

## Savoia-Marchetti SM.82 Canguro



[Savoia-Marchetti SM.82PW Canguro italien](#)

Le Savoia-Marchetti SM.82 Canguro (pour kangourou) était un avion de transport italien de la seconde guerre mondiale, avec des capacités de bombardement. Il fut conçu pour ces missions à partir du SM.75 Marsupiale, un avion civil, à la demande d'Italo Balbo. De même configuration (trimoteur, ailes médianes, train classique rétractable, construction essentiellement métallique) mais plus long et plus large, il fut rapidement développé et fut présenté en juin 1938. 10 exemplaires furent commandés dès le 23 janvier 1939, et 40 la semaine suivante. Le vol inaugural eut lieu le 30 octobre 1939 et fut effectué par un appareil de série. Le prototype, lui, était à l'origine motorisé par des Alfa Romeo 126 RC34, jugés trop peu puissants et remplacés par des Alfa Romeo 128 RC18. Il ne prit l'air que le 5 février 1940. Un SM.82 battit en 1939 un record de vitesse sur 10000 km à 239,67 km/h, tenant en l'air pendant plus de 56 heures. Le SM.82 était motorisé par 3 Alfa Romeo 128 RC.18 en étoile de 860 cv actionnant des hélices tripales en aluminium. Ces moteurs étaient une version ultime du Bristol Pegasus. L'équipage comprenait 4 personnes : le pilote (qui disposait d'un siège blindé), le copilote, un mécanicien et un mitrailleur. La cabine était en 2 parties : la partie supérieure disposait de 32 sièges et la partie inférieure servait au transport de fret ou de soute à bombes. Il emportait 4403 kg de carburant et 4 tonnes de bombes, réparties par exemple en 4 bombes de 800 kg, ou 8 bombes de 500 ou de 250 kg, ou 27 bombes de 50 ou de 100 kg, ou 25 bombes de 100 kg à sous-munitions, ces dernières rarement utilisées. Bien que lent (sa vitesse de croisière était de 250 km/h) et sous-motorisé, il pouvait emporter un char léger L3/35, un Fiat CR.42 ou 40 soldats équipés. Sa défense reposait sur une tourelle dorsale armée d'une mitrailleuse Scotti de 12,7 mm avec 350 coups, et d'une gondole ventrale avec 3 mitrailleuses Breda-SAFAT de 7,7 mm avec 4 magasins de 215 cartouches chacune.



[Savoia-Marchetti SM.82PW Canguro italien vue de dessus](#)

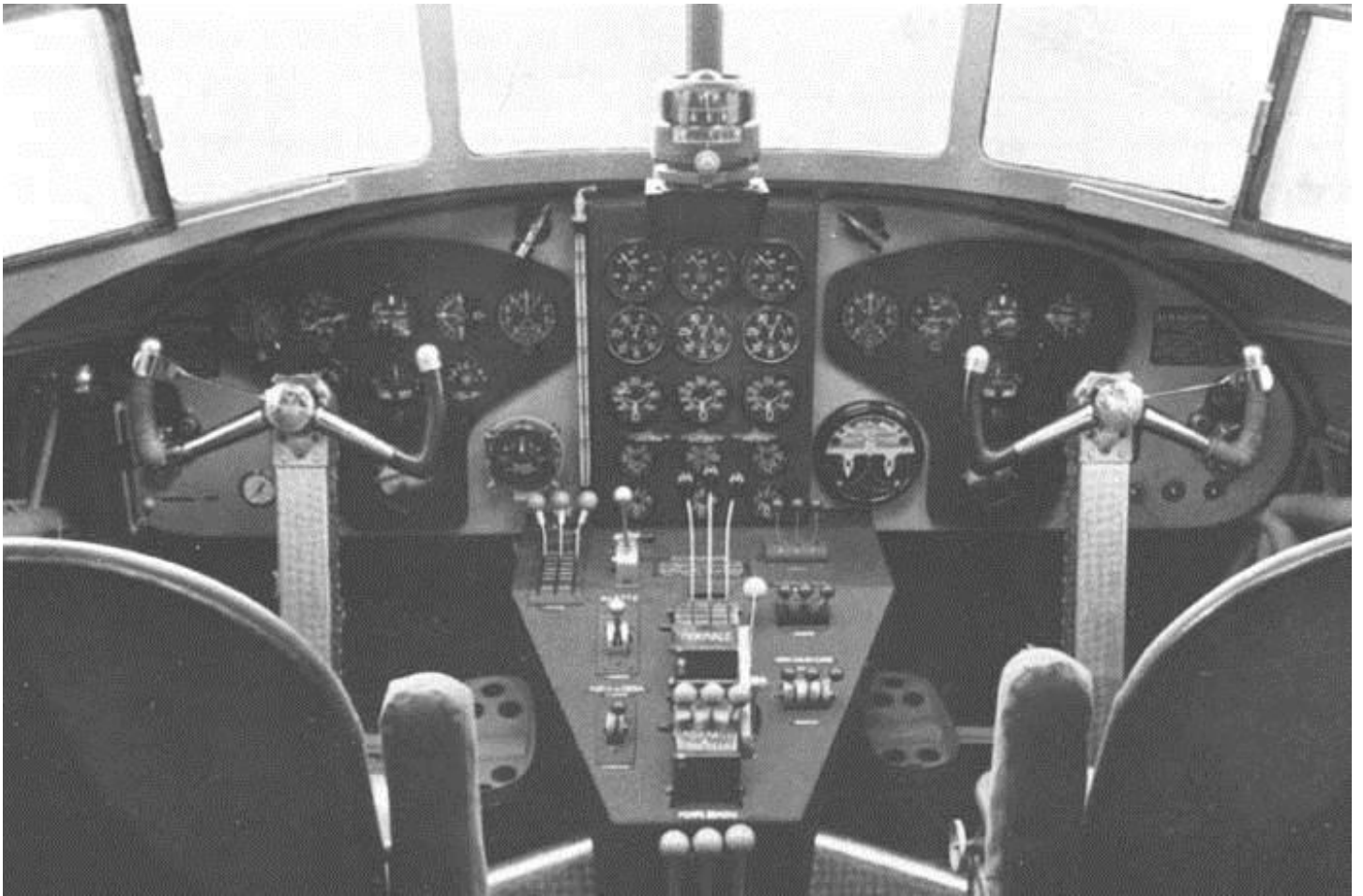
Les livraisons à la force aérienne italienne, la Regia Aeronautica, commencèrent dès 1940. Mais la production fut lente et 100 appareils seulement furent livrés cette année-là, ainsi que 100 autres en 1941. Elle doubla à partir de 1942 et atteignit presque 300 exemplaires en 1944, lorsque l'usine fut contrôlée par les Allemands. Les premières missions commencèrent en juin 1940, lorsque les SM.82 emportèrent 360 soldats du 61<sup>e</sup> régiment d'infanterie en Libye, puis, le 17, 10 canons anti-chars et des équipements radio. L'Italie était formellement entrée en guerre le 10 juin 1940 contre la France et la Grande-Bretagne. Le premier appareil fut perdu le 24 juin. La première mission de bombardement eut lieu le 17 juillet 1940 au-dessus de Gibraltar, puis, en octobre et novembre 1940, au-dessus d'Alexandrie. Ces bombardements reprurent en 1941 et 1942. L'action la plus remarquable du SM.82 fut le bombardement des raffineries de Bahreïn, le 19 octobre 1940. 4 appareils décollèrent de Rhodes pour un trajet de 4200 km, soit 15 heures de vol. Chaque appareil emportait 1500 kg de bombes. Le raid, prenant les Britanniques par surprise, fut un succès. Le SM.82 effectuera principalement des missions de transport (y compris de parachutistes), mais pas en Libye où sa faible vitesse ne lui permettait pas d'affronter les vents contraires particulièrement violents. Il ravitaillera les troupes en Afrique Orientale, Érythrée et Éthiopie. Entre le 27 juillet 1940 et la fin de l'année, 5187 heures de vol avaient été effectuées, 16267 passagers transportés ainsi que 2247 tonnes de matériels (dont des CR.42). Les SM.82 ravitailleront également les rebelles irakiens à partir de mai 1941 avec 18 tonnes de fret et 25 passagers. Ils serviront ainsi au Moyen-Orient et en Afrique du Nord jusqu'à la fin, en avril 1943. Des SM.82 bombardèrent les troupes Alliées qui débarquèrent en Sicile (y compris avec des bombes à sous-munitions, à Comiso), mais ils furent plus une nuisance qu'autre chose. En définitive, ce fut plutôt en tant qu'avion de transport de parachutistes que le SM.82 eut du succès, que ce soit en Italie, en Afrique, en Grèce ou en URSS.



[Savoia-Marchetti SM.82PW Canguro, vue aérienne](#)

La Luftwaffe commanda 100 SM.82, mais en 1943 elle n'en avait reçu que 35. Après l'armistice italien de septembre 1943, elle en captura 200, utilisés pour l'essentiel pour des missions de transport. Les SM.82 avaient de plus grandes capacités que le Ju 52. En 1944, l'usine de Savoia-Marchetti n'ayant toujours pas été bombardée, les Allemands reçurent près de 300 exemplaires. Au total, ils en auront employés près de 500 exemplaires. L'Aeronautica Nazionale Repubblicana utilisa 50 exemplaires. La force aérienne italienne cobelligérante n'en récupéra que 29. Ils furent utilisés par la force aérienne italienne après la guerre, jusqu'au début des années 1960. Le SM.82 se montra vulnérable, en particulier face aux chasseurs. Ses réservoirs, censés être auto-obturants, ne pouvait prévenir une explosion s'ils étaient touchés par des balles explosives. Les mitrailleuses, peu fiables, avaient une portée réelle de 200 mètres. Son altitude de 5000 mètres était inférieur à celui des chasseurs. Ainsi, le 24 novembre 1942, 3 Beaufighter abattirent les 7 SM.82 qu'ils rencontrèrent. Le 10 avril 1943, une formation de P-38 abattit 10 SM.82 sur 20 en une seule passe. Malgré la guerre, quelques SM.82 furent utilisés comme avions civils de transport de passagers, sur la liaison Italie-Bésil (en passant par l'Espagne et l'Afrique Occidentale). L'équipement militaire, représentant 350 kg, était enlevé et 1306 litres supplémentaires de carburant étaient emportés. 14 passagers y prenaient place. 68 vols furent effectués entre le 11 septembre 1940 et l'entrée en guerre du Brésil en 1941. 2 appareils furent perdus en décembre 1940. Il exista différentes configurations du SM.82. 532 exemplaires de la version de base furent construits en 10 lots. 68 SM.82 furent construits en configuration bombardier. 4 appareils furent modifiés pour transporter le char L3/35, et 2 appareils pour livrer un CR.32 ou CR.42 : 51 avions furent livrés en Afrique de l'Est jusqu'en avril 1941. 2 autres SM.82 modifiés servirent à transporter autant de moteurs de rechange au même lieu. 2 SM.82 furent modifiés pour transporter 3000 litres de carburant. Le SM.82P, construit à 21 exemplaires, servit à transporter des parachutistes. Le SM.82Bis, construit à 80 exemplaires avec des moteurs Piaggio P.X de 1190 cv, servait au bombardement de nuit. Quelques SM.82 LATI servirent au transport civil sur les lignes internationales. Le SM.82 LW était spécifique à la Luftwaffe, avec un armement défensif allemand (une MG 131 de 13 mm en tourelle et des MG 17 de 7,92 mm). 231 exemplaires étaient en service début 1944 au sein du "Savoia Gruppen".

Le S.82PD était en réalité un SM.75 modifié pour battre des records. Enfin, le S.82PW était un SM.82 remotorisé avec des Pratt & Whitney R-1830 : 20 exemplaires furent ainsi modifiés et servirent dans la force aérienne italienne jusqu'au 3 août 1960. 721 exemplaires furent construits. Au moins un exemplaire, un S.82PW, a survécu et est exposé au musée de la force aérienne italienne à Vigna di Valle.



Source : <https://aviationsmilitaires.net/v3/kb/aircraft/show/191/savoia-marchetti-sm82-canguro>

The **Savoia-Marchetti SM.82 *Marsupiale***<sup>[2]</sup> was an Italian [bomber](#) and transport aircraft of [World War II](#). It was a [cantilever](#), mid-wing [monoplane trimotor](#) with a retractable, [tailwheel undercarriage](#). There were 875<sup>[3]</sup> (plus one prototype) built, the first entering service in 1940. Although able to operate as a bomber with a maximum bombload of up to 8,818 lb (4000 kg), the SM.82 saw very limited use in this role.<sup>[4]</sup> The SM.82 was the foreign aircraft used in largest number by the [Luftwaffe](#), which operated several hundreds of this aircraft, as a transport.<sup>[3]</sup> Post-war about 30 SM.82s continued in service with the *Aeronautica Militare Italiana*, many remaining in service until the early 1960s.<sup>[5]</sup>

### Development

The SM.82 was developed from the earlier [SM.75 \*Marsupiale\*](#) civil transport as a [heavy bomber](#) and [military transport](#). Although having the same configuration of the SM.75, the SM.82 was larger. The aircraft was quickly developed and the [prototype](#) first flew in 1939. Although underpowered and slow, it was capable of carrying heavy loads, including the [L3 light tank](#) and a complete disassembled [CR.42 fighter](#) (these loads demanded special modifications). It had both cargo and troop transport capability, with room for up to 40 men and their equipment. Deliveries to the [Regia Aeronautica](#) began in [1940](#). However, production rates were slow, with only 100 aircraft delivered in 1940, and another 100 in 1941, so that there were never enough of these aircraft in service. By 1942 production doubled to 200 a year, while in 1944 almost 300 were produced, by which time the factory was under the control of the Germans. In 1939 it set a world's closed circuit distance record when it covered 10,000 km at an average speed of 239.67 km/h, remaining in the air for 56.5 hours. The aircraft saw extensive service throughout all the various African campaigns.

### Design



Rear starboard view of SM.82

The SM.82's fuselage was of mixed-construction, with welded-steel tube framework, with 22 frames and four [longerons](#), skinned with metal forward, and [plywood](#) and fabric elsewhere. The [wings](#) were constructed almost entirely of wood, having three T-section [spars](#), and 42 ribs in each. The [flaps](#) were made from a single piece of wood, while the ribs were of light and flexible [poplar](#). The skin was of fabric-covered plywood, [doped](#) to be water-resistant. The [ailerons](#) (+13/-28°) occupied about half of the wing's [trailing edge](#) while [Handley Page slats](#) occupied the leading-edge. The tail had a conventional [spruce](#) structure and a plywood skin, while the rudder and [elevators](#) were a fabric-covered metal framework. Inside, there were two levels. The upper level held seats for 32. The lower level was used for freight or to carry bombs when used in the bombing role, with two large [duralumin](#) bomb bay doors.

The floor was made of wood, with nine detachable panels, that helped with the accommodation (through the bomb bay doors) of heavy loads. The [cockpit](#) held four: two pilots, with the first (on the left) with an armoured seat, a mechanic and an engineer/gunner. Internal equipment comprised a radio-transmitter (AR8 and AR350), a [fire extinguisher](#) system, and an electrical generator. The instruments included [altimeters](#), thermometers, [compass](#), clock, and a Telefunken P63N radio [goniometer](#). The SM.82 was fitted with three 641 kW (860 hp) [Alfa Romeo 128 RC.18 radial engines](#) with [aluminium](#) and steel three-blade [constant speed propellers](#) 3.6 m (11 ft 9 in) in diameter. These engines were the ultimate evolution of the license-built [Bristol Pegasus](#). The aircraft had six self-sealing fuel tanks in each wing, three between the second and third spar, with a total of 1,276 L (337 US gal). Between the first and second spar there were another three fuel tanks with 653 L (173 US gal). Another tank in the nose, with 167 L (44 US gal) of 100 octane fuel (rather than 87) for the electric generator. The total weight of fuel amounted to 4,403 kg (9,707 lb), plus 136 L (36 US gal) of oil.<sup>[6]</sup> The SM.82 had both defensive and offensive armament. For offensive purposes it could carry a very wide range of ordnance, up to 4,000 kg (8,820 lb).

- 4 × 800 kg (1,760 lb)
- 8 × 500 kg (1,100 lb)
- 8 × 250 kg (550 lb)
- 27 × 50 kg (110 lb) or 100 kg (220 lb) bombs
- 25 × 100 kg (220 lb) cluster bombs, each containing 56 bomblets, though these were rarely used.

Control over bomb release was in the retractable ventral bombardier's gondola, equipped with a *Jozza* bombsight and also fitted with a rear-facing 7.7 mm (.303 in) Breda machine gun.<sup>[6]</sup> Accommodation for the bombardier was far from ideal, being cramped, unheated, unpressurized, and not connected to the oxygen system. The 1 mm steel structure was also highly vulnerable to enemy fire. For protection, only the first pilot's seat was armoured, while the [self-sealing fuel tanks](#) were proofed, theoretically, against 12.7 mm (.50 in) rounds, but did not have [Carbon dioxide](#) pressurization to prevent explosions if they were hit by tracer, incendiary or explosive rounds. No other armour was fitted. All this made it extremely vulnerable to enemy fire.<sup>[6]</sup> The main defensive weapon was a Caproni-Lanciani rotating dorsal turret, armed with a Scotti 12.7 mm (.50 in) machine gun with 350 rounds. This weapon was theoretically more powerful and lighter than the Breda-SAFAT, but reliability was a concern, and projectile dispersion was so wide as to reduce the theoretical range of 400 m (1,310 ft) to around 200 m (660 ft) in practice. Additional 7.7 mm (.303 in) [Breda-SAFAT machine guns](#) were mounted in each side and in the bombardier's gondola, with four 215-round magazines each. The gondola's machine gun was of little use given the cramped accommodation, and was often not fitted, even in the SM.82 equipped for the bombing role.<sup>[6]</sup> German machine-guns were used in the [Luftwaffe](#) versions, with the 13 mm (.51 in) [MG 131](#) in the turret. 7.92 mm (.312 in) [MG 17s](#) were used in some aircraft. The SM.82's performance was modest, with a cruising speed only 250 km/h (160 mph) at 3,000 m (9,840 ft), even without the bombardier's gondola under the nose (which added more drag) it was slow, while its silhouette was large and easy to spot. The ceiling was seldom over 5,000 m (16,400 ft). This left the SM.82 well inside the operational altitude of most fighters of the time, as well as the effective range of heavy and medium anti-aircraft guns. In comparison, the [B-17](#) had a typical ceiling of 6,000–8,000 m (19,690–26,260 ft), (note that the B-17 and B-24 Liberator both had unusually high operating ceilings for the time, as compared to other bomber and transport aircraft). In operation, when faced with a fighter opposition, the SM.82 suffered a devastating loss rate. On 24 November 1942, three [Beaufighters](#) downed seven SM.82s, a 100% loss. Later on 10 April 1943, 10 out of 20 in formation were downed by a single pass of a [P-38 Lightning](#) squadron. At altitude, the SM.82 was almost a fixed target for both flak and fighter opposition.

## Operational history

### Early missions

The first missions were to transport Italian troops to [Libya](#), together with their heavy equipment, but the first two squadrons had only three SM.82s each. The first flights were made the beginning of June 1940, transporting 360 men of 61° Infantry Regiment. Initially, the aircraft were organized in 149° *Gruppo*, with a [SM.73](#) and [SM.75](#).

On the 17 June 1940 the first mission for all five aircraft of the *Gruppo*, transported ten anti-tank guns and 17 radio-communication units. By 24 June, there were 11 aircraft employed in transporting men and equipment to Africa. Within a few weeks a further 25 were delivered. On 24 June, the first SM.82 was lost during a resupply mission in the desert. In July 1940, a series of bombing missions to [Gibraltar](#) was organized, with 1,000 kg (2,200 lb) of bombs in each aircraft. The first bombing mission was on 17 July 1940 with three SM.82s taking off from [Guidonia](#) at 1940, and flying 1,600 km (995 mi) to arrive over Gibraltar eight hours later at 0340. Another mission was launched from [Sardinia](#) to shorten the journey, then another on 20 August, this time by 32° Wing. However one of the two aircraft, carrying a 1,000 kg (2,210 lb) bombload, was shot down. The other two aircraft in 32° Wing were reassigned to transport squadrons. In mid-1940, 41° Group was sent to [Rhodes](#) with three SM.82s, and other four in October, for the [special mission](#) to the British-controlled oil refineries at [Manama](#) in the [Persian Gulf](#). This meant a flight of 4,200 km (2,610 mi), lasting 15 hours at 270 km/h (170 mph), that was for the time arguably a record for a bombing mission. Four SM.82s took off from [Rhodes](#), under the command of [Ettore Muti](#). Each aircraft carried a load of 1,500 kg (3,310 lb).<sup>[6]</sup> This long-range action was successful, taking the target totally by surprise, and the SM.82s landed without problems at [Zula](#). This raid caused the Allies some concern, forcing them to upgrade their defences. This, more than the limited amount of damage caused, further stretched Allied military resources. The scarcity of SM.82s hampered further long-range missions, though some actions were carried out. Six single aircraft night bombing missions were mounted, mainly against [Alexandria](#), in October and November 1940. All these missions were performed by SM.82s of 114° *Gruppo*, but all of their aircraft were destroyed or damaged by the time of [Operation Compass](#) in December 1940.

### East African Campaign



A SM.82 at Fezzan, southern Libya

The need for transport aircraft meant that, apart from occasional special operations, like dropping paratroops, the SM.82s were used solely in this role; especially to maintain contact with Eastern Africa which was more and more isolated from the rest of the Italian forces. Italy at that time had control of part of [East Africa](#) (AOI, *Africa Orientale Italiana*), and needed a long-range supply aircraft to support its troops fighting the [East African Campaign](#). 149° *Gruppo* flew many missions over the Adriatic, and to Ethiopia, despite the fact that the pilots were convinced that given the strong, contrary winds, the slow SM.82s would be unable to return to [Libya](#). The missions to eastern Africa were carried out with a 1,300 L (340 US gal) auxiliary tank fitted, and the first mission was successfully performed on 27 July 1940, between [Benghazi](#) (Libya) and [Asmara](#) (Eritrea). However, on the fourth mission aircraft *MM.60277* overran the airstrip and was largely destroyed by fire. 149° *Gruppo* flew 330 missions with its S.82s, S.75s and S.83s. By the end of 1940, the SM.82s had logged 5,187 hours flight time, with 16,267 passengers and 2,247 tonnes of materials. On 24 August 1940, the first delivery of a Fiat CR.42 fighter was made to Eastern Africa. By April 1941, 51 CR.42s and 51 reserve engines had been delivered, but despite this effort the AOI fell to the Allies in May 1941.<sup>[6]</sup>

In March 1941, 32° Wing received some new SM.82s, and organized five bombing missions over Gibraltar in June and July, always with only one aircraft. On 1 April 1942, another attack was made by three aircraft that dropped 18 160 kg (353 lb) bombs. All this accounted for just eight attacks in almost two years on this key British position, with around twenty aircraft (between one and three each time), and a little more than a tonne of bombs delivered by each aircraft.

## North Africa



A SM.82 at an airfield in North Africa

The Special Bombing Section was constituted, with only two SM.82s, on 10 April 1941, and another five aircraft were delivered later. They performed only a few missions as bombers, including two over [Alexandria](#) in May and June, before being used as transports. On 1 March 1941, 146° Gruppo was formed with 17 SM.82s, one SM.79 and one [Ca.164](#). 146° Gruppo, along with 145° and 149° Gruppo, were mainly involved in transport missions to North Africa. In May 1941 during the [Anglo-Iraqi War](#) the Iraqis requested help from Axis air forces, and SM.82s flew several missions via [Syria](#) carrying a total of 18 tonnes of equipment and 25 persons. In July 1941 37° Gruppo was equipped with SM.82s. In 1942, 18° Wing, and then 44°, 45°, and 48° Wing were equipped with the aircraft. From the end of 1942, these aircraft flew many supply missions across the Mediterranean, until [Operation Flax](#) in April 1943 ended the air bridge to Axis forces in Tunisia. The SM.82 suffered many losses. In December 1941, six were destroyed by [Bristol Blenheims](#) at [Castelvetrano](#) airfield in a single night. In the last months of the North African campaign, SM.82s were used to send troops and materials, even though it was clear that this campaign was lost after [El Alamein](#). Around 100 SM.82 were shot down or destroyed on the ground between November 1942 and April 1943.<sup>[6]</sup> Among other episodes, on 2 November 1942, seven (or six depending on source) SM.82s were forced to land (or crashed) by only three [Beaufighters](#). On 12 November 1942, six Beaufighters downed an entire formation of five SM.82s. On 22 November, ten SM.82s were attacked by three Beaufighters, causing much damage and killing or wounding many of the troops inside the unarmoured aircraft. On 10 April 1943, another seven were downed, four more on 16 April, and finally on 19 April 1943 twelve SM.82, one SM.75, and three [Fiat G.12s](#) were downed or forced to land. Attacks on airfields destroyed five SM.82s at Benina airfield (19 km/12 mi east of Benghazi), three at [Tunis](#) on 22 January 1943, and three on 24 March. At Castelvetrano, 11 SM.82s were destroyed on 13 April.

During the attacks on [Rome](#) on 19 July 1943, eight S.82s were destroyed and seven damaged at [Urbe](#) airfield, and four SM.82s were destroyed, and 14 damaged over [Ciampino](#). Both in the air or on the ground, SM.82s were easy targets. 145° Group, usually a transport unit, was also equipped with some bomber versions and attacked enemy targets in [Marmarica](#) and [Egypt](#) in four night raids in June 1942. On 3 July a single aircraft bombed the El Haman airfield in Libya. Another four aircraft flew from Rodi airfield to bomb Alexandria, but after only four missions, all four aircraft were taken out of service. In July 1943 there were bombing missions over [Sicily](#), to [interdict enemy landings](#), like the one that dropped 20 cluster bombs (100 kg/220 lb and 28 bomblets each) over [Comiso](#). These missions were only a nuisance to the Allies, even if they forced them to assign first line air defences and interceptors to counter the threat. This was the main reason for the Italians to mount these missions, although only a total of 100 [sorties](#) were flown in three years of war, with an average of 1,000–1,500 kg (2,200–3,310 lb) bombload, and the use of some of the best aviators of the Regia Aeronautica. The most successful missions for the SM-82 were in the paratrooper transport role. Several special paratrooper models were made, but all were used by simply putting wooden planks in the bomb bay to stand on. Over 15 combat air drops were made successfully with few losses in Italy, Africa, Greece and Russia.

## Luftwaffe



SM.82 of the *Luftwaffe*

Between 1942 and Spring 1943, *FliegerTransportGruppe* "Savoia" operated 100 Savoia-Marchettis. After September 1943, SIAI kept on producing SM.82 for Luftwaffe, delivering 299 planes. Other *Marsupiali* were captured after the 8 September armistice. These aircraft had better capabilities as transports than the [Junkers Ju 52](#), the standard transport aircraft of the Luftwaffe, that was, however, much more robust, compared to the SM.82, being all metal. Under German insignia, the Savoia-Marchettis were operated mostly by 6th [Luftflotte](#) and *ReichLuftflotte* on Eastern front and in Northern Germany, up to the end of war,<sup>[3][6]</sup> but little is recorded of the activities of these aircraft in the last 18 months of the war as most were ad-hoc units. Records were either not kept or were destroyed.

## After the [armistice](#)



Co-Belligerent Air Force SM.82

After the Armistice of 8 September 1943, only 29 planes were operated by the [Italian Co-Belligerent Air Force](#) in Southern Italy. The [Aeronautica Nazionale Repubblicana](#) of the [Italian Social Republic](#), the fascist puppet state installed by Germany in northern Italy,<sup>[6]</sup> operated about 60 aircraft, 40 of which assigned to 2° *Gruppo A.T.* "M.O. Trabucchi" that flew on Eastern front.<sup>[3]</sup> After the war, about 30 SM.82s continued in service with the [Aeronautica Militare](#) until the early 1960s.

### **Civil transport**

Even with the outbreak of the war long-range civilian routes did not end. The civil aircraft had 14 seats, 1,306 L (345 US gal) of additional fuel, and 350 kg (770 lb) of military equipment removed. They flew to Brazil via Spain and West Africa. Between 11 September 1940 and the entry of Brazil into the war in 1941, 68 flights were made. Two aircraft, *I-BAIA* and *I-BRAZ*, were lost in December 1940. Some S.82s were used in militarized service, with Special Air Services and the task of personnel transport, including the civilian evacuations in 1941.

## Specifications (SM.82)

### General characteristics

- **Crew:** 4
- **Capacity:** 40 troops
- **Length:** 22.9 m (75 ft 2 in)
- **Wingspan:** 29.68 m (97 ft 5 in)
- **Height:** 6 m (19 ft 8 in)
- **Wing area:** 118.6 m<sup>2</sup> (1,277 sq ft)
- **Empty weight:** 10,550 kg (23,259 lb) (transport)

11,200 kg (24,692 lb) (bomber)

- **Max takeoff weight:** 18,020 kg (39,727 lb) (transport)

18,410 kg (40,587 lb) (bomber)

- **Powerplant:** 3 × [Alfa Romeo 128 R.C.21](#) 9-cylinder air-cooled radial piston engines, 708 kW (949 hp) each
- **Propellers:** 3-bladed constant-speed propellers

### Performance

- **Maximum speed:** 347 km/h (216 mph, 187 kn)
- **Cruise speed:** 250 km/h (160 mph, 130 kn) at 3,000 m (9,843 ft)
- **Stall speed:** 110 km/h (68 mph, 59 kn)
- **Range:** 2,100 km (1,300 mi, 1,100 nmi)
- **Service ceiling:** 6,000 m (20,000 ft)

### Armament

- **Guns:**
  - 1 × 12.7 mm (.5 in) Scotti machine gun in dorsal turret
  - 3 × 7.7 mm (.303 in) [Breda-SAFAT machine guns](#) in ventral and lateral positions
- **Bombs:**
  - 4,000 kg (8,818 lb) bombload

