

## 1/72 SCALE MODEL CONSTRUCTION KIT

## **SAVOIA MARCHETTI S.M.79**

The S.M. 79 Sparviero (Hawk) was the mainstay of the Italian bomber squadrons in the second world war and is generally agreed to have been the best land-based torpedo bomber of the war.

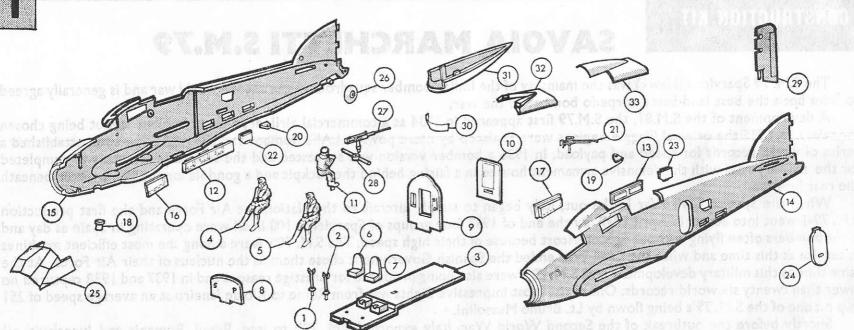
A development of the S.M.81, the S.M.79 first appeared in 1934 as a commercial airliner, a three engined layout being chosen for safety. In 1935 the original Piaggio engines were replaced by more powerful Alfa Romeos and the prototype soon established a series of world records for speed and payload. In 1936 a bomber version was suggested and the second prototype was completed for the military role with the defensive armament housed in a fairing behind the cockpit and a gondola for the bomb aimer beneath the rear fuselage.

When the Spanish Civil War broke out, Italy began to supply aircraft to the Nationalist Air Force and the first production S.M. 79-I went into action in April 1937. By the end of 1937 four groups of Sparvieros 100 in all were operating in Spain as day and night bombers often flying without fighter escort because of their high speed. The S.M. 79's were among the most efficient machines in service at this time and when the Civil War ended the Spanish Government chose them as the nucleus of their Air Force. At the same time as this military development civil S.M. 79's were also being produced for prestige reasons and in 1937 and 1938 captured no fewer than twenty six world records. One of the most impressive flights was from Rome to Rio de Janeiro at an average speed of 251 m.p.h.; one of the S.M. 79's being flown by Lt. Bruno Mussolini.

Shortly before the outbreak of the Second World War, Italy exported S.M. 79's to Iraq, Brazil, Rumania and Jugoslavia, all except the Jugoslavian being a twin engined development, the S.M. 79B. When Italy entered the war in 1940 a new version was in service, the S.M. 79-II torpedo bomber and almost two thirds of Italy's bomber and torpedo-bomber groups were equipped with the Sparviero. S.M. 79's were active in France, Algeria and Tunisia and later Greece and Jugoslavia but it was mainly in the Mediterranean theatre that they achieved the greatest success. Torpedo carrying S.M. 79's were responsible for the destruction of many Royal Navy and Allied warships and merchant vessels and bomber versions operated against Malta.

In September 1943 Italy capitulated and some S.M. 79's that were still airworthy joined the Allies while others in Northern Italy continued to co-operate with the Germans. A new version, the S.M. 79-III was produced in small numbers in the North until 1944.

The S.M. 79-II was powered by three radial engines, normally 1,000 h.p. Piaggio, giving a maximum speed of 270 m.p.h. Defensive armament consisted of three 12.7 mm. Breda machine guns and one 7.7 mm. Lewis gun, the latter on a sliding mount in the rear fuselage. Two torpedoes or 2,750 lbs of bombs could be carried. Wing span 69ft. 6 ins. and length 53ft. 13/4 ins.



It is recommended that the instructions and exploded views are studied and the assembly practised before cementing together. If it is wished to paint internal details such as crew, cockpit and interiors, this is best done before assembly. If stand is to be used cut away the wall of plastic from stand slot in fuselage halves. It will be noted that two variants can be constructed from this kit and before commencing assembly, version to be modelled should be chosen.

 Locate and cement control columns (1, 2) into locating holes in cockpit floor (3).

2. Cement pilot and co-pilot (4, 5) to seats (6, 7).

Locate and cement tabs beneath pilot seats into recesses in raised seat supports on cockpit floor.

Note: bulkheads are marked P.S. for port and starboard.
4. Cement tab on instrument panel (8) into cut out in front of cockpit floor.

 Cement tab on centre bulkhead (9) into slot in cockpit floor behind seats.

Cement tab on end of cockpit floor into slot in rear bulkhead (10).

 Cement tab beneath feet of mid upper gunner (II) into slot in cockpit floor. Set cockpit assembly aside to dry. When dry locate and cement assembly onto and against ribs within starboard fuselage half.

8. From inside cement lower rear fuselage window transparency strips (12, 13) into window openings in lower rear port and starboard fuselage sides (14, 15), carefully applying cement only to window surrounds.

9. Similarly cement single window transparencies (16, 17) into port and starboard window openings to rear of

cockpit.

 Cement landing light transparency (18) into semicircular cut out in lower forward starboard fuselage half.

 Locate and cement waist gun mountings (19, 20) onto ribs below waist window within port and starboard fuselage sides.

 Press, DO NOT CEMENT, pin beneath small Lewis gun (21) into port or starboard mounting as desired, barrel to protrude through waist opening.

 If version without waist opening is being modelled omit gun, and from inside, cement closed fuselage sections (22, 23) into waist openings.

 Cement fuselage door (24) into opening in port fuselage half.  Carefully cement cockpit canopy (25) into top and front of fuselage opening in starboard fuselage half. Apply cement only to edges of transparency.

16. Place, DO NOT CEMENT, tail wheel (26) onto axle at

rear of starboard fuselage half.

17. Press, DO NOT CEMENT, pin beneath Breda dorsal gun (27) into hole in dorsal gun mounting (28).

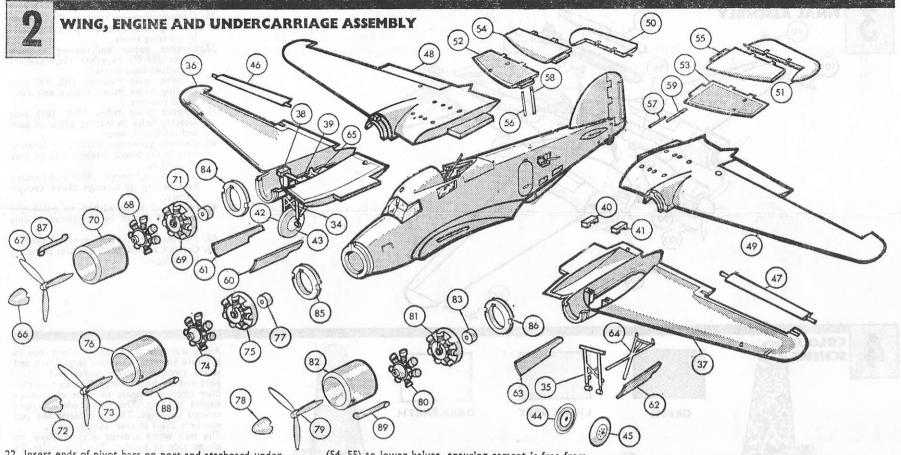
18. Press, DO NOT CEMENT, pivot pin on dorsal gun mounting into hole in bush in starboard fuselage half.

19. Lay pivot bars on rudder (29) into hinge recesses in starboard fuselage half, then cement fuselage halves together, at the same time locating onto and against ribs in port fuselage half, cockpit floor and bulkheads also port side of cockpit canopy and engaging pivot pin on dorsal gun mounting.

 Cement gondola transparency (30) into front of gondola (31) then position and cement gondola beneath

fuselage.

21. If armament is chosen press, DO NOT CEMENT, open dorsal section (32), to top of fuselage. For closed version similarly position and press, DO NOT CEMENT, closed dorsal section (33).



22. Insert ends of pivot bars on port and starboard undercarriage legs (34, 35) through openings in nacelles in lower port and starboard wings (36, 37), locate ends of bars into recesses in pivot boxes within nacelles, DO NOT CEMENT. Note large pips on legs to rear.

23. Carefully cement retainers (38-41) to top of pivot boxes, keeping cement from pivot-bars. Allow to dry thoroughly. Ensure legs are free to move.

 Cement main wheel halves (42-45) together then spring into position on axles on undercarriage legs.

25. Lay pivot pins on ailerons (46, 47) into recesses in lower port and starboard wings, DO NOT CEMENT, then cement upper port and starboard wings (48, 49) to lower.

 Cement tabs on port and starboard wings into fuselage slots.

27. Lay pivot pins on port and starboard elevators (50, 51) into hinge recesses in lower port and starboard tail-plane halves (52, 53) DO NOT CEMENT, then carefully cement upper port and starboard tailplane halves

(54, 55) to lower halves, ensuring cement is free from moving elevators.

 Cement tabs on tailplanes into slots within recess in fuselage sides, but DO NOT CEMENT locating pins on elevators into locating holes in fuselage sides.

29. Locate and cement short (56, 57) and long (58, 59) port and starboard tailplane struts into locating holes in fuselage sides and beneath tailplanes. NOTE: struts are marked F and R (forward-and rear).

 For a model with lowered undercarriage cement undercarriage doors (60-63) to sides of wheel well openings beneath nacelles, doors are marked port and starboard and hang vertically.

31. Cement upper ends of undercarriage supports (64, 65) into bushes within wheel wells and lower ends of supports onto locations at rear of legs. If undercarriage is raised omit supports, swing wheels up into wells and cement doors in closed position.

Cement spinner (66) over front of propeller (67).
 Locate and cement together one forward (68) and one

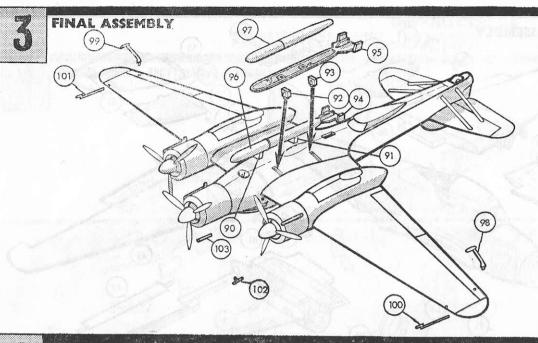
rear (69) engine row, then cement into cowling (70). Note one cylinder fits between locations in bottom of cowling. press shaft of propeller pin through engine rows. DO NOT CEMENT, then cement propeller retaining bush (71) on to ends of shaft ensuring no cement contacts engines and propeller is free to move.

 Repeat procedure for remaining engine with propellers, spinners, forward and rear engine rows, cowlings and

propeller retaining bushes (72-83).

34. Note from illustration position of exhausts two to port and one to starboard. Place cowling back plates (84-86) into rear of cowlings, cut outs at sides fitting ribs within cowlings. Note large cut outs are all to top, and check you have outer recesses in cowlings to correct side for exhausts, when aligned correctly cement into cowlings, then cement cowling assemblies to fuselage and port and starboard nacelles.

35. Cement exhausts (87-89) into recesses in cowlings.



36. Cement torpedo carriers (90-93) into locating holes beneath port and starboard wing roots.

37. Cement upper and lower torpedo halves (94-97) together then cement

torpedoes onto carriers. 38. Cement mass balances (98, 99) into locating holes beneath port and starboard ailerons.

39. Cement pitot tubes (100, 101) into locating holes in leading edges of port and starboard wings.

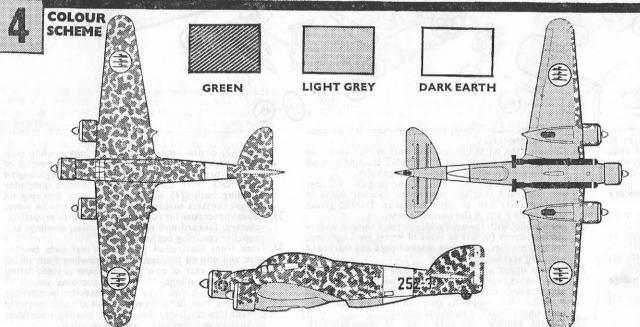
40. Cement generator (102) into locating hole in starboard fuselage side to rear of cockpit.

41. Cement machine gun (103) into locating hole in top of fuselage above cockpit

42. NOTE: If it is wished to paint the model it should be completed at this

43. Cement together both parts of stand. 44. Cement arm of stand into slot provided

in fuselage.



Apply transfers. Separate the sheet into 16 separate subjects. The four large black and white circular insignia above and below port and starboard wings. The two smaller blue circular insignia to sides of fuselage engine cowling. The three white stripes around cowlings. The two black and red numbers 252-3 to rear fuselage sides.

The two white crosses with emblem to either side of rudder. The two white 3's to forward fuselage sides. Aircraft name to base of stand.

LIGHT GREY

GREEN M3 OVER DARK EARTH M2

propeller. Upper surfaces and fuselage sides to give mottled cam-

MATT BLACK M6

WHITE G3

RED GI BRONZE

Undersurfaces.

ouflage effect. Wheel tyres, guns, engines, torpedoes.

Band around rear of fuselage, bands around torpedoes. Spinners. Bands on cowlings.

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