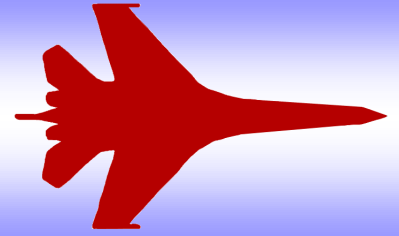


TRAC News



BOARD OF DIRECTORS

President

Don Riek
(813) 484-0703
driek30@tampabay.rr.com

Vice-President

James Chambers
(813) 985-2706
jchambe1@tampabay.rr.com

Secretary

Devin Allen
(813) 731-4702
F4phantomii@verizon.net

Treasurer

Tim Haas
626 Penn National RD.
Seffner, FL 33584
(813) 924-3269
treasurer@tractampa.com

Director

Bob Boetger
(813) 781-6246
rpboetger@gmail.com

Vince Cesario
(813) 621-2542
bigbeautifuldoll@hotmail.com

Newsletter Editor

John Heald
813-689-5020
jheald@tampabay.rr.com

TRACTampa.com

December 2023 Issue

President's Comments

Open House

The TRAC Open House/Thanksgiving event was a fun time, with good weather and a great lunch. Through the generosity of TRAC members and guests, we collected many cans of food, along with \$230 cash. Added to the \$300 donation from the club, we were able to deliver a total cash donation of \$530 to Metropolitan Ministries.



2024 AMA Renewal

Please check your AMA membership expiration date. Many of us have 12/31 as the expiration date. AMA does not have the 3 month grace period that TRAC does, so if your membership expires on 12/31 you are not authorized to fly on January 1 unless you renew.

2024 Membership Cards

TRAC membership cards for 2024 will be available at the December 16th club meeting for those that have extended their AMA membership for 2024, as well as TRAC membership.

Gate lock code will change on January 1

Safe Flying

Don Riek

Upcoming Events

TRAC - Fall Swap Meet at Field, Saturday, December 9, at 08:00AM

TRAC - Club Meeting at Field, Saturday December 16, at 11:00AM

TRAC - Club Meeting at Field, Saturday, January 13, at 11:00AM

TRAC - Club Meeting at Field, Saturday, February 10, at 11:00AM

TRAC - Club Meeting at Field, Saturday, March 9, at 11:00AM

TRAC MINUTES

November 11, 2023

Meeting Call to Order

Meeting called to order by Pres. Don Riek at 11:00 a.m. with 26 signed-in members present.

Motion to accept minutes of last meeting was made, seconded, and passed.

Treasury Report

James Chambers presented a detailed treasury report and break down of expenses.

Beginning Balance	\$ XXXX
Income	\$ 249.94
Expenses	\$ 1325.72
Closing Balance	\$ XXXX
Runway Fund	\$ 3939.00

Motion to accept the Treasurer's Report was made, seconded, and passed.

New Members/New Pilots

Meykel Alfonso

Safety block

Just be nice and remember it's the holidays so just have fun.

Old Business

- 1) Warbird was well attended we had a dozen or so pilots, and many planes on display, at one point there was over 50 cars in the parking lot. Thank You Vince and all the other volunteers that made this happen.
- 2) Thank You Frank Knowles for painting and donating the new signage installed at the entrance, and thanks to Don Riek and Mark Monti for installing them.
- 3) Our annual Thanksgiving Open House and pot luck luncheon will be November 18. We server hamburgers, hot dogs, and supply the drinks. You bring a dish to share. A \$5 dollar donation gets a great lunch. We also are asking for cash donations for Metropolitan Ministries and the club will also be making a donation as always.
- 4) Fall Swap meet scheduled for December 9th organized by Bob Boetger.
- 5) December club meeting will be moved to December 16th due to the swap meet.

New Business

- 1) 2024 Club Cards will be available at the December meeting. Verification of AMA membership and TRAC membership in good standing will be required to receive new card.
- 2) Gate Code will be changed at the January 2024 meeting.
- 3) Club officer elections were held and all current officers have volunteered to serve another year.

Show-and-Tell:

Adjournment 11:20 am

Messerschmitt Bf 110



The **Messerschmitt Bf 110**, often [known unofficially](#) as the **Me 110**,^{[[Note 1](#)]} is a twin-engined *Zerstörer* (destroyer, [heavy fighter](#)), [fighter-bomber](#) (*Jagdbomber* or *Jabo*), and [night fighter](#) (*Nachtjäger*) developed in [Nazi Germany](#) in the 1930s and used by the [Luftwaffe](#) during [World War II](#). [Hermann Göring](#) was a proponent of the Bf 110, believing its heavy armament, speed, and range would make the Bf 110 the Luftwaffe's premier offensive fighter. Early variants were armed with two [MG FF 20 mm cannon](#), four 7.92 mm (.312 in) [MG 17 machine guns](#), and one 7.92 mm (.312 in) [MG 15 machine gun](#) for defence (later variants would replace the MG FFs with [MG 151s](#) and the rear gunner station would be armed with the twin-barreled [MG 81Z](#)).

The Bf 110 served with considerable success in the early campaigns in [Poland](#), [Norway](#), and [France](#). The primary weakness of the Bf 110 was its lack of maneuverability, although this could be mitigated with better tactics. This weakness was exploited by the RAF when Bf 110s were flown as close escort to German [bombers](#) during the [Battle of Britain](#). When British bombers began targeting German territory with nightly raids, some Bf 110-equipped units were converted to night fighters, a role to which the aircraft was well suited. After the Battle of Britain, the Bf 110 enjoyed a successful period as an [air superiority fighter](#) and [strike aircraft](#) in other theatres and defended Germany from strategic air attack by day against the [USAAF's 8th Air Force](#), until an American [change in fighter tactics](#) rendered them increasingly vulnerable to developing American [air supremacy](#) over the Reich as 1944 began.

The Bf 110's main strength was its ability to mount unusually powerful air-to-air weaponry. Early versions had four 7.92 mm (.312 in) [MG 17 machine guns](#) in the upper nose and two 20 mm [MG FF/M cannons](#) fitted in the lower part of the nose. Later versions replaced the MG FF/M with the more powerful 20 mm [MG 151/20 cannons](#) and many G-series aircraft, especially those which served in the bomber-destroyer role, had two 30 mm (1.18 in) [MK 108 cannons](#) fitted instead of the MG 17. The defensive armament initially consisted of a single, flexibly mounted 7.92 mm (.312 in) [MG 15 machine gun](#). Late F-series and prototype G-series were upgraded to a 7.92 mm (.312 in) [MG 81 machine gun](#) with a higher rate of fire, and the G-series was equipped with the twin-barreled [MG 81Z](#). Many G-series night fighters were retrofitted or factory-built with the [Schräge Musik](#) off-bore gun system, which fired upward at an oblique angle for shooting down bombers while passing underneath; it was frequently equipped with two 20 mm MG FF/M, but field installations of the 20 mm MG 151/20 or 30 mm (1.18 in) MK 108 cannons were also used. The *Schräge Musik* weapons were typically mounted immediately in front of the rear [cockpit](#).

The Bf 110 G-2/R1 was also capable of employing armament such as the *Bordkanone*-series 37 mm (1.46 in) [BK 3,7](#) auto fed cannon, mounted in a conformal ventral [gun pod](#) under the fuselage. A single hit from this weapon was usually enough to destroy any Allied bomber.

The initial Bf 110 C-1/B fighter-bomber could carry two 250 kg (551 lb), two 500 kg (1,102 lb), or two 1,000 kg (2,204 lb) bombs on two ETC 500 racks under the fuselage and, starting with the Bf 110 E-0, could be supplemented by four additional 50 kg (110 lb) bombs on ETC 50 racks under the wing.

After a period of use on bombing and reconnaissance, the type found its niche during the winter of 1940-41 as a night fighter in defensive operations. At first, the three main crew members had no special equipment for night operations and relied on their eyes alone to find enemy aircraft in the dark. Ground-controlled interception began from mid 1941 and the Bf 110 began to take its toll on [RAF](#) bombers and was soon an aircraft to be feared. Airborne radar was used experimentally during 1941, effective up to a maximum distance of 3.5 km/ 2.2 miles and capable of bringing the Bf 110 to within 200 m/655 ft of a target.

By July 1942, the Bf 110F-4 was the first version to be designed specifically as a night fighter. It was something of a stop-gap measure, though armed with four 7.92mm/ 0.31 in machine guns and two 20 mm / 0.78 in cannon.

General characteristics

Crew: 2 or 3

Length: 12.0714 m (39 ft 7.25 in)

Wingspan: 16.2497 m (53 ft 3.75 in)

Height: 4.128 m (13 ft 6.5 in)

Wing area: 38.4000 m² (413.334 sq ft)

Airfoil: root: [NACA 2R1 \(18.5%\)](#); tip: [NACA 2R1 \(11%\)](#)^[22]

Empty weight: 4,425 kg (9,755 lb) * **Empty equipped weight:** 4,885 kg (10,769 lb)

Gross weight: 6,028 kg (13,289 lb)

Max takeoff weight: 6,749 kg (14,880 lb)

Fuel capacity: 1,272 L (336 US gal; 280 imp gal) in 4 center-section tanks

Powerplant: 2 × [Daimler-Benz DB 601A-1](#) V-12 inverted liquid-cooled piston engines, 780 kW (1,050 hp) each for take-off

820 kW (1,100 hp) at 3,700 m (12,140 ft)

Propellers: 3-bladed VDM variable-pitch propellers

Performance

Maximum speed: 475 km/h (295 mph, 256 kn) at sea level; - weight = 13,289 lb (6,028 kg)

525 km/h (326 mph; 283 kn) at 4,000 m (13,120 ft)

541 km/h (336 mph; 292 kn) at 6,000 m (19,685 ft)

Cruise speed: 262 km/h (163 mph, 141 kn) maximum continuous at sea level

489 km/h (304 mph; 264 kn) maximum continuous at 5,000 m (16,400 ft)

484 km/h (301 mph; 261 kn) maximum continuous at 7,000 m (22,970 ft)

349 km/h (217 mph; 188 kn) economical cruise speed at 4,200 m (13,780 ft)

Landing speed: 150 km/h (93 mph; 81 kn)

Range: 774 km (481 mi, 418 nmi) at sea level with normal internal fuel at maximum continuous cruise speed

850 km (530 mi; 460 nmi) at 5,000 m (16,400 ft) at maximum continuous cruise speed

Range at economical cruise speed: 909 km (565 mi; 491 nmi) at 7,000 m (22,970 ft) at economical cruise speed

1,094 km (680 mi; 591 nmi) at 4,200 m (13,780 ft) at economical cruise speed

Service ceiling: 10,000 m (32,810 ft)

Rate of climb: 11 m/s (2,200 ft/min)

Time to altitude: 6,000 m (19,685 ft) in 10 minutes 12 seconds

Wing loading: 173 kg/m² (35 lb/sq ft)

Power/mass: 0.241 kW/kg (0.147 hp/lb)

Armament

Guns: ** 2 × 20 mm (0.787 in) [MG FF/M cannon](#) (180 rpg—3 drums with 60 rpg, cannon were reloaded by rear gunner or radio operator during flight)

4 × 7.92 mm (0.312 in) [MG 17 machine guns](#) (1,000 rpg)

1 × 7.92 mm (0.312 in) [MG 15 machine gun](#) for defense



The November Open House was a big success. Lots of fun and good food. Here are some pictures.

