is known to still be in active front line service the North Korean Air Force in respectable numbers, although little is known as to whether they are a mix of survivors from the batch of 24 Soviet manufactured aircraft delivered in the 1960s and some of the newer Chinese built H-5 variant, or are solely H-5s.



Several Ilyushin Il-28s are preserved in museums and as monuments in Russia, Germany, Hungary and in other countries.

Variants Soviet Union

Note: Order of variants determined chronologically by production/development dates.

Il-28

Basic three-seat bomber version, powered by two VK-1 engines.

Il-28U

Unarmed training version fitted with new nose housing cockpit for instructor, while the trainee sat in the normal cockpit. First flown 18 March 1950.

Il-28R

Three-seat tactical photo reconnaissance version, with extra fuel in bomb bay and tip-tanks, and with one forward firing cannon removed. Fitted with revised undercarriage to deal with heavier weights. First flew 19 April 1950.

Il-28RTR

ELINT version of Il-28R.

Il-28REB

Electronic warfare, electronic jamming version, fitted with wingtip electronic pods, that were in the former wing tanks.

Il-28T

Torpedo bomber version for the Soviet Naval Aviation able to accommodate two small or one large torpedo (including RAT-52 rocket propelled torpedoes) in a lengthened weapons bay.

APRIL'S MYSTERY AIRCRAFT



Specifications (Il-28) Data from Jane's All The World's Aircraft 1982-83

General characteristics

- Crew: Three (pilot, bombardier, gunner)
- Length: 17.65 m (57 ft 11 in (excluding cannon))
- Wingspan: 21.45 m (70 ft 4½ in (excluding tip tanks))
- Height: 6.70 m (22 ft 11¼ in)
- Wing area: 60.80 m² (654.5 sq ft)
- Airfoil: TSAGI SR-5S[12]
- Aspect ratio: 7.55:1
- Empty weight: 12,890 kg (28,417 lb)
- Loaded weight: 18,400 kg (40,565 lb)
- Max. takeoff weight: 21,200 kg (46,738 lb)
- Powerplant: 2 × Klimov VK-1A turbojets, 26.5 kN (5,952 lbf) each

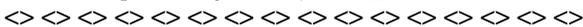


Performance

- Maximum speed: 902 km/h (487 knots, 560 mph) at 4,500 m (14,760 ft)
- Cruise speed: 770 km/h (415 knots, 478 mph)
- Range: 2,180 km (1,176 nmi, 1,355 mi) at 770 km/h (415 knots, 478 mph) and 10,000 m (32,800 ft)
- Service ceiling: 12,300 m (40,350 ft)
- Rate of climb: 900 m/min (2,950 ft/min)

Armament

- Guns: 4 × Nudelman NR-23 cannons (2 in nose and 2 in tail barquette)
- Bombs: 3,000 kg (6,600 lb) of bombs in internal bay (1,000 kg (2,200 lb) normal)
- Source: en.wikipedia.org/wiki/Ilyushin_Il-28



AREA EVENTS



The events listed, as well as others, can be found at your AMA's Contest Calendar Site on the WWW: go to URL: <http://www.modelaircraft.org/events/calendar.aspx> or the IMAA site at <http://www.fly-ima.org/ima/events/index.html>

Others listed are from club newsletters or flyers



6/8/2013 - 6/9/2013 -- Quakertown, PA (C-Restricted)
HAROLD WEIL MEMORIAL GIANT SCALE FLY IN.
 Site: Buc Le Memorial Flying Field. Travis Moyer CD PH: 215.529.6088 Email: tsmdmm@comcast.net. Visit: www.buc-le.org. The Buc Le Aero sportsmen Jon P Fritzges Memorial flying field is a 1000ftx250ft smooth grass runway. Plenty of primitive RV parking. Huge open flying site. Come for a weekend full of fun, good friends and great flying. Food concession. Hotel lodging nearby. No Landing fee. Any size airplane allowed to fly after 12 noon Sunday. Please visit our website for additional information.

Sponsor: BUC-LE AERO SPORTSMEN

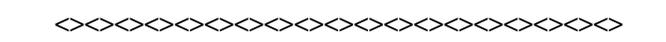


6/22/2013 -- Laurel, MD AIRPLANE OF THE WORLD II.
 Site: Konterra Field. David Wilson CD PH: 410-381-6005 Email: dwilson91143@verizon.net. Visit: www.freestateaeromodelers.org. Scale model fly in . Any type of scale or stand off scale aircraft is welcome. Please come join us. Pilot fee \$10.

Sponsor: FREE STATE AEROMODELERS



MAY'S MYSTERY AIRCRAFT



Until next month,
 Tim Mihalski, Editor

My E-Mail Address:
MIHALSKI@COMCAST.NET



MAY'S MYSTERY AIRCRAFT

A mystery aircraft for you to ponder... you can read all about this mystery ship in the June issue of *Contact*...

IMPORTANT REMINDERS...

Saturday 11:00 A.M. 05/11/13 Club Meeting at Field (weather permitting-next Saturday if rain)

Saturday 10:00 A.M. 05/18/13 Fuel/Electric Fun Fly at Field.-Contact: Ron Becker

Saturday 10:00 A.M. 05/25/13 Fuel/Electric Fun Fly at Field. (Raindate)-Contact: Ron Becker

Saturday 11:00 A.M. 06/08/13 Club Meeting at Field (weather permitting-next Saturday if rain)

No Club Meeting in July

No Club Meeting in August



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