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Estandart Reyat u d'a Cheneralísma, prencipal bandera carlista d'a primera guerra bordada por María Francisca de Braganza em 1833 Royal Standard of the General in Chief, main Carlist flag of the First War embroidered by Maria Francisca de Braganza in 1833). Wikimedia Commons

The *Regia Aeronautica* in September 1942

The disillusioned assessment of the Italian Air Force Chief of Staff at the crucial moment of the war¹

BY BASILIO DI MARTINO

“**T**he situation of the *Regia Aeronautica* (Royal Air Force), as the conflict moves towards further developments, is becoming more and more complex and, in many respects, difficult and worrying”: so we read in the first lines of a study found at the Air Force General Staff in which the conditions of the *Arma Azzurra* at the beginning of the third year of the war are examined, suggesting that there were no possible illusions: the effort required was far greater than both the existing capabilities and those conceivable for the future. The document has neither a date nor a protocol number, but the annotation in pencil “8-1942” on the first page and the contents, with data referring to August and September 1942, suggest that it was written in the late summer of that year, while its scope is clarified by a second annotation, also in pencil, “Situation of the Air Force (at the end of August 1942)”. A third notation, barely legible, “Hand-delivered by Ecc. Fougier”, and the ordinal “3rd” written in pencil in the top left-hand corner, finally suggest that very few copies of this study for the political-military leadership were prepared and that one of these was personally delivered, and probably explained, by the then Undersecretary of State and Chief of Staff of the Air Force, General Rino Corso Fougier (1894-1963), to Mussolini in his dual capacity as Head of Government and Minister of the Air Force.

A stamp on the second page specifies that this copy of the document was kept in the Central Library of the Air Force General Staff,² which is not surprising considering the role attributed to this element of the organisational structure of

1 An Italian version of this essay has been published in *Storia Militare*, xxxiii, No. 378, March 2025, pp. 49-66.

2 Air Force General Staff, Central Library, location no. B01167, inventory no. 8598.

the Regia Aeronautica, established as an autonomous armed force on 28 March 1923. The Central Library, a specific wording that appears on the stamps and bands applied to the paper, was presumably established in 1929. The library, beside a generalist reading section open to the personnel of the Ministry, collected also official documentation and institutional publications produced by the various branches of the *Regia Aeronautica* central structure. The available sources do not allow a detailed reconstruction of the library's history, particularly for the period prior to the institutional change after World War II, but it is certain that the events that followed the 8 September 1943 armistice had a destructive impact, with the loss of several thousand publications.³

The available information does not allow to determine whether other copies of this study still exist, but that at least one has survived to the present day is certainly a fortunate circumstance. In fact, it is a well-documented analysis of the effort produced by the *Regia Aeronautica* in the first two years of the war and a disenchanting forecast of its future prospects based on a mass of data related to the various functional areas concerning operational effectiveness. It is Fougier himself, although he did not sign it, who, in the foreword, states the importance of this choral work of the general staff and takes full responsibility for it:

The inescapable trend towards a tighter and more massive air war, the certain establishing of the air force as a crucial factor in every phase of the war and perhaps even, in the long run, as a decisive factor, require a constantly increasing effort not easy and possible to cope with.

Without entering into the merits of the gradually increasing adversary's strength, a fact that is unquestionable and necessarily present in our mind, I consider it appropriate to briefly summarise all the elements of yesterday and today situation in order to illustrate the truth of the first assertion and particularly the reasons behind it.

In August 1942 the outcome of the conflict still hang in the balance, El Alamein and Stalingrad saw the Axis still on the offensive while Japan seemed able to maintain the initiative in the Pacific, but Fougier had no illusions. Convinced of the central role of air power and aware of the constant qualitative and quantitative growth of the adversary's forces, the Air Chief of Staff believed that his service was no longer capable of sustaining the effort, let alone increasing it to meet foreseeable future developments. To demonstrate this, Fougier used the ir-

³ *Air Force Central Library*, AUSMA, Monographs, b. 27, f. 18.

refutable language of numbers, comparing the situation at the beginning of the conflict with that at the beginning of the second and third year of the war, as well as the situation at the time, with regards to the availability of aircraft, manpower and fuel, the “lifeblood of the organism”, and dwelling on the condition of the units to draw the inevitable conclusions as to what the adversary could do. The analysis considered the so-called *Armata Aerea*, i.e. the proper air force, and excluded almost entirely the auxiliary Army and Navy aviation, ESERCITAVIA and MARINAVIA, for which similar considerations applied anyway, and did not consider at all the *Aeronautica dell’Africa Orientale Italiana*, Italian Eastern Africa Air Force, which had disappeared in 1941 with the collapse of the Italian Empire. In this regard, however, Fougier did emphasise that the commitment to garrison and defend those territories, where a large part of the best trained and most experienced personnel had been deployed to the detriment of the units operating elsewhere, was one of the causes of the present situation.

A worn-out air force

The first aspect examined in the study was the employment rate of the flying units, assessed on the basis of the ratio of the number of *squadriglie* (flights) in the front line to the total number available, from which it was possible to deduce the level of exhaustion of the operational component and its chances of recovery.⁴ During the first months of the war, in the summer of 1940, 56 bombardment *squadriglie*, 54% of the 104 available, and 31 fighter *squadriglie*, 43% of the 73 available, were deployed on the various fronts. By the end of September, with the deployment to Belgium of the *Corpo Aereo Italiano* (CAI), Italian Air Corps, with eight bombardment and six fighter *squadriglie* as well as one reconnaissance *squadriglia* the percentage had risen to 62% for the bombers and 51% for the fighters. The number of *squadriglie* considered on combat duties did not include those under command of the 1st and 3rd *Squadra Aerea* (Air Fleet), that were in action for a few days only during the brief campaign in the Western Alps against France, the *Comando Aeronautica Albania* (Albania Air Command) and the 4th *Zona Aerea Territoriale* (Regional Air Command), stationed on the Apu-

4 The Italian *squadriglia* can be considered the equivalent of the British squadron, with 9-12 aircraft. However the world squadron is more aptly used for the Italian *gruppo*, which comprises two or three *squadriglie*.

lian airfields, since the occasional operations at sea did not significantly alter their peacetime routine.

This situation, which was satisfactory enough in relation to the need for rotation and rest, had changed dramatically with the start of the Greece Campaign, which on 28 October 1940 had seen the *Comando Aeronautica Albania* and the 4th *Zona Aerea Territoriale*, 4th *Squadra Aerea* in December 1940, enter the fray with 22 bombardment and 13 fighter *squadriglie*, later joined by others as far as logistical preparations and state of the infrastructure permitted. This was a massive effort that in the long time severely affected the level of efficiency of the units, not so much for the losses, that had increased in the last phase of the campaign due the arrival of British reinforcements but were never such to call into question Italy's air superiority, but rather for the fatigue imposed on men and material by six months of intense flying activity in harsh environmental conditions with a high sortie rate. The deployed units were kept to numbers without too much difficulty for the personnel but with considerable problems for the aircraft.

In June 1941, at the beginning of the second year of war, the bombardment *squadriglie* had fallen to 88 and 34 of them, assigned to the Sardinian, Sicilian, Libyan and Aegean air force commands and summing to 44% of the total number, were actively and continuously employed in operations. So were 39 fighter *squadriglie* out of 75 and 11 fighter sections out of 21, as well as all 4 *squadriglie* and 3 sections of torpedo-bombers. A year later, in June 1942, there were 16 torpedo-bomber *squadriglie*, deployed in Sardinia, Sicily, Libya and the Aegean Sea, all engaged in active operations, while the bombardment *squadriglie* had gone down from 88 to 55, with 26 of them, in Sardinia, Sicily, Libya and the Aegean Isles, in the front line as well as the six bombardment *squadriglie* under command of the newly established *Aviazione Slovenia-Dalmazia*. For the fighter arm, 54 *squadriglie* out of 93 and 12 sections out of 19 were deployed at the front, as was the only existing reconnaissance *squadriglia*.

This situation, which, albeit with difficulty, still allowed for a rotation of units to cope with rest and re-equipment requirements, had worsened dramatically in conjunction with the highly demanding operations of the summer of 1942, that had pressed almost the entire *Regia Aeronautica* into the line. As of 15 September 1942, 28 out of 49 bombardment *squadriglie* were at the front, and the number rose to 43 taking into account also the *Comando Aeronautica Albania* and the 4th



Fig. 1 – Savoia-Marchetti S.79 bombardment trimotors of the 254th *Squadriglia* (105th *Gruppo*, 46th *Stormo*) over Catania, summer 1940. A bombardment *Stormo* (Wing) had two *Gruppi* (Squadrons) each with two *Squadriglie* (Flights) with nine aircraft each.

The photograph comes from the album of a valiant officer of the *Genio Aeronautico*, Captain Raffaello Vendramin, at the time in charge of maintenance and overhaul support to the airports of Eastern Sicily, who disappeared on 23 December 1941 during a test flight with a two-seater FN.305. Vendramin was awarded the Silver Medal for Aeronautical Valour. (3rd Aircraft and Armament Maintenance Unit)

Squadra Aerea, and so were 56 out of 96 fighter *squadriglie*, rising to 81 considering Greece, Albania and the 4th *Squadra Aerea*, 16 fighter sections out of 26, rising to 20 considering the 4th *Squadra Aerea*, 20 torpedo-bomber *squadriglie* out of 20, including the four under the command of the 4th *Squadra Aerea*, and the single reconnaissance *squadriglia* of the *Comando Aeronautica Sicilia* (Sicily Air Command).

Numbers alone, however, were not enough to explain the seriousness of the situation: during periods of maximum activity, such as the operations against

enemy convoys in June and August, personnel and aircraft from torpedo-bomber training units were to beef-up the operational *squadriglie* and many fighter units that were being reconstituted or in transition from one type of aircraft to another were pressed into the front line to deal with the present urgent needs. This meant that only a few units, thoroughly exhausted and without any operational capability, were not engaged in operations and could enjoy some rest. For the fighter arm, the growing requirement to provide protection to maritime traffic for North Africa and, to a lesser extent, for the Aegean Isles, had led to the deployment of many *squadriglie* on the islands, in Southern Italy, in Greece and in Albania, increasing the attrition since they were called into action continuously for patrol duties and decreasing the capability to counter bombing raids against Central and Northern Italy.

In little more than two years, not only had the operational instrument not grown, but its consistency had constantly diminished, particularly in the attack component, with the bomber arm suffering a strong contraction that was not compensated for by the increase in torpedo-bombers, while the growing demands, which had progressively absorbed all available capacity, accelerated the rate of attrition, bringing it to unsustainable levels. Coping with the situation and possibly remedying it would have required a very different supply capacity in terms not only of aircraft but also of manpower.

Few aircraft and few pilots

The evolution in the number of available aircraft from 10 June 1940 to 15 September 1942 was thoroughly consistent with the proposed scenario regarding the combat ready flying units. After all, it could not have been any other way since this was a determining factor. From the 759 bombers available when Italy entered the war, the fleet strength had decreased to 423 bombers at the beginning of the second year of war, to 422 at the beginning of the third and it was of 398 aircraft on 15 September 1942, including the torpedo-bombers. The bombers available in the depots, which were initially 204, had dropped to 167 after one year and this number had remained basically stable in the following 12 months, with 169 machines in June 1942, only to drop sharply to 121 by the end of the summer. These figures showed that an effective balance between production and losses had not been reached for the multi-engines and that the industry had not

only failed to support an increase of the size of the fleet but had not even been able to maintain it at a constant level. The fact that for two years the number of bombers had been just over 420 and then dropped below 400, had inevitably affected the *Regia Aeronautica*'s offensive capabilities, that were already limited due to the intrinsic qualities of most of its aircraft. The situation was actually even more critical than these numbers could suggest at a glance. As of 15 September, in fact, the capabilities of the attack component were further reduced by the fact that 210 of the 398 front line aircraft were torpedo-bombers, and as such intended for a specific task and not suitable for others.

Front line combat ready fighters had actually increased from 632 in June 1940 to 719 in June 1941, then to 880 in June 1942 and 901 on 15 September 1942, with a depot situation that was of 263, 249, 375 and 300 aircraft respectively. Although the number of fighters, unlike the number of bombers, had increased, numbers alone were misleading and did not give an exact idea of the combat effectiveness of the fighter arm, which was strongly affected by aircraft performance. A large proportion of fighters were in fact outdated types that have been equipped with wing bombs to carry out assault tasks. This was the case with the FIAT CR.42 biplanes, which were now mainly used in this role, while the FIAT G.50 and Macchi C.200 monoplanes, although partly still employed as fighters, no longer had such characteristics in terms of speed and armament as to be able to compete with the most modern enemy fighters, or even, except in extremely favourable tactical conditions, to counter enemy bombers. Only the Macchi C.202 and Reggiane Re.2001 could hold their own. On the whole, therefore, 'quantitatively, fighter aviation was very scarce' and its deployment did not meet the fundamental needs of the country air defence 'because it was made according to an operational "front" criterion' and therefore projected forward, towards the operational sectors in contact with the enemy, leaving a large part of the peninsula and, above all, the main industrial cities, almost undefended.

According to Fougier the steady quantitative decay of the fleet was due not so much to the losses, which were quantified at 3,395 aircraft, 715 of which lost in combat, 1,409 destroyed on the ground, damaged beyond repair or missing for unknown reasons, and 1,271 written off due to flight accidents, but in the industry's inability to compensate them, let alone to increase the size of the fleet:

The state of the fleet in numerical terms is determined by the rate of construction compared to the rate of losses. From the beginning of hostilities

until the current 21 August, 3,395 aircraft were lost due to wartime causes and flight accidents, and a further 1,000 or so were decommissioned or transferred to non-combat tasks. The lost aircraft therefore amount to approximately 4,400. Given the nature of the war, these losses are not excessive; they become so when compared to production, which was not able to provide a modest enough supply of combat aircraft to maintain and increase the line.

The same lack of increase had occurred in manpower. The analysis concentrated mainly on pilots, taking into account both officers and non-commissioned officers, (NCO). For the fighter arm, also due to the transfer of a significative percentage of pilots to the assault branch, the number had gone down from 1,089 on 10 June 1940 to 1,016 as of 20 September 1942, the same time frame in which the number of *squadriglie* had gone up from 73 to 98, or 103 if one considered also 15 night-fighter and interceptor sections that were numerically equivalent to another 5 *squadriglie*. Therefore, in order to have the same number of pilots per *squadriglia* as of 10 June 1940, the pilots should have been 1,536. The apparently slight decrease from 1,089 to 1,016 pilots, while the number of *squadriglie* had increased, resulted in an actual 31% decrease. For bombers and torpedo-bombers, two components that were considered together also because torpedo-bomber pilots generally came from bombers, the decrease was even more evident, from 1,914 pilots at the start of hostilities to 1,402 on 20 September 1942. Since, however, the number of *squadriglie* had simultaneously dropped from 104 to 73, the ratio of pilots per *squadriglia* was unchanged.

The most needed increase in the pilot force had been prevented mainly by the inadequate output of the flying schools, albeit in combination with the losses which, after a sharp reduction in the second year of war, had risen abruptly in the first months of the third. Since 10 June 1940, 706 pilot officers and 537 pilot NCO's, together with 1,664 flying technicians, were accounted for as killed in action, missing in action or prisoners of war. These were the definitive losses, but the wounded and sick also had to be considered, as well as those who, for various reasons, were no longer fit for flying duties or were needed for the functioning of the complex organisational machine of the *Regia Aeronautica*, being therefore unavailable for combat duties.

The losses would have had less of an impact if the output of the flight schools had not steadily contracted since the beginning of the conflict. From the 1,446



Fig. 2 - A section of a FIAT CR.42 fighter biplanes warms up the engines before take-off. In June 1940, the CR.42 was still the backbone of the fighter component of the *Regia Aeronautica*. During the first phase of operations in North Africa and the Greece Campaign, it played an important role, effectively coping with the enemy machines that were then in the Mediterranean theatre, but it soon proved hopelessly slow and out-gunned and was assigned to other roles. (AUSSMA)

commissioned and non-commissioned pilots, including 234 officers from the *Rex* and 242 from the *Sparviero* (Sparrowhawk) courses of the Aeronautical Academy, who graduated between 1 June 1939 and 1 June 1940, the number of new pilots had fallen to 998 in the first year of the war, including 173 officers from the *Turbine* (Whirlwind) course, and to 917 in the second year, including 232 officers from the *Uranus* course. The 488 pilots that graduated in the first three and a half months of the third year, between 1 June and 15 September 1942, seemed to indicate a possible trend reversal, but just enough to return to pre-war levels. Such a situation had made it impossible not only to compensate for the losses but also to set up new units and create a reserve to allow for a rotation of units on the line for resting and re-training.

According to the study, the inadequate output of the flight schools was the effect of a training syllabus change, which at the break out of war had increased the number of flight hours at the schools in order to reduce those needed at the operational units to complete the training of newly assigned pilots, thus delaying their arrival on the front line. Furthermore, the increasing shortage of fuel which had forced training programmes to be diluted over time. The combined effect of these factors, not only delayed the arrival of newly graduated pilots at the *squadriglie*, but also affected the quality of training, with the new pilots leaving the schools having formally completed all the steps of the training process but having taken too long to do so. The dilution of the flying activity was to the detriment of the actual level of readiness and, in addition, the long wait caused a loss of drive and morale. The apparent trend reversal in the first months of the third year of war was not to deceive: it was due to the fact that from 1 June 1942, 400 student pilots in an advanced stage of training had been taken out of the schools and sent to the *squadriglie* that urgently needed them and were to complete their training.

Due to the impossibility of giving the instructional activity the necessary rhythm, the situation in the flight schools, also with regards to the morale of cadre and instructor, was far from what it should have been at a crucial time in the war. Changing it, and giving the right impetus to an organisation whose performance was the basis of the *Regia Aeronautica*'s overall efficiency, was virtually impossible because, due to the constant increase in combat flight hours and the growing demands of transport, the amount of fuel available to the schools would have even decreased, with a further reduction in the number of new pilots. The situation was no different for the various categories of technicians, both ground and flight: 4,231 had completed their training between 1 June 1939 and 31 May 1940 and 5,798 in the following twelve months, but in the second year of the war this number had fallen to 4,907 and the 1,192 of the period 1 June - 15 September 1942 suggested that this trend would continue. This meant that, for flying duties and especially for pilots, the *Regia Aeronautica* had to rely mainly on relatively elderly aircrew, often veterans of two wars, for whom there was no possibility of rest or re-training periods.

A main problem: the fuel

In addition to the capabilities of the industrial base, from both the quantitative and qualitative point of view, the main element to take into consideration when analysing the big picture proposed by the *Regia Aeronautica* after more than two years of war, as well as its performance, is the availability of fuel. The effectiveness of the service was in fact based not only on the quantity and quality of the aircraft, but also on the ability to keep the pilots trained and to adequately train new ones. The lack of fuel had led not only to the contraction of the output from flight schools, but also to the impossibility of training and amalgamating the reconstituted or newly formed units as necessary, the overall decay of the technical and professional qualities of the cadres made evident by the insufficient preparation to night and instrument flying, and the very limited level of activity of the units with the least trained aircrew, with inevitable consequences on both their morale and their capabilities.

Fuel shortage also had a direct impact on the operational possibilities of front-line units, affecting their capability to react to the increasing level of activity of the enemy in the Mediterranean. In this regard, the numbers were pitiless: the 116,420 tons of fuel available at the start of the war, within a year had dropped to 30,703 tons despite the severe limitations imposed on consumption, with a significant increase during the Greece Campaign, confirming the heavy attrition that the *Regia Aeronautica* had suffered in those six months. Subsequently, the situation had become, if anything, even worse, and in the third year of the war, fuel availability had dropped from 12,403 tons on June 1, 1942, to 8,367 tons on September 1, insufficient even for the day-to-day level of activity and the foreseeable operational needs, and incompatible with the required sharp increase of both flight school output and training opportunities. In such a situation, even leaving aside considerations of the quality of the material, no officer could serenely take on a command post “because of the impossibility of shaping the unit according to his views, nor of giving it a good preparation, lacking the primary element by means of which these possibilities must be built up”.

The paper pointed to the growing air transport activity as the factor that contributed to worsening the situation by absorbing a disproportionate amount of fuel compared to the *Regia Aeronautica*’s other needs. In responding to important logistical requirements and in overcoming the relative difficulties, air transport had a deep impact on the overall efficiency of the air force. From 18,049 in the

first year of war, the flight hours of the transport component had risen to 30,911 in the second year and in the first three months of the third year they were already 16,856, which suggested a total of over 75,000 at the end of the coming twelve-month period, with a very high fuel consumption per hour since transport aircraft were trimotors. Furthermore there were the so-called *Nuclei Comunicazione*, former civilian airlines aircraft pressed into service for liaison duty both inside and outside Italy, which had registered 22,869 flight hours in the first year and 24,026 in the second, and a similar level of activity was to be expected in the third year as well. However, while the flight hours of the *Nuclei Comunicazione* had remained more or less constant and were remaining such, the flight hours of the transport squadrons, after having increased by a third in the second year of the war, had risen so rapidly in the third year that in three months they were already equivalent to those of the first year. This growth was mainly to the detriment of instruction and training activities, since, as far as the various components of the operational instrument were concerned, the increase in fighter and assault activity was offset by the contraction in bombardment activity, which fell by a third from the first to the second year of war and then dropped further in the third, even considering the parallel increase in flying hours of torpedo-bombers, which had tripled in the

Fig. 3 - Four S.79s of the 104th Gruppo (46th Stormo) with different camouflage schemes over Albania in the winter 1940-41. The four trimotors are part of a patrol of five in wedge formation, the tactical solution typically adopted by the *Regia Aeronautica* bomber arm. (AUSSMA)



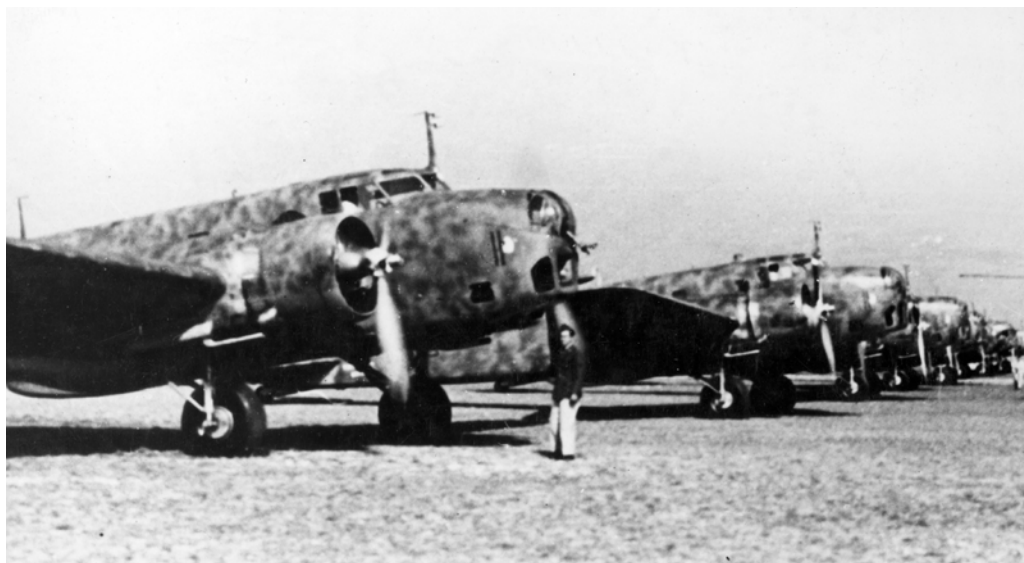


Fig. 4 - FIAT BR.20 twin-engine bombers of the 31st Gruppo (18th Stormo) at Aviano in the summer of 1940. The bombing component of the *Regia Aeronautica* was heavily engaged on all fronts in the first months of the war, then the progressive wear and tear of aircraft and men and the increasing unavailability of fuel reduced its activity that by the summer of 1942 was minimal. (AUSSMA)

second year of war. There was a similar trend for fighters, since their flight hours, after a slight increase in the second year of war, in the third year were having a trend such that it was reasonable to think that they would have doubled compared to the first year.

The parallel growth in the number of reconnaissance missions carried out by the bombardment squadrons' multi-engine aircraft was also a matter of concern. Having doubled between the first and second year of war, this number tended to grow again, far outstripping the number of offensive missions, which was by then reduced to a minimum. This situation, while altering the role of the bombardment component with a clear negative imbalance between its main and auxiliary tasks, contributed to the attrition of crews and aircraft and absorbed precious fuel, further reducing the amount available for training and other operational tasks. The anomaly was underlined by the fact that, in addition to these reconnaissance flight hours, there were those flown by MARINAVIA and ESERCITAVIA, the army and navy auxiliary aviation whose task was precisely reconnaissance in their respective operational contexts. The priority given to operational activities, without

however being able to fully meet the growing needs, had had a negative impact not only on the allocation of fuel to flight schools, training units and recovering squadrons, to such an extent “as to render their performance absolutely insignificant”, but also on the possibility of conducting fundamental support activities, such as test, experimental and transfer flights, which were indispensable to maintain and increase the air force’s capabilities.

Consequences

The combination of these critical factors was to make the situation in the Mediterranean theatre of operations even more complex and difficult, while it was easy to foresee the need to deploy far greater numbers than were available. First of all, the increase in the enemy’s air operational capability from Malta was evident, which made it necessary to reinforce the *Aeronautica Sicilia* to a considerably greater extent than ever before. In Malta, in addition to the fighter squadrons that had strengthened its defensive organisation, there were also a number of aircraft employed to interdict the routes between Italy and North Africa. The intensifying contrast to the maritime traffic with Libya had as a direct consequence the need to increase convoy protection, a task in which until a few months earlier a fighter squadron from Sicily had been occasionally flanked by one from Apulia, while now nine fighter squadrons could not fully meet the need, even with the help of the Luftwaffe.

The Egyptian front absorbed the fighter and assault components to a considerable extent, but on the other hand, due to the qualitative and quantitative inadequacy of the bombardment fleet, bombing activity had practically ceased. Only the *Aeronautica Egeo* bombers continued to occasionally attack at night the enemy’s lines of communication along the coast, and this at the very time when it would have been appropriate to give a greater impetus to strike against ports, airports, railway lines and the Suez Canal, exploiting the cover of darkness as far as possible.

In the maritime scenario, the increasing effectiveness of the Allied convoys defensive organization, due both to the presence of aircraft carriers and the improvement of anti-aircraft defence systems, made attacking them increasingly costly, with growing losses in aircraft and trained aircrew. As for possible enemy initiatives against the coasts of French North Africa or the metropolitan territory



Fig. 5 - A pair of FIAT G.50s from the 352nd *Squadriglia* (20th *Gruppo*, 51st *Stormo*), which in the summer of 1940 ensured the air defence of Rome from Ciampino Airport.

In September, the 20th *Gruppo* was transferred to the 56th *Stormo* and deployed to Belgium as part of the *Corpo Aereo Italiano* (CAI). It would not return to Italy until April 1941, after having been engaged for seven months in gruelling and wearisome patrolling duties, mainly over the English Channel, without achieving any significant results. (AUSSMA)

of France itself, the ability to react would have been very limited due to the conditions and consistency of the attack component, “because of the small number of offensive units, the shortage of fuel and the quality of the aircraft”.

In addition to these current or potential operational needs, there were also those arising from the raids that the enemy was expected to launch against the national territory both during the day and at night. The ability to react to daytime raids was negatively conditioned by the scarcity of fighter units and their geographical dislocation. Furthermore the insufficient number of lookout posts and the inadequacy of their equipment, with particular regard to the means of remote tracking, given the very limited number of radar equipment, and poor communication systems, more so in Southern Italy, compromised the possibility of aptly directing fighters. In the case of night raids, which for the cities of the “industrial triangle”, Turin, Milan, Genoa, would become a dramatic reality in late autumn, the difficulties were even greater. The *Regia Aeronautica* was trying to organise the defence of the most important industrial and demographic centres with modern methods, starting with Northern Italy, by installing “radio tracking” systems, improving communication networks, gathering suitable aircraft and trained pilots, but the work to be done was enormous and had to overcome technical issues that prevented a timely solu-

tion to the problem as well as cultural and structural difficulties.

For a long time the *Regia Aeronautica* had been engaged in an effort that it was unable to sustain: the units on the line were almost all the existing ones and therefore there were no reserves, the flight personnel could not rest through the necessary rotations, the losses in the most experienced and trained personnel could not be made up, with a consequent decay in the combat effectiveness, some components had actually shrunk compared to June 1940 and those which had not were in any case inadequate. The foreseeable course of the conflict would have required the availability of a substantial attack component, which was instead reduced to a minimum, except for the torpedo-bombers which were in any case insufficient, and was worn out in a daily reconnaissance activity, while the shortage of fuel heavily affected flight schools and training as a whole, limiting the number of pilots available and preventing the adequate preparation of the recovering units:

an aviation that does not fly does not prepare and does not improve. The aviation spirit cannot be maintained by faith and enthusiasm alone; it must be nurtured on the airfields, and proficiency is a function of the hours spent flying and solving flight-related problems in the air.

In these conditions, made worse by a low potential industry, the *Regia Aeronautica* could not have the necessary effectiveness and was condemned to an increasingly defensive attitude, contrary to the very nature of the air arm, in itself an offensive weapon, and not in line with the spirit that animated its personnel. However, it was not possible to rely on moral forces alone and it was necessary to examine the situation objectively, which the study had undoubtedly done, drawing the inevitable conclusions:

The situation that has occurred is due to the imbalance between the sources of life in means and men and the effort required to the *R. Aeronautica* following the continuously growing demands. These demands are always on the increase without due consideration being given to the fact that the sources from which the *Regia Aeronautica* should sustain its growth and that instead do not allow to reach at least a balance, are so insufficient for reasons beyond the control of those in charge of the various branches of the service.

Only a much more powerful air force could have coped with the needs of the moment and with those foreseeable in the short term, starting with convoy protection duties, which placed a too great burden on the fighter component. The squad-



Fig. 6 - Macchi C.202 fighters in 1942 on a Libyan airfield. Together with the Reggiane Re.2001, which mounted the same Daimler-Benz DB 601 engine, the C.202, which entered service in September 1941, was at the time the only Italian fighter capable of effectively engaging the most modern enemy fighters. A fighter *Stormo* had two *Gruppi*, each of them with three *Squadriglie* with 12 aircraft. (AUSSMA)

rons that were so engaged, beside performing a wearisome task, since they were too few, were forced to continually redeploy from a airfield to airfield, which quickly reduced their efficiency. The conclusion, in calling for a correct reading of reality, left no room for illusions, emphasising that not only the *Arma Azzurra* would not be able to respond to further demands, but it was no longer even capable to cope with the present ones, unless by rapidly exhausting its residual operational capacity:

The presented picture must be borne in mind when formulating further requests, because of the fatal repercussions arising from those that are excessive in relation to the real possibilities, which will not be remedied if the demands placed on the *R. Aeronautica* are not contained within the limits of a rational use instead of exploiting the units up to the limit beyond which they can no longer give anything due to the exhaustion of all their possibilities.



Fig. 7 - Rino Corso Fougier (1894-1963) took part in the Great War as an officer in the Bersaglieri, earning a Silver Medal for Military Valour on 23 June 1915 during a reconnaissance near the Cave di Selz, on the Carso. A year later, he applied for and was accepted into the Air Corps, obtaining his military pilot's licence in February 1917. As a pilot he served in reconnaissance and fighter *squadriglie*, earning two more silver medals, two bronze medals and ending the conflict with the rank of captain in command of the 83rd *Squadriglia*. Major in 1925, lieutenant colonel in 1927 and colonel in 1931, between 1928 and 1933 he was the commanding officer of the 1st Fighter Wing, giving a decisive boost to aerobatic training and establishing himself as one of the *Regia Aeronautica*'s leading characters. A brigadier general (*generale di brigata aerea*) in 1933 and a major general (*generale di divisione aerea*) in 1936, he held various command posts during the 1930s, participating in both the Ethiopian Campaign and the Spanish War. Promoted lieutenant general (*generale di squadra aerea*) in 1939, in June 1940 he was in command of the 1st *Squadra Aerea* and between 10 September 1940 and 28 January 1941 led the Italian Air Corps sent to Belgium to take part in operations over England. On 15 November 1941, he succeeded General Francesco Pricolo as Undersecretary of State and Chief of Staff of the Air Force, remaining in office until 27 July 1943. He had no further official role and retired to private life.

At the end of the summer of 1942, when the outcome of the conflict could still be seen as uncertain, the *Regia Aeronautica* was unable to give more than it had already given. Due to the exhaustion of its operational capabilities, it was impossible to reverse the trend emerging in the Mediterranean, if not with a massive intervention by the German ally that was very unlikely in the overall framework of the war. No one could have any illusions and Fougier had none.

ATTACHMENTS

1. <i>Squadriglie</i> deployed at 10 JUN 1940				
Commands	Bomb.	Fighter	T/B	Recce
Aeronautica Sardegna	12	5	-	-
Aeronautica Sicilia	22	9	-	-
Aeronautica Libia	18	15	-	-
Aeronautica Egeo	4	2	-	-
CAI (from 27.SEP)	8	6	-	1
Total	64	37	-	1
Other Commands	40	36	-	-
Overall Total	104	73	-	1

2. <i>Squadriglie</i> (+Sections) deployed at 28 OCT 1940 (Greece)				
Commands	Bomb.	Fighter	T/B	Recce
4 ^a ZAT	14	4	-	-
Aeronautica Albania	8	9	-	-
Greek Front Total	22	13	-	-
Aeronautica Sardegna	12	3	-	-
Aeronautica Sicilia	12	9 (+1)	-	-
Aeronautica Libia	22	24	1	1
Aeronautica Egeo	8	2	-	-
CAI	8	6	-	-
Total	62	44 (+1)	1	1
Other Commands	16	16 (+1)	1	-
Overall Total	100	73 (+2)	2	1

3. <i>Squadriglie</i> (+Sections) deployed at 1 JUN 1941				
Commands	Bomb.	Fighter	T/B	Recce
Aeronautica Sardegna	6	4 (+1)	1	-
Aeronautica Sicilia	14	12 (+4)	1	-
Aeronautica Libia	8	17 (+2)	1	2
Aeronautica Egeo	6	3 (+3)	1	1
Total	34	36 (+10)	4	3
Other Commands	54 (+1)	39 (+11)	-	1 Section
Overall Total	88 (+1)	75 (+21)	4	3 (+1)

4. <i>Squadriglie</i> (+Sections) deployed at 1 JUN 1942				
Commands	Bomb.	Fighter	T/B	Recce
Aeronautica Sardegna	2	3 (+2)	6	-
Aeronautica Sicilia	16	16 (+3)	4	1
Aeronautica Libia	4 (+1)	33	4	-
Aeronautica Egeo	4	2 (+3)	2	-
4 ^a Squadra Aerea	6	3 (+4)	-	-
Aeronautica Albania	2	1 sez.	-	-
Aeronautica Grecia	-	3 (+2)	-	-
Slovenia-Dalmazia	6	-	-	-
Eastern Front	-	4	-	-
Total	40 (+1)	64 (+15)	16	1
Other Commands	15 (+1)	29 (+4)	6	-
Overall Total	55 (+2)	93 (+19)	22	1

7. Aircraft losses				
	10.6.1940- 30.6.1941	01.07.1941- 30.6.1942	01.07.1942- 15.09.1942	Total
(1)	336	296	83	715
(2)	1.409			1.409
(3)	1.271			1.271
Total				3.395
(4)	700	248	N.D.	948
(1) Lost in air combat or missing for unspecified reasons. (2) Destroyed on the ground, abandoned, damaged beyond repair, lost for technical reasons. (3) Out of service due to flight accidents. (4) Decommissioned, sold abroad or transferred to non-combat tasks.				

8. Aircraft lost in combat or missing for unknown reasons by type				
Type	10.06.1940- 30.06.1941	01.07.1941- 30.06.1942	01.07.1942- 15.09.1942	Total
CantZ.1007	24	22	12	58
S.79	89	37	12	138
S.81	6	-	-	6
S.82	1	-	2	3
S.84	-	18	5	23
Ju.87	14	23	4	41
BR.20	15	22	2	39
P.108	-	3	1	4
Ba.65	6	-	-	6
Ca.133	1	-	-	1
CR.42	87	26	9	122
C.200	19	65	7	91
C.202	-	25	19	44
G.50	14	9	-	23
Re.2001	-	8	8	16
CR.32	9	-	-	9
CantZ.506	19	21	1	41
CantZ.501	13	3	-	16
RS.14	-	2	-	2

Ro.43	1	3	-	4
Ro.37	12	2	-	14
Ca.309	3	-	-	3
Ca.310	-	1	-	1
Ca.311	3	6	1	10
Total	336	296	83	715

9. Combat losses of military personnel												
	10.06.1940-10.06.1941				11.06.1941-10.06.1942				11.06.1942-30.09.1942			
	K	M	P	Tot.	K	M	P	Tot.	K	M	P	Tot.
Pilots (Officers)	114	159	61	334	78	129	37	244	28	86	14	128
Pilots (NCOs)	109	104	37	250	57	90	30	177	29	66	15	110
Flight Techni- cians	281	447	101	829	205	285	66	556	49	190	20	259
Total	504	710	199	1.413	340	504	133	977	106	342	49	497
M = KIA. D = MIA. P = POW.												

10. Aviation fuel stocks at 1 st of the month (tonnes)			
	1940-41	1941-42	1942
Giugno	136.605 t	30.703 t	12.403 t
Luglio	124.738 t	38.511 t	10.112 t
Agosto	116.757 t	25.417 t	8.364 t
Settembre	107.532 t	23.017 t	8.367 t
Ottobre	98.744 t	18.800 t	-
Novembre	90.646 t	15.327 t	-
Dicembre	83.028 t	14.854 t	-
Gennaio	78.400 t	14.025 t	-
Febbraio	63.530 t	12.622 t	-
Marzo	54.244 t	12.474 t	-
Aprile	41.904 t	13.907 t	-
Maggio	43.904 t	13.020 t	-

11. Combat flight hours				
Time frame	10.06.1940- 30.06.1941	01.07.1941- 30.06.1942	01.07.1942- 15.09.1942	Totali
Bombers	33.007 ^h 30'	9.627 ^h 55'	1.637 ^h 10'	44.272 ^h 35'
Torpedo-Bombers	1.008 ^h 05'	2.998 ^h 20'	1.096 ^h 20'	5.102 ^h 45'
Fighters	61.510 ^h 35'	67.225 ^h 35'	23.875 ^h 40'	152.611 ^h 50'
Reconnaissance	14.264 ^h 40'	23.040 ^h 25'	5.578 ^h 55'	42.884 ^h 00'
MARINAVIA	45.269 ^h 00'	40.963 ^h 55'	7.363 ^h 30'	93.596 ^h 25'
ESERCITAVIA	4.720 ^h 00'	7.217 ^h 15'	2.002 ^h 10'	13.939 ^h 25'
Total	159.779 ^h 50'	151.073 ^h 25'	41.553 ^h 45'	352.407 ^h 00'
Time Frame	10.6.1940- 10.6.1941	11.6.1941- 10.6.1942	11.6.1942- 31.8.1942	Totali
Transport	18.049 ^h	30.911 ^h	16.858 ^h	65.818 ^h
Liaison (<i>Nuclei Comunicazione</i>)	22.869 ^h	24.026 ^h	5.610 ^h	52.505 ^h
Total	40.918 ^h	54.937 ^h	22.468 ^h	118.323 ^h



William Balfour Ker (1877-1918), *Knights of Columbus*, 1917 / Poster showing a priest looking heavenward and raising a crucifix, blessing kneeling soldiers. Library of Congress, Prints and Photographs Division Washington, D.C. 20540 USA. Reproduction Number: LC-USZC4-10131
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