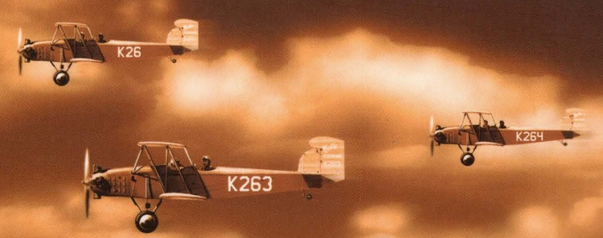
the noblest of human adventures. This book tells of the life of a Brazilian hero who discovered very early that life has to be lived with passion. Fernando Morais has examined this story with all the care of a gold prospector and found a treasure to share with us.

Pascoal Soto

ISBN 85-7631-251-4

In this incredible biography Fernando Morais tells the story of a hero who turned his dream into reality. The story of a young, blue-eyed lieutenant who dropped his bombs on the barracks in Minas Gerais of forces holding out against the 1930 Revolution. A year later, with a flight made on instruments alone he would initiate the National Airmail Service. In 1932 he was imprisoned in São Paulo by the Constitutionalist forces. But at the age of 95 and holding the rank of Air Marshal, Casimiro Montenegro said that these achievements were what "any cattle-driver did". The great work of his life, in fact, would be the creation of ITA – the Technological Institute for Aeronautics – in São José dos Campos, modelled on the famous MIT in the United States. This stimulating book shows how, in spite of the opposition of presidents of the Republic, ministers and even his military colleagues, Montenegro turned his dream into one of the greatest centres in the world for producing knowledge - ITA.



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Montenegro
A Brazilian Airman Foresees the Future

Fernando Morais

The celebrated author of *Olga* and *Chatô, o rei do Brasil*, Fernando Morais now brings us *Montenegro: A Brazilian Airman Foresees the Future*. Fernando Morais, who specialises in the art of discovering hidden treasures in what the rest of us call official history, now introduces us to Casimiro Montenegro Filho, the Brazilian military visionary who created in 1950 the Technological Institute for Aeronautics (ITA), which is today one of the most respected centres in the world for producing knowledge. But the realisation of Marshal Montenegro's greatest dream was only the high point of a life characterised by courage and determination. Motivated by a desire to set Brazil on the path of technological development, in 1931 this pioneer from Ceará made the inaugural flight of the first operation of the National Airmail Service. This same desire caused him to join the revolutionaries of 1930 when he was a co-conspirator with Eduardo Gomes, Juarez Távora and Siqueira Campos. In 1938, he graduated in engineering from the Military Engineering Institute. His greatest dream began to take a clearer shape - but to achieve it Montenegro had to confront ministers, presidents of the Republic and military colleagues. The story of Marshal Montenegro would not actually have attracted the interest of Fernando Morais if it had not been an example of one of

Montenegro

A Brazilian Airman Foresees the Future

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MONTENEGRO

A BRAZILIAN AIRMAN FORESEES THE FUTURE

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FERNANDO MORAIS

Montenegro
A Brazilian Airman Foresees the Future

Translated by Graham Howells

FUNDAÇÃO ALEXANDRE DE GUSMÃO

Brasília, 2010

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Cover:
Ricardo Schwab Schirmer
Lieutenant Montenegro in 1929 standing
in front of a Morane Saulnier 147.

Photo:
Ricardo Schwab Schirmer

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Graphic design and layout:
Juliana Orem Design Gráfico

Impresso no Brasil 2010

M825m Morais, Fernando.
Montenegro: a foresees the future brazilian airman / Fernando Morais. – Brasília – FUNAG, 2010.
304p. : il.

ISBN: 978.85.7631.251-2

1. Montenegro Filho, Casimiro, 1904-2000 - Aviador. I. Título.

CDU: 929:355.354(81)

Depósito Legal na Fundação Biblioteca Nacional conforme Lei n° 10.994, de 14/12/2004.

"In all my professional life
I never believed in Messianism
or in being a star, the concentration of power
and the merit of a single individual. I always worked
in a team. And if I have any virtue
it was to be able to arouse the enthusiasm of my comrades,
to delegate to them authority with responsibility
and encourage them to make full use of their potential and qualities
for the benefit of the Brazilian people."

(Air Marshal Casimiro Montenegro Filho, 1904-2000)

For Fábio Montenegro.

Translator's note

Translator's note on Air Force ranks. The table below shows the equivalents of ranks between the Brazilian Air Force, the British RAF and the USAF – for practical reasons we cannot include the equivalents in other Air Forces.

Brazilian Air Force ranks are used in their original form in the translation and shown in italic script. Ranks of the other services are given in normal script in English translation as they fit more conventionally with Anglo-Saxon equivalents.

Marechal do Ar	Air Chief Marshal	General
Tenente-Brigadeiro-do-Ar	Air Marshal	Lieutenant General
Major-Brigadeiro-do-Ar	Air Vice Marshal	Major General
Brigadeiro-do-Ar	Air Commodore	Brigadier General
Coronel	Group Captain	Colonel
Tenente Coronel	Wing Commander	Lieutenant Colonel
Major	Squadron Leader	Major
Capitão	Flight Lieutenant	Captain
Primeiro Tenente	Flying Officer	First Lieutenant
Segundo Tenente	Flying Officer	Second Lieutenant
Aspirante/SubOficial	Cadet	Cadet/Officer
Primeiro Sargento	Warrant Officer	Sergeant
Segundo Sargento	Flight Sergeant/Chief Technician	Technical
Terceiro Sargento	Sergeant	Staff Sergeant
Cabo	Corporal	Airman First Class

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Chapter 1 - The Revolution Triumphant. Now the Lieutenants rule the skies

Before the disbelieving eyes of a crowd of officers and cadets, the brand new single-engined Potez was taxiing at high speed along the runway of the Afonsos Field in a suburb of Rio de Janeiro. When the pilot had boarded the aircraft he noticed something strange about the instrument panel: the plane was so new it had not been completely fitted out. Where the compass, altimeter and rev-counter should have been, there were only empty holes. Aborting the takeoff and returning to take another aircraft would mean being arrested there and then on the runway so there was nothing for it but to give it full throttle and take off as it was, with no instruments, to fly by eye – and pray that Our Lady of Loreto, who protects flyers, would provide good weather during the flight. Minutes later, over the mountainous region north of Rio, the pilot and gunner saw they were being followed by a military Curtiss Fledgling that had taken off from the Afonsos Field probably with orders to shoot them down. Prudence therefore recommended using full power to escape from their pursuer. As the Potez was faster than the Fledgling, this was not too difficult, but hardly had they escaped from that threat than another danger appeared on the horizon. They were flying over the town of Três Rios, still in the state of Rio de Janeiro, when a wall of CBs – the pilots' abbreviation for that terror of the skies, cumulo-nimbus clouds – appeared a few metres from the plane, only disappearing hours later, at the end of the flight. At one o'clock in the afternoon of 6th October 1930 the aircraft crossed the line

between the states of Rio de Janeiro and Minas Gerais and the pilot pointed the nose of his machine North towards his destination, Belo Horizonte, where there was strong resistance to the Revolution that had just broken out in Rio Grande do Sul.

Typical personalities in the political landscape of the time, the two young crew-members of the Potez, Casimiro Montenegro Filho and José Lemos Cunha, were *tenentes* and being a *tenente* in Brazil in the 1930s meant much more than having a military rank. Ever since the frustrated revolt at the Copacabana Fort in July 1922, the lieutenants and their movement (*tenentismo*) had come to be synonymous with political idealism and revolutionary fervour. They spoke out against the "moral decadence" of the country and fought for the secret vote, public education and free access to the justice system. Although he was not very political and was discreet in his actions, Montenegro had never been immune to the virus of *tenentismo*. From the end of the 1920s, after being appointed a junior officer, he had conspired actively with revolutionaries who had emerged from the Copacabana Fort Revolt, from the 1924 São Paulo Revolution, and with former commanders of the Prestes Column. Already involved in the conspiracy that would take Getúlio Vargas to the Catete Palace, at the start of the 1930s, Montenegro operated as a link between the School of Military Aviation (Escola de Aviação Militar) and some of the leading lights of the Lieutenants' Movement such as Juarez Távora, Siqueira Campos and Eduardo Gomes. The first two had been heads of detachments in the Prestes Column, and when that was defeated, Juarez was arrested and later went into exile in Argentina. Siqueira would not survive to see the lieutenants in power. In May, 1930 he travelled secretly to Buenos Aires seeking the support of Luís Carlos Prestes for the Liberal Alliance led by Getúlio Vargas. Frustrated in his attempt to win over the 'Knight of Hope' to the forces of the lieutenants, Siqueira died on his return to Brazil when the single-engined aircraft carrying him crashed into the waters of the River Plate (his travelling companion, Captain João Alberto Lins de Barros, was more fortunate and survived by swimming to a beach in Uruguay). Eduardo Gomes had a service record almost as dramatic as that of the latter two. In 1922 he had been one of the survivors of the 'Fort 18', the rebel movement that made its bare-chested challenge to federal repression and inspired the birth of *tenentismo*. Arrested in 1924 when he attempted to join the Prestes Column (after trying to throw from an aircraft a bomb consisting of 3kg of dynamite onto the Catete Palace, the seat of government of the

Republic and until that time also the residence of the President of the Republic), he was released in 1926. Three years later he would once again be imprisoned, to be freed at the beginning of 1930. More than politics, however, it was flying that drew him to Montenegro. Ever since the two had known each other, the young junior officer from Ceará had tried to persuade Eduardo to transfer from the Artillery to the new force created by the French Military Mission charged with modernising Brazil's Armed Forces since 1920. Although he had been certified as an air observer in 1921 and as such had taken part in countless missions, Eduardo had still not been given his wings. For Montenegro, who was already a flying instructor with a certain amount of experience, this was an obstacle that could easily be overcome. "Come with me to the Afonsos," he insisted to Eduardo "and I'll make you a pilot in a week." it was only then that Eduardo Gomes would transfer to the Air Force, of which decades later he would become the head.

It was therefore natural that destiny should lead Montenegro to follow his military companions and also become engaged in the political struggle. The *gaucho* [a native of the state of Rio Gande do Sul – trans.] Getúlio Vargas had already managed to attract and unite under the mantle of the Liberal Alliance *tenentista* tendencies that had originated in the revolts of 1922, 1924 and the Prestes Column. Only the minority that had opted for Marxism and decided to follow Prestes would be outside this group. The Liberal Alliance taking shape under the electoral alliance of Getúlio and João Pessoa (the Governor of Paraíba) swam against the tide of the Brazilian political party line. Ever since the proclamation of the Republic in 1889, Brazil had been a fictitious federation that had become an archipelago in which the islands were controlled by 'colonels' - either sugar-producers from the Northeast or coffee-producers and ranchers from São Paulo and Minas. And as well as electoral corruption, which was an integral part of the political process, the oligarchies also had the benefit of the unbelievable Commission for the Verification of Powers (Comissão de Verificação de Poderes) a monstrous organisation inherited from the Imperial Senate that decided which of the elected candidates should take office. The two richest states, São Paulo and Minas Gerais, took turns in providing the President of the Republic, in what came to be known as the 'coffee with milk policy', which the candidacy of Getúlio and João Pessoa would take upon itself to sour. It was in this fertile terrain and that the lieutenants expounded their ideas and set light to the Brazil of the 1920s.

There were no surprises in the election results of March 1930. As in previous years, the winner was the official candidate, in this case Júlio Prestes from the state of São Paulo and, as had also occurred in other elections, he only won thanks to the most barefaced corruption. The new element in Brazil in 1930, compared to previous polls, was the shadow of *tenentismo* hovering around the defeated candidates. And from March to October the lieutenants had done nothing other than conspire. The School of Military Aviation was considered by the government to be a "breeding ground of dangerous revolutionaries" and was placed under redoubled surveillance. At a time when information travelled at snail's pace, it took almost 24 hours for the officers and cadets at the Afonsos to learn that a Revolution had broken out in Porto Alegre the previous afternoon. They only heard the news on the morning of Saturday, 4th October. The highest-ranking officer on duty at that time, Captain Vasco Alves Secco, from Rio Grande do Sul, who had never concealed his revolutionary beliefs, collected in a hangar a few dozen men in uniform or wearing flying suits to give them the news from the South: Getúlio Vargas' revolutionaries had taken three military garrisons in Porto Alegre, where more than 50,000 civil volunteers had enlisted. On the following day four columns proceeded in successive trains towards Rio de Janeiro, commanded by the officers Alcides Etchegoyen, João Alberto, Waldomiro Lima, Ptolomeu de Assis Brasil and Miguel Costa. The captain also revealed that Vargas was not alone: the state of Paraíba had taken up arms and declared its support for the *gauchos* and a few hours later and addition of the *Diário Oficial* of Minas Gerais carried a proclamation written by the recently-appointed Governor Olegário Maciel supporting the insurrection. Alves Secco concluded by calling on the School to throw its full weight behind the Revolution.

It was not going to be quite like that. According to the calculations of *Tenente* Montenegro, who had been dedicating himself full-time to the conspiracy since 1928, two thirds of the sergeants and officers at the Afonsos were with the revolutionary movement, but everything indicated that the Commandant of the recently-created Air Force, *General-de-Brigada* Álvaro Guilherme Mariante, and the head of the School, *Tenente-Coronel* Amílcar Pederneiras, would remain faithful to the Old Republic. With the School placed on a state of strict alert, no-one went home. Meetings were held on the Saturday and went on into Sunday, at the end of which it was agreed that on the morning of Tuesday, 7th October the revolutionaries at the School would declare themselves to be in rebellion, would overpower the legalist officers and

Lieutenant Montenegro (left) is a conspirator in the 1930 Revolution: he is seen above with his cousin Juracy Magalhães and Captain Terra. Far left, he is with Eduardo Gomes and Vasco Carneiro de Mendonça, future Interventor [in this sense, Provisional Governor – trans.] of Ceará: against the country's 'moral decadence' and in favour of the secret vote, public education and free access to the justice system.

fly to Minas Gerais - the news was that in Belo Horizonte and Juiz de Fora some military units were offering armed resistance to the Revolution. Montenegro's fears concerning his superior officers were shown to be founded on the 6th, when he saw his name in the handwriting of *Coronel* Pederneiras, giving the flying rota for that morning. Beside his name was written: "Bombing mission". Taken by surprise, he showed the rota to *Tenente* José Lemos Cunha, his fellow-conspirator. Both had already found the situation strange and had commented to colleagues that, since the arrival of the first news about the Revolution, only legalist officers had been authorised to fly. There were more serious rumours: military pilots loyal to President Washington Luís were taking off from the Afonsos to attack revolutionary forces in Minas. Even so, Montenegro had never imagined that his superiors would be bold enough to choose him - a person known to be committed to the Revolution - for that kind of mission. Montenegro muttered something to Lemos Cunha, who went towards one of the hangars while he himself walked up to the Commandant's room. Colonel Pederneiras ordered him to sit down but he preferred to stand and state his reasons for being there. He explained, without changing the tone of his voice, why he was not going to carry out the order he had received: "I cannot agree to these bombing missions that are being carried out on defenceless towns by servile officers without consciences."

Before the Commandant and the other officers present had recovered from their surprise, he turned, saluted and walked onto the runway. He went up to the door of the hangar where Lemos Cunha seemed to be in deep conversation with a mechanic next to the School's newest aircraft - a Potez 25P with the prefix AIII recently painted on its grey fuselage - and said something that could not be heard by the little groups of officers scattered around the airfield. Although it was not the eighth wonder of aviation, the sparkling new aircraft was part of a lot of 15 recently imported from France by the Washington Luís government. Without being noticed, Montenegro jumped into the cockpit and before anyone could react the Potez taxied onto the runway and took off without authorisation, almost colliding with an aircraft that was landing. In the tiny rear cockpit, sitting with his back to the pilot and both hands grasping the machine gun screwed to the fuselage, Lieutenant Lemos Cunha was already on board. Immediately after them a Curtiss Fledgling took off, flown by an unknown sergeant. Immediately afterwards,

almost in a line and all without authorisation, two Wacos, another Potez and another Curtiss Fledgling also took off. In total, ten pilots and mechanics had not waited for the official reaction of the School of Aviation and had taken over aircraft and left for various parts of the country. As well as Montenegro and Lemos Cunha, the small squadron consisted of *Capitães* Emílio Gaelzer and Agliberto Vieira de Azevedo, *Tenentes* Clóvis Travassos and *Sargentos* Dinarco Reis, Brunswick França, Tíndaro Pereira Dias and Otávio Francisco dos Santos. Half an hour later a latecomer, *Tenente* Joelmir de Araripe Macedo managed to dodge the School's vigilance and take off from the Afonsos in a Potez towards the South of Minas.

Montenegro knew that the machine that was now taking them to Belo Horizonte was far from being an aeronautical marvel. He actually belonged to a group of officers who were united in their opposition to purchases made through the French Mission that had been in Brazil since 1920. And it was not only Air Force personnel who were complaining; officers from the Army high command had already found helmets with bullet holes and gas masks with blood on them included in the training equipment provided by the French, undeniable evidence that the Mission was taking advantage of the military agreement with Brazil to dump its stocks of substandard material. Although considered obsolete however, the military version of the Potez was a dream compared, for example, to the School's old Curtiss Fledglings. With a 12-cylinder motor producing 450hp (able to fly at 240km per hour) the blunt-nosed aircraft had been successfully tested in France's colonial wars at the beginning of the century. As well as being fast, it was a threat: the model that Montenegro had taken came equipped with a 20mm Hispano-Suiza cannon and four light 7.5mm machine guns operated both by the pilot and his crew. Beneath the lower wings (the Potez was a biplane) it carried eight 50kg bombs that could be released both by the gunner in the rear cockpit, and the pilot.

And so it was, in an unfinished Potez flying through the CBs and shaken by lightning storms that the two *tenentes* made the whole flight, only seeing the ground when they arrived at their destination, Belo Horizonte. While the weather was good in the skies over the capital of Minas, on the ground conflict was intensifying. Although the Governor, as well as the patriarch of Minas politics Antônio Carlos Ribeiro de Andrada, had committed the support of their state to the Revolution,

the 12th Infantry Regiment, known in the city simply as 'the Twelve', was carrying out armed resistance - even after its commander, Colonel José Joaquim de Andrade had been arrested by the revolutionaries. The immense barracks covering 180,000 square metres where the Twelve was quartered in the working class district of Calafate had had its water, light and food supplies cut off and was surrounded on all sides by troops loyal to Vargas. Even in the face of an imminent massacre, its officers and soldiers still refused to surrender.

In their first pass over the Twelve, Montenegro and Cunha tipped over the side two hessian sacks they had carried under their feet, filled with pamphlets. One of them was signed by Colonel Aristarcho Pessoa, the brother of João Pessoa and chief of the Revolutionary High Command in Minas:

To the soldiers of the 12th Infantry Regiment.
We are prepared to bomb these barracks from the air. If your surrender is not announced without delay, we shall carry out this action. If you raise a white flag and surrender, you will suffer no reprisals.
If you continue to resist, we shall have to be ruthless.
Colonel Aristarcho Pessoa.

Another dive, another pass and two more packets of pamphlets were thrown out over the barracks. This time it was a message full of threats and exclamation marks, sent by the *tenentes* of Afonsos Field:

To our brave comrades!
We have already shown that we can destroy you! Your sacrifice is useless! The Revolution has been victorious throughout the country! Give up!
The Air Force.

Just then Cunha alerted Montenegro to the fact that some 400m below them a fighter aircraft, apparently from Rio, was dropping bombs on the barracks. Convinced this was a legalist attempt to attack the revolutionary troops surrounding the barracks, Cunha insisted that Montenegro shoot it down: from their position there was no chance of them missing their target. Montenegro, however, was doubtful: what if the pilot were also a

revolutionary trying to drop his bombs on the Twelve and not on the besieging forces? He decided to "follow the dictates of my heart" as he stated on landing, and held his fire: "It would have been easy to shoot him down with the synchronised machine gun I had, given our greater height, but I decided not to do it and waited for him to withdraw before I landed."

It was, however, Cunha who was right and not he. As soon as the Potez landed at the tiny Carlos Prates airstrip on the outskirts of Belo Horizonte, the suspicious aircraft reappeared. It made two passes over the runway with the pilot waving to those below in an apparently friendly gesture. On the third pass, instead of waving he dropped a bomb that exploded 10 metres away from Montenegro, Cunha and another group of officers, seriously wounding two Military Policemen. When the aircraft roared back towards them, preparing for another pass, Montenegro gave orders to the soldiers gathered round: "Fire! Fire at him but go for the engine! Hit the engine and you'll shoot him down!"

That night he learned that the shots had punctured the water-cooled radiator of the aircraft, which had landed a few kilometres away enabling its two crew members to be captured. Carried like heroes in a parade through the streets of the city and lodged in the Brasil Palace, the most luxurious hotel in Belo Horizonte, Montenegro and Cunha never dreamed they would only return home a month later, with President Washington Luís imprisoned in the Copacabana Fort and the Revolution victorious. But they would have a hard time consolidating the victory. In the following weeks the two of them were sent to the south of Minas to carry out missions in the triangle formed by the towns of Barbacena, Conselheiro Lafaiete and São João del Rei (there was still resistance in the latter and in the town of Três Coroas). Until 31st October, when Getúlio Vargas arrived in Rio de Janeiro, they were in constant action. During an emergency flight to Belo Horizonte in a severe storm, Montenegro could not manage to land a Waco on the muddy airstrip at Carlos Prates and crashed into a hangar, writing off the aircraft although he escaped unaccountably unharmed. On 28th October one of the most influential newspapers in the country, the *Correio da Manhã* published in Rio, carried the news that a revolutionary aircraft had carried out missions in Juiz de Fora. It was Montenegro, flying a new Waco. The target in question was an industrial centre in which were concentrated the most effective military forces in Minas after those of Belo Horizonte, and it was also the base of two infantry regiments, a field artillery group, a logistics battalion, a battalion of motorised infantry

In November 1930 Montenegro (in flying helmet) finally arrives at Barbacena and meets Tenentes Lemos Cunha (left) and Eduardo Gomes (centre). One month previously, when Getúlio Vargas raised an armed revolution in Rio Grande do Sul, Montenegro had taken a Potez aircraft from the Afonsos Field in Rio and had flown to Belo Horizonte (below), where he fought against the last groups holding out against the 1930 Revolution.

and a commando company, as well as a military hospital, supply dumps and training fields. Resistance to the Revolution was restricted to the 10th Infantry Regiment. With no attempt to disguise which side it supported, the newspaper printed at the top of the page the triumphant headline: "Benfica, Mantiqueira's Verdun". Only the greatest revolutionary fervour could produce the comparison between Benfica, the modest suburb in which the Juiz de Fora barracks were located, with the French town of Verdun where, in the First World War the armies of Germany and France became locked in what was considered to be the longest, most violent and deadly of all the battles in military history. And it was then, while dropping pamphlets on the Verdun of Minas that Montenegro's name appeared for the first time in a newspaper:

Revolutionary aircraft drops manifestoes on the Federal Garrison of Juiz de Fora on the 23rd

Last Thursday, 23rd October, on the eve of the fall of the Washington Luís Government, an aircraft of the revolutionary forces flew over the town of Juiz de Fora, over the outskirts of the town and the Headquarters of the 4th Military Region, dropping the following manifesto:

To our comrades in Juiz de Fora.
After 13 days you can no longer be in any doubt about the extent and result of the 3rd of October movement…. We are soldiers of the Brazilian nation and when the nation shows its will so clearly we do not have the right to act against its wishes and aspirations…. Look into the spirit of the men under your command and you will see that, like those in Belo Horizonte, São João, Ouro Preto and Três Corações, they are almost as one in supporting the nation and tomorrow you will find them in our ranks, which volunteers have joined in order to save Brazil. Mr Washington Luís is the greatest exponent of the politics of oppression, of crimes, malpractices, abuse of power and despotism and the country has decided to shake itself free of him…. We also appeal to your patriotism, your sense of being Brazilian and as soldiers of Brazil.
We hold our hands out to you and put ourselves on the side of the nation and the great majority of our comrades.
Belo Horizonte, 16th October, 1930.

In the name of "*our companions who find themselves in the front line*", the manifesto was signed by Colonel Aristarcho Pessoa and 30 other officers, among them *Tenentes* Oswaldo Cordeiro de Farias, Olympio Falconiere, Eduardo Gomes, Nélson de Mello, Osmar Dutra, Casimiro Montenegro and Lemos Cunha. Juiz de Fora capitulated that same day. A week previously Três Corações had done the same. After a battle that took the life of Djalma Dutra, a hero of the Prestes Column, accidentally killed by a comrade, the local barracks surrendered. News came from Belo Horizonte that the 12th Infantry Regiment, isolated and without water or light, had also raised the white flag. At the beginning of November, with Getúlio already installed in the Catete Palace and with no more legalist groups to fight or convert, the *tenentes* of the School of Aviation met in Juiz de Fora, now under control of the revolutionaries, to decide what to do from then on. It was there that Montenegro was reunited with Eduardo Gomes, who had been resisting legalist fire in Barbacena since 3rd October, until he was relieved by Lieutenant Nélson de Mello at the head of a troop of 350 men. After a day of seemingly endless meetings, the military pilots chose Montenegro as the group's spokesman. In the command post of the 4th Military Region he was awaited by the head of the High Command of the revolutionary forces in Minas, Colonel Aristarcho Pessoa and one of his subordinates, his old friend Lieutenant Cordeiro de Farias. With his customary coolness, he summed up what he and his friends had to say in a few words:

"What we want is a new Brazil led by the kind of thinking that puts the interests of the country above personal ones. That being the case, before we return to the Afonsos Field, we demand the immediate dismissal of General Álvaro Mariante as head of Military Aviation."

Perhaps the general had not understood the meaning that the rank of lieutenant had acquired with Getúlio's victory. Immediately he was informed of the undisciplined ultimatum Montenegro had delivered, Mariante informed the young *tenente* that the value of the Waco he had accidentally destroyed in Belo Horizonte would be deducted from his monthly salary in instalments. There was not even time for Montenegro to be informed of this. One week later the *Diário Oficial* published the decision of the President of the Republic removing Mariante as Director of Military Aviation. The lieutenants had also come to power at the Afonsos Field.

Chapter 2 - 'Frankenstein' lands at the Jockey Club - The National Airmail Service (Correio Aéreo Nacional) has just been born

With the Revolution victorious and the country at peace, Montenegro was able to once more dedicate himself to his real passion, flying and he was far from being an exception. All the young officers were consumed by the dream of flight and there would more than enough reasons for this. First of all it was because there was not a single Brazilian, military or civilian, who did not feel pride at being a countryman - and a contemporary - of Santos Dumont the inventor of the aeroplane, who had astonished France in the world in 1906 with the flight of the '14-Bis'. And even before him, the skies over Paris had already seen the glory and martyrdom of the *potiguar* [native of the state of Rio Grande do Norte – trans.] Augusto Severo. Severo was a teacher of mathematics, abolitionist Parliamentary deputy and passionate politician who, at the age of 38, had sold everything he had, borrowed money from friends and relatives and travelled to France determined to build and fly a semi-rigid balloon. After months of work and tests, in May 1902 the 'Pax' was ready to fly, but had to wait a week for a break in the weather over Paris, which only happened on Wednesday, 12th May. Although the trial was scheduled for six o'clock in the morning, the expectation created by the news during the previous days was such that a crowd of people had gathered in the streets of the 14th Arrondissement of Paris to witness the phenomenon. Carrying Severo and his French

mechanic George Sachet, 'Pax' slowly took off at the designated time from the cobbles of the Avénue du Maine, halfway between the Montparnasse railway station and cemetery, swerved twice to the side and then gained height. Before the disbelieving eyes of the public the balloon climbed to a height of about 400 m and for 10 minutes made silent manoeuvres in the air, drawing a figure of eight in the sky in smoke to the general applause of the people. Suddenly an explosion turned the 'Pax' into a huge ball of flame 30m high that crashed noisily to the ground, killing its two crewmembers instantly. The impact of the balloon on the ground was so great that the bones of Severo's legs burst through the leather soles of his shoes.

Looking further into the past, we find the figure of another brilliant Brazilian, Father Bartolomeu de Gusmão, who built the first lighter-than-air craft and who, on 8th August 1709, with King João V as an unsuspecting witness, flew his 'Passarola', as the aerostatic balloon he had invented was called. There is no lack of examples of the aeronautical vocation of Brazilians. Three years previously, in 1927, Montenegro had rejoiced on learning that a civilian pilot from São Paulo, João Ribeiro de Barros, had resolved to undertake a feat never before performed: crossing the South Atlantic in his Savoia-Marchetti S-55 seaplane. And he was indignant on learning that, after enduring a mutiny by his crew in Africa and suffering four attacks of malaria, Barros had received a shattering telegram from the President of the Republic. Fearful that an air disaster would damage Brazil's reputation abroad as being the home of the Father of Aviation, Washington Luís advised him to abandon his project. Barros sent his reply also by telegram, in undiplomatic language: "You take care of the responsibilities of your job," wrote Barros, "and do not interfere in matters you do not understand and where your opinion was not invited". But his real answer would be given on 28th April 1927, when he took off in the twin-engined 'Jahu' from the town of Praia in Cape Verde, to land 12 hours later on the island of Fernando de Noronha, in Brazilian waters. If these examples were not sufficiently numerous and instructive, Brazil also had the doubtful glory of being the first country in the world to use the aircraft as a weapon of war, during the defeat of the religiously motivated participants in the *Guerra do Contestado* [land conflict in the South of Brazil – trans.], in Santa Catarina, in 1912 – two years before the outbreak of the First World War.

Postcards celebrate Brazilian achievements: top, Santos Dumont, Augusto Severo and the French mechanic George Sachet in Paris on the eve of the tragedy. Above, the dirigible 'Pax' ready for takeoff.

Although Brazilian aviation had been born as a rib taken from the body of the Army, the pioneer Armed Force in Brazilian skies was in fact the Navy. Created in 1916, the School of Naval Aviation was installed on the tiny Enxadas Island at least 2km off the beaches of Rio. The location offered one of the most beautiful views of Guanabara Bay but did not seem to be best suited for training pilots. As the size of the island, only 400m at its widest point, did not allow for landing strips to be built, training took place at Afonsos Field. The School only began to train pilots and observers in 1921, but one year later it had trained 18 *tenentes, capitães* and *majoress*. The transformation of the school where Montenegro had trained (and in which he was now an instructor) into an arm of the military had a different story. The creation of the Air Force was the result of the activities of the French Mission. Preceded by their aura of victors in the First World War, 24 officers from France landed at Rio in 1920 under the orders of General Maurice Gamelin, who had spent the war as Commander of the French Infantry and a member of the General Staff of General Joseph Joffre, the victorious commander of the allied forces. Charged with fitting out and modernising the Army, in 1927 the Mission realised the old dream of the Brazilian military officers who had received formal training in the School of Military Aviation at the Afonsos Field in the distant suburb of Marechal Hermes in Rio de Janeiro.

While its political agitation had labelled the School as a breeding ground of subversives in the Old Republic, time would show that in the coming years Afonsos Field would also be a breeding ground of future figures in Brazilian political and military life. Of the 55 officers trained in the first groups passing through the School, 16 ended their careers as *brigadeiros*, five became Ministers of State and six reached the highest military rank, de *marechal-do-ar* (among these a black man, Waldemiro Advíncula Montezuma). Only two officers turned to the left in politics: *Capitães* Agliberto Vieira de Azevedo and Sócrates Gonçalves da Silva. They were responsible for distributing in the barracks the pamphlet *Asas Vermelhas* (*Red Wings*) advocating Marxism, and were sentenced to 10 years in prison for attempting to create an uprising in the School of Aviation during the communist revolution of 1935.

The man chosen by President Washington Luís to command the 5th Arm of the Army, General Álvaro Mariante, had boasted of being the great military strategist who had challenged the Prestes Column in 1926. Arriving from Ceará, the 'Knight of Hope' and his men reached Paracatu

in the North of Minas, a journey that would take them through the territory of the state of Bahia. To prevent Prestes passing through Bahia, Mariante joined the Bahian 'Colonel' Horácio de Matos, to whom he offered military advice and a great deal of armament so that the 'Lavras Diamantina Patriotic Battalion' (a crowd of 600 gunmen in Matos' pay) could halt the advance of the undefeated Column. The manoeuvre worked: hotly pursued by the gunmen armed by the Army, the commanders of the Column abandoned their original plan and took refuge in the backlands of Goiás and entered the state of Mato Grosso, to eventually lay down their arms in Bolivian territory, thus ending a journey that had lasted two years and marched over 25,000km. In spite of his military abilities, Mariante was not well-regarded by the *tenentes* of the School of Aviation. On the contrary, to judge from handwritten notes made by Montenegro at this time, which referred to his superior as being "unfair", "pompous" and - a capital sin - someone who "used our Force for political ends during and after the elections".

The School was run by two officers, one French and one Brazilian. From its founding and up to the Revolution of 1930 the local post was held by *Tenente Coronel* Amílcar Pedernais, who had given Montenegro orders to bomb the Vargas forces and had been replaced immediately after the victory of the Revolution by Colonel Plínio Raulino de Oliveira. On the French side, the School was run with an iron fist by Colonel André Séguin, a giant of a man almost 2m tall with a bushy black moustache, who imposed an extremely rigorous regime on students and instructors. One of his demands that most irritated – and sometimes humiliated - the Brazilians was the so-called "ideal cylinder", which was soon called the "French cylinder" by the students. On the pretext of avoiding serious accidents, Séguin imposed limits within which Brazilian pilots could fly without being accompanied by an instructor from the Mission; taking the Afonsos Field airstrip as an axis, the Colonel drew two circles with a 10km radius. The line demarcating the resulting imaginary cylinder was the limit of free flying for the Brazilian officers, no matter how much experience or how many flying hours they had accumulated. While long-distance flights were privilege of the French, the natives only had a small piece of sky which stretched from North to South, from neighbourhood of Belfort Roxa to the Jacarepaguá Lagoon. The then remote and idyllic beaches of the Barra da Tijuca and the Marambai spit, for example could

only be seen from afar by the Brazilian pilots. They could not be flown over because they were 4km outside the limits of the 'French cylinder'. What seemed at first sight to be an institutional whim became a military problem. During the action organised by Montenegro, which included the distribution of pamphlets protesting against French, the Minister of War, General José Fernandes Leite de Castro obtained a copy of the military magazine *Defesa Nacional* (*National Defence*) containing a serious libel signed by *Tenente* Ajalmar Mascarenhas entitled "Travelling to Brazil, beyond the Afonsos". The article protested against the limits imposed on Brazilian military airmen, claiming and even pilots who had flow over three continents were still restricted by the limits of the unjustifiable 10km. The Minister had a peculiar view of the role of the Armed Forces in national life. In his view, in peacetime the Army should dedicate itself to activities which would relieve the Treasury, among which included an airmail service that could connect different points of the inhospitable Brazilian terrain of that time. Various town councils had already stated that if they were included on the routes of the planned airmail service, they themselves would take the responsibility for clearing and marking out landing strips which could in the future be used by regular commercial airlines. As well as providing Brazilian airmen with the chance of acquiring experience in long-distance flying, the initiative would mean that in the future, aircrews working for commercial airlines flying the Brazilian flag would be 'nationalised' - up to that time only foreigners were working as pilots, mechanics and radio operators on those aircraft. But Leite de Castro knew that the first step to reach that point would be to break the 'French cylinder' and to this end the unrest in the School of Aviation suited his plan. He called Colonel Séguin into his office and informed him of the situation. Having no arguments to counter the claims of the Brazilians, Séguin gave in; the 'French cylinder' was buried some weeks later on the 21st May, 1931 with the publication of the decision of the Ministry of War creating the Aviation Group based at Afonsos Field.

For Casimiro Montenegro, the end of the 'French cylinder' provided the opportunity to realise dreams that were as old as they were bold, among which was that of setting up an airmail service. If a regular post could be created between Rio and São Paulo, the first step would have been taken towards a greater adventure, which would be to proceed towards the then distant North, Northeast and Midwest of Brazil. For many of his superior

Above some of the students in the first class of the Air Force. Below, from left to right, tenentes Virmond, Prata, Montenegro, Coriolano Orsini, Lemos Cunha, Araripe Macedo and Marcio de Souza e Mello.

officers, however, that was in no more than a young man's fancy. The immense distances within Brazil and the lack of a letter-writing culture among Brazilians - who were, apart from any other considerations, mainly illiterate - reinforced the arguments of those who opposed the idea of setting up an airmail service. They said that the volume of correspondence exchanged between the two major cities of Brazil, São Paulo and Rio, was so small that it could not justify the very high investment involved in air transport. A postbag put on the *Cruzeiro do Sul*, the train linking the two state capitals, would arrive at its destination the following morning. Moreover, with complete safety, which no aircraft could guarantee. "You don't need an aircraft to carry two letters a day," the gainsayers mocked, "just a carrier pigeon".

A carrier pigeon certainly could carry two letters but Montenegro wanted more than that. His plan was much more ambitious than creating a flying postman. His dream was of an Airmail Service that would reach the furthest parts of the country where progress had still not arrived. If national unity was really one of the pillars of the *tententisa* thinking that had been carried to power in the 1930 Revolution, no institution was better equipped than the Air Force to put this idea into practice. For this reason, Montenegro knew that there could be no more propitious moment in politics to begin the conquest of Brazil from the skies - a conviction he turned into a crusade to convey his ideas to his military colleagues. One of Montenegro's old partners in conspiracy, Eduardo Gomes, now promoted to *major*, was appointed to command the Mixed Air Group. As a proper recognition of his service record, Getúlio had promoted him in a single week to *capitão* and then to *major*. During the weeks in which he remained crammed into Leite de Castro's Cabinet just after the triumph of the Revolution, Eduardo finally came to support Montenegro's project and in fact it was he who convinced the Minister of War to sign the act creating the Group. The inaugural flight was preceded by feverish preparations. Struggling against all sorts of difficulties, the first thing Montenegro had to do was find the basic element necessary for an airmail service: aircraft. His enthusiasm for the project infected the new Director of the School, Colonel Plínio Raulino de Oliveira, who agreed to loan a machine from the institution's sparse fleet. The aircraft chosen was a much-used Curtiss Fledgling with a red fuselage and yellow wings, an aircraft of monstrous appearance thanks to its exposed engine cylinders - an aircraft so ugly it was known as 'Frankenstein'. And no one was surprised at the announcement of the name of the person who would be honoured to command the first flight.

Eduardo Gomes had more than enough reasons to choose the shy, thin pilot from Ceará with sunken blue eyes and the name of a romantic poet. Despite being seven years younger, Casimiro Montenegro had been his flying instructor and the person who had encouraged him to transfer from the Artillery to the Air Force. In addition, it was a reward for what Montenegro had done in the past as he was universally recognised to have supported the creation of the airmail service – in spite of the reluctance with which Eduardo himself had received the idea. The young *tenente* received the invitation with such enthusiasm that no more than three weeks passed between the publication of the act creating the Group and the Curtiss Fledgling's takeoff from Afonsos Field.

At that time flying still implied the challenge of a great adventure. Montenegro would never forget the pilots' black joke at the end of a day of training - counting how many pilots had returned: "Every day it was the same thing: one, two, three, four, five, six, seven, eight! My God! All eight have come back!" Until the day arrived when the count stopped short: "one, two, three, four, five, six, seven…. There's one missing!"

It was one of our comrades who had died in some accident. On those days we would leave the Afonsos Field very depressed and downcast. Many of those boys who came there attracted by the dream of flying had never even seen an aircraft. Such was the case of one of Montenegro's great friends, Lieutenant Roberto Julião Lemos, who would end his career bearing on his shoulders the four stars of *tenente-brigadeiro-do-ar*. He was from Manaus in Amazonia and had arrived in Rio in 1922 at the age of 12 to go straight into the Military College. As he liked horses he had already decided to go into the Cavalry, until the day a friend asked him: "Have you ever seen a plane?"

As would happen with the overwhelming majority of boys of that time, the answer was no. Julião had heard about them and seen photographs in newspapers but he had never seen a real aircraft "Either standing still or flying". Well then, said his friend, if he was prepared to walk the 5km from the Military College to Afonsos Field, he could see not one, but many different aircraft. On arriving at the airfield the two young men spent the afternoon clinging to the fence surrounded it, where Julião could see not only the aircraft but also "some ugly men with huge glasses and strange leather helmets with flaps covering their ears - and although I did not know it, they were the pilots". Before the day was over, the Cavalry had lost one more volunteer to the Air Force. Many years later, at the age of 95, Brigadier Julião would good-

humouredly recall the romantic irresponsibility with which the young pilots overcame their fear: "We felt our lives would be short and that we would survive at most to make captain because it was certain that after that we would die in a crash. As there were many crashes, our superiors advised us not to read newspapers with reports of air accidents so that we would not be affected by them. The best thing to do in those cases was not to give a damn about fear. If the crash happened, the best thing to do was to take a plane up into the air. We believed that some day or another we would come to a bad end: dying in a crash".

And it was against this background of danger and adventure that the colourful old Curtiss Fledgling took off from Afonsos Field in Rio de Janeiro at one o'clock in the afternoon of Friday, 12th June, 1931. The two officers who were now flying over the Serra do Mar had taken different sides in the Revolution of 1930. Montenegro had spent a month and a half dropping bombs and pro-Vargas pamphlets on barracks in Minas Gerais while the family of the observer flying with him, *tenente* Nélson Lavanère-Wanderley, aged 22, had suffered one of the few deaths in the Revolution: on 4th October his father, Brigadier-General Alberto Lavanère-Wanderley had died after being shot in the chest by the *getulista* Lieutenant Juracy Montenegro Magalhães, Montenegro's cousin and friend who, along with Juarez Távora and Agildo Barata were attacking the 22nd Batallion of Chasseurs, headquartered in the capital of the state of Paraíba. The family tragedy did not affect the friendship that united the two and would last until the end of their lives. When the conflict was over, and Vargas installed in the Catete Palace, Montenegro continued to instruct Wanderley at the School of Military Aviation and it was he who had chosen his student to join him on that flight.

The flight had gone well, without surprises or cause for concern until the air began to become turbulent. The headwinds that had buffeted the aircraft since takeoff had caused them to be very late. They were already four hours behind schedule and minutes before, when he had reduced height to 300m and looked out of the cockpit, Montenegro had read the syllable painted in huge white letters on the roof of the railway station: PI. This meant that they had just passed over the town of Pindamonhangaba, halfway between Rio de Janeiro and São Paulo - a waypoint which, according to the original flight plan they should have passed an hour before. If they could reach the runway of the Campo de Marte in the centre of São Paulo and deliver to the Post Office building the only cargo they were carrying - a leather bag with two letters - the two *tenentes* would be assured of

the glory of having made the first airmail flight in Brazilian history. The little aircraft struggled bravely against adverse conditions but the flight seemed to be endless. In spite of the clear weather the constant headwinds and the unstable air had forced the pilot to reduce altitude, which had also reduced cruising speed from 122km per hour to just 80. Even with an additional fuel tank adapted to fit under the upper wing, the aircraft was getting to the end of its range. Without instruments and following a course consisting only of an imaginary corridor following the River Paraíba between the Serra do Mar and the tracks of the Central do Brasil railway, Montenegro and Wanderley knew that they only had to fly over the town of Rio Grande da Serra, on the approach to São Paulo and head Northwest in a straight line to their final destination. After passing over Ribeirão Pires, Mauá and São Caetano do Sul they could approach São Paulo from the South Zone, cross the centre of the city and reach the Campo de Marte without too many changes of direction. The problem was that both night and the temperature fell very quickly and in the darkness of the horizon they could still see no trace of the lights of São Paulo. They did not need a thermometer to realise that at that altitude the outside temperature was zero degrees: the icy wind seemed to cut through their gloves, flying coats and leather helmets, turning any unprotected skin purple. The Fledgling was an open biplane and in each of its tiny cockpits, one behind the other, there was only room for the bodies of the pilot and his observer. Their heads were exposed to whatever temperature and atmospheric conditions the aircraft might encounter. The last rays of the sun had already disappeared over the horizon when Montenegro, shivering with cold, raised his left wrist to his eyes to get a better view of the illuminated face of his watch: it was six o'clock in the evening. If they did not reach São Paulo within the next few minutes they would definitely be in trouble. After flying over São Caetano do Sul, Montenegro turned his head to shout to Wanderley: "We're already over São Paulo and we're not going to make it to the Campo de Marte. We'll have to land here. I'm going to make a pass and you try to find an empty street or some open space for us to land in."

The mail had to the delivered before seven o'clock that night. They made a slight turn to the left and with the aircraft banking, Wanderley indicated to Montenegro the place he had chosen. From the air it appeared to be a large football field, empty and with the lights turned off, with stands on only one side of the field and no obstacle at the goalpost ends, not even the posts, which would make the landing approach easier. Luckily there were no buildings nearby. Montenegro made a wide turn in the dark sky and pointing the aircraft's nose towards the emergency landing strip, began to lower his flaps. The Curtiss

Above: 12th June 1931: Montenegro in the front cockpit and Lemos Cunha in the rear, take off from Afonsos Field in Rio de Janeiro and fly 'Frankenstein', a red and yellow Curtiss Fledgling, to São Paulo but cannot find the Campo de Marte (facing page) and finally land in the middle of the Jockey Club. Thus was the National Airmail Service created.

Fledgling's three small wheels scraped the roof of some houses in the Rua Bresser and seconds later touched down smoothly on the damp grass of what they could now see was the centre of a horse-racing track. The huge grassy oval surrounded by a strip of sand was the Mooca racetrack, which also housed the São Paulo Jockey Club. It was the flyers' good fortune there were no races on Fridays. The machine rolled over the grass, passing in front of the deserted stands and finally came to a stop. Cutting the engine, Montenegro and Wanderley jumped out of their cockpits and grabbed the little bag with the post. Only then did they realise that they were in the dark, surrounded by high iron railings with locked gates and apparently with no one to open them. Some people from neighbourhood had gathered in the street, attracted by the noise of the aircraft and we gazing fearfully at the unusual sight of those too young men in uniform, wearing gloves, with goggles on their foreheads and leather helmets, who were shaking the railings and asking for help: "Open the gate! Please, somebody open this gate!"

It was not the reception the pilots had hoped for, but the main objective - getting to São Paulo with the letters - had been achieved. As no one came to help them, the pair began to climb the railings. When they were in the street they ran to the first taxi that passed and told the driver to go to the Post Office building in the Avenida São João, which closed at 7 p.m. It was only when the taxi came to the Vale do Anhangabaú that Montenegro and Wanderley discovered that there was indeed a reception waiting. A crowd of thousands of people was gathered around the magnificent Post Office building, being entertained by a noisy band. The glacial indifference of the people to their arrival as they paid the taxi and stepped onto the pavement made them realise that in fact the celebration was not for them. The crowd was going to the Municipal Theatre close by, where General Isidoro Dias Lopes, the leader of the 1924 Revolution, was being honoured on his 66th birthday. It made no difference: before the clock in the entrance hall of the Post Office struck 7 p.m., the bag with the two letters had been delivered. Montenegro and Wanderley left for the elegant Hotel Esplanada - alongside the Municipal Theatre - to celebrate their achievement. Brazil had actually just created its Military Airmail.

Chapter 3 - A Band and Tickertape Parade. These are the new heroes who have come from the skies

In 1931, the inhabitants of Leopoldo de Bulhões, a forgotten village in Goiás 80km from the area of savannah where in later years the new capital of Brazil would be constructed, had never set eyes on an aircraft. Even the train was a novelty for them because the narrow, winding tracks of the Estrada de Ferro Goyaz had only arrived there three years previously when the place was still called Pindaibinha. The railway arrived there and stopped. It was in a state of understandable terror therefore that the peaceful villagers saw a strange contraption painted grey and making more noise than a thousand trains coming down from the sky. It was a Curtiss Fledgling, like the one Montenegro had first flown and which was now also being flown by him, trying to make an emergency landing but would end up scattered over Pindaíba Creek, a trickle of water that bordered the village and gave it its original name. When they saw Montenegro emerge from the crashed machine, dressed in flying suit, goggles on his forehead, leather coat, gloves and helmet with flaps falling over his ears, they were even more amazed.

Montenegro was not so astonished, first of all because he was no stranger to Leopoldo de Bulhões, as he had spent some days there some months before during an exploratory overland expedition. Also because, after all, that was not the first - nor would it be the last - crash he would have in his life. It was in one of these forced landings that Montenegro's mouth was injured, which led him to grow a moustache to hide a scar on his lip. Emergency

landings and mechanical breakdowns were routine events in those early days of military flying when, for example, it was common to hear news of landings on marshy fields, or in the middle of a football match or of some Curtiss Fledgling knocking over cows in a field. On that same flight, Montenegro's 'Frankenstein' would make at least one more forced landing before arriving at the final destination of the adventure, the town of Goiás Velho which was then the capital of the state of Goiás (Goiânia would only be inaugurated in 1937, five years later).

In mid-October 1931 it fell to him to make the experimental flights before the official opening of the first long-distance Military Airmail route after the consolidation of the Rio-São Paulo stretch that he himself and Lavanère-Wanderley had started. They initially travelled the 1,200km between Rio de Janeiro and Goiás Velho by land. On the orders of his superior, *Major* Eduardo Gomes, Montenegro had originally bought a ticket for São Paulo on the Cruzeiro do Sul express. From there he went by steam train towards Ribeirão Preto, passing through Uberaba, Uberlândia and Araguari, in the 'Minas Triangle', entered Goiás at Ipameri and finished his journey in Leopoldo Bulhões, literally at the end of the line. "I asked my superiors how far I should go," he said much later, "and they told me to go as far as I could". But after that, things became complicated. The train line ended at the former Pindaibinha, 500km short of the end of the route. In order to travel this distance, Montenegro had to ask for a lift in a car belonging to the Department of Posts and Telegraphs. As he had done from the window of the train, he made notes of significant buildings and geographical features he found along the way - a church, a road dividing in two, a river, a corral, a lake or a mountain. These would be the waypoints to direct and mark out the route of the flight he would make a few weeks later, but this time by air. Having overcome the savannahs of Goiânia, he finally arrived at the historic colonial town of Goiás Velho.

On his journey, when he came to locations he considered strategic as bases for the future air route, Montenegro would leave the train and knock on the door of the local town council offices. The most important part of the mission consisted in persuading local mayors to accept the idea of an airmail service and thus finance the building of airstrips in their towns. The most difficult part was to convince the disbelieving mayor that he, Montenegro, was not a swindler or mad - that the apparently insane idea of aircraft flying through the skies to carry letters from one place to another was in fact a real

project. In most cases the task was made doubly difficult because it involved visiting ranchers whose properties had been identified as being most suitable for the takeoff and landing of the little aircraft that would carry the mailbags.

Even when the initial disbelief had been overcome, much persuasion was still necessary to convince the mayors that this and not that place was, for technical reasons, best suited for building the municipal airstrip. Often the electoral interests of the mayors threatened to overcome Montenegro's technical arguments, which required the use of extra diplomatic efforts to turn the situation around. He carefully explained that, among other deciding factors, it was necessary to take into account the air currents, the mountains in the region and the topographical and geological characteristics of the ground. If it had only depended upon them, the local politicians would have preferred the air strips to be built in areas of great public visibility - alongside the church, for example, or near the town hall - because they thought that in a place so isolated from the world, with no cinema or theatre, the arrival of the aircraft would soon become the main attraction for the people. But this could not be the case, Montenegro pointed out patiently. A landing strip had to be long, very long, he explained. The average dimensions of runways for aircraft of the size used in Brazil at that time were 400m long by 100m wide, and the main axis had to be aligned with the direction of the prevailing winds. When they heard this, the mayors invariably jumped out of their chairs, but they were once more obliged to listen to technical arguments by Montenegro, who finally wore down their resistance. At any event, with an agreement reached and written instructions given for a topographical survey and the construction of the airstrip, Montenegro would return to the station and take the train for the next waypoint. However, after he had left, sometimes the agreement with the local political boss would not be followed to the letter. On more than one occasion pilots of the Airmail Service were surprised, on landing, to find runways much shorter than had been planned, which forced them to descend diagonally to take maximum advantage of every available metre of the cleared area.

The first landings of the Airmail Service transformed the small towns. There would always be a band playing on the ground and a shower of confetti to welcome this novelty. The pilots were treated as celebrities and were mentioned in the headlines of the newspapers of the towns they passed through. The enthusiasm was justified. At that time the overland journey between Rio de Janeiro and Goiás Velho could not be made in less than five days. By

plane, it was eleven hours of non-stop flight. However, as it was necessary to make at least two refuelling and maintenance stops, it was stipulated that the new route should be covered in an official time of 48 hours in order to simplify the undertaking. Uberaba in Minas Gerais and Ipameri in Goiás were chosen as refuelling points. Araguari, located more or less halfway between the two towns, was chosen as an overnight stop for the pilots. Until then, the time between posting and receiving correspondence exchanged between Rio and Goiás had been four long weeks. With the arrival of the Airmail Service, it would now be possible to leave a letter on the counter of the Post Office in Goiás Velho and receive an answer from the Federal District in less than five working days.

This ideal became a reality when, on 19th October 1931; aboard a Curtiss K-272, *Tenentes* Joelmir de Araripe Macedo and Nélson Lavanère-Wanderley carried the first airmail postbag on the 'Goiás Route'. As it was not then advisable to place blind trust in the onboard compass - and as there were no maps sufficiently accurate to guide them - the two men navigated along the line of the railway which snaked below them. It was a strange way to navigate, but one which would become common on all later routes and which the Airmail Service pilots soon jokingly nicknamed *ferrodrômica* [following the railway – *estrada de ferro* - trans.] navigation. In addition, there was another facility for aerial position-plotting the flyers called, in the same spirit, the *olhômetro* [eye-meter-trans.]: Montenegro had caused to be painted on the roofs of the railway stations whitewashed circles in which could be read the distance in kilometres to the next landing strip. Beside the circle an arrow indicated the direction of the course to follow, along with the two initial letters of the name of the town painted large - for example the 'PI' of Pindamonhangaba which Montenegro had seen on his first airmail flight. As an additional aid to avoid getting lost, the pilots soon improvised navigational charts and sketches scribbled in pencil in which they used a unique geographical terminology that renamed, according to their own creativity, the places they flew over along the route: Ferro de Engomar (Starching Iron), Forquilha (Pitchfork), Rio Seco (Dry River), Bosque dos Eucaliptos (Eucalyptus Wood), Fazenda do Pinheiro Isolado (Lonesome Pine Ranch).

On its return from the inaugural flight, the aircraft flown by Araripe and Wanderley crashed on taking off from the Leopoldo Bulhões airfield, but without injury to the crew. Very soon the inhabitants of the town lost their fear of the flying machines crashing into their backyards. At this point the Airmail

Service was a reality. The route between Rio de Janeiro and São Paulo maintained three flights a week with strictly laid-down timetables, to the point where many people set their watches by the passing of the aircraft over their houses. Meetings were even arranged for "before or after you hear the airmail plane". The pilots of the Airmail Service actually prided themselves on their timekeeping. Another advantage proclaimed in prose and verse was the work of unprecedented integration of the country that was taking place. "A work of patriotism worthy of the greatest praise" was how the *Correio da Manhã* newspaper described it on 28th January 1932 when it honoured the men who were often called the '*bandeirantes* of the skies'. [The *bandeirantes* were 16th-century backwoodsmen in the state of São Paulo who followed the flag – *bandeira* – of their leader into the interior in search of precious stones and indian slaves – trans.]

Also in 1932, two new routes would be launched, one connecting the Federal District to Mato Grosso and the other from Rio to Paraná. On the first of these, staging posts were established at São Paulo, Bauru, Penápolis, Três Lagoas and Campo Grande. On the second, the aircraft stopped at São Paulo and at the landing strips built at the towns of Sorocaba, Itapetininga, Faxina and Ponta Grossa. In point of fact, the Airmail Service now extended for a total of 3,630km. Montenegro was responsible for planning and setting up the new routes and came to be known by his colleagues as the 'sower of routes' during that period which would be known in the history of the Air Force as the 'Bow and Arrow' period because of the precarious and primitive nature of the flying techniques of the time. And because flyers are so fond of nicknames, the time was more than overdue to re-christen the old Curtiss Fledglings with a name more suitable to their new and noble function: instead of 'Frankensteins' they came to be known affectionately as '*Vira-mundos*' ('Wanderers'). Very soon, as well as carrying letters, the bold wings of the Military Airmail Service (Correio Aéreo Militar - CAM) also carried solidarity. The frequent contact of the pilots with those living in the small backwoods towns of Brazil gave birth to an inevitable and increasing intimacy, as well as feelings of cooperation on both sides even though they belonged to such widely differing worlds. Along with their mailbags the flyers carried from place to place goods that people had ordered, responding to requests from families and friends separated for long periods by great distances: lengths of cheap cotton cloth, agricultural tools, sweets, toys, rice-powder compacts, photographs, food, clothes, documents, books, receipts of bank deposits

Top, in Goiás, Montenegro waits while his aircraft is refuelled. Above (with arms crossed) in Minas, a common scene at CAM landings: lines of women wait to get a close look at the heroes who have come from the sky.

and sometimes even cash. Those who had put their faith in the failure of the CAM spread the rumour that, in the middle of all this, the pilots were also involved in smuggling, a libel vehemently and indignantly denied by all of them. On the contrary, the men of the Airmail Service were often called upon to carry sick and injured people from a small town to one with a hospital and to carry vaccines, serums and medicines to combat epidemics in out-of-the way places where there was no kind of medical or sanitary provision. And it was not infrequent for women about to give birth - those with complicated pregnancies or facing dangerous births - to be taken in CAM aircraft to maternity hospitals sometimes hundreds of kilometres away from where they lived. Off they went, their nine-month bulges squeezed into the small cockpits of the 'Wanderer' that was now a stork.

Casimiro Montenegro himself took part in several of these aid operations, saving the lives of many ordinary people. But he was also responsible for saving a millionaire from death. In 1934 he received a telephone call on behalf of the businessman Lineu de Paula Machado who was on his Ranch in Botucatu in the interior of São Paulo state, suffering from a serious case of perforated appendix - a fatal complication that could poison the whole of his abdominal cavity to produce a general infection that could kill the patient in a matter of hours. They would be no time to put him, doubled-up with pain, on a train to São Paulo. Lineu de Paula Machado was one of the founders of the Rio de Janeiro Jockey Club and his marriage to Celina Guinle began the Guinle de Paula Machado family that would acquire an incalculable fortune including the luxurious Copacabana Palace hotel, the building where the Palácio dos Laranjeiras would later operate in Rio, as well as the Boavista Bank. Lineu bred racehorses and divided his passion for thoroughbreds with an equal enthusiasm for flying, having also founded some of the first flying clubs in Brazil. For this reason alone, Montenegro asked over the telephone if the Ranch had a landing strip. The answer was no, it did not.

"But does it have an *alfafal*?" he asked, remembering the owner's racehorses.

The person on the other end of the line did not know what an *alfafal* was, but Montenegro insisted: "Alfafal, the field where you must be planting alfalfa grass to feed the animals."

Ah, an alfalfa field, of course there was. So then, over the telephone, Montenegro instructed the ranch foreman on how to turn a stretch of alfalfa into a landing strip in a few minutes. When he took off from the Campo de

Marte in a Waco CSO - an aircraft that had been included in the Airmail Service fleet in 1932 – Lineu de Paula Machado's employees were still trying to do the necessary work. Montenegro overflew the ranch and landed as best he could on the improvised airstrip. He ran to the main building and placed the millionaire, groaning in pain, in the rear cockpit. They immediately took off for Rio de Janeiro where they arrived at the hospital in time for Lineu to undergo life-saving surgery. He and Montenegro became friends for the rest of their lives and from that time on Montenegro always wore on his left wrist the present Paula Machado had given him: a gold Longines watch identical to the one used by the American Charles Lindbergh, who had made the first solo flight across the North Atlantic. As chance would have it, after having his life saved by an aircraft, Lineu Paula Machado would die in an air accident. In September 1942 the Panair do Brasil plane in which he was flying from Rio to Porto Alegre came down near the Billings dam in the municipality of Santo André near São Paulo, killing the eleven passengers and four crew.

The help given to Lineu provided extra publicity and helped to spread even further the excellent image that the Military Airmail Service had begun to enjoy among the population. Montenegro knew that, with its various adventures, the CAM was achieving the triple objective he had set out for it: at the same time as strengthening bonds of integration within the country by connecting Rio de Janeiro to its most distant and isolated corners, it was encouraging the construction of dozens of airfields scattered throughout the country and finally it was giving military pilots experience in long-distance flying within Brazil. Being exposed to the most varied and difficult climatic and temperature conditions and making forced landings in improvised airfields, the flyers were submitted to an exemplary form of training in their daily work. After some weeks of working in the Airmail Service, any flyer was ready to face the most difficult situations he might come across in his future military career.

To ensure the safety of the pilots who flew by the seat of their pants, be it in a 'Wanderer' or any of the other CAM aircraft, there was always an excellent ground crew ready to go into action in any emergency. The emergency teams, who also trained exhaustively in high-risk situations, never hesitated to go into the bush or the jungle, if necessary braving marshes, facing swamps, indians and wild animals, climbing cliffs or diving into lakes, rivers and streams to rescue crashed pilots or to find colleagues lost in the forests. The romantic air

that surrounded the pioneers of Brazilian aviation was tempered by intensive training and also helped to nourish in the souls of those Quixotes of the air the image of manhood typical of barrackroom life.

Hovering over them all, without any distinction, the shadow of death accompanied each flight. Putting into twin cockpits officers of different ranks but who became equal as human beings in the face of the same imminent danger, the shadow of death was felt by some pilots - including Montenegro – to be a touchstone that distinguished the Air Force from the other military forces. Rank, an absolute value in the Army and Navy, was softened in the Air Force by a link forged in the daily routine of flights that had no guarantee of return and the inevitable accidents that happened on the way. Montenegro liked to emphasise that in the pioneering missions of the Airmail Service, a *capitão* and a *tenente* shared the same hotel room and at meal times the same table - sometimes the same plate and the same rusty mug - in the hovels where they were forced to spend the night in the Brazilian interior. Moreover, if the aircraft should smash into the ground it did not matter how many stars one or the other crew member wore on the shoulders of his uniform. The same tragedy would befall both of them indiscriminately and democratically. *Brigadeiro* Julião, who lost a brother in an air accident, well remembers the sense of brotherhood generated by the closeness of death: "Up there you don't have *brigadeiros* or *majores* or *tenentes*, not even *sargentos*. Death does not choose the oldest or the least trained. The constant presence of death created amongst us the camaraderie that was different from that in the army for example. The officers treated the *sargentos* as comrades because they were the ones who took care of the engine. Everyone was in the same boat, or rather the same aircraft. If it crashed, you all died together, with no regard for rank."

Accidents were so frequent that ingenuity and improvisation came to be another trademark of the new Airmail Service. When, for example, the canvas on a wing of an aircraft tore in the middle of flight, the solution was to find a clearing, descend as quickly as possible, land on the road - if there was a road - and make an emergency repair in the first inn or dress shop they could find along the route. This was possible because all they needed was to make wheat-flour glue and mend the wing with strips of cloth. In an emergency, this could even be part of an old cotton dress given by the innkeeper's wife.

The men of the National Airmail Service made no distinction of any kind: they not only gave aid to indians in the middle of the jungle (right, Montenegro and the Kalapalo tribesman Djacuí), but also saved the lives of millionaires. Below, Montenegro and the businessman Lineu de Paula Machado, who was rushed from the interior of São Paulo state to Rio for an appendix operation.

And that is how it was: the same flour glue children used to make kites and stick together segments of balloons for St. John's Night parties was exactly the same 'solder' that Montenegro and his Airmail Service comrades used in emergencies to repair tears in the wings of their aircraft.

And so, from one scare to another, from a crash today and a new route opened tomorrow, the Military Airmail Service gradually increased its sphere of activity. After 'winning the West' with the Goiás and Mato Grasso routes, the objective being to be to reach the main towns in the Northeastern region. This time, Montenegro, the 'sower of routes' had the help of a fellow countryman from Ceará, Lieutenant José Sampaio de Macedo, remembered in the history of the CAM as the 'Air Force Backwoodsman'.

For his military colleagues he was just the 'Backwoodsman' (*o Sertanejo*). The future commander of the Air Base at Fortaleza, Macedo was invited to São Paulo by Montenegro who outlined to him the bold plan to be carried out: connecting Rio de Janeiro by air to Fortaleza, the capital of the state of Ceará. This time the customary reconnaissance by land to win over local mayors and identify probable support bases would be split into two halves. Montenegro would leave Rio by train for the North, crossing Minas Gerais and then, following the São Francisco River, would go up as far as Carinhanha, on the border between Minas and Bahia. The 'Backwoodsman' Macedo would take the opposite route: he would leave Fortaleza for the South, would cross Ceará, Pernambuco and almost the whole of Bahia until he met up with Montenegro. When the two men met the so-called 'São Francisco Route' also known as the 'Old Chico Route' [the São Francisco River is known familiarly as 'Old Chico' – trans.] would have a total length of 2,500km. The journey by land and the studies and surveying of the terrain, which included making maps and demarcating 16 landing fields (without counting the many alternative landing strips for use in cases of mechanical breakdown or bad weather), took three months. When it was finished Montenegro gave his old friend Lavanère-Wanderley the privilege of sharing with José Sampaio Macedo the first flight along the route, which took place on 15th February 1933 in a Waco CSO21. The aircraft left Rio de Janeiro and arrived at Fortaleza two days later, having made stops in Belo Horizonte, Pirapora, Rio Branco, Barra do Rio Grande and Bom Jesus da Lapa. From then on, Wanderley and Macedo flew with the burning sun of the *caatinga* badlands roasting their leather helmets in the skies over the backwoods

towns of Xiquexique, Remanso, Juazeiro, Petrolina, Crato, Juazeiro do Norte, Iguatu and Quixadá, where the other official supply dumps of the route had been set up.

The story of the National Airmail Service was only just beginning. Two years later, in 1935, the Amazon route to Belém was established and the following year there would be an international route to Asunción in Paraguay. Official documents of the period show that in eight years of its existence between 1931 and 1939, the CAM's aircraft travelled 7,870,689km (the equivalent of travelling around the Earth 200 times), carrying more than 2,000 tons of correspondence. During this period CAM pilots accumulated almost 5 million flying hours - more than 70 years after these events, the pilot of an international airliner at the end of his career would have to be reborn 250 times to beat that record. In addition to such extraordinary numbers, Montenegro took particular pride in one aspect of setting up the links to the Northeast: after 1933 and using the Airline Service, a letter from Fortaleza to Rio de Janeiro or vice versa would eventually arrive in the hands of its addressee in less than 48 hours. That would have been unthinkable 10 years earlier in 1923 when the young and determined Montenegro had said goodbye to his family in Ceará, carrying a few changes of clothing in his suitcase and a second-class ticket in his pocket. The weary journey by steamboat from Fortaleza to Rio took nine days. Against the wishes of his father, who wanted him to take a degree to carry on the family's political tradition, Montenegro had decided to travel to the capital of the country to become a pilot. His father almost disinherited him. The rest of his family teased him: young Mimiro must have a screw loose, they said. At that time, leaving Ceará and saying he wanted to become a pilot in Rio de Janeiro was the same as saying today that you are going to the Moon to catch a rocket to be an astronaut on Saturn.

Chapter 4 - From his window Mimiro sees a troop of cavalry attacking children. It is Ceará catching fire

If the dream of almost every boy in Ceará at that time was to have a horse, Montenegro's dream was to fly an aircraft. And while schoolfriends said that when they grew up they wanted to be priests, lawyers or doctors, little Mimiro - as he was called at home - stamped his foot and said he would be a flyer. Apart from his strange mania for flying he was the same as any other child of his age. The tenth son of Casimiro Ribeiro Brasil Montenegro - known to all as 'Doctor Casimiro' - a prosperous merchant who had become a local parliamentary deputy and political boss, the boy really attracted attention by virtue of his blue eyes. They were said to be the legacy of forebears who came from the region in northern Albania - today the Republic of Montenegro - they had left at the beginning of the 12th century to spread all over Europe, especially into Italy, Spain and Portugal, before the first caravels landed in Brazil. Mimiro's father was proud of this family history, in which was included a whole gallery of illustrious Montenegros, including a member of the Spanish Inquisition, innumerable Italian aristocrats and even a Pope, Pietro Montenegro, who the Brazilian branch swore had been chosen as supreme head of the Catholic church in 1437. Although Vatican records make no mention of the existence of a Pope Pietro Montenegro Dr Casimiro never tired of referring to his ancestor as proof of the fundamentally religious nature of the Montenegros, a family as

Casimiro Ribeiro Brasil Montenegro and Maria Emília, Montenegro's parents. 'Doctor Montenegro', as he liked to be called, was the last intendente and the first mayor of Fortaleza and was proud of having helped to beautify the capital of Ceará during its belle époque with gardens, theatres and boulevards.

devoted as it was noble, as was attested by the gilded family coat of arms with red borders framing two red wolves - representing perseverance - next to a cedar symbolising stability and permanence.

Dr Casimiro made a point of emphasising the celebrated religious tradition the clan had maintained for centuries. And he did this with such dedication that one of his many grandchildren, José Maria Montenegro, even several decades after the event, swore he could still feel the pain of the punishment his grandfather had given him one Good Friday when he decided to harness a mare to ride around the streets of Fortaleza as he did every morning. For Dr Casimiro even harnessing a mare on a holy day was a sin. It was under this kind of rigid discipline that the crowd of children, 16 in all, 10 from his first marriage to his cousin Maria Emília Pio Brasil and five more from his second marriage to Lilith Nunes Melo, grew up. Marriages between relatives were actually quite common among the Montenegros. Countless cases of uncles married to nieces and nephews to aunts over several generations of consanguineous matches had produced an intricate family network in which some blood brothers became each other's brothers-in-law.

Of Dr Casimiro's 16 children, two were given his name - the second oldest José Casimiro Brasil Montenegro nicknamed Yoyô from childhood, and Casimiro Montenegro Jr., known as Mimiro. Thus the long tradition of having Casimiros in the family continued, a tradition that had begun on the other side of the Atlantic with the Dominican Antônio Casimiro Montenegro, a member of the Spanish Holy Inquisition in the 18th century. Little Mimiro, who was born on 29th October 1904, was still not old enough to realise the weight of ancestry his own name carried. One of the final fruits of his father's first marriage, his main concern was to get up to mischief the whole day with his brothers. One of his favourite pranks was to hide inside the wardrobe of his older sisters, Maria Esther (Etinha) and Raquel (Nené). He would spend hours waiting patiently for them to come to the bedroom to change their clothes. When Etina and Nené opened the wardrobe he would burst out shouting from the mass of clothes and white petticoats, almost frightening the girls to death. In later life, the two sisters never tired of recalling that story, always raising a laugh at Montenegro gatherings or at Sunday lunch together. Another way in which Mimiro used to torment his sisters was, before going to bed, tying together with cord the handles of the chamber pots under the beds. At midnight, when the living room clock began to strike, he terrorised the family pulling the strings and making the chamber pots travel mysteriously through the rooms as if they were being moved by ghosts.

N.º 894

LYCEU DO CEARÁ

EQUIPARADO AO COLLEGIO PEDRO II

CERTIDÃO

DE

EXAME DAS MATERIAS DO CURSO INDISPENSAVEL Á INSCRIPÇÃO PARA O EXAME VESTIBULAR

Certifico que dos livros de actas dos exames parcellados de preparatorios consta, ve, em 2 de Dezembro de 1920, a Snr. Caimiro Montenegro Filho natural deste Estado, com annos de edade, prestou exame de Geog. Chorog. e Hist., sendo approvado plenamente gráu seis e tres (6,3).

Secretaria do Lyceu do Ceará, em 24 de Novembro de 1924

O DIRECTOR

O SECRETARIO

O INSPECTOR

Fortaleza, 1º de Fevereiro 1923

Montenegro's school career at the Ceará Liceu was far from brilliant. Apart from chemistry, physics and natural history, he was a pupil who did not stand out in any way.

But Montenegro's childhood did not only involve boyhood mischief. At the age of eight he witnessed from the window of his house one of the events that would mark his childhood memories very strongly. On 21st January, 1912 a group of 600 children like him, carrying banners and flags, took over the streets of Fortaleza. It was the 'Children's March', one of the many popular demonstrations organised by supporters of Lieutenant-Colonel Franco Rabelo, the candidate for the post of Governor of Ceará that year, who had been in power for 20 years and gave no signs that he intended to renounce his political monopoly in a hurry. Franco Rabelo's candidacy was part of a larger scheme of things, the so-called 'Policy of the Salvations' orchestrated by military personnel who gave armed support to the then President of the Republic, Marshal Hermes da Fonseca. Fierce critics of the regional oligarchies who ruled the national political scene, the military forces had begun to unfold the flag of public morality and denounce the administrative chaos that was spreading throughout Brazil. For this reason they pressurised Hermes da Fonseca to carry out a complete cleanup of the political strongholds that ruled the provinces. They argued that this was necessary to save the country that was being depraved by nepotism and corruption. This political disinfection would begin with the replacement, at the point of a gun if necessary, of the regional oligarchs by uniformed rulers.

The Governor of Ceará, Nogueira Accioly, was the most perfect embodiment of the stereotype of the oligarch denounced by the 'salvationists'. The target of countless accusations, he dealt with adversaries with club in hand. He did not hesitate to give orders to destroy the offices of newspapers, deport enemies, beat up the disaffected or simply order the death of those who opposed him. Up to then, the first two marches in support of Franco Rabelo, the candidate supported by President Hermes da Fonseca, had been violently stopped by the local police, including a second one organised by the Pro-Free Ceará League of Women that had been dispersed by shots and the massive use of cavalry. At the end of the panic and the disorder that followed it, dozens of girls and young women suffered bullet wounds or had been trampled under the hooves of the soldiers' horses. In spite of all this violence, no one dared to believe that the same could happen to children singing civic anthems and waving flags with the name of Franco Rabelo on them. But this is what happened. Accioly ordered the police into action again and in a few minutes the sea of children was being shot at and enduring the fury of the cavalry. In the midst of the confusion, a

classic picture would help to overthrow the oligarchy: that of a little girl named Odele de Paula.

A small figure, the little standard-bearer of the League of Women stood still, rigid with fear, while the troop of horses and the noise of stray bullets surrounded her. The photograph of Odele standing erect, holding a banner in defence of Rabelo's candidacy was reprinted on thousands of pamphlets and became a symbol of heroism opposed to Nogueira Accioly.

It was enough. Without realising it, Accioly has just signed the death certificate of his government. Fortaleza became a battlefield. There followed three days of uncontrollable insurrection by the people. It became impossible to hold back the gunmen, who began to dig trenches and build barricades in the main streets of the town, ready to face the cavalry with hoes, sickles, sticks, stones, rifles and pistols. To cries of "Down with Accioly!" trams were overturned, shops, cafes and factories looted and lamp posts knocked down. One of the features of Accioly's administration, the beautiful Marquês de Herval Square - which would be renamed many years later José de Alencar Square - was completely destroyed. Benches were torn up, statues knocked down, porcelain jars reduced to dust. The luxurious mansion of the municipal *intendente* (a post which was at that time equivalent to that of mayor of the town), Guilherme Rocha, was looted and then burned. During those three days of collective rage Dr Casimiro, a devoted supporter of Accioly, would not allow any member of his family to set foot outside the house. Even the political leaders who supported Franco Rabelo believed the 'salvationists' had lost control of situation. The demonstrations of the people were felt to be the work of a horde of barbarians and arsonists. Thus, the elections occurred in a climate of extreme tension but as was expected, Franco Rabelo became the new President of the Province of Ceará, ironically forming an alliance of convenience with those same defeated supporters of Accioly. However, Rabelo only warmed the President's chair for two short years. In 1914 a new political storm would shake Ceará and once more provoke general panic in Fortaleza. This time, Dr Casimiro, who had lost his seat as a deputy with the fall of the oligarchy, would be even closer to the eye of the storm.

The deal between Franco Rabelo and Nogueira Accioly soon collapsed. Soon the deposed oligarch became Rabelo's most virulent enemy. The latter, in turn, sent

Above, Júlio and Alice Montenegro - they would become the parents-in-law of their brother and brother-in-law Casimiro. (Left) their daughters Helena (left) and Maria Antonietta (right).

troops to invade one of the largest redoubts of intransigent Acciolism, the region of Cariri, a kind of green oasis in the midst of the thorny scrubland of the *caatinga* in the extreme south of the state of Ceará. The first attack, in 1913, was against the town of Crato where the *intendente* Antonio Luis Alves Pequeno, a favourite cousin of Accioly's, was removed from his post and imprisoned. Claiming the justification of combating religious fanaticism and banditry in the region, which was infested with gunmen and bandits, Lieutenant-Colonel Franco Rabelo's next target was the town of Juazeiro do Norte, ruled by the figure of Father Cícero Romão Batista, 'Padim Ciço', considered a saint by the simple people of the Northeast. About 25 years before, in 1889, Juazeiro do Norte was just a small settlement under the administration of the town of Crato when the news spread that a miracle had happened in the little church there as the young Father Cícero was offering the communion sacrament: the Sacred Host was said to have turned into blood in the mouth of the Blessed Maria do Araújo. This phenomenon was repeated several times for months on end, turning the town into place of pilgrimage and religious ceremonies for hundreds of thousands of people from the most distant parts of the whole of Northeast. Juazeiro grew and became independent from Crato, becoming a town and Father Cícero, increasingly influential and venerated, was appointed by Nogueira Accioly as the first *intendente* of the town. Having doubts about the supposed miracle, the Church hierarchy in Fortaleza annulled the priest's religious vows and forbade him to carry out ecclesiastical functions. This punishment only increased the faith of his devotees even more as they saw it as the unjust persecution of a saint. In Fortaleza Dr Casimiro paid close attention to the news coming out of the interior of the state. His political experience foresaw that at some point the time would come for him to make an entrance.

Soon after taking power and wishing to extend his control over Cariri, Franco Rabelo had removed Father Cícero from the post of *intendente* of Juazeiro do Norte. For 'Padim's' faithful this act was seen as an outrage, but the worst was still to come. News that a military offensive was being prepared against the town arrived together with rumours that Rabelo had ordered the assassination of the priest. This was enough for the citizens of Juazeiro to arm themselves to the teeth to defend their political and spiritual leader. The latter directed the people to dig a large ditch all around the town, which he solemnly baptised as the 'Circle of the Mother of God'. In only six days a moat 9km long, 8 m wide and 5 m deep had been dug. When the government troops finally arrived they came upon an impassable obstacle behind which an army of bandits and gunmen commanded by the doctor and deputy Floro Bartolomeu, Father Cícero's right arm, opened fire against them, which forced

the soldiers to retreat in spite of their enormous numerical superiority. Some days later there was a new attack resulting in an identical disaster. The gunmen, with Floro leading them, realised their strength and went to retake Crato, which they succeeded in doing on 24th January 1914. What many people did not know is that in background of that conflict was no less a figure than the *gaucho* senator Pinheiro Machado, who was one of most powerful men in the Republic, but who had been politically weakened with the overthrow of the regional oligarchies, of which he had been a direct beneficiary within the federal system. Desperate to get back at the 'salvationists' and return to the previous situation, Pinheiro Machado made an agreement with Floro to finance the army of gunmen who were fighting in the name of 'Padim'. Ever more aware of their firepower, Floro Bartolomeu's men received Father Cícero's blessings and departed on what they felt to be a 'holy war'. The plan was to travel across the backlands towards the coast, conquer Fortaleza and place Franco Rabelo in power. Imbued with fundamentalist feelings, the priest promised that each gunman and bandit who died in battle would have a place reserved in Heaven alongside Jesus Christ. At the beginning of March they had already taken the main towns and highways leading to Fortaleza, the capital of the state of Ceará. On the 14th of that month, pressured by events, Franco Rabelo was forced to resign. Father Cícero's gunmen made a joyful entry into the city, shooting muskets into the air, showing off bloodstained daggers and billeting themselves in the streets and squares of the city centre. Along with Rabelo, Ildefonso Albano, the *intendente* of Fortaleza, also lost his post. The Federal Government ordered intervention in Ceará and put in charge of it an old and feared acquaintance of the social movements, General Fernando Setembrino de Carvalho. He had been responsible for massacring the followers of Antônio Conselheiro in Canudos and remained for only four months - from March to June of 1914 - as Governor of the State. After the pacification of Ceará his name would once again make headlines for ordering another massacre, this time against the fanatical followers of the 'monk' José Maria, who were confronting the Federal Government in the so-called *Guerra do Contestado* in Santa Catarina. Having won another war, Setembrino would return to Rio covered in glory and to be known in the barracks as 'the dog-killer'.

His first act on taking over the government of Ceará had been to appoint Dr Casimiro Ribeiro Brasil Montenegro in place of Ildefonso Albano, the *intendente* of Fortaleza who had lost his post along with Franco Rabelo.

For four years, from 1914 to 1918, Casimiro Senior occupied the position of *intendente*, during which time the post came to receive its current title of municipal mayor. The administration of the 'first Mayor of Fortaleza' - as Dr Casimiro later liked to be remembered - was characterised by a systematic effort to erase the idea that the capital of Ceará was a nest of Jacobin yokels. After the people's revolt that had deposed Accioly followed by the raucous invasion of the city by Floro Bartolomeu's gunmen, Casimiro wanted to give the town a more 'civilised' air. He made gardens, encouraged the construction of buildings with architectural designs copied from French models and made a point of appearing in public in morning coat, top hat and a cane with a gold handle at official ceremonies such as the opening of the luxurious Majestic Cinema, one of the symbols of the rural *belle époque* that Fortaleza was experiencing at that time. But in 1915, in the second year of his administration, the urban reforms set in train by Dr Casimiro were interrupted by a tragic event in the history of Ceará: the 'Drought of ' 15', which would later inspire one of the classics of Brazilian literature, Rachel de Queiroz' novel *O Quinze* (*Fifteen*). In that fateful year, a great drought affected the province like a plague, forcing thousands of people to leave the arid backlands and seek refuge in the state capital. Fortaleza had already experienced similar situations in previous dry periods, with a result that was already well known to the population: encamped in conditions of dubious hygiene, the *flagelados* brought with them hunger and diseases such as yellow fever and smallpox. Aware of this, at the same time that Casimiro was working to 'beautify' the city, the government and the city council created isolation zones to receive the migrants. In fact, these were large holding grounds for people popularly known as 'government corrals', but officially labelled by the authorities as 'concentration camps', the same name that would later be used by the Nazis for holding their prisoners.

Not even the compulsory collection of backwoods families into these camps could avoid one of the immediate results of that exodus from the interior of the province towards the capital: the steady increase in the number of abandoned children in the streets of Fortaleza. This was one of the main headaches Dr Casimiro faced in the final two years of his administration. For him, however, the problem was more a police matter than a social one. Official figures show that between 1917 and 1918, about 100 children were detained and sent to the Public Prison on charges of "robbery, drunkenness, vagrancy and immorality". Anxious about the upbringing of his own children, Casimiro

was afraid that the crowd of youngsters wandering the streets would be a bad example for the children of good families. Thus, while he was already inflexible in the upbringing of his own brood, he had to redouble his vigilance and demands concerning his children's performance at school.

In spite of his father's close attention, Mimiro was never an exemplary pupil at the traditional Ceará Liceu, a school that had been founded in 1845 and served what was then the high-class district of Jacarecanga, where the Montenegro family lived. Perhaps his fixation on becoming a flyer made the boy walk around with his head in the clouds. The fact is that in the preparatory examinations he took at the Liceu between 1920 in 1923, he obtained only the minimum marks necessary to pass. Finally he managed to get his highest marks - 7.5 - in chemistry, physics and natural history. Judging from the results of the two previous examinations, we may imagine that Mimiro would do reasonably well in subjects involving calculations, but an undistinguished 6 in arithmetic showed the opposite. A 6.5 in the history of Brazil, another 6 in geography and a 5 in world history showed that the boy did not have a close acquaintance with human sciences either. But his real problem was in languages. In French he had a mark of 5 and in Portuguese, to Dr Casimiro's great displeasure, a wretched 4.5. As if his miserable performance in school were not enough, when Miniro arrived home to announce that he was thinking about going to Rio de Janeiro to try to become a pilot, his father was even less pleased and he told his son he would not lift a finger to help him - not even to pay his passage by ship to the Federal District. It was his older brother Alfredo, a civil servant starting his career at the Ministry of Finance and who would later become the National Treasury representative in Ceará and Paraíba, who came to his help at this point. Although he was now showing himself to be a promising performer in financial bureaucracy, Alfredo Montenegro had had not exactly stood out in his schooldays by reason of his intellectual gifts. Like Mimiro, he too had gathered an unflattering collection of low marks on his reports from the Liceu. This helped him sympathise with his younger brother, for whom he promised to arrange the dreamed-of passage to Rio. Alfredo made use of what influence he had to persuade the Captain of a Lloyd Brasileiro steamship to take Mimiro in a second-class cabin on a ship that was leaving for the capital a few days later.

Thus it was that in 1923, at the age of 19 and with some cash in his pocket that his brother Alfredo had also given him, Casimiro Montenegro Junior left Fortaleza behind, along with the nickname Mimiro. As he was not

exactly sure how to become a pilot, he enrolled in the Military School at Realengo which had been instituted 10 years earlier by then President Hermes da Fonseca. Montenegro was not to know that he had just landed in the middle of the storm. When he set foot in Rio de Janeiro for the first time, there was still fresh blood on the sands of Copacabana spilled by the heroes of the first battle of the Lieutenants. The School still echoed with the sounds of the movement unleashed a year previously when the Realengo cadets had revolted after the arrest of that same Hermes da Fonseca on the orders of the new President, Epitácio Pessoa. The accusation levelled against the old Marshal was that he was mainly responsible for inciting rebellion in the minds of the young lieutenants who were on a war footing in their barracks. On 5th July 1922 the students of the Military School had rebelled at the same time as the revolt at the Copacabana Fort broke out 20km away. The rebellion at Realengo was snuffed out in a few hours, but the one at Copacabana would end in tragedy. With the fort surrounded by legalist troops, the great majority of the rebels chose to disband. However, about 20 of them, in an apparently insane gesture, ran into the street with carbines in their hands to confront about 2,000 heavily-armed soldiers posted in positions where they could fire on the outside walls of the Fort; nine of the combatants died on the spot. This was when the mystique was born of the 'Fort 18' (the total number of rebels caught by the camera lens of Zenóbio Couto, the photographer of *O Malho* magazine. Among the three survivors, wounded by a bullet in the femur, was Lieutenant Eduardo Gomes, who would become Montenegro's close friend.

In 1924, when Montenegro was back in Fortaleza on holiday from the Military School, hardly anyone recognised the athletic-looking cadet with crew-cut hair who came back talking of wars and revolutions, as little Mimiro. His oldest uncle, João Montenegro, who was planning a trip to the interior of the region, asked if he would be interested in going to Juazeiro do Norte. Montenegro, who still had clear pictures in his mind of Floro Barolomeu's gunmen shooting into the air in a public square in 1914, could not turn down the invitation.

The idea became especially attractive when his uncle told him that he was a friend of Father Cicero and that he was planning to visit him when he passed through Cariri. Many years later, in his personal notes, Montenegro remembered the episode in detail, describing how he had gone to lunch with the priest and was surprised to see that the miracle-worker had blue eyes like his own. On learning that the boy was living in Rio de Janeiro and that he was

studying at a military School, the 'saint of Juazeiro' expressed interest in knowing about the life of a future soldier at Realengo and asked the boy an enigmatic question: "With a name like yours, are not you afraid that one day you'll have to go to war my son?".

Father Cicero was perhaps referring to the origin of his surname - the Slav term *Kazatimiru*, which became Casimiro, means 'man of peace' - or perhaps to St Casimiro the pacifist patron saint of Poland. Whatever his reasons, Montenegro was unable to reply because the emotions he felt in the presence of a saint prevented him from uttering a word. However, life would reveal that fear of war was one thing he did not have. In 1930, six years after that conversation in Juazeiro do Norte, Montenegro would be dropping bombs from his aircraft onto legalist forces in Minas Gerais who were holding out against Getúlio Vargas' bid for power, and he would only avoid fighting in another war - the Constitutionalist Revolution of 1932 - because on that occasion his enemy was faster than him.

Chapter 5 - Montenegro spends four months as a prisoner of his friends in São Paulo - unable to get away

The priest was right to see wars in the cadet's future. When the state of São Paulo (the *paulistas*) rose up in arms against President Getúlio Vargas in July 1932, eight officers and two *sargentos* were serving in the São Paulo Air Detachment that had been commanded by Casimiro Montenegro since November 1931. One of them, *Segundo-Tenente* Geraldo Guia de Aquino, managed to escape when the Campo de Marte had been surrounded by state troops and took a train to Três Corações in Minas Gerais, reappearing some days later at Afonsos Field in Rio. A *tenente* and two *sargentos* immediately joined the *paulistas* and the remaining officers, Montenegro among them, proclaimed themselves to be loyal to the Federal Government and were immediately placed under arrest. The commander of the Campo de Marte noticed the suspicion with which the *paulistas* had received the arrival of his three subordinates and had the definite feeling that they were in fact intending to infiltrate the São Paulo forces as spies. Before being taken to the political prison in the Liberdade district - known as 'the Bastille of Liberty' - Montenegro gave his opponent an unexpected piece of information: "You can trust *Tenente* Porto and *Sargentos* Barros and Amaro. They really have joined you out of conviction and will not carry out any sabotage."

Some weeks later it would be the turn of the School of Aviation at Afonsos Field in Rio to suffer defections. Majors Lysias Augusto Rodrigues and Ivo Borges, together with Lieutenants José Ângelo Gomes Ribeiro and Orsini Coriolano boarded a ship in the Federal Capital and headed for São Paulo where they presented

themselves as volunteers in the local forces. In São Paulo the four of them were surprised to discover that Montenegro, their former flying instructor, was in prison - he had been transferred from Liberdade to another prison with an equally ironic name, Paradise. After much discussion, the officers from Rio managed to convince the High Command to relax the regime under which Montenegro was held and allow him to be held under house arrest, on parole. In other words, he would be free to walk around at will but would have to report to the police every day. To the amazement of the officer who had brought him this supposedly good news, Montenegro rejected the offer:

> *"Keep me prisoner, but don't insist on having my parole."*
> *"But why?" asked his gaoler.*
> *"If I give you my parole, I sha not be able to escape. If you offer me imprisonment subject to parole I'll have to give up my natural right to escape."*

This was what the *paulistas* wanted to hear. If gave his word he would not escape, and in fact this is what happened. So Montenegro actually spent the last three months of the Constitutionalist Revolution on parole, but unable to escape. While he was in prison he grew a great black beard which he only shaved off after he was released. The *paulista* uprising had not been a surprise to him. As soon as he learned that he would be transferred to São Paulo in November 1931, he knew he would be working in a powder keg. As an attentive military observer he had seen that since the 1924 Revolution, the *paulistas* had been preparing against new surprises like that one. In the middle of the 'decade of the revolts', as the 1920s were known in Brazil, the country's richest and most powerful state gave discreet signs that it was not ready to tolerate more *tenentista* enlightenment in its territory. In an apparently routine action, some weeks after the normalisation of the political situation in 1924, the Governor of the state of São Paulo, Carlos de Campos, had decided to re-create the Military Aviation Service, the air section of the Military Police that had been deactivated for a long period. It was noticeable that the decree was not re-creating the old school that had been open even to civilians, but was setting up a squadron - a military organisation ready to go into action at any moment with trained pilots and operational aircraft at its disposal. The first official announcement to recruit the pilots who would make up the staff of this Service - which already called a squadron - made the intentions of the São Paulo authorities even clearer. The text stated without equivocation that vacancies were open to "candidates to become

fighter pilots" and were restricted to "police officers, graduates and soldiers". In the 1924 Revolution the *paulistas* had had direct experience of the devastating power of the aircraft as a military weapon and this encouraged São Paulo to make up for lost time in the field of military aviation. Thus it was that after some weeks the Governor decided that all those aspiring to be Military Police officers should be made to take courses to become fighter pilots and observers/bomb-aimers. As the first group trained by the service at the beginning of 1925 was made up entirely of *sargentos* - eight in all - the authorities decided to promote them all to the rank of officer cadets.

The *paulista* fighter pilots' baptism of fire came after 18 months of training, in June 1926. Responding to a request from the War Minister, General Setembrino de Carvalho, Governor Carlos de Campos transferred to the Army the whole of the Military Police Squadron, which was at that time part of the mixed battalion with which General Álvaro Mariante - who would become Montenegro's commander at the Afonsos Field - pursued the Prestes Column through the Brazilian Midwest. Led personally by the General commanding the *paulista* Military Police, Colonel Pedro Dias de Campos, and made up of eight officers, the Squadron was also accompanied by the American Orton Hoover, an aeronautical engineer with a passion for aircraft who was advising the Military Police Air Service. In order to harass the Column the pilots themselves had to clear landing strips in various small towns in the middle of the backlands - some of them very close to the future routes of the Airmail Service. At the end of the conflict, after three months of combat, the Squadron returned to São Paulo deprived of one of its greatest aces, *Tenente* Edmundo Chantre. On 31st August, almost at the end of the campaign, as he was taking off from Uberaba for Araguari, taking supplies from São Paulo to the Goiás front, Chantre lost control of his unstable Sikorsky and crashed, dying instantly. It was a shocking loss, but in fact the *paulista* air force had passed its test and was eventually victorious.

The *paulistas* had every reason to be suspicious of the lieutenants who had taken over their state by force after Revolution. One of President Getúlio Vargas' first acts two hours after arriving in the Catete Palace as Chief of the Provisional Government on 4th November 1930, was to appoint General Miguel Costa, who had commanded the 'Unconquered Column' with Luís Carlos Prestes, to the post of *interventor* [in this context, government representative – trans.] in the São Paulo Military Police. To the conservative members of the First Four Hundred families, this was a double insult: as well as a *tenentista* with a past record of services to political agitation, Miguel Costa was not even a Brazilian (he had in

fact been born in Buenos Aires, brought to Brazil as a baby and had become a Brazilian citizen). São Paulo had reason to be afraid. Within a few days all the senior posts in the Military Police had been occupied by young revolutionary army officers among whom, with the commission of *Tenente-Coronel*, was *Major* Eduardo Gomes. After removing *Major* José Garrido from his post as Commander of the Military Police Squadron, Miguel Costa really devastated the institution: all the *paulista* aircraft were transferred to the Army, among them the Curtiss Fledglings that would later be given to the Military Airmail Service. The civilian aircraft confiscated during the death throes of the Washington Luís Government were returned to their owners, all civilian personnel (including the American Hoover) were dismissed and military staff re-incorporated into the formal body of the Military Police. So that there should be no doubt about their intentions concerning *paulista* military aviation, the *interventor* issued a short statement of little more than 30 words to have the final say in the matter:

> *Because its duties extend beyond the scope of this Force and since the Air Force should be a part of the Army, as of this date, the Air Squadron is dissolved and its equipment shall be handed over to the Federal Government.*
> *Miguel Costa, 18th December, 1930.*

In July 1931, just seven months after the victory of the Revolution, no less than four *interventores*, General Hastínfilo de Moura, the banker José Maria Whitaker, the journalist Plínio Barreto and Lieutenant João Alberto Lins de Barros, had passed through the Campos Elíseos Palace, the centre of government of the state of São Paulo. Candidates proposed by São Paulo were vetoed by the lieutenants. Organised through the United Paulista Front (FUP), old adversaries joined forces to impose their conditions on Getúlio, and this gave them a banner under which to fight: the *interventor* had to be "civilian and a *paulista*". They demanded more: the immediate return of the country to democracy by calling a constituent assembly. All this would not end well and Montenegro had no illusions about the feelings of the *paulistas* towards the lieutenants. He himself, for example, after being transferred to São Paulo, had lived in a climate of comradeship and good relations with everyone. At the age of 27, good-looking and surrounded by the romantic feelings the young pilots aroused, he was famous for his great success with women

With the victory of the 1930 Revolution, Getúlio's tenentista forces take São Paulo by storm. Appointed Commander of the Campo de Marte, Montenegro had excellent relations with the paulistas, but knew that most of them saw him as just another officer in the occupying forces.

(his car, a blue sports car, was known as the 'sugardish' because of the great number of 'flappers' from São Paulo society it attracted wherever it went). But even so Montenegro felt that he was still basically seen as the soldier of an occupying army.

During the first half of 1932 conspiracy ran riot in São Paulo. A broad front brought together representatives of the coffee-growing oligarchies who had been ruined by Getúlio – the 'worm-eaten', as the lieutenants called them - old rebels such as General Isidoro Dias Lopes and even sincere liberals like the militants of the Democratic Party, who had been openly in favour of the Liberal Alliance and the Revolution in 1930. This time, they were all united against Getúlio, demanding democracy. In an attempt to achieve reconciliation with the *paulistas*, in July 1931 João Alberto resigned his post as *interventor*, but the gesture did not lower the political temperature. The same old problems reappeared in the attempts to choose a successor: a name suggested by São Paulo would not be approved by the lieutenants and the candidates put up by the latter were not even considered by the *paulistas*. The person either had to be "a civilian and a *paulista*" or he was not considered. Two more attempts met with failure: neither the Supreme Court Judge Laudo de Camargo nor his successor, the *tenentista* Colonel Manuel Rabelo lasted a week in the post. The final choice before the war began was a "civilian and a *paulista*", the septuagenarian Pedro de Toledo, but the fuse had already been lit. Although intended to start on 14th July, the anniversary of the fall of the Bastille, the Revolution finally broke out on 9th July.

On handing over command of the Campo de Marte, the first military objective taken by the *paulistas*, Montenegro warned them they would be taking possession of meagre spoils of war: on that Sunday morning there were little more than 10 aircraft parked there, of which only two Potez and two Wacos were battleworthy. The rest were small civilian pleasure aircraft that were useless for any kind of military activity. In the days that followed, this tiny Squadron would receive one more Waco and a Nieuport Delage (removed from the Afonsos Field in Rio and taken to São Paulo by, respectively *Tenente* Motta Lima and *Capitão* Adherbal da Costa) and an airmail seaplane made by the French Latécoère Company that had been confiscated soon after it had landed at the Praia Grande hangar on the coast of the state of São

Paulo. The firepower the Federal forces could put into the air was vastly greater than that of the São Paulo Constitutionalists. Taken all together, the squadrons belonging to the Mixed Air Group and the Naval Air Arm consisted of 70 fighter aircraft, among them 12 Potez TOEs, 20 De Havillands, 5 Waco-CSOs and 7 Savoia-Marchetti S55s. Soon after the start of hostilities the Federal Government made an emergency purchase of no less than 30 Waco C90s, of which only 10 were built and delivered in time to fight. The Federal air forces terrorised São Paulo. On 20th July, at the age of 59, Alberto Santos Dumont, holidaying on the beaches of Guarujá, heard on the radio that Getúlio's '*vermelinhos*' ('little reds') as the Legalist aircraft were called, were firing on the people living in the Paraíba Valley. Prostrated by a deep depression, the Father of Aviation - who had offered his written support to the São Paulo forces some days previously - poured out his anxieties to a friend: "Why did I create this invention which, instead of helping to create love between men, has turned into a damned weapon of war?".

Three days later, it was not only news that Santos Dumont would receive from the front. From the balconies of the Hotel de la Plage in Guarujá where he was staying, it was possible to hear the noise of the damned weapons of war dropping bombs on the Itaipu Fort in Santos, less than 10km away. This was intolerable for the frail little man whose hair had already turned completely white. Santos Dumont locked himself in his suite, went into the bathroom and hanged himself.

In spite of the police embargo forbidding the cause of his death to be made public, the news spread and took on the aspect of an ill omen, but the *paulistas* did not admit defeat. Surrounded and facing an imminent massacre, they went looking for arms. In the rush to make money and buy arms, the State Government authorised the sale of hundreds of thousands of sacks of coffee at rock-bottom prices from the regulatory stocks of the Coffee Institute, a deal which provided, in 2006 prices, about US$ 12 million. Of this, US$ 8 million would be spent on arms and ammunition and US$ 4 million for buying 10 Fleet 10D bombers made in the United States. The deal had already been signed when the Brazilian government persuaded the US State Department to abort the operation. After many manoeuvres to avoid the international treaties regulating arms sales, the money passed through

Argentina and ended up in the town of Cerritos in Chile, where the US Curtiss Industries had a factory making fighter aircraft. It was from there that the 10 Curtiss 0-13 Falcons, the latest and most powerful aircraft involved in the Brazilian conflict, left as soon as they were built. Ferried by foreign pilots specially contracted for the task, as soon as they arrived in São Paulo the Falcons went straight into the workshops Montenegro had set up on the Campo de Marte, where they were fitted with machine guns and bomb racks. Luck, however, really did not seem to be on the side of the *paulistas*. Half of the US$ 8 million set aside for buying arms disappeared into the hands of go-betweens and arms salesmen and when the first Curtiss Falcons bought in Chile began to arrive in September, the imminent defeat of the *paulistas* was clear to see. On 2nd October São Paulo raised the white flag: the lieutenants had won the war. The conflict that had taken the greatest number of Brazilian lives in the country's history was coming to an end. The surrender of the *paulistas* also put an end to the imprisonment on parole that Montenegro had been subject to for the 85 days the Constitutionalist Revolution lasted. When he received news of the armistice in the house where he was living in the Pacaembu district, he shaved off his beard, took his sports car out of the garage and headed for the North Zone of the city to resume his duties at the Campo de Marte.

It was only in the following year that Getúlio conceded that which the *paulistas* had not been able to seize by force: the convocation of a National Constituent Assembly that would return democracy to the country and make him no longer a dictator but the Constitutional President of the Republic. Slowly normality was returning to Brazil, to São Paulo and to the Military Air Detachment. When he saw that peace had arrived to stay, Montenegro felt that it was time to reopen the doors of the Campo de Marte to civilians after a gap of 10 years. Thus it was that he instituted a system guaranteeing a quota for men and women who did not belong to the Armed Forces in the flying courses offered by the Detachment. That freedom, however, would be short-lived. In April 1934 he received a less than cordial message from General Eurico Dutra, the Director of Military Aviation, giving him express orders to end that system. Dutra killed two birds with one stone and put an end to another democratic initiative introduced by Montenegro by which *sargentos*, as well as officers, could be taught to fly:

Top, Montenegro (indicated) in the salons of São Paulo; on the right, in the light suit, Adhemar de Barros. Above, Montenegro (indicated) on the left. Inset, held on parole in the 1932 Revolution, Montenegro would only cut his beard again when he was free.

Federal Capital, 9 April 1934
To the Captain Commanding
Air Detachment, São Paulo
a) You should make every effort to avoid the property of this Detachment being used by civilians;
b) It is in no way suitable that sargentos, be they technical or of the rank-and-file, of this Detachment should continue to receive flying instruction, thus distracting them from their duties and tasks. Remember that a sargento has already suffered a flying accident and that if necessary I shall transfer you from this Detachment, such is my determination that this recommendation be carried out;
c) No civilian shall be carried in aircraft of this Detachment without my authorisation, and this is completely forbidden for women and children.

Eurico Gaspar Dutra,
Brigadier-General, Director

If Dutra's decision had indeed been taken, as was later stated, at the request of Eduardo Gomes, this episode would show the first cracks in the relationship of the latter with Montenegro, who had always supported the idea of sharing with civilians the progress the State had aqchieved. Among the civilians who had qualified to fly at the Campo de Marte before the prohibition, Montenegro retained happy memories of a young, good-natured *paulista* named Adhemar de Barros who had graduated in medicine and was passionate about flying. In spite of the huge difficulty in squeezing his amply proportioned 1.85m frame into aircraft cockpits, in a few weeks the young man was already making his first solo flight. When Dutra ordered Montenegro to close the doors of the Campo de Marte to civilians Adhemar was living in exile in Portugal, purging his sin of having worked as a field doctor during 1932 Revolution, out of which he emerged with the honorary rank of captain (as an example of the countless twists and turns of politics, back in Brazil six years later, Adhemar would be appointed by Getúlio as federal *interventor* for São Paulo). In any event, Montenegro's activities in command of the Air Detachment of São Paulo were not restricted to training pilots and opening up routes for the Airmail Service. He was often picked for special missions. Some months previously, for example he had been appointed to command the fighter squadron that would escort a delegation of Italian brigadiers visiting Brazil.

On another occasion, in May 1935, Getúlio Vargas announced an unusual decision: at the age of 43, the President would travel to Argentina and Uruguay on the first overseas trip he had ever made. The aim was to return the visits that the Argentine President, General Agustín Justo and the Uruguayan President Gabriel Terra, had made to Brazil. Getúlio, the First Lady Darcy Vargas and the official delegation boarded the Navy battleship *São Paulo* to make the journey to the River Plate escorted by the cruisers *Rio Grande do Sul* and *Bahia* and by a fighter squadron from the Air Force (made up of three Boeings, seven Corsairs and two Bellancas) commanded by Montenegro and captain José Vicente Faria Lima. In spite of the destinations being quite close together, it would be a long trip. In addition to the 10 days spent travelling (five going and five coming back), the official delegation would still have to spend two weeks in the two countries.

As happens on most formal journeys, the days seemed to be endless. It was a succession of banquets, masses, Te Deums, visits to universities, parades, placing wreaths, signing agreements and openings. In Buenos Aires, for example, Vargas was to cut the ribbon to inaugurate the creation of a dual carriageway in what would become one of the best-known arteries of the city, Corrientes Avenue, which would be immortalised in the tango *A Media Luz*. A national holiday was decreed in both countries on the days the delegation arrived and left. On 2nd June, on the eve of the return to Brazil and already on the Uruguayan half of the journey, Montenegro and the other officers escorting the delegation witnessed an incident that almost turned into tragedy. After attending a Grand Prix at the Moronas Racetrack in Montevideo the two presidents were heading for a buffet set up in the upper part of the Members' Gallery, surrounded by important personalities and journalists from both countries when suddenly a man armed with a pistol - ex-Deputy Bernardo Garcia - pushed between the guests and fired at the Uruguayan President Gabriel Terra. Amid the general confusion, the attacker was arrested. Taken to hospital along with Getúlio, Gabriel Terra found that he had only been hit in the shoulder and that night he reappeared, to general applause, at the farewell reception Vargas offered on board the *São Paulo*.

At Montenegro's side was another witness of the attack, a young reporter and writer from Bahia called Jorge Amado, aged 23 at the time, who was covering the presidential visit for the left-wing newspaper *A Manhã* that was linked to the National Liberation Alliance. Even though he had written three relatively successful books (*O país do carnaval* (*Carnival Country*), *Cacau*

Encouraged by Eduardo Gomes, General Eurico Dutra calls Montenegro (indicated) into line and (right) forbids the Campo de Marte to continue to give flying instruction to civilians. Among those affected by this measure was the ample figure of Adhemar de Barros (on Montenegro's left).

Capital Federal
Em 8 / IV / 1934
A/c AVTE.- GABINETE -
Do DIRETOR DA AVIAÇÃO
Ao Snr. CAP. CMT. DO DESTACAMENTO DE AVIAÇÃO DE S. PAULO.
Assunto: Declaração sobre ordens.

I - CONSOANTE-VOS que tomei conhecimento das informações prestadas em ofício reservado de 6 de Abril corrente, tendo a declarar-vos o seguinte:

a) deveis envidar todos os esforços no sentido de evitar que as despedidas desse Destacamento sejam frequentadas por civis;

b) não é conveniente, de forma alguma, que sargentos tenentes ou de filiação, desse Destacamento, continuem a receber instrução de pilotagem, desviando-se de suas atribuições e afazeres. Lembrai-vos que um sargento já foi acidentado em vôo, e, que, si necessario, os transferirei desse Destacamento, tal o interesse que tenho em que semelhante recomendação seja mantida;

c) que, sem minha autorização, não deve ser permitido o vôo a civis em aviões desse Destacamento, senão absolutamente vedado às senhoras e crianças.

EURICO GASPAR DUTRA
Gen. Bda. Diretôr.

S. L. D.

(*Cocoa*) and *Suor* (*Sweat*)), Jorge Amado was better known as a militant. And he was not the only communist in the delegation: among the officers commanding the squadrons escorting Getúlio was Captain Sócrates Gonçalves, head of the clandestine communist party cell at the Afonsos Field. Precisely six months after the presidential visit to the River Plate, in the middle of the communist revolt led by Prestes, Sócrates would take the School of Aviation by armed force after a confrontation in which *Tenente-Coronel* Eduardo Gomes would be wounded while resisting the communist action. Arrested and tried by the National Security Court, he would be sentenced to 10 years in prison.

Getúlio Vargas first overseas visit ended on 3rd June when the delegation and its escorts returned to Brazil. The programme had been exhausting but it would leave happy memories in the minds of all who went on it. If the day was taken up in official activities, at night the aircraft went into their hangars and the pilots - at least the bachelors like Montenegro - went on the town.

To judge from the amount of love letters, notes, photographs and drawings received by him from chorus girls and dancers in the lively Buenos Aires nightlife, it must really have been an unforgettable trip.

Chapter 6 - Handsome, a pilot and single - there goes Montenegro in his brand new Plymouth

For Casimiro Montenegro the night, with its irresistible temptations, was a thing apart. After all, at that time, aircraft rarely flew at night and after sunset military pilots felt perfectly justified in letting their hair down. During the day, however, they had to live the hard life of the barracks. Thus, Montenegro's bohemian activities did not prevent him from always getting up at the crack of dawn and, in line with standing orders, to be impeccably organised immediately after reveille in his post as Commandant of the Campo de Marte. Modest as always, he did not feel that commanding the Nucleus of the 2nd Air Regiment actually required too much effort. Some years later, in an interview, he played down his role: "My responsibilities there were very minor".

In 1938, after six years of working continuously in São Paulo, he was promoted to *major* and transferred to the Directorate of Military Aviation, which was the direct responsibility of the Army High Command in Rio de Janeiro. This new post implied a career advancement but Montenegro was not at all happy to exchange the harsh noise of aircraft engines for a bureaucrat's desk piled high with headed paper and a mountain of official stamps. It was at that point, in the midst of his dissatisfaction with the bureaucracy of the Directorate of Aviation that he learned of a great innovation. A rumour was running around the corridors of the Army Technical School that had been set up in Rio eight years previously

In May 1935 Montenegro (highlighted) was a member of President Getúlio Vargas' air escort on his state visit to Argentina and Uruguay. The days were taken up with a succession of official meetings, as in the photograph above. At night, however, the aircraft went into their hangars and the bachelor pilots went to the nightclubs. Some, like Montenegro, brought back spicy *recuerdos* of their nights out in Buenos Aires (facing page).

O Montenegro, un abrazo
fraternal de los camaradas
argentinos
La Aeronautica Militar Argentina
en honor de la
Aeronautica Militar
de los
Estados Unidos del Brasil
Vuelta del Temo. Presidente
Dr. Getulio Vargas

in 1930, under the name of the School of Military Engineering (later renamed the Institute of Military Engineering (Instituto Militar de Engenharia - IME)). Up to that point the School had been training engineers in armaments, electricity, electronics, chemistry, mechanics and metallurgy. The War Ministry decided to introduce a course that had not existed in Brazil until then: aeronautical engineering. The new course would take three years and would be open to civilians with degrees in exact sciences, as well as Air Force officers like *Major* Montenegro. The inspiration for the course came out of the realisation that developing Brazilian air technology by training specialist engineers in the area had become a vital factor at a time when aircraft had shown themselves to be the most important military weapon in the world. Marking time in this area, therefore, would lead to a serious disadvantage in the face of an enemy during a possible conflict. It was no longer enough for the Armed Forces to have excellent fighter pilots at their disposal. From now on it would also become strategically important to master the increasingly sophisticated technology that kept those machines in the air. In addition, military thinking still clung to the belief held since the 1930 Revolution that the Army should be responsible not only for cleaning up public administration but also for the country's economic development and material progress. Not only that, the idea was developing, even if a little vaguely within the military elite, that investing in technology was a vital precondition for this to occur.

But what Montenegro really found fascinating was the news that old friends like Joelmir de Araripe Macedo (who, along with Lavanère-Wanderley, had made the first Airmail Service flight to Goiás Velho) and Waldemiro Advíncula Montezuma (one of his contemporaries at the School of Aviation at Afonsos Field) also wanted to enrol on the Aeronautical Engineering course, where classes would start at the beginning of 1939. Montenegro did not think twice. He enrolled at the Army Technical School and when he was accepted, cleared his desk and asked to be released from the Directorate of Aviation. At the age of 35 and with the rank of *major*, enjoying the prerogatives of a respectable position within the High Command, he was living the good life, especially in comparison to the spartan conditions of normal military life. As soon as he returned to Rio, he exchanged his 1936 Chevrolet for a shiny brand new Plymouth sedan. To raise the 29 *contos* to buy it, he gave his old car in exchange for 16 *contos*, added one *conto* of his own and arranged to pay the remaining 11 *contos* in 23 monthly instalments of 479 *mil-reis* guaranteed by promissory notes registered with a notary-public. He would miss his old light-blue Chevrolet. As sweet a machine as the São Paulo

'sugardish' sports car, this car also witnessed some amazing nights out, mainly on the trips he made to the beaches in the state of São Paulo when he would go to Santos to visit his elder brother Júlio. Even when faced with the natural temptation to settle down into the daily life of his career, he chose to take the risk of making another, different kind of flight, one which at that time seemed even more challenging: studying aeronautical engineering. And he did this without being in any way embarrassed by the fact that some of the lecturers at the Technical School were younger than him - and lower in rank - such as *Capitão* José Vicente Faria Lima who, after fighting the *paulista* rebels in 1932, at the age of 30 shared responsibility for running the course with Guilherme Aloysio Telles Ribeiro, also a *capitão* and also the same age, both of them graduates of the prestigious *École Nationale Supérieure d'Aéronautique* in Paris. Among Montenegro's friends, the only one to turn his nose up at the opportunity was Eduardo Gomes:

"Come on, Montenegro, you're going to sit your backside on a school desk and study engineering at your age? Why?"

Montenegro replied, smiling: "Yes, Eduardo, I'm going to because the Air Force has got nothing left to interest me. The future is in engineering."

In fact, the course turned out to have weaknesses because of the difficulty in importing qualified foreign instructors or even putting together a good team of Brazilian teaching staff since only a few Brazilian aeronautical engineers had graduated overseas. It was therefore the very pioneering nature of the initiative that brought out its obvious failings. In spite of these limitations the trio of Montenegro, Macedo and Montezuma took their studies seriously and would thus be included in the group of the first 11 aeronautical engineers to graduate in Brazil - seven officers and four civilians - as attested by the diploma issued in December 1941 and signed by the Director of Studies of the Army Technical School, Colonel José Bentes Monteiro, father of the future General Euler Bentes who, 30 years later would be a candidate in the indirect election for President of the Republic against General João Baptista Figueiredo.

While he was attending engineering classes Montenegro was not unaware of what was going on around him in Brazil and in the wider world. In September 1939 the Second World War broke out following Adolf Hitler's invasion of Poland. Previously, in March 1938, the Nazis had annexed Austria into the Third Reich and a year later, in March 1939 occupied Czechoslovakia to set up the famous 'Polish corridor'. The German offensive, which would be the result of an official declaration of war by Great Britain and France, had

been based upon a revolutionary military strategy, the blitzkrieg ('lightning war' in German) consisting in rapid attacks overland by armoured divisions to snuff out the enemy with pincer movements in cooperation with bombing missions carried out by the feared *Luftwaffe*, the Nazi Air Force. Thus Germany introduced the 'war of movement' with highly destructive armoured units at the same time as it changed the role of the aircraft from simply carrying out supporting actions into a decisive battlefield weapon. The result of this was that by 1940 Hitler had already conquered Denmark, Norway, Holland and Belgium and on 14th June of that year, after having crushed the hitherto all-powerful French army, his soldiers paraded victoriously in their Panzer tanks along the Champs Élysées towards the Arc de Triomphe, under the astonished gaze of the people of Paris.

In the meantime, in Brazil the dictator Getúlio Vargas could not make up his mind which side his New State should support in the conflict. One fact had become clear to Montenegro and the Air Force officers: the bloody war that had broken out in Europe was showing for once and for all that it was impossible for the Air Force to be a mere appendage of the War Ministry. Technological progress and the crucial role aircraft had come to play in carrying out modern military strategy demanded the formation of a separate military force, along with the subsequent creation of a new organizational structure and a new ministry, which until then was referred to by the provisional name of the *Ministério do Ar*. Discussion raged within the armed forces and gained even more strength in the Army Technical School, especially among the students of aeronautical engineering, who began to mount a warm defence of the idea of autonomy for military aviation. The topic spilled over the walls of the barracks and was soon being widely debated in the newspapers. In this environment filled with expectation, while still studying in the last year of his Technical School course, Montenegro was sought out by *Capitão* Nero Moura, Chief Instructor at Afonsos Field and Getúlio Vargas' official pilot. Nero took him into his confidence. The previous night the President had called him to the Guanabara Palace and handed him a large pile of papers that had been gathering on his desk during the previous few days. They were the studies and plans he had received from various sources suggesting that an Air Ministry should be created. With a Santa Damiana cigar between his fingers, Getúlio told Nero Moura: "Be discreet. Get your friends together and show them these papers, talk to them and give me an opinion," he said between puffs on his favourite cigar.

Captain Nero was delighted. Being entrusted with this task proved that Dr Getúlio had confidence in him. Like the President, a native of Rio Grande do

Montenegro with his much-coveted Plymouth that cost 29 contos: top, with his niece Antonietta (highlighted), who would later become his wife, and above, with lady friends in Santos.

Sul, Nero was a friend of Lutero Vargas, the President's son and a frequent visitor to the Guanabara Palace soon as he was always there, he became close to the rest of the family to the point that in 1938 he was invited to fly the presidential aircraft, an twin-engined eight-seater Lockheed 12A built in the USA. When the President entrusted to him the task of consulting his military colleagues about the possible creation of the Ministry, the first person he looked for was Montenegro. The two men had already known each other for some time. Nero had begun his career as a flying instructor at the Afonsos soon after the 1932 Revolution, during which he carried out 60 combat missions against the *paulistas* around the Paraíba Valley. When he spoke to Montenegro he explained that he was still going to sound out half a dozen other officers, all of them *getulistas* and above suspicion, career flyers who had qualified among the first groups from the Flying School. He promised that in a few days he would hold a meeting in his own apartment for them all to discuss the question together. On the appointed evening Montenegro went to Nero Moura's house and there, sitting on the sofa of the *Capitão's* living room was the imposing figure of Lavanère-Wanderley sitting beside his instructor on the aeronautical engineering course, Faria Lima. A little later, other old friends arrived: Clóvis Travassos, one of the daring pilots who had taken off from the Afonsos along with Montenegro to join the 1930 Revolution and Captain Miguel Lampert, a colleague from the heroic days of the Airmail Service. They were, therefore, among friends. The group pored over the papers Nero had brought from the President's office into the early hours and at the end of much discussion came to an agreement that was confirmed in later secret meetings on subsequent evenings, always in the same apartment: first, they were all in favour of urgently creating the Air Ministry; secondly, the person to be appointed as Minister should definitely be an airman. During the last days of August 1940, Nero Moura took the group's suggestions to the Guanabara Palace set out in a document already in the form of a draft Parliamentary Bill which only needed the President's signature. Getúlio read the document and saw that the group consulted by Nero had done a meticulous piece of work in which they had even taken the precaution of recommending that the Ministry should be created before the end of the year so that there should be sufficient time to include its financial requirements in the 1941 budget. However, to avoid discussing details that might delay the immediate approval of the idea, Montenegro and his colleagues proposed the setting up a specialist office within the new Ministry to deal with further regulations at a later date. This would avoid, for example,

The Minister Salgado Filho (in suit) with Air Force Colonels Henrique Fleiuss (in dark glasses), Ajalmar Mascarenhas (with moustache) and Montenegro (indicated): Getúlio bypasses all of them and appoints a civilian to run the Air Ministry.

anticipating the probable opposition of members of the other Forces - the Army and the Navy - when it came to establishing the promotions and equivalent ranks between the three bodies.

"Mr President, if you set up the Ministry, things will be cut and dried. We feel it would be more prudent for the new Minister to establish the criteria for promotions," Nero suggested to Getúlio. The President did not commit himself either way and said he would think about it. He knew that he risked a major confrontation with the Army and Navy, whose officers did not look kindly upon the change as they would not only lose a considerable number of staff but would also have to give up aircraft and equipment to this Air Ministry. They would also question the fact that many colleagues would become superior to them in rank during the transfer because it would be necessary to supply the new Force with a sufficient number of commissioned officers to fill posts in the command. Not only that, but the rumours that a new Ministry was going to appear only helped increase the long-standing notoriety of airman as being internally undisciplined and very averse to wearing uniforms, which was absolute heresy for any good soldier. There were cases considered to be unacceptable of Airmail Service flyers not taking the trouble to introduce themselves to the military authorities at the staging posts simply in order to avoid putting on their complete uniform of beret, tunic and highly polished boots, preferring to fly with an ordinary shirt underneath their flying jacket, and wearing comfortable shoes. The justification from the pilot's point of view was that what their colleagues in the Army felt to be a proof of discipline was in fact a simple question of wearing clothing suitable for the task, because making long flights wearing army boots and bandoliers was almost senseless as well as being uncomfortable. Getúlio was aware of all of these arguments and therefore pondered the decision for more than a month. For that reason, whenever Montenegro and the other members of the group bumped into Nero Moura they asked him, although always in whispers: "And the Ministry, when is it going to be approved?" "It's coming, it's coming…." Nero would reply, equally worried, but hiding his own anxiety.

When Getúlio finally decided that he could no longer put off taking a decision on this delicate question, he chose a high-risk but cunningly planned strategy. He was perfectly aware that the most delicate part of his decision involved, in the final analysis, the choice of the first Air Minister. The person appointed would have to deal with resistance and use all the diplomacy at his disposal to try to cool heads and encourage general

tolerance. If he chose an airman, as Nero Moura and his friends wanted, Getúlio would certainly displease the Army and the Navy. If he appointed a general or an admiral, the airmen would complain. Obviously this matter had come to be the sole topic of conversation between Montenegro and his colleagues who had drafted the project Nero had passed on to the President.

"If the President chooses a good person, it'll work. But if he chooses a fool, we shall all suffer," Montenegro commented to Nero Moura. Getúlio surprised everybody with a ploy that showed acute political skill. He authorised the creation of the Ministry in October but surprisingly chose a civilian to run the new military Ministry. Instead of inviting someone from any of the existing services, he pulled out of his hat the name of Joaquim Pedro Salgado Filho a lawyer from Rio Grande do Sul who had graduated from the Law Faculty at Rio de Janeiro and had been one of the original supporters of Getúlio Vargas' candidature in 1930. After the revolution Salgado Filho had been appointed Chief of Police of the Federal District and in 1932 was raised to the position of Minister of Labour, Industry and commerce. A faithful *Getulilista*, he had supported the coup d'état with which Vargas had established the New State in 1937 and in recognition of that was made Minister of the Supreme Military Court, a position he had held since 1938. The wager which Getúlio had put all his chips on was highly risky and if it did not work, instead of cooling the temperature, it would raise the heat in the barracks. They were historical precedents for this. In 1918 President Wenceslau Braz had done something similar in choosing another civilian, the engineer Pandiá Calógeras to be Minister of War, which had caused a general revolt among the military and helped to foment great discontent in the barracks. But at this point Getúlio's choice of Salgado Filho was so unexpected that it neutralised any opposition that might have been developing.

In spite of the airmen's initial suspicion, Salgado Filho immediately began the work of organising the *Ministério da Aeronáutica*, the title which eventually substituted the one that had been predicted. On 20 January 1941, Getúlio officially sanctioned the creation of the Ministry by a decree-law the 29 articles of which contained the basic points proposed by Nero Moura, Montenegro, Wanderley, Faria Lima, Travassos and Lampert. In brief, it stated that all air units should fall under a single command, thus integrating those sections previously shared between the two pre-existing military ministries. Naval Aviation and Military Aviation were abolished. Thus, the stock of aeronautical

equipment incorporated into the new ministry included 99 aircraft from the Navy and 331 other aircraft coming from the various Army air units. Officers who might not wish to leave the service they were in had 30 days to ask their respective ministries to stay. One detail did not go unnoticed in the wording of the decree: clearly inspired by the same principles that had previously guided the creation of the aeronautical engineering course, there were evident references to the idea that scientific research was an essential condition for developing the country. This was because the decree stated that one of the new Ministry's responsibilities should be to encourage Brazilian aviation by dedicating specific resources to aeronautical technology.

One of the airmen's long-standing wishes would also soon be granted. They were delighted when, nine days after taking up his post, Salgado Filho signed one of his first orders setting up a commission to urgently review the question of Air Force uniforms, which would result in the adoption of a jacket and trousers more suitable for flying and the approval of kaki as the official colour of the service (the current blue uniforms would only appear in 1959). An official note would also soon order the removal of the names and insignia of the Army and Navy from the aircraft incorporated into the new force. The very first Uniform Plan made mention of the badge to be adopted by the newly-created FAB (Força Aérea Brasileira): a winged sabre with both wings spread. In naming ranks, however, the greatest possible effort was made to keep the names is already used in the Army, adding simply the word '*aviador*' to the ranks of officer up to that of colonel (which, for example, came to be '*coronel-aviador*') while the ranks of general officers would receive the titles of *brigadeiro-do-ar* (equivalent to the Army's *general-de-brigada*), *major-brigadeiro* (in the Army, *general-de-divisão*), and *tenente-brigadeiro-do-ar* (*general-de-exército*) keeping the title *marechal* for the highest post in the hierarchy.

Another measure that Salgado Filho needed to take immediately was to organise the structure of the Ministry and the subsequent filling of posts at the main administrative levels. Rear-Admiral Armando Trompowsky de Almeida, aged 51, who had been Director-General of the now extinct Navy Air Force and was the senior officer among those who came to form the new Air Force (and who had already been given the new rank of *brigadeiro-do-ar*), was put in charge of the newly-created Air Force High Command. Beneath him there were still a large number of posts to be filled. These consisted first of all of four Directorates-General, some of them with sub-

directorates and all directly subordinated to the Minister, each responsible for a specific activity: personnel, procurement, air routes and civil aviation. Coincidentally, Montenegro was receiving his degree in aeronautical engineering at precisely the time when the Ministry was being reorganised and needed qualified professionals who were able to carry out the new duties that were being created. The choice he had made three years previously to exchange the comfortable life of a bureaucrat for a technical course now revealed itself to be prescient. Although he had finished the engineering course with an average mark of 7.2, his year-group was exceptionally competent and that mark only put him in ninth place out of a total of eleven graduates. Nevertheless he continued to enjoy an excellent reputation and his past record weighed in his favour. Having qualified in the first group of Army Air Force pilots, having been one of the first *tenentista* revolutionaries in the 1930s, the creator of the Airmail Service, a *legalista* in 1932 and Commander of the Campo de Marte for six years, his Record of Service qualified him to occupy an important post in the new Air Ministry. So much so that it did not take long for *Coronel-Aviador* Ivan Carpenter Ferreira, who had been appointed to lead the Directorate of Procurement, to invite Montenegro to be second-in-command of the section and moreover to be responsible for organising the sub-directorate for Aviation Technology, the name of which gave sufficient indication of the Ministry's intention of investing in technological research. Montenegro, who had been promoted to *Tenente-Coronel* in December 1941, promptly accepted the offer and made a point of including in his team three colleagues who had stood out as exemplary students at the Army Technical School and who, like him, were recently-graduated engineers: Major Waldemiro Advíncula Montezuma and Captains Renato Augusto Rodrigues and Dirceu de Paiva Guimarães. Montenegro established right from the start a trademark policy he would cultivate for the rest of his life: surrounding himself with first-rate auxiliary staff without the slightest fear that one day their abilities might eclipse those of their leader. "Montenegro only invited people to work with him who were really good," was how the instructor Oswaldo Fadigas Fontes Torres, one of his future colleagues, would remember the situation years later. "He was not a man to be afraid of living in the shadow of someone brighter than him". Deputy-Director Casimiro Montenegro went back to working behind a large jacaranda-wood desk, but this time his job was not simply bureaucratic. Among its other tasks, the duties of the Directorate of

Procurement was to be responsible for buying and maintaining new military aircraft to keep Brazil's Air Force up-to-date since the great majority of aircraft inherited from the Army and Navy were obsolete and it was only by force of the greatest goodwill that they had not been written off for scrap during the transfer of stock to the Air Force. What changed everything was that at that point Getúlio Vargas had been forced to take an official position with regard to the conflict which, having begun with the German attack on Poland in 1939, had spread throughout the world.

From Italy, Benito Mussolini, Hitler's ally, had extended the war into Africa and the Mediterranean. In July 1941 the Nazis, who had dropped about 58,000 tons of bombs on Great Britain, broke the non-aggression pact signed by Hitler and Stalin and invaded Soviet territory. In December and Japan had destroyed the US naval base in Pearl Harbor in Hawaii in a devastating attack. The Axis, which until then had been formed by Italy and Germany, thus received a third member and forced the United States to enter the war. There was no other choice for Brazil than to ally itself to the United States. Up to that point, Getúlio had maintained a dubious and pragmatic position in an attempt to gain advantages from both sides before choosing which one to join. His New State had evident philosophical and ideological affinities with Nazi fascism but it was also the object of attention of the United States, which was concerned that no country on the American continent should join its enemies. Even so, it was only in August 1942 that Getúlio finally came down on the side of the Allies. As part of the agreements signed by Brazil, US troops would have permission to set up bases on Brazilian territory and the US would provide the country with strategic equipment. Among the latter, clearly, would be included military aircraft. All of these events were developing just as Montenegro was starting his work at the sub-directorate of Aviation Technology.

From the moment when Brazil declared war on the Axis, German submarines began to invade Brazilian territorial waters and attack ships flying the Brazilian flag. Ships of the Brazilian merchant navy began to sail in convoys escorted by fighter aircraft of the Brazilian Air Force and this made it even more urgent to replace the decrepit Brazilian aircraft with new and sophisticated military machines. Only in this way would it be possible to take on the powerful German submarines that were infesting Brazilian waters. On 30th January 1943, as Deputy-Director of the Directorate of Procurement, Casimiro Montenegro departed for

the USA along with other officers tasked with transferring a group of US aircraft to the Air Ministry. As he was also head of the sub-directorate of Aviation Technology, he discussed with his team the idea of visiting the Wright Patterson Air Force Base (which would later be known as simply 'Wright Field') in Ohio, a centre for advanced research and engineering run by the US Air Force. He knew that he would have to stay away for a long time, which meant spending some months away from his latest weekend pastime: flying *Tamboatá* the Savoia Marchetti S-56 seaplane that had belonged to Captain Francisco de Assis Correia de Melo and which he had bought for 30 *contos de reais* - the same price as a brand new American car. Nevertheless, spending that time away from flying would have its rewards: Montenegro would only return to Brazil four and a half months later, but he returned amazed by what he had seen in America.

Chapter 7 - Montenegro goes to MIT and returns with a mad idea: to set up the same thing in Brazil

Ten days after landing at the recently-opened Washington National Airport, considered at the time to be the most luxurious in the world with its gilded domed ceilings in *art-déco* style and enormous floor-to-ceiling glass walls, Casimiro Montenegro received some bad news. He would have to tighten his belt during his stay in the United States. Captain Miguel Lampert, the head of the Brazilian office responsible for buying aviation equipment in the United States, committed an indiscretion and leaked to him a confidential memorandum. The typed document signed by *Major-Aviador* Faria Lima, ex-Director of the Army Technical School and now an official in the cabinet of Minister Salgado Filho, told Lampert that the expenses Montenegro had expected to receive to cover his costs during the mission would not be approved. At the same time the same message brought the news that *Coronel-Aviador* Henrique Dyott Fontenelle, who had been selected to command the group of officers who were in Washington to take the US aircraft to Brazil, had been authorised to withdraw $2,000 - the equivalent of about $23,000 in 2006 terms - that the Ministry had sent him to help with his expenses. Lampert, who had known Montenegro well since the days of the Airmail Service, sent him a copy of the orders containing the bad news and wrote a message in ballpoint pen in the margin:

For Montenegro, the journey to the United States involved spending three months away from his new hobby: Tamboatá, the Savoia Marchetti seaplane he used on his trips to Santos.

Montenegro my friend,
As you can see, you will have no money for expenses. But if you should have any expenses, and as a Tenente-Coronel-Aviador and a gentleman, you surely will, you can count on me for up to a hundred dollars.

Underlining the word 'gentleman', Lampert made it clear that he was referring to the reputation his colleague enjoyed as a ladies' man, and one who enjoyed great success with women. At the end of the note he mentioned that the hundred extra dollars would come from his own pocket on account of their long friendship:

This is how I would like to return the favours you did me in times past when you were my chief and turned a blind eye to many things.
Best wishes from old Lampert.

Montenegro thought that landing in Washington in the middle of winter in a year when the city's thermometers were already showing 10° below zero, would be the worst of the problems a native of Ceará like him would face on the journey. However, for a confirmed bachelor who had reached the age of 40 passionate about cars and the good things in life, being in the United States on a tight budget would actually prove to be the major problem. Lampert was aware of this and in his message he advised Montenegro to avoid spending money even on the flights he intended to make to the air base at Wright Field in Ohio, about 650 km from Washington. "I suggest you don't fly because you won't save money travelling like that," Lampert warned, later comparing the situation of the bachelor Montenegro with that of another travelling companion, Captain Almir dos Santos Policarpo, a married man who, on the express orders of the Ministry, was also not receiving money for expenses: "I don't know about your plans to save money, but Almir, who is the 'mother' of seven children, may want to save some…." he joked. Casimiro Montenegro listened to his friend's advice and realised he would have to travel by bus across two American states - Virginia and West Virginia - before coming to the border with Ohio, from where he would have to travel about 200km before finally arriving at Wright Field.

As if it were not tedious enough for a flyer to have to subject himself to travelling overland to visit an air base, spending almost a whole day to

travel the distance he could cover in just a few hours by air, another mortification was waiting at his destination. The name of the air base itself was a real affront to a Brazilian pilot as it was named in honour of Orville and Wilbur Wright, the brothers worshipped by Americans as the real inventors of the aeroplane, thus ignoring the rightful position of Alberto Santos Dumont. Even though this ruffled Montenegro's patriotic feathers, he was shocked by what he saw. Brazil possessed nothing that came even close to this. Opened in 1917 as no more than a training field for US pilots during the First World War, in less than 30 years Wright Field had transformed itself into an advanced centre for aeronautical research, developing in its laboratories the technology necessary to manufacture the aircraft the US was now showing the world during the Second War. At the end of his visit to the base Casimiro Montenegro was convinced that Brazil - the country that was proud of having given the world the 'Father of Aviation' - should follow the example of the Americans and not simply import aircraft produced by them. At the time Montenegro's ideas seemed to be purely delusional. He would run a serious risk of being treated as a lunatic if he dared to claim that aircraft could be mass-produced in Brazil, a country that did not even produced bicycles and actually imported toilets from overseas. Certainly some pioneering initiatives had previously been attempted. Among those were some that had been carried out by the Institute for Technological Research linked to the São Paulo Polytechnic School, which had been working since the 1930s on a project to build small aircraft on frames made of *freijó*, a light wood found in Pará, powered by a four-cylinder engine and appropriately nicknamed 'Bichinhos' [small animals - trans.]. A company belonging to the American Orton Hoover, along with Henrique Santos Dumont, the nephew of the inventor of the aeroplane, had started up the Empresa Aeronáutica Ypiranga in 1931 and five years later had launched the EAY-201, a civil aircraft built in the Campo de Marte workshops under the supervision of the then Captain Montenegro. Later, in 1942, Ypiranga was sold to the businessman Francisco 'Baby' Pignatari who owned the Companhia Aeronáutica Paulista, which redesigned the EAY-201 and renamed it the CAP-4A, better known as the 'Paulistinha', 777 examples of which were built. A little later, from 1935 to 1941, *Tenente-Coronel* Antônio Guedes Muniz from Alagoas, who had been an active participant in the *tenentista* movements in Rio de Janeiro, had also built 26 models

of the Muniz 7, or M7, a biplane with wooden wings, metal fuselage and a British Gypsy Major 130hp engine. However, those were individual undertakings the results of which could in no way be compared to the performance of the modern aircraft coming out of the hangars of the US air industry. Filled with enthusiasm after his visit to Wright Field, Montenegro decided to invest every dollar he still had in his wallet on another visit, this time one that had been suggested by one of his best assistants in the Sub-Directorate of Aeronautical Technology, Arthur Soares Amorim from Amazonia, a graduate of the Massachusetts Institute of Technology (MIT), one of the major technology centres in the world, in Boston. A recently graduated engineer who was working for the Technical Air Service - an institution created by Getúlio Vargas in 1934 to encourage the study of aeronautical engineering – Amorim was one of a small group of civilians and military personnel sent to study at MIT in 1940 as part of a cooperation scheme between the Brazilian and US governments that was in operation at the time. On his return to Brazil, Amorim found himself in the sub-directorate led by Montenegro and spoke of the wonders of MIT. When he learned that his chief was going to the US and intended to visit the Wright Field air base, Amorim suggested that he should not miss the chance of taking a trip to Boston to see what was being done there.

With the providential help of his friend Miguel Lampert, Montenegro put a few more dollars in his pocket and travelled to Boston. His arrival coincided with a violent storm that left the streets, parks and gardens of the town covered with a thick layer of snow. Montenegro jealously guarded for the rest of his life the photographs he took showing the white background of that severe Boston winter. But what really stayed in his mind was the labyrinth of buildings, laboratories, classrooms, workshops and departments spread over about 680,000 square metres that made up the MIT campus. It was a huge complex completely given over to teaching and research which had begun to receive its first students in 1865 and from that time on had produced an endless list of scientists, among them several Nobel Laureates. At the turn of the century MIT would have 60 students and teachers who had won the Swedish Academy's prize, 26 Nobel Prizes for Physics, 12 for Chemistry, 13 for Economics, 8 for Medicine and 2 for Peace - among them the Secretary-General of the UN, the Kenyan Kofi Annan who had obtained his MBA from MIT and was the first black person to lead the UN. The statistics show an amazing average of one Nobel Prize every two years since the institution was formed.

SIGNAL CORPS 10 fevereiro 1943

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COMUNICO EM 22 PROXIMO PASSADO MINISTRO ENVIOU RADIO DELEGACIA AUTORIZANDO CEL. FONTENELLE SACAR ATE $2,000 AFIM ATENDER DESPESAS EXTRAORDINARIAS REPRESENTAÇAO SUA VISITA ESTADOS UNIDOS COM MAJOR HANDSBLEY. OUTROSIM REFERIDOS OFICIAIS, TEN.CEL. MONTENEGRO E CAP.ALMIR PODERÃO REQUISITAR PASSAGENS INCLUSIVE AVIAO PARA RESPECTIVOS PROGRAMAS VISITAS.

MAJOR FARIA LIMA
Oficial de Gabinete

LCM/

In spite of having his budget cut and the cold weather he found in Boston, Montenegro (below, with Miguel Lampert) knocked on the right door: the legendary Massachusetts Institute of Technology, MIT.

At the beginning of his stay in Boston Casimiro Montenegro met *Major-Aviador* Oswaldo Nascimento Leal who had recently enrolled on MIT's aeronautical engineering course and who had been under his command at the Campo de Marte. As they walked through the snow-covered campus Montenegro, full of enthusiasm even though his teeth were chattering with the cold, and wearing a thick woollen overcoat over his Brazilian Air Force uniform, spoke of the visit he had made to Wright Field a few days before and how it had impressed him. He confided to his friend his dream of one day seeing something similar re-created in Brazil, an experiment which would prove in practice the theory that massive investment in technology meant a guaranteed return in terms of national development. There is disagreement about Nascimento Leal's reaction on hearing Casimiro Montenegro's unexpected comments. Some state that, contrary to what might have been expected, Major Leal did not think Montenegro had lost his reason. On the contrary, it is said that he claimed to share the same hope and made a comment that inspired his friend: instead of Wright Field, the example was right there, all around them in those buildings that housed the cream of world scientific intelligence.

"Wright Field is a splendid thing but it's a typically military operational unit," Major Leal said. "What Brazil needs is a high-level school to train aeronautical engineers, an institution specialising in general aviation, the civilian or monetary, and not one dealing only with Air Force matters."

Violet Leal, the widow of Major Leal who had died in 1961 with the rank of *Coronel-Aviador*, says that she has a perfect memory of the night when the question was once again discussed by her husband and Montenegro around the table of her house in Boston. "Oswaldo does not appear very much in this story but I know that he played a decisive part in it," she says firmly. "Actually, not many people realise this because my husband was not a man who liked to push himself forward, he did things and remained in the background. He was very modest and not at all pushy". Montenegro, however, in a statement he recorded many years later, would give a different version of the story. According to him, Leal at first thought the plan was unsuitable. In his view it made no sense to set up a sophisticated centre for research in aeronautical engineering in Brazil if the country could still perfectly well send students to study in United States. The idea of imitating the model of MIT came from Casimiro Montenegro himself.

Whatever the truth of the matter, the fact is that while the other officers who had travelled to the United States were already preparing to fly home in the aircraft bought by the Brazilian government, Montenegro was firing off telegrams to his superiors asking to extend his fact-finding visit to the Massachusetts Institute of Technology. As the arguments in favour of technological development had been foreseen in the very documents that had given rise to the existence of the Air Ministry, it was not difficult to find reasons to justify special leave for a longer stay in the United States for him to carry out an intensive programme of visits to the various departments of the Institute. In all, he spent a total of 73 days working outside Brazil. This also meant 73 nights available to Montenegro who could now enjoy the freedom of an expense account to carry out this new task. As well as working visits to Boston and Washington he also visited Los Angeles and New York, as was attested by the souvenirs he took back to Brazil. Among these was the programme of a show in which he had a front-row table in The Latin Quarter, a nightspot with room for 500 people that called itself "the most exciting nightclub in New York" and offered its clientele a varied programme in which singers and bands took turns onstage with a group of beautiful dancers in the briefest of costumes, some of them showing their breasts, which was a mortal sin in the puritanical society of America at that time. The place was so famous that its owner, Lou Walters (father of the future journalist Barbara Walters), went on to open branches in Miami and Boston. On the back of the programme kept by Montenegro, illustrated with prints of naked women, were messages in female handwriting, such as the following:

I'll fly to Rio with you.
Love,
Bronia

Stars who were at the beginning of their careers like Frank Sinatra and Tony Bennett often appeared at The Latin Quarter but the night Montenegro was there the main attraction was a two-act show called *Folies Fantastiques* which included a saucy sketch freely adapted from the *Thousand and One Nights*. This was followed by *Ballet on Fifth Avenue* performed by a lively group of showgirls after a performance by Corinne and Tito Valdez, who generally appeared on stage undressed and enveloped only in a white sheet. In the same envelope where he saved the programme from the nightclub

Montenegro had kept a small collection of postcards from his time in America. One of them showed a sepia photograph of the Olympic Hotel in Seattle on one side and on the other was an illegible signature underneath the following message that had been sent to Montenegro at No. 1781 Orchid Avenue, Los Angeles, the address of the hotel where he was staying:

Montenegro,
Seattle reminds me of the Brazilian Song: "Oh, what a great country for having fun". I hope you feel the same in Los Angeles.

As might have been expected, when Casimiro Montenegro finally returned to Rio de Janeiro on 14th May 1943, Bronia from The Latin Quarter was not with him. He had left behind the nights out in New York and Los Angeles although he kept the memories of them in that envelope at the back of a drawer in his bachelor quarters. What had really become his obsession from that time on was the seemingly eccentric idea of setting up a high-level centre for aeronautical engineering in Brazil, to some extent inspired by the immense achievement of MIT and which would come to take the place of the inadequate course in which he had graduated at the Army Technical School 18 months previously in 1941. To most of his colleagues, however, this seemed to be an immeasurable act of lunacy, an unreachable utopia. In addition, there were more things to worry about at that time, according to his comrades in arms. Indeed, the time did not seem propitious for such optimistic thoughts. Brazil was about to organise the Brazilian Expeditionary Force that had officially been formed in August of that year by Getúlio Vargas to send soldiers to the war being waged on the other side of the Atlantic. But from the first day of his return to work in the Sub-Directorate of Aviation Technology, Montenegro gave no thought to anything else. So much so that he turned his workplace into a trench system from which he began to wage another, parallel and private war: persuading his superiors in the Air Ministry that he was not hallucinating.

With the aid of his assistant Arthur Soares Amorim, the engineer from Amazonia who had graduated from MIT and suggested the visit to Boston, Montenegro began to sketch out his amazing plan. Whether or not he had agreed with the idea from the start, there is no doubt that Major Oswaldo Nascimento Leal would soon become a fundamental link between Montenegro and the Massachusetts Institute of Technology. It was Leal who provided him with up-to-date information about how the Institute

Montenegro (right) arrives in the USA with a question in his mind. He will have to decide what will be best for Brazil: founding another Wright Field or copying MIT?

functioned, including details such as the salaries paid to the elite team of instructors and administrative staff who worked there. Actually, Montenegro's plan was to bring to Brazil people from MIT with master's and doctoral degrees, paying them in dollars and offering them similar working conditions to those they enjoyed in the United States - or even better. He knew that this would not be a small investment. And as well as a highly-qualified teaching body, there would also be a need for the best possible infrastructure that would need well-equipped laboratories and installations suitable for the activities of a modern teaching institution. For this reason, those who saw the first sketches of the plan would no longer be in any doubt that Montenegro had finally lost his senses.

At that point, some of his best friends had gone off to the war, for example *Major* Nero Moura, who had exchanged his post as official pilot to the President for that of Commander of the First Fighter Group. The unit had been formed by official decree in December 1943 and, in contrast to the soldiers who took part in the Brazilian Expeditionary Force, its members did not need to be ordered to go: the more or less 350 members of the Fighter Group, among them 43 pilots, spontaneously volunteered, thus consolidating the heroic aura that surrounded them. Nero Moura and his men were sent to American bases to be trained in the latest fighters like the Republic P-47 Thunderbolt, the most modern fighting aircraft in the US Air Force. The training, carried out by US pilots who already had combat experience, was extremely rigorous and included interception, shooting, instrument flying and realistic simulations of air combat. The demands of these activities even before their baptism of fire meant that at least one of the Brazilian volunteers died before the end of this period of exercises, *Segundo-Tenente-Aviador* Dante Isidoro Gastaldoni, aged 21, from Rio Grande do Sul, whose aircraft went into a spin following one of the more risky manoeuvres and crashed into the ground at an American base in Panama - one of the countries where the pilots were trained. Before leaving for the front the group would suffer another casualty, *Tenente-Intendente* Alfredo Barcelos was unable to withstand the psychological pressure of the training and committed suicide a few days before leaving for Europe. In October 1944, after hundreds of hours of preparatory flights, the members of the First Fighter Group finally landed on Italian soil shouting the war cry that from that day on would be immortalised as one of the most important symbols of the Brazilian

Force: "Senta a pua!" [Roughly equivalent to "Go for it!" or "Let 'em have it!" – trans.]

In all, Nero Moura's men flew 5,465 hours and 445 missions in Europe. Among those missions was one that took place three days before Christmas, at nine o'clock in the morning when two squadrons of the First Fighter Group dropped 16 200kg bombs on a group of buildings occupied by the Italian Army in the town of Porreta Terme, 70km from their operations base at Pisa. Eleven bombs landed on target, destroying no less than 15 buildings.

That same morning, in Brazil, Casimiro Montenegro, who had been promoted to *Coronel-Aviador* three months previously, was quietly taking a commercial flight to the United States. His was a peaceful mission. His final destination was the Massachusetts Institute of Technology in Boston. In his baggage he was carrying the plan he had been developing for 18 months with the help of Arthur Soares Amorim and Major Leal. He intended to deliver the document to Professor Richard Herbert Smith, Head of the Department of Aeronautical Engineering at MIT. Montenegro was counting on the fact that the possible support of an intellectual authority of someone with the standing of Smith, a consultant to the US government in the field of aviation technology, would give inestimable support to his cause.

Just as there are different versions concerning who had the idea to use MIT as a model instead of Wright Field, there is also disagreement concerning the first person to have the idea of knocking on the door of Professor Smith. Some sources claim that Major Nascimento Leal first suggested the idea to Casimiro Montenegro. The latter, however, wrote in his personal notes that credit should be given to Soares Amorim. Whatever the truth of the matter, the fact is that Montenegro was frustrated when he arrived at MIT and found Smith's office empty because, according to the Professor's secretary, he had made an unexpected journey and did not know when he would return. Devastated by this news, Montenegro saw no alternative other than leaving the papers for Leal to pass them on to Professor Smith as soon as he returned to Boston. Having left this message, he said that he would fly back to Washington and return to Brazil a few days later, where he would wait for Smith's reply. But Montenegro's disappointment was not to last long; he was still in Washington when he received a letter from Nascimento Leal. When he read it he could not contain his joy; the message said that Smith had not only returned from his trip but had read the plan and found the idea to be excellent, expressing his full support for the initiative of creating an aeronautical technology research centre in Brazil. They

could count on his support if it were necessary, but Leal kept the best news for last: Smith was prepared to go to Rio de Janeiro and help to start up the 'Brazilian MIT'.

When he returned to Brazil on 27th February, Casimiro Montenegro lost no time in asking for a meeting with the Minister for Aviation, Salgado Filho, to tell him the news. The Minister received Montenegro and heard his concrete proposal: to give Professor Smith a six-month temporary contract so that he could help to develop the plan to set up the school. Salgado Filho raised no objection and authorised the committee to open the negotiations to bring the American expert to Brazil. Montenegro got to work and by means of *Tenente-Coronel* Miguel Lampert, who was still head of the procurement committee in Washington, made the official invitation to Professor Smith in the name of the Air Ministry. It was left to Lampert, by means of Order No.1175, dated 24th May 1945, to formalise the introduction of Richard Herbert Smith, instructor at the Massachusetts Institute of Technology, to the sub-director of Aeronautical Technology, Colonel Montenegro Filho:

> *This is to introduce Professor Smith. Since the idea of setting up the school in question came from you, I'm sure that you will provide him with the care and assistance he deserves and for which you are justly well-known.*

The formal tone was a requirement of the rigid Brazilian bureaucracy. Smith already had his bags packed and was soon installed in the room next to Montenegro's office at the Sub-Directorate with an old acquaintance, his ex-student at MIT, Soares Amorim, as his personal assistant. But he spent little time behind the desk allocated to him. Soon after his arrival he made a series of trips and evaluation visits to various teaching institutions in Rio de Janeiro and São Paulo, including secondary schools, civilian universities and military courses. He then met with Montenegro and Amorim to draw up a detailed plan of action that would be known as the 'Smith Plan'. It was a bold idea: a school would be set up to be called the Technological Institute for Aeronautics (Instituto Tecnológico de Aeronáutica - ITA) with the aim of training engineers not only for specifically military purposes but also capable of working in aviation in general, including the civilian branch. The Institute would form part of a larger structure, the Technical Centre for Aeronautics (Technical Centre for Aeronautics - CTA), that was openly modelled on MIT and would be equipped with research laboratories for developing aeronautical technology in Brazil. There was one condition that Smith considered vital that certainly did not go down well in the ranks of the Air Force: ITA would have to have complete academic freedom and its director should be a civilian elected by a board made up of the Institute's own

I hope to see you
in Brazil, Soon.
Love
Rachel

(Facing page) Montenegro dining with friends in The Latin Quarter, the celebrated review bar owned by Lou Walters in New York, and when he returns to Brazil his luggage is full of notes, photographs and declarations of love.

instructors. Smith put his foot down: neither the administrative body an institution of this level nor the heads of laboratories of the highest technical standard can be subordinated to the normal rules of military discipline. "The director of a school like ITA," Smith insisted, "cannot rule by authority, only by consent".

Montenegro knew that he was going to meet expected resistance from within the Air Force. Therefore, to prepare the ground and begin to forestall the likely criticisms, he felt Professor Smith should give a public lecture to explain his ideas and use the occasion to sketch out the scenario for aviation in Brazil and the world, making some projections for the immediate future. Montenegro was sure that this topic would arouse great interest. Smith's arrival in Brazil in May had coincided with the end of the Second World War and the victory of the Allies over the German-Italian-Japanese Axis. It was therefore difficult to find anyone who was not wondering about the future of the planet after the end of the conflict. Thus, the dust had not yet settled on the battlefields when, on 26th September 1945, Professor Richard Smith stood behind a microphone to give a lecture entitled "Brazil, a future air power". The title was deliberately optimistic and at the same time provocative. It contained an innate prophecy but also an underlying invitation to action. Also symptomatic was the fact that the premises chosen for the event had nothing to do with the Air Ministry but belonged to the Ministry of Education. Smith's opening statement surprised the audience when he stated that the next 20 years would in future be seen as the golden age of the history of aviation in Brazil. Most of the pilots present were proud of having lived through the heroic years of the 1920s and 30s, which were felt to be the golden age *par excellence* of flying in Brazil. But Smith would upset his audience even more by playing down the topic that was the point of honour in Brazil in aviation - the pioneering work of Santos Dumont compared to the American Wright brothers. "There is no point in discussing right now which country was first to achieve the art of flying," said Smith firmly to his listeners who listened uncomfortably in the auditorium. "The whole world has inherited those discoveries and everyone has an equal right to develop them," he continued, in the same tone. Smith then called on Brazilians to stop being mere consumers of military equipment produced by other countries. Between 1942 and 1945 the Committee for Procurement established in Washington by the Air Ministry had acquired no less than 1,288 American aircraft. Smith felt that this was not the most intelligent policy even if the argument could be made that equipment

Richard Harbert Smith
1946 - 1951

Richard Smith, the man from MIT advises: “Brazil should not buy foreign aircraft even if they are offered free of charge”.

had been bought by Brazil at rock-bottom prices since the United States had sold off cheaply models that were being replaced in their Air Force by newer ones. This was a false advantage, suggested Smith. Brazil had just bought equipment that would soon become obsolete and therefore expensive to maintain on account of the cost of spare parts that would become scarce through being out of production and thus subject to the laws of supply and demand. But the greatest problem in buying foreign aircraft, he warned, was that it held back the Brazilian air industry.

"It is the worst kind of deal. I believe that the best policy for this country is not buying aircraft from abroad, even if they are offered free of charge." Professor Smith explained that the Second World War had accelerated progress in aeronautical engineering to an incredible extent. In his view, during the brief period from 1941 to 1945 the technology of flight had packed in a level of progress which in times of peace would have required at least 20 years to achieve. The days of propeller-driven aircraft and piston engines were numbered. He predicted that the future of aviation was in jet-propelled aircraft and that soon afterwards the world would see the domination of aircraft powered by atomic energy. Smith foresaw that radar would allow what he called a "fascinating prospect": making instrument flying as safe as visual flight. Finally, he was categorical. There was only one way for Brazil to keep up in this technological race: "Brazil can only become independent from other nations by setting up high-level schools in the various areas of aeronautical engineering and by installing in them first-rate scientific laboratories."

In spite of the general disbelief felt by his audience, the future would show that the few who did believe Smith's words, including Montenegro, were right.

Chapter 8 - Now President Dutra falls out with Oscar Niemeyer: no communists in ITA

One month after his lecture at the Ministry of Education, Smith took off from Rio de Janeiro on board a C-47 together with a group of civilian and military engineers and some officers from the Air Force High Command. After flying South for an hour and a half the aircraft landed on a huge open space called the *Campo dos Alemães* (German Field) near to the tiny old town of São José dos Campos on the banks of the River Paraíba. The wide-fuselaged aircraft with the FAB symbol painted on its tailplane landed in a cloud of red dust, taxied over the rutted landing strip and came to a halt at the door of a decrepit wooden hangar which was, as far as the eye could see, the only work of human hands in the area. In the doorway Colonel Montenegro was waiting for them. After the due greetings he walked quickly off, followed by Smith and the other visitors, going for some distance into the tangled vegetation and looked around as if he were seeking a reference point, then stopped: "It's right here."

He unrolled the tracing paper he was carrying under his arm – an aero photo map - and spread it on the ground, kneeling over it and holding it down with stones so that the wind did not carry it away. He put his finger on a certain point looked around at the new arrivals: "Where we are now is where the first wind tunnel will be…."

Wind tunnel? While the military and civilians exchanged glances, Montenegro went on: "Over to the right we're going to build the engine

laboratory. That's where we going to have the living quarters with houses for the instructors and rooms for students. On the other side, to the left, will be the teaching buildings and laboratories. At the other end will be the airfield which will be available both for testing Brazilian aircraft as well as an alternative landing place for commercial flights going to São Paulo…."

At the end of the afternoon Professor Smith and his travelling companions returned to Rio as if they had really just seen on that sun-baked and the dust-covered desert the state-of-the-art teaching and research institution Montenegro had described. As they were leaving, one of the officers in the group could not resist calling from the steps of the aircraft: "See you later, Jules Verne!"

Time would show that that it was not a total exaggeration to compare him to the brilliant author of the futuristic *Twenty Thousand Leagues under the Sea*, but the modest Montenegro was less interested in praise than in building his dream. The choice of the location for creating the school had required months of research in various regions until the choice fell upon São José dos Campos, the only town that contained all the requirements Montenegro had compiled as being indispensable for the institution: a suitable climate, an altitude of about 700m, an accessible electricity supply, proximity to major industrial centres and convenient communications with the rest of the country.

One of the old "dead towns" described by Monteiro Lobato, São José met all the requirements: it had an abundant energy supply and was 100km from the port of São Sebastião, 80km from São Paulo and 320km from Rio de Janeiro (it was only in 1951 that the old dirt road connecting Rio to São Paulo would be replaced by today's Via Dutra). Its celebrated air quality had turned the town into a national centre for treating tuberculosis, something which initially alarmed some of the invited students and teachers, who were afraid of the risk of infection. One of the future directors of ITA, Marco Antônio Cecchini, remembers being warned the first time he travelled to São José dos Campos: "Don't drink even a glass of water and don't even drink coffee there; stay inside the CTA and don't go into town for any reason whatsoever."

It was said at that time that rich patients went to Campos do Jordão and the poor people with TB were packed off to São José dos Campos. Nonetheless, a major factor in choosing the location of the CTA was also the fact that property prices were low in an area like São José that had no great expectations of development. Indeed, in 1945 the municipality which 50

years later would become an international centre for the aerospace industry only had three significant industries: the Tecelagem Parahiba blanket factory, a producer of rayon thread belonging to the French company Rhodia and the Weiss pottery company. Of its 30,000 inhabitants at that time 5,000 lived in the town and the rest were scattered around the neighbouring countryside.

It was only many years later, when he was a *brigadeiro*, that Montenegro would discover that some years previously the place had been chosen for setting up a school by no less a person than Santos Dumont. As he was passing through the Paraíba Valley by train at the beginning of the century, the inventor of the aeroplane had made notes that could have been copied from Montenegro's project and would only come to light in 1918 in the short work entitled *O que eu vi, o que nós veremos* (*What I Saw and What We Shall See*) the author of which signed himself "Santos Dumont, inventor".

> *It is perhaps time to set up a real school on a proper campus. Alongside the Central do Brasil railway line, especially near to Mogi das Cruzes, there are areas that seem to me to be suitable…. Students need to be accommodated near the school and so it will be necessary to construct suitable buildings for this purpose…. I feel that from all points of view it would be better to bring instructors from Europe and United States instead of sending students to those countries…. My greatest desire is to see real aviation schools in Brazil. To see the aircraft, which is today a powerful weapon of war, used tomorrow as a means of transport crossing the huge regions of this country and being seen in our skies, those skies to which Father Bartolomeu Bueno de Gusmão first raised his eyes.*

There was still, however, a long way to go before Montenegro could realise "the greatest desire" of the Father of Aviation. The question of land values, for example, was not a mere detail since Montenegro had calculated that an area of 12 million square metres would be necessary for the project - an area equivalent to the districts of both Ipanema and Copacabana in Rio de Janeiro, or 10 times the area of Ibirapuera Park in São Paulo. After hearing Montenegro describe what he intended to build in his town the Mayor, Pedro Mascarenhas, gave in: the municipality owned a section of vacant land measuring 9.2 million square metres and was prepared to donate them immediately. The Air Force could begin building whenever it wanted to.

Before it could be turned into bricks and mortar however, Montenegro's plan would still meet with some setbacks. As he was going to have to spend a month in Great Britain, he burned the midnight oil setting out the Explanation of Intentions and the Development Plan for the CTA that the head of the Air Force High Command, *Brigadeiro* Trompowsky, would have to take to President Getúlio Vargas to be signed and approved since its content had already been agreed by all interested parties.

The four-engined Avro York that had taken Foreign Secretary Anthony Eden to Cairo and Yalta was sent to Brazil by the Royal Air Force to transport the Brazilian delegation that was visiting Great Britain - an official return visit to that which Air Marshal Sir Arthur Harris, Commander-in-Chief of RAF Bomber Command, had made to Brazil. The chief of the delegation, Minister Salgado Filho, was accompanied by *Brigadeiro-do-Ar* Vasco Alves Secco, Deputy Head of the Air Force High Command, Casimiro Montenegro and three other officers. During their trip to Britain the Brazilians visited RAF bases and aircraft factories and were received at No. 10 Downing Street by Prime Minister Clement Attlee. On 29th September the group returned to Brazil and in spite of having spent such a short time away, when Montenegro was back in Brazil he found the dictatorship in a state of deep coma - a fact which in fact came as no surprise to him. The first signs that the New State was in its death throes had begun to appear some time previously, at the beginning of 1945. In a gesture towards re-democratisation, in April Getúlio had given an amnesty to all political prisoners and had reopened the floodgates the closing of which, in November 1937, with the institution of the New State, had plunged Brazil into one of the worst dictatorships in its history. With the end of censorship the country demanded the convocation of a National Constituent Assembly and direct secret elections at all levels - starting with that for the President of the Republic. Even though their leader Luís Carlos Prestes had spent ten years in prison and his wife Olga had been deported to Nazi Germany by the Government and died in a gas chamber, Brazilian communists still supported Getúlio. As soon as they had been released from prisons all over the country and set foot on the streets the militants of the Communist Party of Brazil joined the so-called *'queremismo*', a movement that supported Vargas' staying in power and the banners of which proclaimed "Queremos Getúlio" (We want Getúlio) and "Constituinte com Getúlio" (Constituent Government with Getúlio). After granting one concession after another the Dictator finally called presidential elections in December of that

year - a contest in which he, encouraged by the *queremista* movement, threatened to stand for election. It was too late. The most visible sign that the regime was at an end came in October when João Alberto, Getúlio's old comrade (once more occupying the post of Chief of Police of Rio de Janeiro) ordered a *queremista* demonstration in the centre of the city to be violently dispersed. On the 29th, the Minister for War, Góes Monteiro, sent an emissary to the Catete Palace to inform the President that he had been deposed. Among the orders that Getúlio left on his desk waiting to be signed was Explanation of Intention GS-19 with the Plan for Establishing the CTA that Armando Trompowsky, head of the High Command of the Air Force had left with him some days previously. It was a huge setback but one which happily would not last long. As there was obviously no Vice-Dictator and Congress had been closed since 1937, José Linhares from Ceará, President of the Federal Supreme Court, assumed the presidency, charged with leading the country into the elections scheduled for December, when the new President and the National Constituent Assembly would be chosen. Montenegro heard the news of Linhares' appointment with some trepidation. Under Getúlio the CAT/ITA project had a supporter inside the Cabinet, the pilot Nero Moura, but José Linhares was known to have not the slightest knowledge of matters like aviation and aeronautical technology. "Getting approval for this project is going to mean a lot of work for us," Montenegro complained to his colleagues, "because the new President knows absolutely nothing about the subject."

To his surprise, only hours after taking power Linhares announced that he had invited to be Air Minister a person who was equally committed to establishing the CTA: *Brigadeiro* Armando Trompowsky. Thus it was only necessary to update the order that accompanied the paperwork, now called Explanation of Intentions GS-20, dated 16th November 1945, the date that would officially mark the birth both of the CTA and its academic arm ITA, the Technological Institute for Aeronautics. José Linhares presided over clean and democratic elections such as Brazil had not seen for a long time. Even the old demonised Communist Party was able to register as its presidential candidate the engineer Iêdo Fiúza, ex-Mayor of Petrópolis. The real contest, however, was between two men who had played opposing roles in Brazil's recent history. On the one hand, standing for the recently-created UDN (União Democrático Nacional) was the romantic Eduardo Gomes, the hero of Copacabana in 1922 and of São Paulo in 1924, a revolutionary in 1930 and a legalist in 1932. A 50-year-old bachelor, a *Brigadeiro-do-Ar* and with

a physique that charmed women, his campaign slogan was the simple phrase "Vote for the *Brigadeiro*/He's handsome and unmarried". Opposing him, for the PSD was the crusty general from Mato Grosso Eurico Dutra, in every way the opposite of his adversary. As well as being neither good-looking nor a bachelor, Dutra had almost always been in the opposite camp to Eduardo Gomes: out of the country in 1922, he had suppressed the 1924 Revolution in São Paulo and had supported Washington Luís in 1930. After a brief punishment post in what was then the remote town of Ponta Porta in the backwoods of Mato Grosso, in 1932 Dutra had the chance to give unequivocal demonstrations of his conversion to Getulism: he not only refused the invitation of Colonel Euclides Figueiredo (father of the future Present of Republic, General João Baptista Figueiredo) to join the *paulistas*, but he also became one of the main figures responsible for the victory of the Federal Government over São Paulo. In November 1935, when in command of the Vila Militar in Rio de Janeiro, he was responsible for snuffing out the communist revolt led by Luís Carlos Prestes in less than 12 hours. In May 1938, with the same vigour with which he had overcome the communists, and ever more faithful to Vargas, Eurico Dutra personally took part in suppressing the right-wing *putsch* of the *integralista* party that had attacked the Guanabara Palace and isolated within it the President and his daughter Alzira (exchanging shots with the 'green chickens' as the Brazilian fascists were called, Dutra's ear was grazed by a bullet). And three years before the elections, in 1942 when Getúlio gathered those in his confidence to decide which side Brazil should join in the War, he did not hesitate to vote for Nazi Germany. Dutra's life story may not be the most attractive but behind his candidature, and supporting it, was the shadow of the still-popular Getúlio Vargas. When the urns were opened they revealed that Brazil had opted for the man who supported order: Dutra was elected with 3.2 million votes (54.16% of the total) as opposed to the 2 million obtained by Eduardo Gomes and 500,000 for the communist candidate.

Along with the new President, the National Constituent Assembly took power on 2nd January 1946. Casimiro Montenegro knew that in a democracy important decisions are not only taken in cabinets, as in a dictatorship, but also in Parliament. And if the provision of funds and approval of laws now depended on votes in plenary sessions it was also time to win over the deputies to his cause. For that reason, a few weeks later he repeated the tour he had made in August with Professor Smith and the officers of the High Command, except that this time the group consisted

Top: As part of the official delegation Salgado Filho (in hat) took to Great Britain. Montenegro (top, left and above, right) travelled on Anthony Eden's aircraft and was received by Prime Minister Clement Attlee.

only of deputies. A C-47 cargo plane had to be converted to accommodate the 20 VIPs flying to the German Field. The leader and organiser of the group was his cousin Juracy Magalhães, the ex-*interventor* of Bahia and an old star of the *tenentista* movement who now, promoted to the rank of colonel, had been elected as a member of the UDN (one of the strongest anti-Vargas redoubts) and had become an influential deputy. Among the Parliamentary representatives he had invited was an obscure federal deputy in the PSP party from Rio Grande do Norte, Café Filho, whose destiny would later lead him to be President of the Republic. In the midst of the São José dos Campos dustbowl Montenegro repeated to the deputies representing different parts of the country the script and speech he had made in August: "This is where the first wind tunnel will be, over there the engine laboratories, that's where the houses for the instructors and student accommodation will be, the airstrip will be there…."

At the end of the afternoon, as they were walking towards the aircraft baking in the sun, Juracy took his cousin's arm and drew him away from the rest of the group to speak confidentially: "Montenegro, I'm sorry but I don't think anything is going to happen in this wilderness. I'll do all I can if it is within my power. Whatever you want from me, I'm ready to do, but I want to tell you right now than I have no faith in any of this".

Any sensible person reading the *Diário Oficial* a few days later would certainly have agreed with Juracy Magalhães. The Air Ministry had launched a public competition to choose the architectural and town planning projects for the complex to be built in São José dos Campos. Printed in small type and taking up 20 pages of the publication, the specification written by Montenegro showed in detail the extent of the mad dream. In a world that had been destroyed by the Second World War and left hordes of hungry and homeless people scattered all over the planet, Montenegro proposed to invest a mountain of public money to build an institution that was without parallel even in wealthier countries. The area planned for residential quarters for students, instructors' families and administrative staff occupied 50,000 square metres, equivalent to about eight Maracanã football stadiums. And they were not any old houses. Accommodation for an instructor, for example, included a library, office, hall, four ground-floor rooms (reception, living, dining and lunch), three bedrooms, two bathrooms, maid's accommodation, washroom, and garage and driver's bedroom, all built in high-quality materials and occupying two floors. In addition to the 30 individual houses for senior teaching

staff, 100 apartments would be built for assistant instructors and 700 more for the remaining staff. Married workers responsible for services such as cleaning and maintenance on the campus would have an official apartment with at least two bedrooms, and unmarried staff a single bedroom. The accommodation for the 1500 students had changing rooms with individual cupboards and rooms for reading and studying. There was also a restaurant with ceilings twice the normal height capable of feeding 800 people at a time and equipped with a freezer, food storage area, bakery and pastry shop as well as a complete kitchen planned 'in the American style'.

The school itself would operate in a complex covering an area of more than 100,000 square metres with individual offices for instructors, 500 classrooms and design areas, two libraries with a total capacity of 300,000 volumes, four sets of offices for administration two large auditoriums - one with 600 and the other with 1,200 places, both equipped as theatres and cinemas - dining rooms, recreation rooms, a bank, post office, telephone room, print room and changing rooms. There would also be 10,000 square metres reserved for the first laboratories and a hospital to be built in a separate area of 50,000 square metres together with a playground and children's clinic. The recreational area would have a social club containing a dance hall, stage, bar and cloakroom. There would also be two Olympic swimming pools and a smaller one for children. The teachers, administrative staff and students would have a covered gymnasium and a sports area containing a football field, ten courts for volleyball, six for basketball, six for tennis and six running tracks, as well as a stadium with seating for 10,000 spectators. In addition to all this there would be a large cinema/theatre with stalls, boxes and galleries holding 2,000 spectators. As well as the residential, leisure and teaching areas there would be a maintenance area of 1,350 square metres with workshops for carpenters, builders, painters, metalworkers, foundrymen, tyre repairers, electricians, upholsterers, panel-beaters, polishers, firemen and glaziers, as well as other tradesmen.

As this was no task for amateurs, only four architectural firms competed for the contract - the largest in Brazil and all headed by famous names: Afonso Eduardo Reidy, Benedito de Barros, Marcelo Roberto and the most celebrated of all, the young Oscar Niemeyer, aged 39 who, together with his friend Lúcio Costa and the greatest star in world architecture, the Swiss Le Corbusier had helped plan the Ministry of Education building in Rio de Janeiro in 1936 - one of the first examples

of modern architecture in Brazil. In 1940 he himself had gained international fame in planning the bold architectural complex of Pampulha for the capital city of Minas Gerais, Belo Horizonte, at the request of its Mayor, Juscelino Kubitschek,. In October 1945, the year before competing for the CTA contract, Niemeyer had followed many of his intellectual friends on the left such as the writers Jorge Amado and Graciliano Ramos, the painter Cândido Portinari and the historian Caio Prado Jr, in joining the recently-legalised Brazilian Communist Party. In 1946 he would suffer the first of many headaches his militant communism would arouse during the rest of his long life. Invited to teach a course at Yale University, Niemeyer had his entry visa to the United States refused by the American government. If the price for obtaining the visa was to leave the party, as the United States consul in Rio suggested, then Yale could wait. This setback would be repeated some months later when Le Corbusier invited him to collaborate on the design of the headquarters building for the UN, which had recently been created to take the place of the old League of Nations. The importance of the work Niemeyer was hoping to do in the United States made no impression on the State Department and his visa was once again refused. The Norwegian Trygve Halvdan Lie, the first Secretary-General of the UN, had to intervene personally with Secretary of State James Byrnes for the veto to be suspended and the visa finally granted. Some weeks later he was enjoying the New York winter and working in Le Corbusier's office.

At the end of March Niemeyer received in New York a telegram from the Brazilian Air Ministry with a splendid piece of news: the committee headed by Minister Trompowsky had selected his plan for the CTA/ITA complex as winner of the competition. Hardly had he celebrated the good news when, a week later, a friend called from Rio to say that a rumour was circulating in the town to the effect that President Dutra had vetoed his name because it was a communist. The contract would be given to the second-placed competitor. He walked a few blocks to where the UN headquarters was temporarily operating and sought out his old friend Oswaldo Aranha from Rio Grande do Sul who had been a powerful *Getulista* for almost 15 years and was now the head of the Brazilian delegation at the new organisation. In his usual quiet voice with its slight Rio accent, the architect went straight to the point: "Listen Aranha, they're saying in Brazil that Dutra has blocked my name from doing the ITA project because I'm a communist. Do you know anything about this?"

The ambassador seemed as surprised at the news as Niemeyer was. After all, it was no longer a crime to be a communist in Brazil because the PCB was as legal a party as Present Eurico Dutra's own PSD. Aranha put the rumour down to the climate of intrigue that always surrounded these competitions, but just to keep Niemeyer happy he said he would telephone to Brazil to investigate the matter. The next day he called the architect in his office and told him what he had learned: unfortunately it was not a false rumour but official information. With no legal basis, the President had indeed vetoed his name and precisely for the reason given: because he was a communist. "Dutra said that this was a question of national security, full stop. I know this is a bugger, Oscar," fumed Aranha, "but the worst thing is that because this veto has come from him, you know there can be no appeal".

Seen from a distance, the President's action may seem to be petty or a personal slight to Montenegro, with whom Dutra had had previous differences (for example, in a blunt order, he had forbidden him to teach civilians at the Campo de Marte in São Paulo). But this was not the case. The matter was one of sincere concern to the President who seemed to believe that buildings designed by a communist could contaminate the minds of the young people who studied in them. The fortunate thing was that Montenegro was not interested in ideological discussion but in establishing ITA and if the best plan was Oscar Niemeyer's then he must beg the President's leave to adopt it. Going against all the lessons of discipline and rank he had learned in more than 20 years of military life, Montenegro was determined to overturn veto caused by the President's deep-seated feelings.

Chapter 9 - Wallaucheks, Teodorensens and Schrenks - Montenegro creates a Tower of Babel on the banks of the River Vidoca

Those who were expecting a dispute were mistaken. As was his nature, Montenegro went about solving the problem without making a fuss. His plan was highly risky and if discovered could have provoked unpredictable reactions from Dutra. He called the United States and asked Oscar Niemeyer to come immediately to Brazil. At the first meeting with the architect he put his cards on the table: "The President of the Republic actually vetoed your appointment because you're a communist and that's something on which we cannot agree. If your project was the best, that's the one we'll build. You must find someone you trust to sign the contract with the Air Ministry in your name and leave the rest to me."

Finding someone to sign the contract was easy. To formalise the agreement with the Air Force Niemeyer chose two of his best friends, the engineer Fernando Saturnino de Brito and the architect Rosendo Mourão - the latter, who was as much of a communist as Niemeyer, passed unscathed through Dutra's sieve. What was more difficult for Niemeyer was putting up with Montenegro's constant suggestions. The first change he proposed concerned the boundaries of the land: the architect wanted the area for the CTA/ITA to be bisected by the Via Dutra which was still being built, under which would be constructed two tunnels to allow free circulation around the campus. Montenegro opposed the idea claiming that they had an area of 400 *alqueires* [a measurement of varying size according to which area of Brazil it is found – trans.], which was more than enough to accommodate the project and that the money spent on two tunnels

could be better applied elsewhere. Montenegro also asked for changes to the plans of the instructors' houses, which were originally planned to have three floors and ended up with only two, and to some "walls that were leaning too much" in a residential area. But the architect agreed with all the changes and soon amazed everyone with the first elements of the plan.

With Niemeyer's elegant lines still in his head, Montenegro was in a cinema in São Paulo some weeks later when he saw in the foyer the model of a new building to be erected in the city. He was so impressed with what he had seen that he thought of doing something similar at ITA. He made a note of the name of the architect that was on a tiny card in one corner of the exhibition case: José Zanine Caldas. Without realising it, Montenegro was once more choosing the best. At the age of 30 and without any academic training, the name of Zanine, from Bahia, was already respected in the world of Brazilian architecture. His small model-making company in Rio had carried out large-scale work for figures of the stature of Lúcio Costa and Niemeyer himself. The success of the models created for the CTA/ITA complex opened up new doors for him. He was invited by Casimiro to design all the furniture for the buildings at São José dos Campos and invented a style based on the then revolutionary 'toothpick legs' which, half a century later, was still modern and above all intact. Although he still carried on his work as a model-maker, this experience changed his life. When he had finished the ITA commission Zanine stayed in São José dos Campos where he set up a furniture factory the design of which was recognised worldwide and even honoured many years later with an exhibition in the Louvre in Paris. Montenegro turned Zanine's models - which were truly beautiful and interesting to look at - into a new means of winning over the unbelievers and another way of silencing opponents of his project, who were becoming dangerously numerous.

He knew that the models would not change anyone's mind but he had to guard all his flanks. In order to prevent further hold-ups within the Ministry itself, Montenegro set up a team consisting only of people who enjoyed his closest confidence. When, in January 1946, Minister Armando Trompowsky signed the order instituting the committee responsible for organising the CTA, strategically subordinate to the Sub-Directorate of Aeronautical Technology headed by Montenegro, the latter invited three people to join it who shared his own commitment to the São José dos Campos project. And as always, he only invited the best. It was only necessary to take a quick glance at the curricula of each of the three members of the group to realise that not only did they share Montenegro's own ideas but more importantly they were

highly qualified professionals. The first, an aeronautical engineer who had graduated with distinction at MIT, was *Tenente-Coronel-Aviador* Benjamin Manoel Armarante, a former classmate of Artur Soares Amorim, Montenegro's favourite assistant who had worked with Professor Richard Smith. The second was *Capitão-Aviador* Aldo Weber Vieira da Rosa, an engineering graduate of Stanford University who had also studied at Harvard. The third was the architect Hélio de Oliveira Gonçalves who had been responsible for instigating the architectural plan and was one of those who defended the choice of Niemeyer. This was a team that could block any attempt at outside interference directed against the commission.

But they could not drop their guard and Casimiro Montenegro tried to put into place a strategy that would prove to be doubly efficacious. Thus he had suggested to Minister Trompowsky that by decree, the so-called Committee for the Organisation of the Institute of Aeronautical Technology (Comissão de Organização do Technical Centre for Aeronautics that would become known by its abbreviation, COCTA) should be granted complete administrative autonomy. This was the means found to avoid on the one hand the legal problems that could arise if the committee remained at the mercy of the orthodoxy of military regulations, a factor that could prejudice the academic independence at the heart of the Smith Plan. At the same time, this autonomy would save the committee from falling, on the other hand, into the legal labyrinth that controlled public service and the straitjacket that constricted the working of higher education in Brazil. If ITA were born linked to any public higher education institution, for example, paying a salary equivalent to salaries paid to foreign teachers - about 20,000 *reais* a month at 2006 prices - would cause thousands of legal actions to be brought throughout the country by Brazilian teachers demanding equality with the Wallaucheks, Fengs and Smiths that Montenegro had gathered from all over the world. For this reason the committee would have its own budget, set at 148 million *cruzeiros*, the equivalent of 140 million *reais* at 2006 values, which did not include the heavy expenses of the physical construction of the Centre. This whole process made it clear that, in spite of evident opposition at the heart of the Air Ministry itself, Montenegro had won the clear support of the leadership of the Ministry which had also just authorised its office in Washington to help with hiring instructors and buying the latest American equipment for the CTA. Montenegro's dream, which had always been regarded as mere foolishness, was actually beginning to take shape.

Nevertheless he was aware that it was vitally important to choose his priorities because funds would only be released gradually and in homoeopathic doses. The

Montenegro asks Oscar Niemeyer to plan the ITA complex (top) and to design the furniture invites the unknown Bahian José Zanine Caldas, who would become world-famous. Half a century later, his furniture (left) is still solid and modern.

most pressing task was to start preparing the ground and installing the necessary infrastructure for the project, which even involved building a dam on the River Vidoca which flowed near to the land chosen for building the CTA and where a large water-treatment centre was to be installed to supply the establishment. Little by little, one by one, the buildings designed by Niemeyer also began to leave the drawing board and their sinuous rooflines began to change the landscape around São José dos Campos. The library, the large auditorium and the teaching and administration blocks were among the first buildings to be completed in the anthill of the building site. It soon became clear that all of Montenegro's time at the sub-directorate of Aeronautical Technology had become completely taken up in putting the Smith Plan into action. Something else that soon became clear was that COCTA, which had developed under the authority of the Sub-Directorate, had become larger than the latter. For this reason, on 25th March 1949 a presidential decree made legal what was already a matter of fact: a reorganisation of the Committee appointed Colonel Montenegro to be its head, thus freeing him from the post of deputy head of the Directorate of Materiel, even though he would formally continue to be attached to it. But at this point everyone knew that Colonel Casimiro Montenegro had for a long time been working on COCTA practically 24 hours a day.

As the CTA was being built, the first overseas instructors had begun to be hired, which created frequent short-circuits in the ossified Brazilian bureaucracy. One of these happened when, after months of pressure, Montenegro had managed to get a long-awaited 'Yes' from one of the most respected American experts, the engineer Charles Stanton, who at the time was Director of United States Airways, a post only two steps below that of Minister of Transport. COCTA had in its US office the São Paulo lawyer Paulo Ernesto Tolle, who had helped Montenegro to set up CTA/ITA's legal framework and was now in charge of formulating the contracts of the teaching staff without contravening the laws of either of the two countries involved. On the day he happily signed his contract in the Brazilian Embassy, Stanton announced that instead of just asking for leave of absence, he was resigning his post in the United States as a demonstration of his support for Colonel Montenegro's project and that he would set out within the next few days, with his whole family. After he had arrived in Brazil and had worked for a month, as the ITA courses were still operating in Rio de Janeiro, an embarrassed Stanton told Montenegro that payment of his salary had not been authorised. After an

exchange of telegrams it was discovered that because of some bureaucratic problem his American contract had been refused. Montenegro was not one to pound his fist on the table. When his staff thought that they were going to see an explosion, he reacted calmly: "It's going to be embarrassing for us in Stanton has to go back to the United States because of a missing certificate for his grandmother. I'm going to persuade the Treasury to pay, but that will take time so we're going to pay his salary today even if the money has to come from a bill for bricks".

The next day Stanton received his salary but it did not come from a bill for bricks. Without anyone knowing, to solve the problem Montenegro obtained a personal loan from a friend in São Paulo, the businessman José Mindlin who was then President of the Metal Leve Company. When a member of his staff pointed out that this was not exactly legal, Montenegro replied: "It may be illegal but it's not immoral".

A week later, the Director of the CTA was leading yet another sightseeing tour of men in collars and ties in the strong sunshine of São José: they were Treasury officials who had been invited to see at first hand what was happening to the funds they had approved (and often refused) for COCTA. The problems seemed to be endless: one day it was a political veto, the next a bureaucratic difficulty. When things seemed to be making progress Montenegro was told that the Light Company, the powerful Canadian multinational responsible for providing energy throughout almost the whole of the Brazilian Southeast, was threatening to carry out an old idea of building a high-tension network the pylons of which would cut through the CTA/ITA property and with it the classrooms, laboratories and living accommodation. To begin with, it seemed that this would be a minor problem but when Montenegro met the board of the company to ask for the route of the electrical network to be changed, an arrogant executive suggested another solution: "You can change the ITA project if you want to. Our network is going to go exactly where it was planned."

Montenegro did not allow this rudeness to affect him: if that was the way things worked, then the answer was to appeal to the Air Ministry, which could put an end to the problem at the stroke of a pen - in favour of ITA, of course. But Trompowsky was out of the country and had left the Ministry in the hands of *Brigadeiro* Gervásio Duncan, who was not anxious to stir up this particular wasps' nest: "You're mad, Montenegro! Are you going to pick a fight with the Light? No one in this country is strong enough to take on the Light."

President Eurico Dutra (centre) visits ITA. According to Montenegro (right), the government did not help ITA but neither did it cause problems.

And it was true. The São Paulo Tramway, Light and Power Company Ltd had been Brazil since the end of the Empire and was known as the 'Canadian octopus' because of the number of tentacles it had in the areas of production, use and sales of electricity and the building of railways, telegraph and telephone lines in Brazil. Politicians used to say openly that to be President of the Republic the candidate had first to ask permission from Sir Alexander Mackenzie, the Light's representative in Brazil. The journalist Assis Chateaubriand, who owned the Diários Associados network had written in an editorial defending the company from attacks by national groups, that "if our people had a different intellectual level, the day of the Light's birthday would be a national holiday". Montenegro, however, did not throw in the towel so easily and decided to knock on the door of the Catete Palace. With the help of his friend Hélio Macedo Soares, a government energy adviser, he asked for the President's help only to receive another blow: Dutra told Macedo Soares that the Government would not spend another cent. If ITA did not wish to change its plans, ITA could pay for its own fancies out of its own pocket. The problem turned full circle. Montenegro had to start again and go back to the Light, this time to negotiate the cost of changing the route of the electrical network, since the idea of changing the ITA plans never entered his head. The cost of making the change was worked out, Montenegro bargained as much as he could and finally an agreement was reached. When the deal was settled, the Light representative made a revealing statement: "You know, Colonel, this is the most important deal the Light has ever made in Brazil. We've been used to dealing with the Government for many years but this was the first time we've not had to pay anyone a commission nor deal with inflated budgets."

And so, stone by stone, Montenegro built his cathedral. In 1947, when the first group of students to study at ITA had been chosen - for the school had already been operating for three years in Rio in the Air Force's buildings at the Ponta do Calabouço next to Santos Dumont Airport - Professor Richard Smith wrote a confidential seven-page document to the heads of COCTA that had the effect of a jet of cold water. The curricula and the instructors to the school created by Montenegro were of such a high level that Brazilian students were not sufficiently well-prepared to take the courses. The revelation of these huge deficiencies in young Brazilians, however, did not seem to put the Professor off. In his paper he first of all indicated certain basic conditions in the Brazilian secondary education system that had to be improved for ITA "to be able to turn those coming out of secondary schools

into good professionals". According to Smith, the first condition was almost cultural; although attentive to not hurting national feelings, he cut deep with his scalpel:

> *The average Brazilian secondary school student needs to be more or less re-educated in terms of working practices and even, in some cases, in terms of honesty. Most Brazilian boys who finish secondary school have never been taught how to study nor to take responsibility in a normal course of study. Most of them do not know how to use a library or to learn from a teacher in a lecture. Most secondary school students will also profit considerably from a school environment of complete honesty and integrity, which unfortunately does not always exist in secondary schools but which will be a fact of life in the Technological Institute for Aeronautics.*

Smith's careful language when he wrote of "an honest school environment" left no doubt that he was referring to the plague that existed in all Brazilian schools: copying. Although it was usually seen by Brazilians as being a virtue - being smart - in ITA copying was unforgivable and, contrary to what might be expected, this was not a rule inherited from the barracks. It was never necessary for any instructor to control it. This was because from the very beginning ITA had established what came to be called 'conscious discipline', in other words the students themselves were equally responsible for keeping the rules for living together within the academic community. This was not simply a case of encouraging an atmosphere of self-discipline where each individual was aware of his role within the group and passively obeyed preordained rules at the risk of receiving some punishment if he broke them. It was something more subtle than that: the rules were not established by the senior staff of the school, nor by any other ruling body, but agreed among the students, who were also in charge of carrying them out. Thus, if anyone were caught copying, it was not the role of the school to apply any kind of punishment. 'Conscious discipline' would exclude that person from the institution. But as the daily practice of this idea was taken seriously and agreed by everyone, copying was an extremely rare event. The same applied to taking care of maintaining the school's material property, which prevented torn textbooks, graffiti in bathrooms and misuse of equipment in classrooms, residential areas and laboratories. But Smith's criticisms did not stop at

copying; he also pointed out as a great drawback in Brazilian secondary education in the mistaken belief that professional competence depended entirely on knowing basic theory. For him, this constituted only half of what was necessary for success in professional practice. "This is the greatest defect in preparing Brazilian secondary school students for studying in higher education institutions," he stated in his paper. "It leads to many mistakes both in education and in professional practice."

Even after spending a short period in Brazil, Richard Smith was already aware that if he had to wait for the Brazilian Government to correct throughout the whole secondary education system vices that had taken root over many years, it would be better for him to go back to the United States and postpone the ITA project until the following millennium. The only way to solve the problem was to create a preparatory school that would operate in parallel to ITA to retrain students who had already passed the entrance examination but whose level of education did not meet the requirements of the Institute's curricula:

> *The best solution is to set up a new kind of school which is separate from the university but under the guidance of the latter, consisting of two initial years of instruction with a prior year of revision for those who need it. In this kind of school the problems indicated can be corrected. For the sake of argument, I shall call this the Basic School.*

It was not only moral concepts that ITA instituted in its daily routines. All the invited instructors, starting with Richard Smith, had made the same demand: freedom for the teaching body and academic autonomy. The problem was that these demands, which had been guaranteed in the contract of each of them, did not go down very well with many people in the Government, especially in the Air Ministry. In the first notes of the 'general plan' for ITA that Montenegro had sent to Trompowsky and Dutra, he left them in no doubt on this point when he stated that "academic freedom and autonomy in teaching and discipline related to the teaching staff are an indispensable condition for success in teaching - and this in fact is the philosophy followed by the main universities in the world". The paragraph dealing with this point, written by him and Tolle, was even clearer:

> *The decisions of the teaching staff cannot be revised or substituted by any other authority; they may, however, be annulled by the*

The senior staff of ITA, the Brazilians Jeremias Chrispim, Luiz Cantanhede, Casimiro Montenegro, Marco Aurélio Cecchini and Oscar Spinola, the Czech Richard Wallauschek and the Swiss Charly Künzi.

President of the Republic at the suggestion of the Air Ministry when they violate the Law or go against higher national interests.

There it was, written in fluent Portuguese: except for the President of the Republic only ITA instructors gave orders in ITA. Or, as the increasingly aggressive critics of the project put in: *"On Montenegro's farm*, only Montenegro gives the orders". And that was indeed the case: the institution that would revolutionise Brazil's technological profile was called from the start 'Monenegro's farm'. Indifferent to criticisms, he carried on his interminable obstacle race. There was huge resistance among his military colleagues to the idea of making CTA/ITA a centre of excellence open to the whole of society. In the view of this group, which even Eduardo Gomes belonged to, the establishment should certainly be a centre for training highly qualified personnel in the area of aeronautical technology, but one restricted exclusively to the Brazilian Air Force - which after all was paying the very large bill for Montenegro's eccentricities.

In spite of everything, he could not complain. An account of the five years of the Dutra Government, which was now coming to an end, showed a highly favourable balance in favour of the CTA/ITA. All the instructors chosen had been hired, the construction timetable at São José was being strictly kept to and the rare budget overruns had been covered by emergency grants from the Ministry. Indeed, much of what Montenegro had achieved up to that point could be credited to Minister Trompowsky, who was an ardent defender of the requirements of the CTA/ITA to the President of the Republic, and also to the discreet but efficient work carried out in Congress by the ex-Air Minister, Salgado Filho, who was now Senator for Rio Grande do Sul. And this made Montenegro fear for the results of the presidential elections scheduled for October, 1950. A year before the contest the two favourite candidates had been announced by their respective parties: Eduardo Gomes once again for the UDN, and against him and the PTB had named Getúlio Vargas who, after a kind of voluntary exile on his ranch at São Borja in Rio Grande do Sul, had returned to the political stage. As his vice-presidential candidate Getúlio had chosen Deputy Café Filho, the politician from Rio Grande do Norte who had visited São José dos Campos along with Juracy Magalhães. If Vargas were elected

The bureaucrats do not pay the salary of the American Charles Stanton (above) and Montenegro fumes: “It’s going to be embarrassing for us if Stanton has to go back to the United States because of a missing certificate for his grandmother”.

S. A. EDITORA TRIBUNA DA IMPRENSA

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CERTIFICADO Nº 0453

O Snr. Casemiro Montenegro Filho

Proof in Montenegro's files that there was 'the DNA of the UDN' in the Marshal's blood: the Tribuna da Imprensa worked to help Carlos Lacerda in his war against Vargas.

it would make no great difference to Montenegro's project, but if the people chose Eduardo Gomes the prospects would indeed be more discouraging.

Getulismo was divided. The PSD (Partido Social Democrático) he had created in 1945 now had its own candidate, Cristiano Machado. Some of his old comrades like Oswaldo Aranha and Góes Monteiro had gone over to the opposition and supported the candidature of Eduardo Gomes. Two months before the elections Getúlio left his refuge in São Borja and began a veritable electoral *blitzkrieg*. Although he was no longer young, in 53 days he visited 54 towns and cities scattered across 20 of the states in Brazil. As well as carrying throughout the country the flag of nationalism that defended social ownership of natural resources, the ex-dictator claimed to be not a candidate of any one political party but "of the humble, the poor and the unemployed".

In July the journalist Carlos Lacerda would publish in his *Tribuna da Imprensa* (an openly pro-UDN newspaper which Montenegro had helped to found by symbolically buying a share for a thousand *cruzeiros*) a bitter and provocative article against Getúlio, whose candidature had just been officially registered with the electoral authorities. In the content of the article it was possible to foresee that the political temperature was about to rise sharply in Brazil, and quite soon. "Mr Getúlio Vargas the senator should not be a candidate for the presidency," wrote Lacerda, and hammering the point home stated: "As a candidate he should not be elected. If elected he should not take power. If in power we should turn to revolution to stop him from governing".

It was never clear if he was replying to this or not, but some weeks later Getúlio gave an interview in São Paulo in a very depressed and, as time would show, prophetic voice. "I know that I'll be elected but that I shall not reach the end of my mandate. I'll have to fight, but shall I be able to survive?" he asked, and then answered his own question: "I'll tell them this. I shall not put up with humiliation. I'm 67 years old, with not many years left to me. I want to dedicate this time to serving the people and Brazil. When I die I want to leave a worthy and respected name".

The first part of this forecast came true on 3rd October of that year: Getúlio won the elections with 3.8 million votes (nearly half the total) as against 2.3 million for Eduardo Gomes and 1.6 million for Cristiano Machado. Casimiro Montenegro breathed a sigh of relief more on account

of Getúlio's victory than for the defeat of the *Brigadeiro*. If the second part of the President-elect's prophecy did not come true and he succeeded in seeing his mandate through to the end, the dream of building the CTA/ITA would have five more years to come true.

Chapter 10 - Doing business with Great Britain: tons of cotton in exchange for 70 jet aircraft

Casimiro Montenegro had a glass of champagne in his hand when *Coronel-Aviador* Nero Moura, whose birthday was being celebrated, called him to one side to talk privately. As Nero had just separated from his wife and was living alone in an apartment on the Rua Hilário de Gouveia in Copacabana, his 41st birthday party was being held in the house of his friend and neighbour, *Coronel-Aviador* Dario Azambuja. Some minutes before, the arrival of the lawyer Miguel Teixeira had caused a stir in the room where about 40 guests were celebrating. Everyone knew that Teixeira was a friend of the Present-elect. Getúlio would take office on the following day, 31st January, 1951 and had still not named his Cabinet. Thus, the fact that Nero Moura disappeared for a few minutes and locked himself away in a room with Teixeira encouraged the inevitable speculations. Talking to Montenegro, Nero Moura explained the reason for his absence and gave him two pieces of news: one good, one bad: "Montenegro, don't say anything to anyone until tomorrow, but Getúlio is going to make me Air Minister."

This was indeed good news and it cheered Montenegro up. His friend's appointment ensured that ITA would continue to receive the full support of the Ministry, avoiding any danger of the project's fierce critics taking power and possibly putting the plans into reverse. This had been Montenegro's greatest fear in recent months when it was still not at all sure that the future Minister would continue to give the CTA the understanding support it had received from *Brigadeiro* Trompowsky.

Despite his denials, Montenegro (right) goes to Holland to buy the Fokker S-14, a Jet capable of flying at 720km/h, an almost unbelievable speed for the time.

"But Nero, what was the bad news?" asked Montenegro.

"Well, that's it. You're going to have to leave the CTA to help me in the Ministry."

Montenegro froze. His work at the Technical Centre for Aeronautics had become as vital to him as breathing. Taking him away from it would be almost a death sentence, so he used all the arguments he could find to dissuade Nero Moura from what he felt to be a ridiculous idea. But the future Minister remained unmoved and explained that he had to surround himself with loyal allies in his office since it was clear his appointment would ruffle the feathers of many people in the Air Force. As he was only a *coronel* his colleagues with higher ranks could see the choice of his name as being a serious breach in the hierarchy. It was precisely to tell him this that Miguel Teixeira had come to the party, drunk a glass of champagne and then gone away. Getúlio had given Nero the official invitation that afternoon and then sent Teixeira to warn him that certain *brigadeiros* were holding a meeting to plan action to be taken against him. Getúlio's message also said that early the next day, before the press conference in which he would announce the composition of the new Ministry, Nero should find *Brigadeiro* Eduardo Gomes to tell him about his selection first, and also that when building his team he should make available any post the latter might require. Getúlio believed that this gesture would be an antidote to the dissatisfaction of the group of officers who were fiercely loyal to the *Brigadeiro*.

In the face of these arguments Montenegro realised he had to give way. But he agreed with Nero that his post at the CTA should remain his and only loaned to someone who would not change a single comma in any of the projects already under way. To all intents and purposes he would leave São José dos Campos but would carry on giving orders there. Nero not only agreed but also offered to make Montenegro the head of the Directorate of Procurement, which would put him in a strategic position in relation to the CTA. After all, according to Air Ministry regulations, that Directorate's responsibility covered a vast list of functions that included the "maintenance, supply, storage, distribution, servicing, repair, recovery, acquisition, manufacturing and other duties it had to carry out for the repair and efficiency of aeronautical materiel, installations, machinery and equipment to maintain aeronautical infrastructure". Regulations also required the Directorate to be responsible for the "control and mobilisation of the country's aeronautical industry". In short, Montenegro would have his cake and eat it. The day after his birthday, as Getúlio had

recommended, Nero Moura sought out Eduardo Gomes and found him at seven o'clock in the morning in shorts and T-shirt playing tennis on the private courts of the officers of the Galeão Air Base. He waited for the *Brigadeiro* to finish his game and invited him to have coffee at the nearby snack bar. As they drank their coffee Nero said, trying to disguise his embarrassment: "*Brigadeiro*, the President is going to appoint me as Minister and has asked me to tell you how it would give him immense satisfaction if you could work with me at the Ministry, choosing any post you would like."

Brigadeiro Eduardo Gomes looked at the *Coronel*, finished his coffee and answered directly but in the politest manner he was capable of: "Nero, a President is the only person who can choose ministers. He has the authority to choose any Brazilian he likes. He is fully within his rights."

Before leaving the table, Eduardo Gomes rejected the offer to choose any post he wanted. He was grateful for the honour but said he could not agree to work for a government against which he had stood in the elections. Nero seemed to be unaware of the fact, but a few days previously Getúlio Vargas had invited Eduardo to be Air Minister and he had refused. If he had turned down the senior post he could not accept a subordinate one. His place would continue to be in opposition to Getúlio although he promised he would not allow any colleague to try to stand in the way of Nero Moura taking office. With this, he excused himself with a certain coolness. Later he would be once more irritated to learn that Nero had invited Casimiro Montenegro to head the Directorate of Procurement. The fact of their being old friends from the days of the Airmail Service did not prevent Eduardo Gomes from telephoning Montenegro to tell him to make a similar refusal: "You are a *coronel* and the directorates of the Ministry are to be given only to *brigadeiros*," he complained.

The old friendship between the two, already strained by the *Brigadeiro*'s opposition to the principles guiding the creation of ITA, had finally ended in bitterness. Montenegro still tried to argue that his was a post made available at the discretion of the Minister and that he felt he had the right to accept it as he had been one of the first students at the School of Aviation. His friend was not convinced. On the contrary, he protested that Nero Moura was sowing disharmony and causing dissension in the senior ranks because he had appointed other *coroneis* to posts previously reserved for *brigadeiros*, citing the example of Nélson Lavanère Wanderley who had been put in charge of Air Transport Command. Eduardo foresaw serious problems in giving senior

posts to lower-ranking officers. Far from being the case however, there was no ill-feeling on the day when *Brigadeiro* Raymundo Aboim left the post and passed the baton of the Directorate of Procurement to *Coronel* Casimiro Montenegro. After all, the two had been friends for a long time. A passionate defender of the Brazilian indians, Aboim had taken Montenegro along on some of his expeditions to the Xingu, where they had sometimes attended the *Quarup*, the xavante religious ceremony for the dead.

The first thing Montenegro saw in his new job warned him what he would be facing during the three years he was head of the Directorate of Procurement. Before handing over to him, sitting behind a desk piled high with memorandums and documents to be sent off, *Brigadeiro* Aboim pulled up his trouser legs to show his shins, covered with eczema. He said this was the result of the stress - and all the aggravation - that came with the job. Montenegro laughed and said that if that were the case, his subordinates would have problems with their legs, not he. Indeed, it took only a week for the staff who were crowded into the Directorate for Procurement to realise that he was serious. His four years at the head of COCTA that involved countless juggling acts to get around the paralysing government bureaucracy had given Montenegro a special kind of training in administration based on delegating tasks and insisting on responsibility. His first act was to divide the pile of papers into smaller piles according to subject matter. Then he called in, one by one, those responsible for each area and required them to immediately processor documents, noting the date and time when the questions dealt with were returned to him, together with details of the actions taken. Thus, as if by magic Montenegro cleared his desk incredibly quickly. Another thing which bothered him from the first day was the large number of people waiting in the anteroom to be seen. On his first day at work Montenegro shocked his adjutant by telling him to let everyone in the same time. After finding chairs for everyone, Montenegro asked them one by one why they were there. As he received the answers, he sent that person to talk to the member of staff or the section dealing with that question. Within minutes, as a countryman from the rustic São José dos Campos of that time might have said: "the man cleaned up the farm".

"The secret of administration is putting your team to work" was Montenegro's motto. Curiously, in contrast to what many of his subordinates might have thought at first, instead of leaving them drowning in endless tasks, the 'Montenegro method' of management produce the opposite effect. As he

required deadlines for completing each task, it became impossible to push a question to one side by putting off answering it. Very soon, therefore, the task had been completed and the list of jobs cleared. This rationalisation of time meant that a few months later Montenegro decided that staff at the Directorate of Procurement were no longer required to work on Saturdays, thus abolishing on his own authority the compulsory three hours required by the Administrative Department of the Civil Service (DASP) the high command of Brazilian bureaucracy at that time. "These people live a long way away and it makes no sense to make them catch a train in Saquarema to spend just three hours here and then go home," he argued.

Nero Moura was worried: "What are we going to say to DASP?" he asked over the telephone.

"We're not going to say anything and they are not going to hear anything," replied Montenegro.

"But what if I need to talk to you on a Saturday?" the Minister replied.

Montenegro told Nero not to worry because he would draw up a relay system so that there would always be someone on duty at the Directorate who would have all the details of where he could be found. Before hanging up he took advantage of the call to ask permission to stop going the Ministry every Friday for the weekly meetings. "My desk is clear and there's no need," he explained.

"Well, come anyway, just so that we can have a chat," Nero suggested, laughing. The Minister was sure that Montenegro was a serious administrator and that the Directorate of Procurement was in good hands. Everyone was aware that because it handled large sums of money for government purchases the Directorate was a potential open door for shady deals and cartels. Indeed, it was not long before Montenegro noticed that in many public bidding processes competing companies fixed the prices among themselves in a rotating system and decided in advance who should win the contract. In that game with marked cards it was the practice for suppliers to inflate the final cost of products, multiplying it several times in relation to its real market value. In other to protect the Directorate from sharp practice Montenegro started to ask three officers to go out in civilian clothes and check the prices in the open market before each bidding session. Thus, when the suppliers inflated the value of contracts he simply cancelled the process.

"The individual would win, but got nothing. If his company sold the product for a certain price, I would not pay one cent more," he would recall later in an

With Nero Moura (in white, centre) ‘Montenegro’s farm’, as his enemies called ITA, would enjoy four years without problems.

interview. Immediately the suppliers asked for a meeting with the head of Procurement, who heard their confession: they used those kinds of tricks because payments by the Air Ministry, as with all public sector organs in Brazil, took a long time to arrive, which left them with obvious problems if they charge normal market prices. *Coronel* Montenegro told them he would no longer accept that kind of trickery while he was in post, but there and then he gave them his word: during his administration he would keep rigidly to the dates for payment set out in the advertisement for each bidding process. "If this doesn't happen, you gentlemen can come back here and demand satisfaction from me. And you don't even have to go through my adjutant, come straight in without knocking."

He was indeed a strict administrator but while he was the head of COCTA he had shown that if possible he would work magic to make business go forward. For example, there was the occasion when there was no more money during a certain financial period to buy empty fuel tanks. So Montenegro had no hesitation in going for a rather unorthodox solution. He invited bids for the purchase of petrol and specified that it had to be supplied in drums - exactly of the type he needed. The result: the Brazilian government's usual supplier of fuel, the powerful US Standard Oil, lost the contract to a small Brazilian manufacturer of oil drums which submitted the lowest bid. The multinational complained and threatened to appeal, but could not demonstrate that Montenegro had committed any irregularity.

But what would really cause a controversy was a large contract the Air Ministry signed through the Directorate of Procurement with the Dutch Fokker company, the producer of some of the classic aircraft in world military aviation, among them the DR-1 triplane made famous in the First World War by the German pilot Manfred von Richthofen, the 'Red Baron'. In order to avoid the requirements of the 1919 Treaty of Versailles which had forbidden the defeated Germany to develop military technology, the company's founder, Anthony Fokker dismantled the workshops and took all the material to the Netherlands, where his father's family had come from. There he founded the *N.V. Nederlandsche Vliegtuigenfabriek Fokker*, setting up an aircraft industry in the country hitherto only known for its dikes, windmills, tulips and clogs. In May 1952 Anthony Fokker, known as the 'Flying Dutchman', received in his Amsterdam office a letter with the heading of the Air Ministry of Brazil proposing a contract to build in Rio de Janeiro aircraft that had come directly from his designers' drawing boards. On Sunday, 25th May *Coronel*

Casimiro Montenegro set out for Europe. He carried in his briefcase a draft contract detailing a payment of 90.5 million *cruzeiros* (about 45 million *reais*) for the purchase of 200 Fokker aircraft to be built in Brazil, including 50 S-14s, a jet capable of flying at 720kmph, an almost unbelievable speed at the time.

But more was involved. The Fokker contract would also include opening a new company in Brazil, Fokker Indústria Aeronáutica S/A, with a joint capital of 20 million *cruzeiros* (about 9 million *reais* in 2006 values) divided equally between the Dutch company and a group of Brazilian businessmen. Of the 10 million *cruzeiros* to be invested by Fokker, half would be paid in cash and the other half paid in the form of services and royalties. The deal seemed to be advantageous for both sides. Brazil would have a promising jet aircraft factory using Dutch technology and Fokker would make a relatively small investment to open a subsidiary factory in Rio de Janeiro. But the agreement would take on an air of scandal when it appeared in the press. *Brigadeiro* Eduardo Gomes was the first to open fire, questioning the fact that the Brazilian government intended to use public money "to smooth the way for a private company", moreover a foreign one. He also criticised any negotiation made by the Air Ministry to buy jets because in his view that type of propulsion was still in the experimental stage.

A week after returning from Holland, Casimiro Montenegro had to put out the fire Eduardo Gomes had lit. He was convinced that there was nothing wrong in encouraging the start-up of a business undertaking which, more than just mass-producing aircraft, would transfer aeronautical high technology to Brazil. The main product Fokker had to offer, explained Montenegro, was knowledge, which was something intangible and thus did not appear on the financial spreadsheets of the company to be set up in Brazil. However, in the face of the general outcry, he preferred to play for time. So he denied to journalists that his journey had had anything to do with a possible official contract with Fokker, or even with any other international company.

"We can deny reports that have been circulating to the effect that *Coronel* Casimiro Montenegro, Director of the Air Force Procurement Department, has bought or is interested in buying the designs of the Fokker jet," stated the *A Noite* newspaper our 9 July 1952. "The *Coronel* returned to Rio a week ago after spending about 30 days in Europe visiting aircraft factories," the article stated. But anyone who checked the notes in Montenegro's official

diary would see that he had indeed been, more precisely from 25th May to 27th June, at Fokker's Dutch headquarters, with the proper authorisation from the Air Ministry.

What no one knew was that Montenegro had used the journey to try to launch an even more daring plan. Because of the defeat of Germany in the Second World War and the treaties that once again placed in quarantine all the country's investments in military technology, the Germans were forbidden from carrying on scientific research in that area. So Montenegro hoped to attract from Germany the best brains in the field of aviation and offer them all the conditions necessary to continue their work in Brazil. With the help of *Capitão* Aldo Weber Vieira da Rosa from Santa Catarina who was a member of COCTA and spoke fluent German, he looked for another legend of contemporary aeronautical engineering, Professor Heinrich Focke who, in spite of the similarity between their surnames, was not related to Anthony Fokker the 'Flying Dutchman'. Focke was the man who had designed the first helicopter known to have flown, the Focke-Achgelis FW-61. Given the impossibility of continuing his vertical takeoff experiments in Germany, he was very interested in the idea of going to Brazil. While still denying to the newspapers that he was thinking of bringing a branch of the Fokker Company to Brazil, Montenegro persuaded Minister Nero Moura to formally invite Heinrich Focke to work at the CTA in São José dos Campos. Focke would be able to bring from Europe any members of his team that he might need to build in Brazil what had been announced as one of the most spectacular aeronautical inventions in the world: the 'convertiplane', a hybrid mix of helicopter and aeroplane that could take off vertically under the power of four rotors and then fly horizontally, achieving speeds of up to 500kmph.

In Montenegro's visionary view this represented a revolution in flight but what he could not envision was that this machine would only be produced 30 years later in Great Britain in the shape of the Sea Harrier, the the fighter tested by the British with such success in the Falklands War in 1982. Even after so many years, the only original aspect of the Sea Harrier was its ability to land and take off vertically like the convertiplane. Montenegro's enthusiasm convinced Nero Moura, who authorised the exchange of official correspondence with Heinrich Focke and set out the terms of his contract: a fixed salary of 18,000 *cruzeiros* (about 9,000 *reais* in 2006 values) with a furnished house at the CTA and a 5% commission on the price of each machine built in Brazil, as well as 50% on whatever profits the Air Ministry

made from selling this equipment to other countries. Professor Focke would also receive a gratification of US$ 25,000 divided into three parts to be paid respectively after signing the contract, his arrival in Brazil and the moment when the first prototype took off. Having no prospects in a Germany destroyed by war, Focke did not think twice. Within a few months he was living in a house designed by Oscar Niemeyer with furniture designed by Zanine. He was followed by 16 other foreign engineers who would work on the convertiplane project, most of them German. Each day, leaving home for the CTA laboratories, Professor Focke could be seen, masses of papers under his arm, proudly perched on the pillion seat of a German NSU motorcycle driven by one of his assistants, the Hungarian Joseph Kovacs. Kovacs would later recall: "The Professor held his hat on with the handle of his umbrella, but never lost that sedate dignity typical of folk born in Bremen".

The arrival of the Germans belonging to the so-called 'Focke Group' also gave ammunition to those critics who continued to aim their fire at the Technical Centre for Aeronautics. The accusations that rivers of public money were still flowing down the drains of 'Montenegro's Farm' resurfaced. The idea of an aircraft that could take off like a helicopter seemed more like idle talk. Thus, it did not take long for the convertiplane to acquire the mocking nickname of 'conversationplane'. But on this occasion opposition did not only come from off the campus; Montenegro would soon be called on to adjudicate in a problem that began to appear within the CTA itself: the group of engineers led by Professor Focke did not seem willing to integrate with the other instructors at ITA. There developed a kind of polarisation between the Germans and the other foreigners.

"I don't know if this was based on envy, ethnic motivations arising out of the war or because of the privileges granted by generous contracts," stated the Hungarian Kovacs, who also felt somewhat excluded by the Focke Group even though he was a member of the same team and spoke German fluently. In the midst of all this, the mystery concerning setting up the Fokker factory in Brazil soon became an open secret. It was impossible to work on a contract of that magnitude without providing the necessary information to be judged by public opinion. On 7th August 1953 Minister Nero Moura signed a contract with Fokker Indústria Aeronáutica S/A, which was represented by one of the the company's Brazilian shareholders, the businessman Vasco Pezzi. This raised the temperature of criticism considerably, but not yet to boiling point.

One of Montenegro's duties as Director of Procurement was the maintenance and updating of the country's fleet of aircraft, a question of such importance that he could not push it into the background. His aim of setting up a Brazilian aviation industry would clearly have to be dealt with in the longer term. The Fokker factory had not yet begun production and Professor Focke's convertiplane was so complex it had not even left the drawing board. Although the idea would go against the basic principles of Professor Smith's historic lecture at the Ministry of Education, it was necessary to purchase foreign equipment to re-equip the FAB and provide it with more modern aircraft compatible with the advances in aviation during the previous ten years. At the height of the Cold War, a period characterised by the global polarisation between the United States and the Soviet Union, the Air Force High Command decided it was preferable that American aircraft should be bought. Nevertheless, as a reprisal to the fact that President Getúlio Vargas had not sent Brazilian soldiers to the fratricidal war that had been raging between North and South Korea since 1950, in which both the USA and the USSR were directly involved, the Washington government vetoed the deal. There was no alternative but to look for another supplier and the choice fell upon Great Britain, which was producing the Gloster Meteor, the first jet-powered British aircraft, which was capable of flying at an incredible 952.5kmph, four times the speed of a rifle bullet. For reasons of economy – and to calm those who said that the Government never tired of throwing huge sums of money out of the windows of the Air Ministry – Getúlio personally suggested to Minister Nero Moura that instead of offering the British cash, they should suggest exchanging Brazilian agricultural produce for the aircraft. When the offer was made to exchange aircraft for sacks of grain, the English began to haggle. They did agree to an exchange, but instead of agricultural products they wanted hardwood. "Wood is the same as dollars," Getúlio told Nero Moura, shaking his head. "But if they're interested, I've got more than enough cotton."

Indeed, there was a stock of 7,000,000 tons of cotton packed into the Bank of Brazil warehouses. As the product was in high demand on the international market, the British accepted the deal: they wanted 14,000 tons of cotton – worth 4,1 million pounds sterling – in exchange for 70 Gloster Meteor jets. However, if it was easy to convince the British to agree to this form of barter, this would not be the case when the time came to persuade Brazilian public opinion of the suitability of the transaction. In Parliament the

Conservative UDN deputies, gathering around the so-called 'musical band' – a nickname acquired on account of their noisy and orchestrated speeches in plenary sessions of the chamber – felt the operation to be a moral and financial fiasco, a real assault on the country's honour and finances. From a grandstand seat, one of the conductors of the UDN's fanfare, Deputy Aliomar Baleeiro from Bahia flourished a copy of the British magazine *The Economist* which carried news of the deal between Brazil and Great Britain. Baleeiro accuse the government of being about to hand over valuable Brazilian cotton at the bottom of the market at prices far below its real value. Moreover, blustered the deputy, those jets, contraptions the Air Ministry was calling the eighth wonder of the world, were not even the unanimous choice of aviation specialists. The professional authority of *Brigadeiro* Eduardo Gomes, one of those who will still not convinced about the viability of jet engines, was invoked as final proof that the country might be falling victim to a very expensive swindle. The negative effects of all this began to cause doubts within the Government itself. Air Minister Nero Moura, accompanied by Finance Minister Horácio Lafer, took the Gloster contract to be examined by President Getúlio Vargas. Getúlio read it and washed his hands of the matter: "This is a matter for you: make your decision," said the President, ending the meeting. Outside the room Horácio Lafer and Nero Moura looked at each other.

"Now what, Nero?" asked Lafer.

"Now we've got to make a decision. If anything goes wrong, if the deal goes bad and the press starts shouting, we take responsibility and the President fires us. If everything goes well, we say that we acted on the President's orders. As ministers we have a duty to protect him."

That same day, Nero Moura called Casimiro Montenegro to his office and passed the job to him: to go to Britain immediately and bring back the Gloster Meteors, the first jet aircraft Brazil had possessed in its history. A few days before leaving, *Coronel* Montenegro met the still intransigent *Brigadeiro* Eduardo Gomes in a corridor; in the latter's view the Air Ministry was committing a huge folly. "Eduardo was not keeping up with developments. He did not have vision," Montenegro would write later, when recounting the episode in the spiral-bound notebook with lined pages in which he scribbled the outline of his memoirs. On the same page of notes he recorded part of the brief conversation he had with the *brigadeiro* on that occasion: "Montenegro, I'm against you buying the Glosters. I don't like jets".

"Forgive me, Eduardo. You don't have to like them, but the other FAB officers will love them."

At midnight on 31stAugust 1953 Montenegro left for London to carry out the unique mission of exchanging jet aircraft for tons of cotton. In contrast to other overseas trips he had made when he was only accompanied by fellow-officers, on this occasion he took with him a far more agreeable companion: his niece Antonietta, the daughter of his elder brother Júlio Montenegro. Although Casimiro Montenegro was a 49 year-old bachelor and Antonietta, who was also unmarried, was a young woman of 29 – and in spite of ther many instances of consanguineous relationships within the family – no one would dare to cast any doubt on the *Coronel*'s intentions when he invited his niece on a trip to Europe. Everyone knew that London was celebrating, still redolent of the sweet bouquet of the champagne that had been drunk to celebrate the coronation of Queen Elizabeth II three months previously. The streets were still decorated with flowers and lights but not even news of the air of romance surrounding the British capital was enough for the family to imagine the incredible news that Montenegro and Antonietta would bring back with them.

Chapter 11 - The beautiful Antonietta catches Uncle Mimiro – his bachelor life ends at the age of 50

She was a beautiful woman in the dark brown eyes. Her short hair showed off her long neck and her every movement had an artless elegance. Casimiro Montenegro had held her on his lap when he was a cadet and she a plump little baby, the middle daughter of his brother Júlio. As a girl she had written plays that were presented at family parties, evoking applause and smiles from her relatives, among whom there was always Uncle Mimiro an airman in a beautiful grey uniform. Maria Antonietta – spelt like that, with double 't' - had been born in Salvador, Bahia where her father had been working as an Customs officer and where he had met her mother, Alice Spínola, a Bahian who looked more like a Swiss. She had grown up in a sunny house half a block from the beach on the Rua Cira in Santos, where her father had been transferred. She had often seen Uncle Mimiro landing his Savoia-Marchetti seaplane nearby, right on the sand, an unforgettable treat for the children and for the girls in Santos who never tired of waving their white handkerchiefs at the smiling pilot.

Antonietta herself turned into a charming girl who played the piano with skill having studied with Dona Dadinha, the neighbour who was the daughter of the lawyer, journalist, politician and writer Vicente de Carvalho. In spite of Júlio Montenegro's conservative ideas in bringing up his two daughters, in his household there was always a great intimacy

with books and culture. One of Antonietta's friends from this time, the future writer Anna Maria Martins, said that the first time she heard of the modernist Mário de Andrade, was right there in the family library of 'Mr Júlio'. But Antonietta, who could always be seen with a novel by Marcel Proust under her arm also loved riding her bicycle and swimming in the sea. She was outgoing and radiated friendliness, and everyone said that even when she was wearing the traditional uniform of the Stella Maris School, the institution run by French nuns where she studied, she embodied sophistication. She had inherited this quality from her mother, Dona Alice, a woman of refined habits who always wore beautiful clothes and never had a hair out of place. Maria Antonietta was demanding and had had few boyfriends. She was still unmarried at the age of 29 because of the complete lack of competence on the part of the band of boys who flocked around her, none of whom had managed to breach the regulation distance she imposed between them and her, during weekends at the Santos Tennis Club or at the young people's parties at the Parque Balneário Hotel.

Her parents would not settle for less: they kept a close eye on their daughter and had not even allowed her to study ballet at the São Paulo Municipal Theatre as she had wanted because they did not want her to become a ballerina, and mainly because they did not want her to travel alone. But when she was 20, Antonietta finally managed to get her family's permission to take a course in interior decoration at the São Paulo Museum of Art (MASP), a time she spent in the house of her friend Heloísa Maria do Amaral, the cousin of Anna Maria Martins and niece of the painter Tarsila do Amaral. She used her time in São Paulo to go to the Brazilian Comedy Theatre (Teatro Brasileiro de Comédia - TBC) where she saw stars like Cacilda Becker and Tônia Carrero, and got to know some of the so-called 'golden years' of São Paulo nightlife, for example the famous Oasis nightclub and the no less famous Nick Bar that was immortalised in a romantic summer lyric by the composer Garoto and sung by the velvet voice of Dick Farney. But in São Paulo too, however much they tried, the boys could not attract the attention of the girl from Santos with refined manners and the face of an angel who took tea at the end of every afternoon with Uncle João Montenegro in the Vienense cake shop or the Jaraguá bookshop, a well-known meeting point for intellectuals and artists owned by the founder of the TBC,

Alfredo Mesquita. A keen fan of French cinema, Antonietta was finally able to choose for herself the films she wanted to see. In Santos she was only allowed to watch films that had passed the censorship of her parents, who personally made sure they would be no scene of impropriety presented to the immaculate gaze of their daughter by watching the films the day before. When, for example, *Gone with the Wind* appeared at the Roxy, the first cinema to install air-conditioning in Santos, she was not allowed to see the classic starring Clark Gable and Vivien Leigh because Mr Júlio felt that the rebellious Scarlett O'Hara set a terrible example. In the same way, her mother strictly vetted which pages her daughter could read of the English novelist Daphne du Maurier's bestseller *Rebecca*, although she was allowed to see the adaptation of the book filmed by Alfred Hitchcock.

Thus, Antonietta eagerly looked forward to her trips to São Paulo and when Uncle Mimiro invited her to go to Europe with him she could hardly believe that she was finally about to make her first trip abroad. Montenegro had explained to his brother Júlio that the Air Ministry was allowing him to take one companion with him. He had first of all thought of inviting another niece, Maria Neisse, Yoyô Montenegro's daughter, but she was working and could not take more than a month's holiday from her job. So, if his brother agreed and if Maria Antonietta wanted to, she could go with him. Júlio saw no problem in allowing his daughter to travel since she would be in the care of an uncle who in turn would be with two other Air Force officers, *Coronel* João Adil de Oliveira and *Coronel* Oswaldo Pamplona, both of whom were married and would be accompanied by their respective wives. When she was already on the flight to Europe Antoniatta wondered if the trip was a good idea because the other five people were all much older than she, which made her feel out of place in the group. However, at the first stop, Orly airport in Paris, a sister-in-law of *Coronel* Pamplona who was the same age as her, joined a group and kept her company. While Montenegro and his two colleagues carried out their official duties in the French capital, accompanied by the respective wives, the two girls took the opportunity to visit shops and art galleries and go to ballets and fashion parades.

"As I was educated in a French school where the nuns and said we had two homelands - France and Brazil - I loved Paris; we walked all

over the city and I was only sorry that I couldn't visit Marcel Proust's house," Antonietta recalled years later. From Paris they all went to Holland for a visit to the Fokker workshops before they finally arrived in England, were Montenegro would do his business with the makers of the Gloster jets. Immediately on arriving in London Antonietta, who had begun to smoke without her parents' knowledge, bought a long cigarette holder and the Dunhill lighter that had long been the object of her desire. At the reception given to the Brazilian officers at the Embassy in London, she appeared with her cigarette holder and long black dress like a second Audrey Hepburn, who had just starred in one of that year's greatest successes, *Roman Holiday*, which won her the Oscar for best actress. At the party everybody asked who the beautiful young woman was. More than once Maria Antonietta heard herself described as "a real ambassadress". These comments seem to have made Montenegro feel like Gregory Peck. "I think it was at that party that Casimiro first began to pay attention to me and see me as a woman," Antonietta would recall later.

During the journey *Brigadeiro* Montenegro left the group and went to the United States by himself to make contacts with the office of the Air Ministry's purchasing commission. So Antonietta returned to Brazil without her uncle. "I was sad when he left," Antonietta confessed later. However, if something more than just a flirtation happened between the embassy reception in London and the return of both of them to Brazil, that is a secret which they were too discreet to reveal to anyone. It is impossible to know whether their love affair began then or a little later, but in fact her cousin Sônia, who lived in Fortaleza and was spending her holidays in Rio de Janeiro, was the first to notice that a certain romantic atmosphere was developing between Maria Antonietta and her Uncle Mimiro. Before returning home to Santos, Antonietta had decided to spend a few days in Rio at the house of her Aunt Rachel, nicknamed Nenê, Montenegro's sister. One Sunday morning, while walking in Copacabana, she and Sônia were in an ice cream shop at Posto 2, near to the famous Lido restaurant, when they saw Montenegro passing in his huge dark green convertible Buick with the top down, surrounded by beautiful, suntanned Rio girls. Antonietta left her ice cream and to Sônia's alarm began to cry. Antonietta shed copious tears while her ice cream melted and her cousin understood what was happening.

On the way back to Aunt Nenê's house, Antonietta began to speak and asked Sônia's help to arrange a little revenge on Montenegro, who was due to have lunch there. When he arrived, Antonietta did not appear at the lunch table and remained locked in her room without answering the persistent calls she had arranged for her cousin to make. "It's no good Uncle Mimiro, before she locked herself in there she told me that she was very angry but did not want to tell me why."

Montenegro sat down at the table, told his sister Nenê then he was not very hungry, ate little and went away in a very sombre mood. Later, he called Sônia and asked if Antonietta had come out of her room yet. Sônia lied and said no, her cousin was still there and was not talking to anyone. "Then I'd better go there and break down the door," said Montenegro, in an irritated voice. "Perhaps something unfortunate has happened."

Sônia felt things are gone far enough and told him the truth: Antonietta had arranged the whole scene because she thought the Buick had turned into a real harem on wheels. "Call the little madam to the phone!" demanded Montenegro. Antonietta put the black Bakelite phone to her ear, replied to his explanations in monosyllables and hung up. After replacing the telephone on its hook she looked at Sônia with the air of someone who has won a victory and said that Montenegro would be visiting that evening to pick up both of them in the Buick and take them to the cinema, but again she arranged to make things difficult, saying she had a headache and would turn down the invitation. At the appointed time, before Antonietta could make her feeble excuse, Sônia anticipated her and told her uncle that it was she who was indisposed with a migraine and suggested that he should take Antonietta to the film alone. That night, when they returned from the cinema, Casimiro Montenegro told his sister Nenê that he and Antonietta were courting. In contrast to what might have been expected in other families, but not among the endogamous Montenegros, his sister found nothing strange in the situation. While Montenegro was speaking to Nenê Antonietta was trying to call her parents' house in Santos. In those days, with the usual breakdowns and difficulties in getting a line, making an intercity call was a major feat. So it was that Dona Alice heard her daughter's voice through a fog of humming and whistling, shouting to be heard at the other end, telling her that Montenegro would go to Santos in the next few days. "Mummy, tell Daddy that Uncle Mimiro, I mean Casimiro, is going to ask if he can marry me."

Above: returning from his journey, Montenegro (in dark suit) goes to Santos to ask his brother Júlio (with white hair) for the hand of his niece Antonietta (centre, right) in marriage.

(Above) The engaged couple Montenegro and Antonietta, with close friends and her parents: now, as well as being Montenegro's elder brother, Júlio was also his father-in-law. Alongside, Antonietta and her sister Helena.

Dona Alice, who had never properly understood the apparent mania for consanguineous marriages in her husband's family, almost fainted. Dr Júlio, however, was delighted at the news that he would be his brother's father-in-law and his daughter's brother-in-law. Moreover, another of his brothers, the oldest of them, Carlos Augusto Montenegro, had married a cousin, the daughter of his father's brother. And one of the younger brothers, Eduardo, would also marry a niece, becoming the son-in-law of the second-oldest brother, José Casimiro (Yoyô) Montenegro. What was most difficult to believe in that tangled growth of lianas that the Montenegro family tree had become, was that Mimiro, who was almost 50, was finally going to give up his life as a confirmed bachelor. In Fortaleza, his brother Alfredo, the same one who had bought him his ticket on the Lloyd ship to Rio de Janeiro 20 years earlier, was puzzled when he received a letter from Casimiro asking for a favour: to find and send him a copy of his birth certificate in Ceará. "Why should he need his birth certificate, at his age?" Alfredo asked his wife Emília.

"Well, it can only be to get married," she commented, reminding her husband that the Catholic Church required the document to authorise a religious wedding ceremony.

"Mimiro, married? Well, that's a good one." he replied dismissively. But when Alfredo finally learned that the future bride would be Antonietta, he felt the idea was beginning to make sense. "He's going to marry a niece? Ah, then it could be true," he said.

Later, Cousin Sônia would smile as she remembered that one of Antonietta's biggest problems at first was to stop calling Montenegro uncle: "Gosh Sônia, what am I going to call him now? 'Uncle Mimiro' is no good. 'Mimiro' is almost the same thing. I'm going to have to get used to calling him 'Casimiro'. It is odd, isn't it?"

When Montenegro noticed this he decided to make fun of his fiancée's embarrassment. When he felt that Antonietta wanted to approach him he deliberately remained a little distant and pretended he was not aware of it, just in order to make her say his name. "Sônia, what can I do about this?" Antonietta demanded desperately. The courtship that had begun in the early days of October was meteoric and the wedding was set for February of the following year. After the romance had become official Montenegro would spend his weekends from then on taking Antonietta to his country house (which he had

exchanged for a Cadillac convertible in 1946) at the foot of a high mountain in the verdant Boa Esperança Valley in the Itaipava district of Petrópolis, about 60km from Rio de Janeiro. In spite of having spent more than a month with Antonietta in Europe, Montenegro still did not allow himself to travel alone with her before they were properly married and so took Nenê's sister with them to look after her niece. Antonietta knew Itaipava well because when she was younger she had walked on the lawns of her uncle's house and on one occasion one of her cousins, Maria José, enchanted by the landscape, had sighed: "Have you ever thought, Antonietta, what it would be like if this were ours?" Years later, the same Maria José would remember the scene with a smile: "And didn't that darned Antonietta end up being the lady of Uncle Mimiro's house after all?"

About 20 days after returning from the trip to Europe with Antonietta, *Coronel* Montenegro was promoted to *brigadeiro-do-ar*, joining the select group of general officers of the Air Force. So he could proudly wear on the shoulders of the dress uniform in which he went to his civil marriage the two stars he had the right to after 23rd October 1953. Four months after his promotion and less than five months between courtship and engagement, Montenegro and Antonietta were kneeling at the altar of the Mayrink Chapel, a romantic little colonial church decorated with panels by Portinari, amid the greenery of the Tijuca Forest. Antonietta had chosen the place because of its charm and because she had chosen to have a simple ceremony with no great show but with great good taste, as was her style. Montenegro had immediately approved of the idea because he too wanted a discreet ceremony with only a few guests because he was not really fond of big occasions. The only colleague he had invited was Minister Nero Moura. However, years later when she remembered her cousin's wedding on 25th February 1954, Sônia Montenegro still preferred to believe that there were other motives behind the choice of that isolated little chapel. "It was to avoid the crowd of women who were always after Uncle Mimiro. I think Maria Antonietta was afraid they would cause a scandal at the door of the church."

When he presented the marriage certificate to the Administrative Division of the Department of Procurement to register his new civil status, the officers' record book stated: "Married to Maria Antonietta Spínola

Montenegro under the system of shared property, the female party signing herself Maria Antonietta Spínola Montenegro" – as they belonged to the same family she did not have to changed her surname.

They went to live in the same place where Montenegro had lived since 1941, on the third four of No.118, Rua Copacabana, which he rented for 555 *mil-reis* from the family of Tobias Rego Monteiro, a historian, banker and ex-Senator of the Republic. The decoration of the little apartment with two bedrooms, living room and kitchen, which until then had been bachelor's quarters, underwent a radical overhaul at the hands of Antonietta. One of her first duties was to carry out the general spring clean of all the junk Montenegro had collected since his days in the Airmail Service, which also included a disorganised pile of indian artefacts he had collected on his trips with *Brigadeiro* Aboim. There is a story in the family that Antonietta also tried to hide the huge collection of photographs of indian men - and women, naked obviously - the Montenegro had spread around the house. One day, during this redecoration project a woman friend was visiting the house and asked to use the bathroom, where she saw a pile of bows, arrows, and drums, rattles and hundreds of photographs and letters from women, all thrown in the bath ready to be put directly into the rubbish bins. It is not known exactly how Montenegro managed it, but he saved from the general clearout some records of the trips he had made abroad, in particular his souvenirs of the unforgettable Latin Quarter and his nights out in Buenos Aires.

His actual honeymoon consisted of spending a weekend in the house at Itaipava. A month after his marriage, Montenegro would have to accompany Minister Nero Moura on a trip to the Northeast to visit air bases in Recife, Natal and Fortaleza. He took the opportunity to take his wife with him and added to the official trip the 30 days of leave he had coming to him that year. The idea was to spend some weeks with Antonietta at the house of relatives in Ceará and meet the family to taste again the wonderful fish dishes with prawn sauce and lie in the hammock hanging on the veranda of the house where he had been born. But *Brigadeiro* Montenegro's official log would show that these plans were rather rudely interrupted: "He only had 25 days of leave from his duties prior to 1953 because he had returned to his work at the Directorate of Procurement on 30th March 1954". What a formal tone of that note

did not reveal was the reasons why the honeymoon trip of Montenegro and Antonietta was cut short: the country was in the grip of a serious political crisis, especially in Rio de Janeiro. Nero Moura had ordered all his men to be ready from action at their respective posts. No one could have dreamed how the story would end.

Chapter 12 - Montenegro signs the '*Brigadeiros*' Manifesto opposing Vargas - the end of '*tenentismo*'

When he returned from his honeymoon trip Montenegro found Brazil in flames. The level of radicalisation of the war of opposition against the government was such that he would soon be forced to choose between two paths. The first was to stay with Getúlio and Nero Moura, who had until then guaranteed the material resources and freedom of action to the CTA/ITA. The second option - to follow the majority of his military comrades and join those who wanted to overthrow Vargas - contained one ingredient that could be fatal to his plans: the unrivalled leader of the opposition was also the best-known opponent of Montenegro's project, *Brigadeiro* Eduardo Gomes. At the beginning of the year the Labour Minister, João Goulart, announced a 100% increase in the minimum wage that would raise the monthly earnings of a workman in Rio, for example, to 1,500 *reais* in 2006 terms. The proposal would have been received without protest had it not been the fact that this was more than the monthly earnings of a second-lieutenant in the Armed Forces. The comparison fomented even more the discontent that already existed in the barracks. At the beginning of February the War Minister, General Ciro do Espírito Santo Cardoso, received a document that would be known as the 'Colonels' Manifesto'. In it, 81 colonels and lieutenant-colonels of the Army protested against the lack of resources going to the Armed Forces and rejected the idea that a workman with no qualifications should earn more than an Army officer. Among the signatories were Colonels Amaury Kruel, Jurandir Mamede and Sizeno Sarmento and the Lieutenants-Colonel Golbery do Couto e Silva, Sílvio Frota

Mass for the soul of Major Vaz: in the middle of the war against Getúlio the priest-like figure of Eduardo Gomes stood out.

and Ednardo d'Ávilla Mello. Although the press had already revealed parts of the document and the names of some of its signatories, the War Ministry withheld the document until 18th February, when it was finally taken to Getúlio, thus warning him of the seriousness of the situation. On the 19th the President dismissed General Espírito Santo and appointed in his place General Zenóbio da Costa, and three days later repeated the dose, dismissing Goulart from the Labour Ministry. This rapid and unexpected reaction postponed the crisis for a while.

Those who imagined that such concessions to the military indicated that Getúlio was some kind of fireman would be shocked during the following months by the fire-raiser who spoke to workers on the 1st May in Petrópolis. After announcing that he would institute an increase in the minimum wage - the same 100% promised by Jango - he covered his ex-Labour Minister in praise and spoke in a more radical tone, ending with a stirring point of order: "Today you are with the Government. Tomorrow you will be the Government."

From the point on, crises sprang out of the ground like mushrooms. The *Tribuna da Imprensa*, the obscure newspaper that Montenegro had helped to found, seemed ready to carry out threats promised to its readers during the presidential campaign: " [If Vargas is] in power we should turn to revolution to stop him from governing". In his editorials Carlos Lacerda referred to the President of the Republic as "the patriarch of theft" and the "general manager of corruption in Brazil". Fearing physical reprisals against his provocations, Lacerda took to going around permanently surrounded by a small personal guard made up of young officers given leave from the Directorate of Air Routes by Eduardo Gomes and who took turns in protecting him. In the early hours of 5th August Lacerda was returning to his house on the Rua Toneleros in Copacabana when a series of shots was aimed at him. He himself survived with a bullet wound in the foot but the Air Force officer who was with him, 32-year-old *Major* Rubens Florentino Vaz, died on the spot with two shots to the heart. When he arrived at the Miguel Couto Hospital, carried by Air Force police officers, Lacerda found the crowd of journalists and politicians surrounding the priest-like figure of *Brigadeiro* Eduardo Gomes, the commander of the unit in which *Major* Vaz served. Less than 24 hours after the shooting a meeting called by the Air Force Club brought together 600 officers from the three branches of the Armed Forces who demanded the immediate investigation of the crime and punishment of those responsible.

Within a few days the links between the Catete Palace and the attack had begun to appear. From his redoubt at the *Tribuna* Lacerda fired off increasingly violent broadsides that Getúlio. After calling for the President's resignation and accusing him of ordering the crime he began to call openly for a military coup to overthrow Vargas. As the revolver used to kill *Major* Vaz was of a type used only by the Armed Forces, the Air Force decided it was a case of a military crime. Pressurised on one side by his military colleagues and on the other by his loyalty to Getúlio, Minister Nero Moura had no alternative but to authorise a Military Police Inquiry to investigate the crime, transferring control of the investigation from the police to the Air Force. After giving the order the Minister resigned, giving way to *Brigadeiro* Epaminondas Gomes dos Santos. From then on all investigation and questioning took place at the Galeão Air Base, which had now been re-christened the 'Republic of Galeão'.

Bad news continued to arrive at the Catete Palace. On the morning of the 17th in the forests of the Tinguá region of the state of Rio, a patrol of 200 men and officers of the Air Force commanded by *Coronel* Délio Jardim de Matos and the filmmaker and civilian pilot Carlos Niemeyer family managed to capture the missing link between the murder and the Catete: Climério Euribes de Almeida, a member of Getúlio's personal guard who had hired the gunman Alcino do Nascimento to kill Lacerda. At the Galeão base Climério confessed that he had been hired by Gregório Fortunato, the 'Black Angel' who commanded the President's personal guard.

"The crime was instigated by the Catete," Carlos Lacerda stated. "And now it only remains to get Getúlio out of the Catete". The President was concerned and asked his aide-de-camp *major-aviador* Hernani Fittipaldi to summon Gregório to his office and, with a copy of the *Tribuna* in his hands, briefly spoke to him in front of the officer: "Gregório, did you have anything to do with this?"

"Have you lost confidence in me, Mr President?"

"Confidence is something else. You can go"

Taken to the Galeão base under arrest, Gregório was subjected to various torture sessions and finally confessed everything, accepting complete responsibility for the crime. The pressures is on Getúlio to resign became unbearable. On the morning of 22nd August Eduardo Gomes called a meeting of *brigadeiros* at the Air Force Club and read to them the complete statements of those indicated in the crime - all of them directly or indirectly connected to Gregório's men. The meeting lasted all day and ended at five

o'clock in the afternoon with the approval of a manifesto demanding the President's resignation - as the Navy and the Army had already done. Having been promoted to *brigadeiro* 10 months previously, Montenegro was invited to the meeting and knew that he did not have much choice: he either remained on the side of the Government or joined his comrades-in-arms. Indeed within himself he did not agree with Lacerda's campaign against Getúlio. The journalist's radical and openly revolutionary behaviour during the crisis had given Montenegro a very negative impression of him. He liked even less the closeness of the Air Force to Lacerda, but it could not be denied that Getúlio had made the fatal mistake in giving to an unqualified person like Gregório Fortunato the power the 'Black Angel' enjoyed in the Catete Palace. However, it was his almost 30 years of military life that spoke loudest. The document was prepared for signing by Eduardo Gomes and would also be signed by 29 other *brigadeiros* gathered there, among whom were his friends Ivan Carpenter, Henrique Dyott Fontenelle, Raimundo Aboim and Márcio de Souza e Mello. In the version that would be handed to the President the names of the signatories were organised according to rank and seniority, which meant that Montenegro's name only appeared at the end of the list.

When he learned of the *Brigadeiros*' Manifesto, the Minister of Justice Tancredo Neves - a man famous for his abilities as a conciliator - also took a radical stand and suggested the arrest of all the signatories and sending a message to Congress asking it to decree a state of siege. Before it was even sent to Getúlio, Tancredo's suggestion was vetoed by the three military ministers, General Zenóbio da Costa, Admiral Renato Guilhobel and *Brigadeiro* Epaminondas. The *brigadeiros*' document was delivered to the President by Marshal Mascarenhas de Morais, Chief of Staff of the Armed Forces. Although he maintained his usual calm exterior, Getúlio reacted severely: "I cannot agree to this, Marshal. They want to drag me out of here as if I were a criminal. I'm too old to be discredited like this and I've no reason to be afraid of death. I shall only leave here when I'm dead."

In a desperate gesture some Army officers still faithful to the President asked permission to arrest Eduardo Gomes, but time had run out. As Brazil was waking up on the morning of 24th August, Getúlio killed himself with a shot to the heart. Instantly, everything changed. Radio stations only interrupted their broadcasts of funeral marches to give brief news flashes on events or to

read and re-read dozens of times the testament left by Vargas the last paragraph of which increased the drama of the moment even more:

> *To those who think they have defeated me I reply with my victory. I was a slave of the people and now I have freed myself for eternity. But this people whose slave I was will no longer be the slave of anyone. My sacrifice will remain forever in its soul and my blood will be the price of its rescue. I have fought against the looting of Brazil. I have fought against the looting of its people. I have faced the enemy head on. Hatred, insults and slander have not discouraged me. And I have given you my life. Now I offer you my death. I fear nothing. Calmly I take the first step on the road to eternity and leave life to enter History.*

The men who had been asking for his head and the night before been applauded as heroes in the streets now had to hide to escape the fury of the people. On being informed of Getúlio's suicide, Lacerda was taken to the Galeão Air Base and at the end of the afternoon was taken from there in a helicopter by a group of Air Force officers to be installed in a safe place on the Ilha do Governador. The leader of the UDN, Afonso Arinos, had to ask the police to protect his house because he had received threatening telephone calls. In the centre of the city the police fired on a group trying to set fire to the buildings of the United States Embassy and the Esso Oil Company. In the Cinelândia district, where the PTB headquarters was located, a great crowd listened to the reading of the letter over loudspeakers. Immediately, after shouting "Viva Vargas", they cried "Down with the Air Force", "Down with the Americans", "Death to the *Brigadeiro*" and "Death to Lacerda". The newspapers that had been distributed in the morning with anti-Government headlines were taken from the newsstands and burnt. The *Diários Associados*, the *Tribuna* and O *Globo*, the papers that were most closely identified with the anti-Vargas campaign, and there offices invaded by crowd of demonstrators who wrecked their presses and set fire to rolls of newsprint.

There was not even time to speculate about the direction the new government, headed by Café Filho, should take. Getúlio's body had not even arrived at São Borja, where would be buried, yet the Catete Palace was already operating what Montenegro would call "Café's little Government". So that they should be no doubts concerning the political direction to be followed, the new President announced the name within his team that was most anxiously awaited, that of the Minister for Air: the choice was the very man, the undisputed military leader of the campaign that had

put the Government on the ropes and led the President to suicide: *Brigadeiro* Eduardo Gomes. Gomes' appointment fell like a bomb on the CTA/ITA, with more than enough reason. The 30 years of confrontations, irritations and breakdowns of communication that had built up between Eduardo and Montenegro - from their first disagreements about the relevance of the Airmail Service to the disagreement concerning the appointment of Nero Moura to the Ministry and their differences concerning the purchase of jet aircraft – were resolved in a single week and with the stroke of a pen. On 1st September, by means of a curt administrative order, Montenegro was relieved of his post as Head of the Directorate of Procurement and ordered to return to the Directorship of the CTA. What might at first sight have seemed to be a return to his proper place was soon shown to be an act of revenge. The experience of the last three and a half years had shown that the post of Director of Procurement had become vital for CTA/ITA projects to go forward without problems. For proof of this, one only had to look at the agreement signed the previous year with Fokker to build the first jets in Brazil, which would bring the relevant transfer of technology to Brazilian engineers, because that was when Minister Eduardo Gomes made one of his first interventions in the area.

A month after the government had taken power, *Brigadeiro* Montenegro received a confidential memorandum from *Major-Aviador* Luciano Guimarães de Souza Leão, who represented the Air Ministry with Fokker in Brazil. The document, dated 23rd September, said that a verbal order had come from the office of the new Minister ordering the suspension of all payments to Fokker from that date. In his memorandum the astonished *Major* Souza Leão asked his immediate superior, in this case *Brigadeiro* Montenegro, for instructions about what to do because the latter, although he had been dismissed, was still temporarily responsible for the functions of the Directorate.

"Blocking the payments without any legal or contractual basis can cause incalculable problems because it is a unilateral measure that leaves the Government unprotected and liable to be held responsible," the *Major* suggested. Montenegro immediately sent a memorandum to Eduardo Gomes' office in which he noted his surprise at the order. Using formal language and being careful not to breach the code of hierarchy, he asked the Minister for instructions on "how to proceed with reference to the oral order from yourself". The reply informed him that the decision to halt payments to the Dutch company had been taken as a result of "the results of the technical and financial analysis of the contracts with Fokker".

In 1930, they were together in the Revolution but now they are together against Getúlio. Among others (seated) Juarez Távora and Eduardo Gomes. (Standing) his cousin Juracy Magalhães and (far right), Casimiro Montenegro.

Montenegro obtained a copy of this analysis and discovered that it consisted of pamphlet with no signature or any other indication of the authorship of its five typewritten pages written in a prejudiced tone that was not typical of the smooth the prose of official documents. "Without investing a cent in the business, a group of wise guys led by Jews with bad reputations have pulled a fast one," stated the text making a reference to the Brazilian shareholders (Jorge Ludolf, Francis Kann, Emerick Kann and Jorge Aqsel). The main argument of that "Brief technical analysis of the Fokker contract" as the document called itself, was that the Ministry was "burning money" to keep Fokker in Brazil, especially with the plan to build the S-14 jets - the same aircraft which had been the object of Eduardo Gomes' doubts from the beginning. The document described the agreement as the "greatest swindle in Brazilian industrial history" and drew attention to a clause that allowed Fokker to import any part that was not being produced in Brazil. Thus, concluded the author of a document, the company would simply disassemble aircraft already built in Holland, bring them to Brazil, reassemble them and sell them to the Government at inflated prices. "The price of every aircraft built here will be about 5 million *cruzeiros*. The same model built in Holland by Fokker and bought ready-made costs Cr$ 2,786,500.00. Thus the Air Force will use up its budget to pay twice the price for a jet aircraft that is already being built overseas, just so that can say it is 'made in Brazil'". Finally, the document concluded: "This is a case of a production line of unknown material from abroad for which we are paying its weight in gold under the pretext of creating a national aircraft industry".

The same day Montenegro was indignant to learn that Minister Eduardo Gomes had also handed the Fokker contracts to *Tenente-Coronel-Aviador* Aldo Weber Vieira da Rosa for him to examine the prickly question and give his opinion. Montenegro had no doubts about the competence or the character of his colleague Vieira da Rosa, but to submit a *brigadeiro-do-ar*'s decisions to the judgment of a *tenente-coronel* was more than a humiliation, it was "a flagrant disrespect of rank and discipline, elements that are so important in the Armed Forces," he noted in his private papers. As a precautionary measure Montenegro submitted the contracts to examination by the German economist Walter Heuer,the head of a respected financial consultancy in Rio de Janeiro and who was closely connected to matters linked to aviation since he had been one of the founders of the Condor Syndicate (a pioneering Brazilian air transport company in the 1920s that was later re-christened Cruzeiro do Sul and many years later taken over by Varig). After three pages of technical explanation Heuer concluded that Fokker was a

respectable company and that the contract with the Air Ministry had been completed with sufficient guarantees for the Government and with no financial irregularities. The document drawn up by *Tenente-Coronel* Vieira da Rosa for the Minister also arrived at the same conclusions. Dealing one by one with all the accusations Eduardo comments had used as a basis for withholding payments, Vieira da Rosa demolished them all. "There is clear evidence of bad faith in the document being examined, which compares chalk to cheese," his report stated. In his view the figures presented by the 'technical analysis' were fallacious because they omitted to point out that the price of about 5 million *cruzeiros* for an S-14 built in Brazil was the gross price, which therefore included profit, administration costs and taxes, while the price of Cr$ 2,786,500.00 for an aircraft of the same type built in Holland was simply the production cost of each machine. When he re-calculated the figures, Vieira da Rosa found that there was still a difference of one million *cruzeiros* between the final cost of two aircraft, one built in Brazil and the other in Holland. However, this money would remain in Brazil in the form of purchases made from Brazilian suppliers because it was also untrue to say that all the parts and components of the aircraft would be imported. As well as the sheets of aluminium, reinforcing rods and steel tubing used in the S-14 that were already being produced in Brazil, the CTA engineers would be able to produce more sophisticated equipment that would gradually be incorporated into the Fokker jets. The document delivered to the Minister concluded that this was precisely the wider meaning of the contract with the Dutch company: to create conditions by means of which Brazil would come to develop not only components to install in foreign aircraft, but also to build its own aircraft. In his first meeting with Minister Eduardo Gomes, Montenegro armed himself with Walter Heuer's carefully argued report, which was more than sufficient to do away with any doubts concerning the transparency of the contracts with Fokker. Montenegro sat down, opens in folders on the table and began to speak: "I'm here Eduardo to explain how the contracts were drawn up…."

He was not even allowed to finish his sentence. The Minister interrupted: "Montenegro you're here to explain to me what we have to do to cancel these contracts." The meeting came to an end, but the Fokker contracts did not. Much against his will, Eduardo Gomes was forced to honour them in the face of an argument raised by Walter Heuer: as they had been registered with the National Audit Office the contracts could not be broken unilaterally because this would imply paying millions of *cruzeiros* to Fokker. However, if it was not possible to finish the company with a single blow, it was possible to slowly

starve it to death. Thus, from the end of 1954 the Air Ministry constantly delayed its payments to Fokker, which as a result was unable to deliver the planes on time. After three years the company asked for a liquidation agreement after having built about 150 training aircraft, none of them jets, in line with Eduardo Gomes' wishes. In fact, their differences over the Fokker case simply revealed publicly the break and that was ending the old friendship between Montenegro and Eduardo. Until a short while previously the two of them could still be seen together in the early evening at the tennis courts of the Botafogo Club, which they both belonged to. When they arrived at the sports centre and found the gates locked, Montenegro and Eduardo provided passers-by with the privilege of seeing a *brigadeiro* and a *marechal-do-ar* in uniform climbing over the fence around the Botafogo courts.

Eduardo Gomes' declaration of opposition to Montenegro's projects came to the surface soon after the Café Filho Government took office. Some of the handwritten notes Montenegro made in his notebook still remain from that time.

> *That was a terrible time. Eduardo did everything to lower the prestige of the CTA. He used to take a plane in Rio and make a surprise visit to the CTA to meet with a group of ITA officer cadets. These officers were led by* Major *Burnier, who did everything to cause problems for the CTA because he did not agree with the ITA system, the presence of civilian students, etc. It was often the case that I, the Director of the CTA, did not even know the Minister was in the Centre meeting these officers in the restaurant. Eduardo would go there to hear the comments of Burnier and his followers.*

The Burnier Montenegro was referring to was *Major-Aviador* João Paulo Moreira Burnier, and his deep-seated opposition to ITA was the result, according to the unanimous testimony of his ex-colleagues and instructors, of having committed the one capital sin in the codes of the institution's 'conscious discipline': copying. This was one of the rare misdeeds in ITA's academic life for which the punishment was resignation from the school, which in fact happened to Burnier. The handwritten record left by Montenegro States in no uncertain terms that Burnier was caught copying and left the ITA for that reason. "The Burnier copying case reflected so badly on his whole year group in the eyes of the instructors and civilian students," he wrote "that afterwards

even Eduardo Gomes no longer appeared at the CTA". Ex-colleagues and ex-instructors of the accused confirm the information given by Montenegro but no one speaks of the matter in front of a tape recorder, as if the ghost of the awful Burnier could still come back to torment them.

Chapter 13 - The poet Schmidt tells of a Brazilian miracle in prose: the *São José Conspiracy*

On his return to São José dos Campos *Brigadeiro* Casimiro Montenegro found the Institute of Aeronautical Technology turned upside down. At the Directorate of Procurement he had enjoyed the prerogative granted him by Minister Nero Moura to appoint whoever he liked to run the Centre. In the previous four years, from 1951 to 1954, the CTA had had five different directors, all of them simply keeping Montenegro's seat warm for him while awaiting his return. But now the latest of these, *Coronel-Aviador* Oswaldo Ballousier, decided to leave firing from the hip. On 10th September 1954, in the address he gave while handing over the post to *Coronel* Dirceu de Paiva Guimarães (who would be acting head of the CTA while Montenegro, although dismissed from the post, would still be responsible for the work of the Directorate of Procurement), Ballousier caused general consternation among those present by the tone of his talk: "With a few exceptions, ITA is made up of people who are only looking out for their own interests," he stated. "The Institute has been led by men who have gone looking for depressing rewards on the office carpets since they lack the ability to obtain them in frank and loyal meetings". Some of those present saw in that allusion to loyalty a veiled reference to Oswaldo Nascimento Leal, the ex-MIT student who had been one of the ITA instructors from the very beginning and had asked to take leave of absence from the Centre some months previously because he was unhappy with Ballousier's leadership. But in the final analysis, Ballousier's

accusations threatened to come back on Montenegro himself because everyone was aware of the fact that he had continued to exercise total control over the CTA from his office at the Directorate of Procurement.

The quarrel between Oswaldo Ballousier and Casimiro Montenegro had been brewing for some time. On taking over as head of the CTA in November of the previous year, Ballousier had first clashed with the Director of ITA Professor André Johannes Meyer when he said that students from the Institute were committing "acts incompatible with discipline" and quoted as an example the consumption of alcohol in their rooms. Meyer defended the students and soon there was an air of mutual animosity between the two men that led Ballousier to write a letter of complaint to Montenegro in which he described the situation at ITA as in "a state of uprising". From the Directorate of Procurement Montenegro tried to calm things down and in July, before the Fokker crisis blew up, he invited Oswaldo Ballousier to be the Air Mininstry's representative with the company, in a clear move to get him away from the CTA. Ballousier refused in a rude letter written in a shaking hand in which he said he still had much to do in the CTA. "In my administrative functions I have not yet issued a single order on my own authority," he wrote, indicating that he had not forgotten he had been put there by Montenegro himself, "but I have simply tried to put right things I have found here," he explained. "I have tried to develop an atmosphere where any family can live without being embarrassed, especially those who have teenage children." Ballousier spent a whole paragraph saying that he admired Montenegro but then said that he could not creep out of the back door as that would mean a loss of self-esteem for him: "I want to carry on my life and my career leaving my daughters a respected name".

Up to that point Ballousier was only bringing into the open internal disagreements. At a certain point in his address, however, turning directly to the students, he fired an ideological broadside when he warned them: "Do not allow yourselves to be influenced by ideas that try to demonstrate the universal nature of science or the internationalisation of the scientist, because these ideas do no more than sovietise the thinking of the free person". To the general amazement of all present and to the particular disgust of the foreign instructors, Balloussier went on, even more doggedly: "Remain firm in the face of these real cyclotrons of demagogies that are trying to change the nature of the patriot by corrupting him and sapping his moral fibre". A witness said the ceremony, the engineer Oswaldo Fadigas, who had a master's degree

from MIT and had been an instructor at ITA since 1952, described much later the uneasiness caused by Balloussier's words: "Professor Luiz Castanhede was President of the Senior Teaching Body and was presiding over the ceremony. When Oswaldo Ballousier began to make that speech which was so critical, it caused embarrassment. Not even Cantanhede, who was quite a calm character, could let it go. He got up and left the room in protest. Most of us instructors followed him and the room emptied."

Balloussier's provocative address provoked an immediate motion of denial from the ITA Senior Teaching Staff, which said that it did not wish to imply that Institute was perfect but that it could not permit the indiscriminate accusation that the school was a nest of personal interests. Much less could the instructors accept the claim that they were encouraging the 'sovietisation' of ITA by considering science to be for the good of all humanity. "Your statement clearly shows a complete ignorance of the spirit that created the CTA," was the response of the text that the instructors sent to Balloussier the next day, with a copy to Montenegro. In contrast to what you seem to believe, today it is only in countries under the rule of communists that it is possible to find a national form of science. And even so, Soviet scientists are already corresponding with those in other nations and appear at scientific conferences in other countries".

It was left to Montenegro to try to calm the minds of his staff when he returned to the CTA. Without enjoying his previous prestige in the Air Ministry (now in the hands of *Brigadeiro* Eduardo Gomes) he was going to have to face much more serious problems than dealing with Balloussier's sniping. It took only a few weeks for Montenegro to realise that ITA was no longer a priority for the Minister. The delay in releasing funds – which were now sent in small quantities – had serious consequences which were detailed in the confidential report written by the Director André Meyer and sent to Montenegro on his return. For example, new instructors could not be hired because of the simple fact that, with building having been halted for lack of funding, there was no accommodation available for anyone other than those already living there. The Director also told him that there were more serious problems: with the sharp drop in the value of teachers' salaries they had only been cases of instructors moving to the private sector and to other universities.

When ITA was being founded Montenegro carried out much administrative juggling to avoid teachers hired by the Institute being included in the lists of employees of the Federal public service. So the solution was to hire them as

personnel providing services included in a so-called 'Grant-3' from the Government and thus immune the Draconian rules of the DASP and the requirements of the National Audit Office. But in the long term the strategy that had seemed to be brilliant began to present problems. Not being included in public service also meant not being included in regular wage increases and all the other benefits acquired by civil servants with the same length of service as an ITA instructor. The differences had reached such a point that CTA office staff were now earning more than assistant instructors and specialist technicians. According to Montenegro's own notes at this time a bilingual secretary with shorthand, for example, was earning a salary of 12,000 *cruzeiros*, which was more than a researcher starting to work at ITA, who was receiving about 9,000, the same wage as a good typist. The engineer Oswaldo Fadigas recalled those difficult times without pleasure: "There was a time when, in order to put petrol in my car, I stopped some way before the filling station, took a can and went to buy just a few litres of fuel, as if I was taking it to help someone who had run out. This was all to avoid the embarrassment of having to ask the assistant to put just a litre in the tank because I had no money for more."

The situation had become so serious that Montenegro even came to re-think a point that had always been a dogma for him: the full-time exclusive contracts for ITA teaching and technical staff. At one point one of his immediate assistants, Pedro Ivo Seixas, a graduate of the Institute itself, was invited to take a part-time job teaching in another engineering college in a town near to São José dos Campos.

"I had children to raise and needed to send money to my mother in Pernambuco, but I was uncomfortable about accepting the invitation because of my original commitment to ITA," he would recall years later, when he revealed it the conversation that occurred when he broached the matter with the Director of the CTA. "*Brigadeiro* Montenegro, I have been asked to teach in another place at a different time from when I'm needed to teach here. The classes are on Wednesday nights and on Saturdays, but I need your permission," said Seixas.

"My answer, unfortunately, is no. You work for us and according to the regulations you can have no other job outside the CTA. I cannot set a precedent." As he was expecting that reply, Seixas stood up and asked permission to leave but when he was on the way out, Montenegro called him back: "Seixas, you know I don't like these little engineering schools they are

opening all over the place. If you leave here tired after a day's work, what kind of class will you give there?"

"You're right, *Brigadeiro*," replied Seixas, with a resigned and hangdog air. But, unexpectedly Montenegro reconsidered: "On the other hand, if you don't go, they'll hire any old body. It's better it should be you because you're serious and you know a great deal. Go on and take the job."

As he was trying to find ways to solve the problem of the shrinking salaries at ITA, Montenegro received another document from Director André Meyer that was more like a coup de grâce. Stamped 'Confidential' again, the 13 typed pages gave a disheartening diagnosis: "Although I cannot admit this publicly, I am convinced the School is threatened with a drop in standards and has already been greatly damaged and will be even more damaged in the near future," stated the text Meyer had signed. "About 60% of the teaching staff in the Structures Department, which has been without a head for some time, want to cancel their contracts. If it is not possible to replace these people we shall have to reduce the number of classes in that Department in the second semester – a loss we shall take years to make good and could greatly damage the school's reputation."

Nonplussed by this situation, Montenegro thought about unleashing a great publicity campaign to support the survival of ITA and the CTA. To do this he invited opinion-formers and journalists from the most widely different areas to visit São José dos Campos and see with their own eyes that ambitious project few Brazilians had heard of and which, as even fewer people knew, was in danger of being strangled at birth. But, discreet as ever, he avoided the limelight. During these visits he stayed away so that reporters should gather their own impressions from the community of students, teachers and technicians in the Centre. One of those who accepted the invitation was the poet and publisher from Rio de Janeiro Augusto Frederico Schmidt, a respected intellectual who had written books that had been highly praised by Brazilian critics and some of them had been translated in other countries. Schmidt was a friend of Casimiro's nephew the businessman Paulo Montenegro who five years previously had acquired a controlling share in a research company, Ibope, that had become a giant in the area of marketing and public opinion. After visiting the campus Schmidt unfolded and brandished the CTA banner in a series of three articles he published in the *Correio da Manhã*. The first, in January 1955, was called "Conspiracy in São José dos Campos" and was lavish in his praise of Casimiro Montenegro calling him, with sophisticated

irony, an "incorrigible conspirator". After recalling the *Brigadeiro*'s time as a revolutionary in 1930 and the heroic period of the Airmail Service, the article said:

> *Brigadeiro Montenegro's conspiratorial technique obeys a principle which is absolutely scandalous especially, here in Brazil: he tries to achieve his aims without drawing attention to himself. He prefers silence to deceit; he does not like to show himself off or appear to put himself forward. He seems to be a cold man because he is reserved but the country should note that we are talking here about a genuine although converted fanatic, an insistent, determined man who is different from most Brazilians. I have never met Brigadeiro Montenegro and I do not know what he looks like – whether he is tall or short, fair or dark. I had vaguely heard of the existence of this man, as I had about many others of his companions-in-arms. What I am writing here about this different kind of citizen is a result of having made the late discovery of what will be recorded in the history of national development as the São José dos Campos Conspiracy.*
>
> *In the absence of Brigadeiro Casimiro Montenegro, his colleagues felt themselves free to commit the greatest indiscretions concerning the chief, the founder, the major conspirator in this movement to challenge mediocrity, backwardness, incompetence, negativity and the lack of understanding on the part of many who tried to prevent this country occupying the position to which its natural conditions entitle it. If Brigadeiro Montenegro were here with me, his discretion, his preference for silence and that kind of shyness or sobriety that everyone notes in him would have inhibited his staff, both military and civilian who, in São José dos Campos, embody and run one of the most extraordinary adventures being carried out in this country. I became aware of who Casimiro Montenegro is because of the enthusiasm he arouses in his colleagues. It is not an easy enthusiasm, one of those sicknesses certain charismatic men cause in their followers and admirers. On the contrary, the Director of the Technical Centre for Aeronautics inspires a feeling of normality, a kind of awareness in those who are helping him in his work. To those closest to him, he is not a god, not one of those leaders who is not open to*

argument; he is not at all like that. What people recognise in the Brigadeiro, mainly those who work with him, is a person who knows how to work seriously, a person who has an honest objective to achieve and who sees things in perspective with a broad vision, a penetrating view of reality, a simplicity of reasoning and that idealism that belongs to the poetic or creative essence of man.

The following two articles by Augusto Frederico Schmidt in the *Correio da Manhã* maintained the same enthusiastic tone, this time calling ITA "the best and most authentic Brazilian University". Just at the moment when Montenegro was trying to convince the 'little Government of Café' and *Brigadeiro* Eduardo Gomes that the CTA was on the brink of insolvency, Schmidt was repeating the mantra that if Brazil took the CTA as a model for education and public administration the country would definitely find a path to development and at the same time moral cleansing. "If the spirit that rules at the Technical Centre for Aeronautics were applied to Brazil we would soon see the stifling of the hysterical cries of the politicians who identify their individual defeats and misfortunes with the fate of the country". The Air Ministry, however, remained indifferent to these arguments, returning always to talk of financial austerity to justify turning off the taps that had previously watered ITA. Schmidt replied that austerity was being confused with obscurantism. "Could there be anything more austere than training men with the attitude and preparation for creative action?" he asked. "Could anything be more austere than going out to find, wherever they may be in the world, first-class instructors so that the highest quality education can be given to young people? This is what I call austerity: no falsehood, no nationalist influence in the choice of personnel, rather the criterion of precise worth."

While Schmidt was pursuing his crusade, the CTA continued to go downhill. The new confidential report to Montenegro by Director André Meyer examined the effects of setting up a second institution within the Technical Centre for Aeronautics , the Institute for Research and Development (Instituto de Pesquisas e Desenvolvimento - IPD) that had been founded in 1954. While ITA was responsible for the teaching and training of professionals in aeronautical engineering the IPD, as its name implied, was intended to concentrate on developing research projects, including those in the private sector, to create the conditions out of which a Brazilian aircraft industry could emerge. However, in André Meyer's view, in that situation of extreme

difficulties the resources necessary to maintain the proper functioning of the IPD were sucking the lifeblood out of ITA. "One of the faults in this great and brave country is the existence of many unfinished projects. Unfortunately the CTA is on the way to becoming one of these. Now I have a better understanding of one thing: a new idea always kills previous ideas," Meyer lamented.

For example it was the IPD that had been given the task of making the convertiplane project work, that hybrid aeroplane/helicopter developed by the German Professor Heinrich Focke's team. The fact that the project still suffered from practical problems because of its complexity only increased the dissatisfaction of the Air Ministry. The attitude of the German technicians under Professor Focke's authority also caused problems with the other members of the CTA. "The Focke group constituted an almost perfect experimental group for a psychiatrist," said Joseph Kovacs, the Hungarian member of the team. Among his colleagues was a certain Mr Brussman, a veteran specialist in mechanical transmission systems who had worked for BMW – and who was receiving one of the higher salaries in the CTA. "Brussman worked alone in a room in front of the drawing board with a sheet of tracing paper held down with drawing pins and an old, yellowed slide rule in his hands. The days, sometimes weeks, he just looked at the white paper on his drawing board and chain-smoking," Kovacs remembered. "The bosses began to think they had not made a good deal in hiring him when one day the dam broke: in a few hours Brussman covered the paper with incomprehensible drawings for the transmission system of the convertiplane". There was also the equally unpredictable pilot the group used for testing parachutes, Mr Eiebegott, who Joseph Kovacs suspected had been hired for the job because he was small and weighed very little: "He was the smallest German I ever saw in my life". One morning, at about three o'clock, Mr Eiebegott's alarm clock began to ring loudly making up those sleeping in nearby rooms. He did not hesitate: he opened the window and threw out the alarm clock, which shattered on the ground. Instead of lightening the atmosphere and providing the subjects for good stories, that kind of behaviour only helped to form the idea that Professor Focke's people were a crowd of German Nazis and madmen, the very caricature of the mad scientist in films. The opponents of the CTA said that the Air Ministry spending public money on people like these.

As the main target of the criticisms of opponents and the legitimate complaints of the teaching staff, Montenegro had to be patient in order to overcome the crisis. There was no doubt that, in the best of cases, the situation

could only improve in Januaryof the following year, 1956, when the Café Filho Government would end its term and Eduardo Gomez would leave the Air Ministry. The information concerning those disputing the post of President had been issued at the end of July, with four names on the list. For the PSD-PTB alliance that had inherited the Getulista legacy, the candidate was the Governor of Minas Gerais, Juscelino Kubitschek, whose candidate for Vice-President was 'Jango' Goulart, Vargas' former Labour Minister. The UDN chose a soldier of great moral stature, General Juarez Távora, a *tenentista* hero who taken part in the revolts of 1922 and 1924, the Prestes Column and the Revolution of 1930, and had also distanced himself from Getúlio; his candidate for Vice-President was Milton Campos, Juscelino Kubitschek's predecessor as Governor of Minas. Also in the race were Adhemar de Barros, an ebullient millionaire who had been *interventor* in São Paulo from 1938 to 1941 (and whom Casimiro Montenegro had taught to fly in 1931, at the Campo de Marte), and for the PRP the former *integralista* leader, Plínio Salgado. The political tension was so great that the elections of 3rd October had to be held under the protection of Federal troops. When the votes were counted it was discovered that Brazilians had chosen the pairing of Juscelino-Jango, who were elected with 3.07 million votes (as against 2.6 million for Juarez, 2.2 million for Adhemar and 714,000 for Plínio Salgado).

Although Juscelino had only obtained 36% of the votes, this did not invalidate or take away the legitimacy of his election, since the Constitution of Brazil at that time gave victory to whoever had the most votes, without the need for an absolute majority. This, however, was not the way the UDN and its military allies, among whom featured the figure of *Brigadeiro* Eduardo Gomes, saw it and they said that the elected representatives should not be allowed to take up their posts. Speaking in the name of this group the journalist Carlos Lacerda, now a Federal Deputy, lit up the Congress chamber with invitations to revolution. The fuse to the crisis was lit in a cemetery. On 1st November, during the funeral of General Canrobert Pereira da Costa, Colonel urandir de Bizarria Mamede made a speech in the name of the Military Club defending the UDN position: the elected representatives should not be allowed to take power. Determined to punish Mamede for breaking the rules of rank and discipline, the War Minister, General Henrique Lott, encountered resistance on the part of President Café Filho. Eduardo Gomes threw even more wood on the fire when he informed General Lott that he too was against punishing Mamede. Some days later Lott realised that for the Air Minister it was not

Montenegro (left) receives Eduardo Gomez (right) on a visit to ITA. The new Air Minister was less impressed by the modern laboratories than by the relaxed attitude of the students “who can’t even make their own beds”.

simply a question of principle: when *Brigadeiro* Luís Neto dos Reis gave an interview to the *Correio da Manhã* in which he defended respect for the Constitution, Eduardo Gomes did not hesitate to hold him under arrest for 10 days – for breaking the rules of military rank and discipline.

On the morning of 11th November *Brigadeiro* Montenegro was in São José dos Campos dealing with incoming bills, bank statements and accounts when he received an order from the Minister's office to travel to São Paulo immediately, in field uniform. Although Antonietta was seven months pregnant with their second son, Marcos (their first child, Fábio, had been born in February 1955), he knew he had to go because he had heard on the radio news about the latest events. Refusing to accept Café Filho's decision not to allow the punishment of Mamede, Lott had resigned from the War Ministry and on that morning was due to hand over responsibility to his successor. In the early hours of the morning, however, he changed his mind and decided to prevent – he now had no doubts – the move against Juscelino taking power that was being plotted by the group consisting of the UDN, Carlos Lacerda and parts of the military led by Eduardo Gomes and Juarez Távora, the UDN candidate who had lost to Juscelino. At the peak of the crisis President Café Filho, who had remained in accommodating and silent agreement with the manoeuvres to start a coup, went into hospital unexpectedly claiming he had a heart problem and handed power to the President of the Chamber of Deputies, Carlos Luz from Minas Gerais. According to what Montenegro had heard on radio bulletins, at one o'clock in the morning of that Friday, with military units in the neighbourhood, Lott decided to act: he returned to his post as War Minister and ordered tanks to surround the Catete Palace, the Telephone Company building and the barracks of military units whose loyalty to the instigators of the coup was suspect. He also ordered troops to surround the offices of the *Tribuna da Imprensa* newspaper, which would appear that date with the headline "They must not take power" and an editorial that left not the slightest doubt as to the intentions of the revolutionaries:

> *It must be made clear, very clear that the President of the Chamber did not take over the leadership of the Government to prepare for the installation of Messrs Juscelino Kubitschek and João Goulart. These men must not take power, they should not take power they will not take power.*

When he learned of Lott's decision to resist, Minister Edward Gomes took a plane and flew to São Paulo under the illusion that Governor Jânio Quadros would hand the state over to the service of the coup. Before leaving he had put the Air Force on alert, decided that all its officers should go to São Paulo to meet him and gave orders for the fighters and bombers stationed at the Campo de Marte and Galeão should take off and head for the Cumbica Air Base in São Paulo State. With the Catete surrounded by *legalista* troops, President Carlos Luz, still hoping for the support of Jânio, boarded the cruiser *Tamandaré* with all his staff and set off for the town of Santos where he hoped to install the seat of government.

Professor Paulo Ernesto Tolle, who was with Montenegro when the latter received his orders to join Eduardo Gomes, remembers his friend's reaction: "Montenegro was an officer who was completely faithful to the principles of his profession, such as discipline and hierarchy. Wearing for once his field uniform, with pistol and canteen on his belt, he called the instructors together and gave a calm explanation of the situation, saying that he really had to go to São Paulo because orders were orders."

As he took his leave of colleagues and friends he said that before going to São Paulo he would pass by the Caçapava Barracks, 20km from São José, to prevent any action against ITA: "I'm going there to remind my friend *Coronel* Zerbini that this is a civilian organisation that contains no military personnel nor weapons and that therefore no one needs to bomb ITA."

Minutes later, in a letter to a fellow-officer, Montenegro confessed that he had joined the attempt to prevent JK from taking power not out of conviction or a sense of discipline but simply out of loyalty to Eduardo Gomes:

> *I had proved my loyalty to all my superiors even when my views differed from theirs. I would draw attention to what happened on 11th November when, in spite of all my differences with Eduardo and out of loyalty, I went to offer him the support of ITA and my own in particular, and insisted that there should be a reaction to the move that had displaced him from the Ministry. I did not act like many others, who felt themselves to have been mistreated by his administration and swelled the ranks of his opponents.*

We should point out that when he refers to the 'move', Montenegro is talking of the attempt by Lott to follow the Constitution to the letter and not

the plan thought up by Eduardo, Lacerda and Carlos Luz to prevent Juscelino and Jango from taking office. This episode, which would become known as the *Novembrada* ended in fiasco for the UDN and its allies. Lott's men made Carlos Luz write a letter of resignation and placed the Senator from Santa Catarina Nereu Ramos, President of the Senate, in the Office of the President of the Republic. On 31st January 1956, in accordance with the Constitution, Juscelino and Jango were installed as President and Vice-President. Democracy had won and with luck ITA would once again breathe unaided as in the times of Dutra and Getúlio.

The Casimiro Montenegro of that time was definitely not a *juscelinista*. Many family members who were close to him at that time, such as the journalist Júlio César Montenegro, his grand-nephew, say that in spite of the huge problems he had had with Eduardo Gomes, a *UDNista* heart beat under his tunic. "The best test to see if Uncle Mimiro had the DNA of the old UDN in his blood," Júlio recalls, "was to have someone praise JK in front of him. To really see things catch fire you only had to let my cousin Paulo, who was fascinated by Juscelino, speak well of him in front of Uncle Mimiro. One would shout, the other would shout louder. Afterwards they would go and have dinner as if nothing had happened, laughing and exchanging remarks."

The whole family knew, however, that opinions on this or that politician revealed at home stayed there and became a family secret. If he really was a *UDNista* and anti-JK, only the family knew about it, so much so that the first name the new President of the Republic thought of to take over the Air Ministry was actually that of Casimiro Montenegro. As the two did not know each other, it is quite likely that Montenegro's name had been suggested by his Platonic admirer Augusto Frederico Schmidt, JK's close friend, counsellor, adviser and ghostwriter. When he received Juscelino's invitation to a meeting a few weeks after the latter had taken office, Montenegro was suspicious of his intentions. According to *Brigadeiro* George de Moraes, who knew of the invitation (or, in this case, the attempted invitation), JK made another attempt, claiming that he wanted to talk to Montenegro about matters concerned with ITA, but he did not fall into the trap: "I am a witness that Montenegro avoided the first meeting because he was afraid the President would invite him to the Minister. He also managed to avoid the second one, he delayed and delayed and ended up not going".

Those drops of *UDNismo* in his DNA probably helped to define Montenegro's behaviour at this time. However, to a very restricted number

of people, among them *Brigadeiro* Moraes, Montenegro revealed the true reason for turning down the invitation that had not even been made. His unusual explanation also cast light on his character: "I could not offend Eduardo Gomes by working with Juscelino, his main political adversary".

Chapter 14 - A weapon of war arrives at ITA in secret - the 16 kb IBM-1629 supercomputer

The visitors who came to the CDA could not understand it. With all those Niemeyer-designed buildings gleaming as new, *Brigadeiro* Casimiro Montenegro insisted on working in a cramped wooden shed that had been put up when building began, as an office for the engineers working on the construction. If Brasilia would have its 'Catetinha', a 'palace' of planks which President Juscelino Kubitschek would use as an office before the new capital was inaugurated, in São José dos Campos this was 'Montenegro's Cateteinho'. The difference was that JK would soon move into the imposing Planalto Palace while Montenegro stayed in his improvised office for several years.

"Montenegro, why are you, a *Brigadeiro* and Director of this whole centre, working in a shack like this?" his officer friends asked when they visited him in São José.

"Yes, well. But have you seen how wonderful my laboratories are?"

Building the CTA had radically changed the landscape of the old German Field. It was still all hard-packed earth but amid the greenery that dominated the landscape it was already possible to see the rounded shape of the Structures Laboratory building, the rectangular classroom blocks, the glass-covered administration complexes and the first residential buildings with their bold lines and grassy gardens. As in Brasilia, addresses and localities were identified by letters and numbers. The 220 square metre houses of the so-called H17 were reserved for instructors and senior administrative staff and for this reason

were the object of general desire. The fact that Montenegro preferred to carry on working in a wooden shed was an antidote to possible unreasonable claims. On one occasion, for example, a *major* went to see him who did not feel he should have to live in a 180 square metre house in H22 while a foreign instructor lived with his family in a larger residence in H17. As the CTA was run with Air Ministry funds the officer did not feel that civilians should have more privileges. Montenegro listened to the complaint and said he would solve the problem immediately: "Let's make an exchange, *Major*: tomorrow I shall tell my wife Antonietta to pack our things and I'll go and live with her and my children in your house in H17. You can come and live in our house."

Faced with an offer as generous as it was disconcerting, the *Major* obviously dropped the question. That kind of solution, involving considerable touches of diplomacy and irreverence would be Montenegro's trademark as head of the CTA. This was the so-called 'education by example' he liked to talk about so much. Instead of adding fuel to the problems that came to his office he calmed troubled waters by disarming those he talked to with unexpected replies. This would soon be noted by Professor Rogério Cezar Cerqueira Leite, who had just returned from Paris after finishing his doctorate in physics to join the teaching staff of ITA, from which he had graduated some years previously. One summer morning, Cerqueira Leite went to Montenegro's shed and told him he would have to cancel the first laser experiment in Brazil, which had been scheduled for the following day in a CTA laboratory. "*Brigadeiro* it's incredible that we should have to interrupt an experiment in its final stages based on highly innovative technology just because two wretched air-conditioning units we asked for haven't arrived," complained Cerqueira Leite after explaining that in order to work properly the equipment needed to be operated in a properly cooled laboratory. After a few seconds of silence, Montenegro called the his office chief, Oscar Spínola: "Spínola, the Professor here is telling me that the air-conditioning units he asked for haven't arrived. So right now I want you to get this unit moved from my office and taken to his laboratory. And if I were you I would do the same with yours. From what he's telling me, this laser business must be kept very cool".

Montenegro and Spínola spent a week sweating profusely but that was the only way for the bureaucratic system to speed up the delivery of the units. "And so the first laser to work in Brazil was set up in the ITA laboratories," the physicist Cerqueira Leite would recall later, when he was emeritus professor at the University of Campinas. This unconditional support Montenegro gave to the CTA scientists and instructors was not always well received by the

military personnel who also worked there. There was a *cause célèbre* that still has the air of legend in São José dos Campos concerning the day a high-ranking officer knocked on Montenegro's door to complain that an American engineer, responsible for maintaining the Wright aircraft engines at the CTA, was earning a far higher salary than a *tenente-brigadeiro*. "Are you aware that a simple mechanic here is earning more than a military officer at the height of his career? How can you explain something so absurd?" the officer asked point-blank with all the authority of his four stars.

"He's not as simple mechanic, he is an engineer who graduated at MIT," answered Montenegro.

"Even so, this turns the hierarchy on its head," the officer insisted.

"You know that throughout my whole career I've given sufficient proof of my respect for the hierarchy, so I'm going to fire the engineer on the spot. Now I would just ask you to send me a *tenente-brigadeiro* who can teach our students how aircraft engines work," replied Montenegro, giving another of his unanswerable arguments.

"That story is true and the only reason I'm not giving the name of the officer is because he still has family living and his children are not to blame for their father's foolishness," says *Brigadeiro* Tércio Pacitti, a former instructor at ITA. Pacitti also ("without giving names, please") recalled another of the many famous disagreements involving civilians and the military at the CTA, one more story to add to the list of those concerning the first years of the Centre that are still told to general laughter year after year in São José dos Campos whenever Casimiro Montenegro's name is mentioned. When recounted by those who lived there at this time, this episode has slight variations concerning who the real protagonists were. The rank changes (sometimes it is a *capitão*, sometimes a *coronel*) or the instructor's subject changes (he may have an MSc in engineering or a PhD in chemistry) but the basic story is still the same. Of all the variations, one of the most likely and delightful is that told by the economist Cláudio de Moura Castro in an article in the *Jornal do Brasil* published in 1991:

> *The wives of two instructors were quarrelling in the backyard. One of them was the wife of a* capitão *who taught at the school and the other was the wife of an American instructor. The cause of the quarrel had been forgotten, perhaps someone's dog had spoiled the neighbour's garden, but the matter ended up in the office of the Director [Casimiro Montenegro]. Going through the military directory containing the names of all the officers*

The American instructor R. N. Dubois (right), a giant in mathematics and in stature. If there was no bed the right size for him, they would have to saw his legs off at the knee.

in the same position, the Director commented: "There are many, many pages with the names of captains, aren't there? How many instructors in Brazil are able to teach the subject the American teaches? None? Right, then tell your wife to bite the bullet or make your peace with the American".

The fact that the CTA houses were semi-detached made neighbourhood relations easier but could also be reason for frequent arguments among those living in them. The widow of *Coronel-Aviador* Oswaldo Nascimento Leal, Violet Leal, remembers the afternoon that ex-Director Oswaldo Ballousier, when still head of the Centre, found children's footprints on the immaculate white front wall of his house. Some child had been doing handstands there and had left marks on the wall as proof of his or her innocent mischief. Ballousier treated the matter as if it had happened in the barracks. He threatened to mount an inquiry to investigate the case. "The *Coronel* accused my children are having done it. Well, they were already quite grown up and weren't going to do handstands in front of other people's houses," Violet Leal recalls. "But there was nothing for it, Ballousier made a huge fuss, saying that the youngsters at the CTA, the children of instructors and administrative staff, were very badly brought up."

While Ballousier was complaining, the children took advantage of the privilege of enjoying a childhood spent in the green and cosmopolitan atmosphere of the CTA. "At that time the great majority of my friends were the children of Chinese, Americans, Germans and Japanese and so we grew up learning to respect the differences and diversity of cultures," *Brigadeiro* Casimiro Montenegro's son Fábio observed. In the memory of George Hilf de Moraes, one of the children of *Brigadeiro* George de Moraes, what stood out was the impact the CTA houses had on relatives who visited the family in São José dos Campos: "You remember those classic photographs of the 1950s, the modern houses, the stylish furniture, the kitchen with the Hotpoint fridge, the blender and the dishwasher, just like the TV series *Father knows Best*? When our aunts came to visit they were astonished and told us we lived in a house that looked more like a film set". But for the youngsters the best thing was the result of Niemeyer's creativity, which had placed huge deep concrete structures as a division between the houses, making them 'climbable' by the children. While the adults complained of the lack of privacy because of this architectural detail, the children had a great time climbing up and going from one house to another, to the despair of their parents. The interior of the houses was a no less tempting

area for juvenile mischief. "Everything was transparent, with a lot of glass and stairs going up the wall with no banisters, which terrified anyone who had a baby at home but was perfect for us to jump off," Fábio Montenegro remembered. Outside, the CTA and its laboratories were a world to be explored. Old bits of aeroplane, propellers, pieces of wings and twisted iron were used to make dens and hiding places. And it was not uncommon for the pilots to let the children crouch down in the nose of the B-25 and take off. "We had fantastic games. Instead of playing good guys and bad guys we played at being astronauts. With Dad's help we even launched small rockets. We organised flights with turtles as crew. I ended up making a laboratory in my bedroom and collected snakes and spiders which got loose one day and caused panic at home," Fábio recalled. "I dreamed of being a mad scientist and discovering a cure for cancer."

The future writer Eric Nepomuceno was one of those happy children brought up at ITA. Eric was the son of the physicist Lauro Xavier Nepomuceno – that same Lauro X who was responsible for setting up the first acoustic laboratory in Brazil - Eric remembers the group of boys like him packed into an old 1948-model Chevrolet school bus painted with the coat of arms of the Air Force that took them every morning to school in São José dos Campos. "We would get off the bus in noisy groups in that sleepy little town and would go to classes in which the maths teachers seemed to be diabolic creatures who demanded from us 'children of the geniuses' results that none of us could achieve." But the strongest memories are actually of the high spirits and liberal nature of a certain *Brigadeiro* Montenegro, who closed his ears to the complaints of the other officers who would have preferred to see life at the CTA organised with barrack-room discipline. "Once we set fire to some brush there, just to make a bunch of guinea pigs run out so that we could chase them more easily," George Hilf de Moraes confessed later, in his adult years. "The little animals were running around terrified and we were hitting them with stones fired from slingshots." After the main part of the fire had been put out, a *Coronel* of the Fire Brigade went to see the Director of the CTA to make an angry complaint about how the blaze had started. In his view the children needed to be given an exemplary punishment. "Steady on, *Coronel*," said Montenegro calmly. "Look on this as an exercise in firefighting. Leave the kids alone and I'll talk to them."

Instead of a reprimand, Montenegro gave the boys a lesson in how the wind could catch an innocent-looking spark and cause an uncontrollable fire. "The *Brigadeiro* never missed a chance to show us how things worked. If any one of

Brigadeiro Tércio Pacitti, who became a collector of stories concerning Montenegro at the CTA recalled: “One of the great lessons Montenegro left behind him was that military regulations were not written by God. They were written by men and therefore can be changed”.

us in our gang of boys met him on the campus and mentioned how hot it was, he would stop and explain how some days are hot and others are cold because there are seasons in the year, how clouds are formed and how it rains for that reason," George Hilf de Moraes remembers. "If we asked: *Brigadeiro*, why does a tyre get hot when the car is moving?" He would answer: "It's the friction with the ground that produces the heat. Then he would give a proper explanation of the physical phenomenon of friction so that we could understand.

"It was really nice to talk to him. The *Brigadeiro* managed to be an officer and a teacher at the same time. He was firm but not strict. He wanted us to understand things and not just obey. If he gave an order he explained the reason for it. They say he treated his subordinates the same way. I only know that he had a horror of fools, of people who carried out orders without knowing why."

It was not by chance that Casimiro Montenegro was dismissed by many of his opponents as being an officer 'in civvies' - which was almost an insult when spoken by a uniformed colleague. As Montenegro did not make the regulations a straitjacket, his attitudes were often felt to be incompatible with barrack-room life. He shrugged his shoulders at these acsusations and whenever he saw an opportunity, tried to show that common sense was more efficient than inflexibly following the rules. Another of the *causes célèbres* that have entered ITA folklore concerns the American instructor R. N. Dubois, who was considered to be a giant both in mathematics and in physical stature. As he was 6 feet 6 inches tall he asked that a bed might be provided a little longer than normal because since he had arrived at São José dos Campos he had not slept well, as his legs stuck out beyond the end of the mattress. The instructor's request, however, was refused because there was after all a regulation that controlled the design of the furniture produced at the CTA. After passing through various departments, the problem finally landed on the desk of Casimiro Montenegro, who could not believe he had been called on to intervene in such a matter. To show how ridiculous the situation was, he sent an order to the head of the Carpentry Department instructing him that as it was not possible to change the regulations, Professor Dubois should be taken to the workshop to have his legs sawn off at the knees. This was enough: the next day a king-size bed appeared out of nowhere and was delivered to Professor Dubois' bedroom.

He also tells of the day when he was approached by the then Director of ITA, Professor Marco Antônio Cecchini, to buy a computer in the USA. This would be paid for from funds of around US$300,000 that were being donated to ITA by the Ford Foundation. Pacitti had written to Professor

Harry Huskey, who had supervised his dissertation at Berkeley University, where he had taken his master's degree in engineering, and suggested that the best option would be the IBM-1620, a powerful machine that was considered to be quite small in size at the time. Today's generation, brought up with with personal computers and notebooks with dozens of gigabytes of memory, cannot imagine what this meant. "The CPU of that computer, which was only 16kB, was the size of a desk and the printer as big as a 3-seater sofa," recalls Pacitti, to whom fate would give the privilege of living long enough to see computers the size of a book with a memory 32,000 times greater than the Jurassic IBM-1620 become consumer items. The importation of this equipment, however, fell into the bureaucratic mesh of Cacex - the Bank of Brazil's Foreign Trade Register that was responsible for all exchange operations carried out with foreign countries. As there was no precedent - obviously this must have been one of the first computers to arrive in Brazil - nor legislation concerning the matter, Cacex vetoed the transaction. Upon learning of this, Tércio Pacitti went to Casimiro Montenegro's shed to ask for help. His chief's answer took the form of a parable: "Pacitti, you cannot do anything great in public life without taking risks. But remember: risks cannot compromise ethics," Montenegro said enigmatically, without elaborating the point further.

Tércio Pacitti interpreted the phrase in his own way. "I felt that what he had said in other words was: "As long as I was careful not to be unethical, I had to look for loopholes in the rules to get the computer to Brazil". He started looking for his loophole and found it. A few days later a sturdy DC-4 - a huge four-engined aircraft left over from the Second World War - piloted by Pacitti, landed noisily at Galeão airport in Rio de Janeiro, having flown in from United States. Inside, in addition to the pilot and co-pilot the aircraft was carrying a large, sealed wooden container the contents of which were identified merely by two huge stencilled words: 'National Security'. And these were the two magic words that opened doors and allowed the IBM-1622 arrive at São José dos Campos.

Chapter 15 - Professor Feng will explain how a coleopteron flies. You mean a helicopter? No actually, a coleopteron

After much insisting, Casimiro Montenegro managed to convince *Brigadeiro* Eduardo Gomes to finally make a visit to the Technical Centre for Aeronautics. He hoped that in this way he could break down the resistance his old friend had put up concerning ITA. He rolled out the red, carpet and as he always did with important visitors, made a point of giving a personal tour of the laboratories, classrooms, directorate, wind tunnels, the residential blocks designed by Niemeyer, the restaurant and the student accommodation. At the end of this extensive tour it was with a certain trepidation that Montenegro asked the *Brigadeiro* if he liked what he had seen and would henceforth have a more favourable view of the CTA. Eduardo Gomes tut-tutted and answered the question with another one: "Montenegro, why don't the ITA students make their beds in the morning?"

After paying a visit to an institution that was by far the greatest centre for producing technology in the country, the only thing that caught the attention of the Air Minister had been a small failure of discipline in a student's room. Casimiro Montenegro realised that all his efforts had been in vain. *Brigadeiro* Eduardo Gomes could still not tell the difference between a modern centre for teaching and technological research, and a barracks. This episode, which Montenegro later related to his family without attempting to disguise his long-standing hurt, was the last nail in the coffin of any hopes that Eduardo Gomes might come to develop a less biased view of the CTA. And the Technical

Centre for Aeronautics was not going to order its civilian students to start behaving like raw recruits just to please the Minister. Professor Oswaldo Fadigas remembers that not even the officers who lived in ITA seemed to be over-concerned with military formalities such as keeping their uniforms spotless. "When anybody announced that a high-ranking officer was coming to the Centre, there would be a mad rush: 'Have you got a tie you can lend me?' one would shout. 'Can anyone lend me a black sock?' another would ask. It was chaos," Fadigas recalls, laughing, in spite of the fact that he himself had had problems with some hardline officers who were studying at the Institute: "I had a student, a *major*, who could not accept getting a mark lower than one of his colleagues who was only a *tenente*," Fadigas remembers, without naming names. "This chap caused me problems and even threatened me." Another former instructor at ITA, the civilian engineer Fernando Venâncio, who worked at São José dos Campos for 20 years, recalls that another *major* demanded satisfaction when he refused to repeat an explanation here given in a previous class which the officer had missed. But the atmosphere between civilian and military personnel was not always antagonistic. On the contrary, the same Venâncio makes the point that for most of time those two apparently conflicting worlds lived together in harmony on campus. "The person mainly responsible for this was without a doubt Montenegro, who was a catalyst," and then qualifies that by saying: "There were some brilliant officers. One of them was Hugo de Oliveira Piva, who would reach the rank of *brigadeiro*. Piva, who would later become Director of the CTA was a genius. He knew about wine, he knew books, he knew about snakes, he knew everything about mathematics, he was eclectic. And everything that he did, he did well." In the same tone, the writer Eric Nepumoceno, the son of Professor Lauro X, tells how several times he travelled with his father in the twin-engined Beechcraft passenger plane the CTA used, and his memories are always of officers and military instructors living together in an atmosphere of good humour and open comradeship: "Everybody teased everybody: the civilian instructors jokingly complained about the supposed incompetence of the military flyers, while the officers told pilots to "shake this crate around a bit to teach this bunch of whinging civilians a lesson". They all enjoyed a laugh together. In a centre which had managed to bring together instructors from 16 different countries, speaking at least 10 different languages, it was inevitable that learning to live with differences would be a daily exercise. That veritable Tower of Babel created unusual situations like the classes of the Chinese instructor

Kwei Lien Feng. After fleeing from the communist revolution in his country and living in exile in the United States and Germany, Feng had landed in ITA. "In that mixture of nationalities Professor Feng ended up not speaking any language properly. He mixed up Cantonese, Mandarin, English, German and Portuguese so that it was difficult to understand what he was saying. I think that in fact Feng spoke *Fenguese*," Hugo de Oliveira Piva, one of his best students, would recall years later. One morning the diminutive Feng, wearing his tortoiseshell spectacles and his hair on end, was explaining on the blackboard a complicated equation to represent mathematically the flight of a 'coleopteron'.

"Professor, don't you mean a helicopter?" asked a student, raising his hand.

"Non… Coleopteron…." insisted Feng, who insisted on carrying on resolving the equation, with his back stubbornly to the class.

"I'm sorry Professor, the word is 'helicopter'," the young man insisted.

"Non, non. Feng is explaining about this creature, isn't he? An actual coleopteron."

Only then did the class understand that Professor Feng really was explaining the mechanics of the flight of a beetle - in fact, a coleopteron, the scientific name of the insect. *Brigadeiro* Mílton Segalla Pauletto, who was Director of the ITA medical Centre recalls a time when a group of Hungarian experts came to São José dos Campos and were given the usual health inspection required for admission to the CTA. "They had left Hungary after the Soviet invasion of their country and only spoke Hungarian and nothing else; they didn't understand a word of Portuguese, nor English or French. We had to carry out the medical examinations using mime. The doctor breathed deeply and the Hungarians copied him; the doctor opened his mouth and so did they; he put his tongue out and they did the same. It was quite funny to watch," Pauletto would recount many years later. If English became in practice the official language of the CTA - staff meetings and most classes used English, with Portuguese as only a second language - there was a universal language that everyone at ITA understood well: mathematics. Eric Nepomucena never forgot the scene he witnessed in his living room every Wednesday evening. His father Lauro X gathered together a group of instructors from various countries to listen to Johann Sebastian Bach's *Brandenburg Concertos*. As the disc turned they decoded the music, from the first chord, in the form of mathematical

equation: "After a year of that, at a certain point - I think about the Fourth Concerto - they discovered that Bach had made a mathematical mistake. And they remained puzzled, never managing to discover how a little further on that brilliant composer - through another mistake - put things right and brought the equation to a perfect ending." Montenegro was amused by the tales of the eccentricities concerning the foreigners in ITA and called them the 'brainboxes'. And there is no doubt that he overlooked their minor acts of misbehaviour. On one occasion a written complaint arrived on his desk concerning an American instructor who had been found with his secretary on his lap. Instead of giving the instructor a warning or a moralistic reprimand, Montenegro did not hesitate: he sent an official note to the instructor informing him that he had asked for an extra chair to be put in his room so that two people would not have to share the same seat. One of the best-known 'brainboxes' of the early years of the CTA was Czech instructor with a narrow moustache and broad forehead, Richard Robert Wallauschek, who had a doctorate in science from the University of Prague, spoke eight languages: Portuguese, English, Czech, German, Russian, Italian, Spanish and Dutch, and became head of the Electronic Engineering Division of ITA. At the age of 41 Wallauschek arrived in São José dos Campos bringing with him a lengthy curriculum containing more than 30 patents for inventions in the area of electronics, including the design of a sonic cannon, a lethal machine he had developed in the 1940s that emitted a wave of high-frequency sound capable of killing anything within a radius of 50 metres – or of causing unbearable pain to any living being within a distance of up to 250 metres. As far as one can tell the weapon never came to be used in real battlefield situations although there are rumours that it was tested successfully on animals. But in ITA Professor Wallauschek was working for peace. He was the supervisor of a group of four students: José Ellis Ripper, Fernando Vieira de Souza, Alfred Wolkmer and Andras Vásárhelyi, better known to their colleagues as, respectively as *Plumatex*, *Elvis Pélvis*, *Brucutu* and *Jaburu*, who presented as their final coursework in electronic engineering in 1961 a plan to build a computer made with components produced entirely in Brazil. With 1,500 transistors the computer, which was christened *Zezinho*, consisted of a panel 2m wide by 1.5m high and a set of neon lights that went on and off as information was processed. In fact it was basically a huge calculator, a kind of pachydermic great-great-grandfather of the little machines that would become

(Above) Students of the class of 1958 play volleyball on the campus: left to right, standing: Katuchi Techima, Moacyr Leitão, Adolfo Leirner, Paulo Gavião Gonzaga and Delson Siffert. Crouching: Paulo Ribenboim, Airton Veras, José Raul Alegretti, Manoel Sobral Jr. and, lying down, Capitão Julio Alberto Coutinho. Left: at night the athletes turned into scientists who were preparing to launch an experimental rocket, the RX-1: Leirner, Ribenboim, Pedro Magyar, Gavião Gonzaga and Ruy Jacques de Morais.

popular 20 years later. *Zezinho* was able to carry out the four basic mathematical functions but did not attract the attention of any Brazilian manufacturer and remained a prototype which would be dismantled a few years later. Wallauschek worked in ITA for the rest of his life. One rainy night in 1962 he died along with his eldest son Michael in a motor accident on the Via Dutra when the Rural Willys driven by Professor Lauro Xavier Nepomuceno, Lauro X, hit a cart that was stopped on the highway without any lights. "Father spent 29 days in a coma and when he regained consciousness and learned of the tragedy he was inconsolable," remembers his son Eric Nepomuceno.

Because of the excellent quality of its teaching staff ITA became famous. Its entrance examination began to attract thousands of candidates every year from all parts of the country, to such an extent that competition for places surpassed that in the greatest Brazilian universities. When the most sought-after courses at the USP had about 23 candidates for each place, at ITA there were 60 candidates registered for each one who passed. "I was known as being an excellent student but when I entered ITA I realised I was not so wonderful after all. I was just one among many other high-fliers. There were plenty of blokes there who were much better than I was. My superiority complex was blown out of the water," recalled Pedro John Meinrath who graduated in 1959. In order to be a member of that fiercely competitive team it was also necessary to undergo an initiation ritual. Montenegro had advised the students not to go too far in hazing the freshmen and thus avoided the fun and games descending into violence. Professor Técio Pacitti remembered that one of the pranks that became famous in ITA was making new students calculate the area of the classroom using only a matchstick as a measuring instrument. However, Pacitti recalled, the ritual was not always so intellectual; once, as he was having dinner at the house of a friend he saw his own son, who was also an ITA student, jump from his chair when the cuckoo clock sounded the hour. "He explained to me that in the CTA ritual he had to go into his bedroom closet each night at eight o'clock punctually, open the door and shout eight times: 'Cuckoo! cuckoo! cuckoo!', beating his arms as if they were wings".

Montenegro decided that the ITA entrance examination should always have one unique point: instead of candidates going to São José dos Campos to take the examination, the Institute would provide officials who would go to various places in Brazil and the examination would be taken at the same time in different towns, usually state capitals. Where there were few

candidates in a particular region, these would have to go to some town where there was a larger number of candidates registered. This is what happened, for example, to José Francisco Lopes, who got a lift in an Airmail Service Douglas C47 in 1954 from the small town of Ipameri in Goiás, to São Paulo where he took the ITA examinations in the Polytechnic School building of the University of São Paulo. After taking the examination, Lopes returned home, once more getting a lift in an Airmail Service aircraft and two months later received a telegram in Ipameri telling him that he had passed and that he should therefore present himself in São José dos Campos two weeks before classes began on Monday, 4th March. The problem was that, as the telegram had been sent by train it had taken so long to arrive in the interior of the state of Goiás that Lopes only received the news two days before classes were about to begin. The time limit for registering had therefore already passed. Even so, the young man decided to take the risk of making the journey to still try to take up the place he wanted so much. He knew there would be problems because it was Saturday and there were no Airmail Service flights scheduled for the weekend. What he could not foresee was that he would live through a veritable epic of a journey during the next 48 hours to finally arrive at the CTA. To further complicate the situation he could not even take a train to Goiânia to try to get a commercial flight to São Paulo: a storm on the previous day had caused the Corumbá River to rise and left the railway bridge under water. The only thing was to wait for the next day and get a lift on an aircraft belonging to Nacional Transportes Aéreos,which was due to take off Sunday afternoon for São Paulo. As the plane was full, Lopes could only take a small bag on board with him which would also be his seat during the flight. At a stop at the town of Uberaba in Minas Gerais the flight was temporarily held up because one of the undercarriage tyres burst on landing and as Lopes was being given a lift, had to help change it. The delay meant that the young man arrived in São Paulo in the middle of the night, half an hour after the last Central do Brasil train and the last Sunday bus of the Pássaro Marrom Line had left their respective terminals for São José dos Campos. For anyone else this would have been the end of the line, but not for the young *goiano*. After sleeping in a small hotel near the railway station, Lopes took the first bus at six o'clock on Monday morning, finally arriving at the CTA after nine o'clock, right in the break period between morning classes. As it was the first day of classes, the older students were amusing themselves by playing tricks on the freshmen. When he asked some students

for directions, telling them he had passed the entrance exam and needed to present himself to the Student Office, Lopes was brought into the game, which cost him some more precious minutes: they made him get into a car through the right-hand door and leave through the left, increasingly quickly. Exhausted after almost an hour of that mad getting in and out, he was sent by one of the older students to the reception committee for freshmen. There, Professor Octanny Silveira da Mota checked his telegram against the list of students who had passed: "As a matter of fact you passed in sixth place out of the 3,700 candidates who were competing for the 70 places this year. However, all the places have already been filled. I'm very sorry. As you didn't come on the prescribed date you have lost your right to enrol."

Lopes did not give up, he pointed out that the telegram had been laid arriving at Ipameri and managed to get taken to the office of the Director of ITA, André Johanes Meyer. On hearing Lopes repeat his arguments, he too was inflexible: "There will now only be a place for next year. I suggest you take the examination again." One of the instructors, Abner Lelis Vicentim, heard the young man's story and decided to take into the head of the CTA, Casimiro Montenegro. Young José Francisco Lopes was very familiar with that name; the landing strip at Ipameri, one of the staging posts of the Goiás route in the heroic days of the Airmail Service, had been built 23 years earlier in 1931 by Montenegro himself on land belonging to his father Francisco Vaz Lopes. In that small town in Goiás the *Brigadeiro's* name was almost a living legend and Lopes was thrilled to learn that he would be personally received by in this mythological being. "I was amazed to find that the office of the head of the CTA was a shed on the building site," he would recount years later. The young man had arrived exactly as Montenegro was meeting a group of older students who were there on an official visits to discuss the problem caused by the fact that the ITA degree was still not recognized by the Ministry of Education, something which they thought could cause them future problems when they tried to get jobs.

"Don't worry about that," Montenegro reassured them. "We're going to get the better of those bureaucrats in the Ministry of Education. All our students have got excellent jobs in Brazilian industries. Very soon, even before the course has ended, you too will find yourselves being swamped with dozens of job offers. Get back to class now !" he told them. The students accepted his argument and beat a retreat. Lopes found himself alone in front of Montenegro. "And you, what's your problem?" asked the chief of the CTA.

"Because of the great respect and admiration I have for you, I don't want cause you any problem, I just want to tell you what happened to me," stammered Lopes, who then told the whole story of what he had just been through, from when he received a telegram to his arrival that morning at São José dos Campos. "With all its details, the story took some time. Then I noticed that the *Brigadeiro* was becoming visibly restless, looking at his watch all the time," Lopes remembers. "I'm sorry to be taking up your precious time with this story of mine…." he apologized, in some confusion.

"What's annoying me is that it's gone 1:30 and afternoon classes have already started. You're wasting your time here. Go and find your class immediately."

So it was that Casimiro Montenegro once more gave preference to a sense of justice over the strictness of the rules and José Francisco Lopes - who would be nicknamed 'the Goiano' and who, while still a student, would personally present his design for an aircraft to President Juscelino Kubitschek - joined the 70 new students entering ITA that year. This was not the only occasion in Montenegro's time as head of the CTA that he authorised matriculations in exceptional cases. On another occasion he ordered the immediate enrolment of a student who had failed his medical exam because of a serious congenital deformity on his face, a harelip. When he saw the young man's papers Montenegro noted that he had been among the top students in the entrance exam, but was about to suffer an injustice, so he decided to act. "Why should the problem with the boy's mouth prevent him from becoming a competent engineer?" he asked. Even if the young man had opted to be an Air Force pilot the *Brigadeiro* would not have found any problem in signing him up for the Air Force: "As far as I know, nobody flies with his lips," he said.

After passing through the fine mesh of the entrance exam, ITA students gained a student scholarship and went to live in a dormitory in block H8, where the rules of 'conscious discipline' were followed to the letter. There was no reveille call, nor fixed times to get up or go to bed. As long as they went to class, students could organise their lives as they felt fit - as long as they respected the choices of those sharing the dormitory and the building. As there were no women students in the early days of ITA - the Institute began to admit them only in 1995 - women were not allowed to visit student quarters, but that rule was not always blindly obeyed.

"My father openly defended in front of the teaching staff committee those students who broke rules that he felt to be foolish, such as the one forbidding

students to take their girlfriends to the CTA. He said that he could not punish a good student on account of a girl," says Eric Nepumoceno. After a hard week of studying, students were free at weekends and most of them went to the centre of São José dos Campos. There were not many leisure opportunities in that small town apart from the greasy tables of the old Bar do Boneca, which were taken by storm by the students on Saturday afternoons.

The ex-student Pedro John recalls: "Gradually the quiet town of São José dos Campos got used to us savages enjoying our days off, but at the beginning the lads who lived in São José dos Campos suffered quite a lot from the cruel competition of those young outsiders who took all their girlfriends. At the end of the dances the town boys got together to beat up the ITA people. In one of those fights a group of students only just managed to get away and when they got to the school they called on their friends to help them take revenge. The whole battalion of ITA people went there and broke up everything, the room, the chairs, the tables, there was nothing left. After that there was a truce but it was a long time before the town started to be proud of the 'ITA boys', as we came to be called".

If there was not much entertainment in São José dos Campos, the students themselves, with the unstinting help of Montenegro and using the Santos Dumont Academic Centre, did their best to bring quality shows to the CTA Theatre. Famous artists like Paolo Autran, Cacilda Becker and Ziembinsky, as well as avant-garde groups like the Arena and Opinião theatre groups, performed there more than once. Another guest performer invited by the ITA students was the conductor Isaac Karabtchevsky, who was at that time conductor of the Madrigal Renascentista group from Minas Gerais that had performed in various countries in Europe and the United States. In the same venue the students put on very popular film shows showing works from Europe and Latin America that were not often seen in commercial cinemas, much less in the tiny picture house at São José, which was only open on Saturdays. As well as films, theatre shows and musical concerts, the students of the Academic Centre put together an excellent library that contained classics of world literature. A radio station, which the students had also built, provided music and information for the whole CTA community. In an interview decades later, José Ellis Ripper, one of the leaders in fibre-optic technology in Brazil whose dissertation was supervised by Professor Wallauschek as part of the Zezinho computer project, stated: "I think the most important aspect of my professional training was the Santos Dumont Academic Centre; it was even more important

José Francisco Lopes: coming 6th out of 3,700 candidates in the entrance examinations, he made an epic journey from Goiás to São José dos Campos, but arrived late, to be told: "There will now only be a place for next year. We suggest you take the examination again".

The physicist Xavier Nepomuceno (Lauro X, or just LX), who built the first acoustic laboratory in Brazil: turning Bach's Brandenburg Concertos into a mathematical equation.

than my doctorate from MIT". In addition to the Cultural Department, the Academic Centre also contained the Sports Department, which was responsible for training winning teams in various sports in the Brazilian university Olympics.

Pedro John recalls: "Montenegro supported all we tried to do in the Academic Centre but always with that typical 'invisible presence' of his, where he did everything very discreetly without clapping people on the back or giving great speeches. Because of that he was greatly admired - I can even say, greatly loved - by the ITA students".

It is impossible to find among ex-students of the Technological Institute for Aeronautics anyone who saw *Brigadeiro* Casimir Montenegro, who was promoted to *Major-Brigadeiro* in December 1958, use the three stars on his shoulders to correct any person of lower rank by raising his voice. *Brigadeiro* Milton Segalla Pauletto says, "I never saw Montenegro raise his voice. *Brigadeiro* Oscar Spínola confirms this: "His style was not to bawl people out. If he wanted to make a comment to someone of lower rank, he always did it very politely so that the other person was convinced Montenegro was right and should be obeyed". The only time he saw Casimiro Montenegro really angry was when the students asked him to check on the hygiene conditions in the CTA restaurant. On that occasion, breaking his usual habit, Montenegro did not have lunch at home. He picked up a tray and joined the queue along with the students. When he came to the counter he saw that the serving staff had dirty fingernails, and had not shaved or combed their hair. He went straight to the kitchen and reprimanded the *tenente* responsible: "This is not some roadside greasy spoon café. The students are right to complain. You only have to look at the hands and faces of the staff to lose your appetite. If I come back here tomorrow and find the same conditions, you're going to gaol".

As it happened, the *tenente* did not end up behind bars because from that day onward the CTA restaurant improved considerably. Nevertheless this did not stop the students continuing to call the meatballs served at dinner by the interesting name of 'Lavoisier'. As Pedro John Meinrath explained: "When we had beef for lunch, we were sure to have meatballs in the evening. Those meatballs, made from the beef left over at lunch, followed Antoine Laurent Lavoisier's precept that nothing in nature is created, and nothing is lost, but everything is transformed." But what was really important was that the students had received sufficient proof that Montenegro would face any challenge to support them, whether inside or outside the CTA. Members of

the Academic Centre used to joke among themselves that if one day he had to choose to be on their side or to take the side of the President, Montenegro would have no doubt as to which side he would choose. Very soon the ITA students would discover if that were an exaggeration or not.

Chapter 16 - Is this a military college? No, replies the journalist. This is an extremely civil college

With his hands in his trouser pockets and a vague expression on his face, *Brigadeiro* Casimiro Montenegro was pacing backwards and forwards in the reception room of his house. His family, instructors and the students closest to him knew that he always acted like that when he had a difficult problem to solve. Indeed, he had not lacked for concerns ever since the CTA had been created. He had fought fierce battles even to get the idea of ITA accepted, had solved administrative difficulties and turned what had seemed like a grand quixotic dream into reality. But now he had another, very delicate, mission to perform: to withdraw the invitation to Juscelino Kubitschek that had been made by the Director of ITA, the American Samuel Sidney Steinberg, to give the end-of-year speech to the engineers graduating that year, 1959. The students had chosen another person to honour, Professor Oswaldo Fadigas, whose name had already been printed on the invitations sent out for the graduation ceremony. The Director had taken the initiative of inviting JK because he thought that the gesture would appealed to him and thus make him look more kindly upon questions involving ITA. The problem was that Steinberg, ex-president of the University of Maryland in Baltimore who had taken up his post at ITA at the beginning of the year, had taken the decision on his own, without consulting anyone or giving the students prior notice of it, so that they were taken by surprise. This was why a group of instructors and students were sitting on Montenegro's sofa discussing the best

way to solve the problem. The students said they had nothing against JK, quite the opposite, but they could not see how to solve the misunderstanding. One way out would be to 'promote' Juscelino from the position of end-of-year orator to be the patron of the year-group, an idea that was soon discarded since it would seem to be in bad taste – and possibly even ill-fated – to invite a living person to join a gallery of people composed only of the illustrious dead. Moreover, there was still the question of the invitations that had been printed and posted. There was no other way out: a senior member of the CTA staff would have to go to the Palace, apologise and with the greatest possible diplomacy, try to resolve the confusion without offending the greatest authority in the Republic. One of the instructors, Paulo Vítor, an engineering graduate of the ITA who had been the first President of the students' representative body the Santos Dumont Academic Centre in his student days, still tried to insist that the least damage would be done by the graduating students reconsidering their decision: "Let's collect the invitations that have not yet been sent out, declare the rest of them invalid, overrule the Director's decision and put JK's name forward as the speaker."

Immediately, one of the students present, the big, baby-faced Pedro John Meinrath from Rio de Janeiro who went by the nickname of 'Boloto', raised his finger, jumped from the sofa and cut him off: "Isn't it funny, Professor Paulo Vítor, that you who tried to stop Juscelino taking up the Presidency, now want us to make him our orator?"

This was true. Three years previously, a few days before Juscelino Kubitschek had taken up his post in January 1956, the then *Major* Paulo Vítor had abandoned his post at the Air Base at Belém in Paráand joined *Major* Haroldo Veloso and *Capitão* José Chaves Lameirão, who had taken over an aircraft at the Afonsos Field in Rio de Janeiro and set up a rebel headquarters at the Air Base at Jacareacanga in the south of the state of Pará, from where they had unleashed a rebellion to depose JK. The so-called Jacareacanga Revolt was snuffed out in a few weeks and all those taking part had been amnestied by the National Congress on the initiative of Juscelino, who wanted to show by that that he wanted to calm everyone's nerves in order to carry on without future disturbances in the barracks. The pardon granted by the President included all civilian and military personnel "involved in revolutionary activities between 10th November 1955 and 1st March 1956" – which included Eduardo Gomes, Lacerda and all the others responsible for the attempt to prevent him coming to power on 11th November 1955. For

this very reason Montenegro felt that to dig up that episode again now would do nothing to help solve the problem of there being two orators for a single graduating class at ITA. Given the circumstances that had come to light, he felt that it was his duty as head of the CTA to take action. He said that the students could relax because he would support their decision to honour Professor Fadigas: "Well, this is all I needed, withdrawing an invitation from a President of the Republic. Let's see what this is going to lead to…."

There was more than enough reason for Montenegro to feel uncomfortable about the outcome, but one in particular left him especially depressed. Just as bureaucracy had been the greatest obstacle in getting the São José dos Campos project off the ground, the greatest help ITA had received had come from Brazil's industrialisation under the JK government. It was only when the giants of the automobile industry had begun to approach even third-year students at the Institute with job offers that the eyes of Brazil had turned towards ITA. Casimiro himself never tired of repeating: "It was this that made everybody shut up: we were creating an engineering elite in Brazil".

When Juscelino received him he explained the reasons behind the involuntary fiasco. As Montenegro would tell the story later, JK found the whole thing funny and understood how it was that the students had selected the instructor of their choice to speak for the class. Once the initial embarrassment was over, the *Brigadeiro* relaxed and took advantage of the occasion to talk to the President about another matter: he was convinced that it was necessary to turn ITA into a foundation as soon as possible in order for it to become an autonomous university institution with its own budget coming from the public purse while still enjoying the kind of prerogatives that were typical of the private administrative structure. Montenegro explained to JK that this would be the only way to protect ITA against the whims of any temporary Air Minister. Administrative and financial autonomy would solve once and for all questions concerning instructors' salaries and would neutralise the long-standing suspicion that the more conservative sectors of the Armed Forces felt concerning the Institute. Juscelino listened carefully and suggested Montenegro that he should write a paper on the subject that would then be sent to Air Minister *Brigadeiro* Francisco de Assis Corrêa de Melo who was better known by his nickname of Melo Maluco [Crazy Melo – trans.] on account of his celebrated aerobatic feats. Before leaving, Montenegro added: "The idea, Mr President is to set up at ITA the same system as that of the University of Brasilia, UnB, which I know you want to create in the new

capital. A public body but one that is administered independently with a great deal of academic and financial freedom.

Montenegro was well-informed. At that moment, about six months before its inauguration, Brasilia was simply a huge building site and the UnB project was still being created, led by a working group that included the educationist Aníso Teixeira and the anthropologist Darcy Ribeiro. At the same time, at the CTA, another group of instructors was also burning the midnight oil to find a way of freeing ITA from the administrative shackles imposed by the Air Ministry. The idea of turning the school into a foundation was not new; it had been implicit since the time of the so-called Smith Plan that insisted on the need for the Institute to have complete freedom in its teaching programme. In 1950 the same Professor Richard Smith had created a minutely detailed dossier in which, after examining the way various US and European universities operated, he came to the same conclusion. Now, shortly after his audience with Juscelino, Casimiro Montenegro had received an invitation from the Administrative Department of the Civil Service (DASP) to discuss the financial situation of the ITA teaching staff, who had not been included in the federal civil service and were thus in an illegal situation. On the day of the meeting, Montenegro suggested to the directors of the Department that they should visit São José dos Campos on the following weekend, when he would make a special aircraft available to them.

"Can I take my wife?" one of the directors asked, hopefully.

"Yes, of course…." answered Montenegro.

"And can I take my husband?" asked a female member of staff.

"Yes, madam, you can…."

"And my children, can I take them?" asked a third.

"Yes, take them…." said the *Brigadeiro*, who soon realised that the official visit to the CTA was being seen as a family picnic on 'Montenegro's farm'. But it was unimportant; he said that the aircraft had 20 places and they could take whoever they wanted to up to that number. They would leave on Saturday morning and return on Sunday night.

Soon after their arrival at the CTA, around midday, Montenegro invited the group to a barbecue and then took the DASP directors, together with their respective families, on a walk through the campus. He showed them the large telescope planned and built by the Centre's technical staff, the electronic equipment in the research rooms, the Structures Department building with its rounded architectural design, the construction project of the wind tunnel - a

colossal concrete structure which, when ready, would produce winds of up to 500km/h where new aircraft designs would be tested in simulated flight conditions - the modern classrooms, the library, the theatre and the sports centre. As they passed the residential area and the groups of children from wide variety of nationalities and ethnic groups who were playing in the gardens of the houses and apartments planned by Niemeyer, the directors of DASP were told that about 2,000 people lived there and that year about 1,500 candidates had enrolled for the entrance examination to compete for the 20 places available each year. Still amazed by what they had seen, the visitors were then accommodated in the living areas tastefully furnished by Zanine. One of the members of the committee was moved to comment: "*Brigadeiro* Montenegro, what about the meeting to talk about the points concerning the teaching staff?"

"We can talk about that tomorrow. But today enjoy your stay and prepare yourselves, because I've ordered an excellent dinner for you."

The following day, Sunday, Montenegro finally held the planned meeting. "The greatest problem I had was to restrain the enthusiasm of the DASP directors, who wanted to give me heaven and earth after what they had seen the day before," Montenegro remembered years later as he lay smiling in a white hammock, making a video-recording for his son Fábio. "I said to them: 'I only want one thing from you, support for the idea of turning this place into a foundation'." the following week, the Administrative Department of the Civil Service sent to the office of the President of the Republic an official report examining the problem of the teaching staff of the Technological Institute for Aeronautics, at the end of which was the following opinion: "The only solution for achieving the progress the Technical Centre for Aeronautics seeks would be to create a foundation to take the place of the present ITA".

Montenegro attacked on all fronts. Two months after the inauguration of Brasilia sent the Air Minister, *Brigadeiro* Correia de Melo, a 27-page typed document dated 21st June 1960, which set out a wide range of reasons for the implementation of a new legal status for ITA. "The Technological Institute for Aeronautics is losing teachers and researchers who are being attracted to other universities not only by better pay offers, but mainly by the attraction of and access to equipment and research grants that several Brazilian engineering institutions are offering," he argued. There is a threat that the CTA, the institution that was without a doubt the pioneer in renewing university-level education in Brazil, will stagnate while other bodies which look to us as an

example to be followed flourish and develop". He concluded: "We cannot allow the considerable investment that has been made, the invaluable material and intangible property that has been acquired in 10 years of accumulated experience in terms of renowned instructors and scientists, to be lost". According to the Draft Bill annexed to the document, all movable and immovable goods at ITA in São José dos Campos at that time belonging to the Air Ministry, would become the property of the Institute itself, which would also receive an annual grant of 3% of the Air Force budget in addition to a permanent subsidy of the profits on 10% of the Petrobrás shares belonging to the Union.

Although Montenegro was pessimistic about the future (in his spiral notebook he lamented the fact that Minister Correia de Melo "did not seem very interested, but simply let things go forward"), in fact change was on the way. On 11th January 1961, when his government had 20 more days to run, President JK sent to Congress Draft Law 2,561 proposing to turn ITA into foundation. Both the text of the draft and the accompanying explanatory memorandum signed by *Brigadeiro* Correia de Melo, were a literal translation of the 27 pages Montenegro had delivered to the Minister some months before. The only thing removed from the original text was the paragraph suggesting the transfer of funds from Petrobrás to the future foundation.

An important battle had been won but the war was not yet over. Experience had taught Montenegro that the passage of a project through Congress could take either hours or decades, depending on the kind of pressure that could be brought on the deputies. He had no hope of exerting pressure through the Executive branch of government. The answer then was to draw the attention of the public to ITA. It was no accident that from 1959 to 1961 the Institute made the headlines in newspapers and the covers of national magazines, always referring to news items that avoided reference to the crisis itself while highlighting the technological wonders that were being created in the CTA. For example, on the cover of the magazine *Visão* for 20th March 1959, Montenegro appeared in a colour photograph alongside the *Beija-Flor 1*, a two-seater helicopter designed and built by the team of the German Professor Heinrich Focke. This was not the long-awaited convertiplane - for that, apart from unsuccessful prototypes, still existed only in the form of a mass of calculations and drawings on the drawing boards of its designers – but it was the first practical result of the million-*cruzeiro* investment that had been made to keep the Focke group active. The helicopter

Although he is confined to the Air Ministry, Montenegro opens up ITA to the press to show Brazil the size of the enterprise under construction at São José dos Campos

weighed about a ton, was powered by a 225hp engine and flew at a speed of up to 150km/h. As the Hungarian Joseph Kovacs, a member of the group, recognised: "The main aim of the *Beija-Flor* was to show to public opinion and the Air Ministry a rapid and concrete result". The article in *Visão* magazine showed the daily life of the CTA in four pages illustrated with various photographs with details of work at ITA and the real revolution in teaching that the idea of 'conscious discipline' entailed. At the end it mentioned a project that was being carried out in secret by the specialists led by Casimiro Montenegro: an amazing flying motorcar, the details of which seemed to have come out of a science-fiction film.

> *The team developing a model of this original vehicle avoids all kinds of publicity. They feel, quite rightly, that nothing should be said about it until something concrete has appeared. By special dispensation, Visão was allowed to see the model of the car, which is being subjected to lift tests in the CTA laboratories. It is similar to those being secretly developed in the United States and Europe and is a vehicle with an aerodynamic shape with a vertical takeoff rotor in the centre section and another, for horizontal propulsion, in the tail. It will have a 400hp motor and the flying motorcar will weigh about 1,000 kg.*

It is not known what became of the futuristic project of the 'flying motorcar'. No one heard any more about it but the CTA/ITA was always on the news. In September 1960 a special report in the sophisticated magazine *Alterosa*, published in Belo Horizonte and edited by Roberto Drumond, took readers by the hand and led them on a tour of the Technical Centre for Aeronautics: "Friends, let's turn off the Via Dutra are a few moments. I want to show you the most original college in Brazil," the article began. "Here is one of Niemeyer's first 'Brasilias'. Notice how this one has much of what is in the other, because that is simply a kind of CTA on a larger scale," the text continued, leading its readers through the Centre's avenues. "That three-storey building in front is the administration and classroom block. See how one side is completely made of glass. Windows and more windows, just like Brasilia and ten years in advance of the new capital." At a certain point the article observed: "You are asking me, dear reader, if this is a military college. No, it is not. It is extremely civil. The vast majority of teaching staff don't wear uniform, 90% of the students are

civilians and the subjects studied are only vaguely military". Even if Montenegro had written the article himself he could not have given a better description of his point of view and objective at the time: to bring society at large onto the side of ITA. One of the most consistent criticisms made by military personnel who were opposed to the Institute was still precisely the fact that the Air Ministry was paying a fortune to train personnel who were being recruited by private enterprise. But for Montenegro, far from being a defect, this was ITA's greatest virtue.

"Up to now, ITA has produced more than 300 engineering graduates. While some of these professionals remain working in the school or stay there for a few years to do practical work in postgraduate studies, most of them move to other parts of Brazil, from the North to the South, working as highly specialised professionals in large factories, in basic industries, and are highly sought-after, with many being offered jobs by those factories even before they have graduated," he said in the *Alterosa* article. This was exactly the same theme as appeared in another article published at the same time in the Rio de Janeiro magazine *PN: Publicidade e Negócios*: "The CTA is not a military base (although it is under the aegis of the Air Ministry), it is not an officer training centre, nor does it aim to train civilians for the Armed Forces. The CTA has a much broader aim: to train aeronautical and electronic engineers the vast majority of whom will work in private enterprise". Montenegro's fingerprints were clearly scattered all over the article:

> *As you pass through São José dos Campos, make a diversion to visit the modern university city known as ITA. You will be welcome. If you do not want to bother anyone - but you can be sure that it won't be a bother - take a drive along the pleasant roads bordered by Niemeyer's buildings. This will be easy because there are no security guards (why should there be?) or even porters, those antediluvian figures of other colleges. If you studied at a normal Brazilian University, do not envy the students you see there. You should actually be happy because you can imagine that the CTA, by its example, may be able to transmit to other Brazilian universities a taste for its clear-minded educational methods. And - who knows? - your child may one day study in one of the new schools inspired by ITA.*

Illustrating the article was a half-page photograph of the new *Beija-Flor 1* that had become the CTA's main pinup. On the cover of *PN* was a black-and-white picture photograph of Montenegro, who had also decided to gradually emerge from the shadows and 'conspire' in the light of day. Even Assis Chateaubriand, the owner of the powerful *Diários Associados* group, celebrated the undertaking *Brigadeiro* Casimiro Montenegro had planned. "One of the aims of the Centre is to train young men with good human qualities and a good scientific basis who can follow the course without necessarily having to join the Air Force," wrote Chatô in an article that was reproduced in all the group's newspapers, in which he also stated that the example of the CTA was the best remedy for curing a great national cancer: "Brazil has one problem, just one, but a big one - ignorance!". In October 1961 there appeared a long article published in the *Correio Paulistano*, with a photograph of Montenegro in the middle of the page above the grandiose headline: "CTA-ITA: a new world 85km from São Paulo". The text of the article was generous with its positive adjectives, and informed its readers:

> *we had heard about* the Technical Centre for Aeronautics and *ITA but we had not realised how complex and large-scale the undertaking was. Everything we saw on this visit seems so immense that, even if we wanted to, we could not describe it all in a single article.*

The battle to present ITA to the Brazilian public was being won, but in the year and a half that had passed between the *Visão* article and that in the *Correio Paulistano*, a series of crises had broken out in the country which were of course reflected in the Air Ministry and by extension gave Montenegro cause for anxiety. Juscelino Kubitschek had ended his mandate with the country sinking into economic collapse, with stratospheric inflation rates and the President exposed to a volley of accusations of corruption fired off by the ever-present Carlos Lacerda. In the presidential elections of October 1960, the ex-governor of São Paulo, Jânio Quadros, his hair awry, spectacles crooked on his face and waving a broom in the air, promised Brazilians that he would "sweep away the rubbish". With the help of the Conservative UDN, Jânio's 48% of the votes defeated the candidate supported by JK, Marshal Henrique Teixeira Lott, who gained 32% of the vote, followed by Adhemar de Barros with 20%. When he took office in January 1961, Jânio had appointed *Brigadeiro* Gabriel Grün Moss - who had been head of Air Transport Command

Governor Jânio Quadros arrives early in the morning on an official visit to ITA and surprises Montenegro with an unusual request, at least for that time of day: “Brigadeiro, could you manage a whisky for me?”

during Juscelino's Government - as Air Minister in the place of Melo Maluco. For Montenegro, Moss was an unknown quantity. "I thought that he could perhaps help us," he noted in his little book. As for Jânio Quadros, he did not have good memories of him. In 1954 the graduating students of ITA had chosen the then Governor of São Paulo to give their leaving speech. As Jânio had arrived very early for the ceremony, which was scheduled for 10 o'clock in the morning, he had been directed to the house of the head of the CTA.

"Would you like something to drink?" Montenegro asked him, thinking that his visitor would want a fruit juice or perhaps a coffee.

"Yes please *Brigadeiro*. A whisky," Jânio replied.

As he had no alcohol in the house, Montenegro quickly sent out for some to be brought from the house of a neighbour at CTA. The story of the Governor who asked for a whisky at around nine in the morning soon spread over the campus and left Montenegro with a very bad impression.

After just seven months in government, the resignation of the mildly bipolar Jânio Quadros created an institutional impasse because *Brigadeiro* Grün Moss, along with the other ministers of the Armed Forces - General Odílio Denys and Admiral Sílvio Heck - stated their opposition to Vice-President João Goulart (Jango), taking office; he was Getúlio's main heir and was considered to be too far to the left for the taste of the military. The solution was to opt for a parliamentary system that would limit the powers of the President: Jango would be Head of State but that the power of government would be exercised by the recently-chosen Prime Minister, Tancredo Neves. Montenegro's hopes therefore rested on the new occupant of the Air Ministry in the Parliamentary Cabinet. On 8th September 1961, when the new government took office, the news was not encouraging: the Air Minister would be *Brigadeiro* Clóvis Travassos, once an ally but who had become umbilically connected to Eduardo Gomes.

Two and half months later, Montenegro saw the ground open beneath his feet. By direct decision of Travassos he was solemnly dismissed from the post of head of the CTA and sent once more to be the head of the Directorate of Materiel. The difference was that this time the posting implied an exile in which he would be condemned to stamp papers. There was nothing more for him to do, as the following note in his officer's log records:

On 28th November, Major Brigadeiro-do-ar Casimiro Montenegro Filho took over the post of head of the Directorate of Materiel of the

Air Force, to which he had been appointed, although all the orders of his predecessor remain in force until experience and necessity suggest any modification.

This meant that he could only dismiss or appoint an airman or lowly messenger boy when, for example, experience and necessity allowed it. They had managed to tie him hand and foot. To use the Portuguese phrase, instead of being fried all at once, he would be slowly cooked in a *bain-marie*. However, if anyone thought he would end his career behind a desk, they were mistaken. The smooth Casimiro Montenegro Filho was a hard nut to crack and anyone who doubted that could pay to watch.

Chapter 17 - Castello appoints Eduardo Gomes to the Air Ministry - the circle closes on ITA

As the passenger aircraft was preparing to land at Galeão Airport, *Brigadeiro* Casimiro Montenegro observed the landscape below him in a thoughtful mood. In his hand baggage the results of the medical examinations he had undergone in the United States were definite: he had glaucoma. In recent months he had felt his peripheral vision to be rather cloudy and because of the number of cases of the disease in his family he had gone in search of a more exact diagnosis at an advanced ophthalmic clinic in San Francisco. At the age of 59, he was starting to go blind. News like this would be terrible enough for anyone, but for a flyer the situation had an extra degree of cruelty.

These were very difficult times for Montenegro. Photographs of this period show that the two years that had passed since his dismissal from the Technical Centre for Aeronautics had been enough to turn his hair and moustache white. "I don't have much to say about this period, I was just carrying out routine work at the Directorate of Materiel," he said dismissively and discreetly in an interview he recorded some years later. In fact, he felt like a man thrown into limbo. From a distance, he followed events concerning the CTA both through his duties as well as through news sent to him by students, instructors and in particular by the Director of ITA, Marco Antônio Cecchini, a chemistry professor who had graduated from USP and had been in the position since 1960, having been appointed by Montenegro himself. In December 1961, a month before the *Brigadeiro* was dismissed, as a disguised way of softening

the decision of the Ministry, Cecchini had arranged a special ceremony for him, giving him the title of Doctor *Honoris Causa* of ITA. Now, as he was landing in Rio de Janeiro after his medical consultation in the United States, Montenegro had been warned that the new Air Minister, *Brigadeiro* Anysio Botelho, had called him for a meeting in his office. Botelho had been appointed about six months previously, in June 1963, in a ministerial overhaul ordered by President João Goulart, who was governing in a presidential regime having defeated the parliamentary system in a plebiscite. Botelho was an old friend of Montenegro's. He had been one of the original members of the newly-formed Air Force, had been in command of the Campo de Marte in the 1940s and in1953 had led the Air Force purchasing commission in Washington. Two years later he had been Chief of Staff of Minister Vasco Alves Secco in Juscelino's Government. Montenegro foresaw that the interview with Botelho would finally bring him some good news.

He was right: *Brigadeiro* Botelho asked Casimiro Montenegro if he would like to go back to being head of the Technical Centre for Aeronautics . The Minister pointed out that, as well as recognising that this was a long-overdue right Montenegro deserved, the CTA also needed someone with a sufficiently cool head and moral authority to put an end to a series of internal conflicts at ITA. Botelho did not have to explain further because Montenegro well knew what he was talking about. On 27th December 1963, Director Cecchini had set up a special committee of instructors to examine the case of two students – Frederico Burchal de Magalhães Gomes and Luiz Maria Guimarães Esmanhoto – who had exceeded the permitted limit of 10% of absences from total class time during the academic period which, according to the rules, should have resultrf in their automatic expulsion from the institution. This apparently commonplace affair had already been examined by the Institute's Educational Guidance Committee which had suggested that the Director's office should order the compulsory suspension of the two students for the period of a year since they were repeat offenders and had already been let off after exceeding the same limit of absences on previous occasions. But what seemed at first sight to be only an internal question of discipline actually contained a complicating and potentially explosive element. As Brazil was at that time passing through a period of bitter ideogical conflict, with the Armed Forces and conservative social groups accusing the João Goulart Government of sowing anarchy and 'communising' the country, any punishment meted out to those students would inevitably be interpreted as political persecution since

Birchall and Esmanhoto were student leaders and supporters of the affiliation of the Santos Dumont Academic Centre to the National Union of Students (UNE), which was claimed by Jango's opponents to be "a nest of communists". As Montenegro's name was revered by the whole of the academic community in ITA, there would be no one better than he to oversee the investigation without raising suspicions of political interference.

"*Brigadeiro* Montenegro was well-known as not being a leftist, quite the contrary, but his political convictions did not affect his personal and professional relations," said the businessman Carlos Augusto Salles, one of those who spoke most frequently with Montenegro in the last years of his life. "For example, he preferred to deal with a communist like Niemeyer, whose ideology he deplored, than with a right-winger like Dutra."

However, as his nephew Júlio César Montenegro likes to remember, no one was unaware of that "drop of *UDNista* blood" that ran in his veins. And Minister Anysio Botelho himself, who was looked on with suspicion by the more conservative elements of the armed forces on account of his defence of Jango, was no exception. Even so, Botelho felt that the appointment of Montenegro would calm feelings at ITA and the latter of course accepted the offer.

The *Diário Oficial* of 10th January 1964 carried the ministerial order of the day before naming *Brigadeiro* Casimiro Montenegro Filho head of the Technical Centre for Aeronautics . When he took up the post four days later, he gave a deliberately calming presentation that included an appreciation of *Brigadeiro* Oswaldo Nascimento Leal, who had been associated with the CTA since its foundation and had died at his desk of a heart attack two years previously when he had taken Montenegro's place as head of the Centre after the latter's dismissal in 1961. As he finished speaking, Casimiro Montenegro made a point of re-stating his belief that the development of technology was vital for the country's future: "The ideas I hold dear are well-known. I believe it shows acceptance and approval of these ideas that I have been given this honourable appointment to the elevated responsibility of head of the CTA". He recommended to the Director of ITA that, as a question of urgency, the work of the special committee charged with resolving the case of the two absentee students should be speeded up, but he emphasised that they should have every right to defend themselves.

The committee, presided over by Professor Octanny Silveira da Motta, initially heard from Director Marco Antônio Cecchini, since it was his decision

to set up the investigation. His opinion was categorical: in recent years absence from class had been treated very leniently by the Institute, something that led students to lose their fear of possible punishment and the problem was becoming increasingly serious. The previous year Cecchini had already given verbal warnings to Birchall and Esmanhoto, who had at that time promised not to reoffend.

"I warned them that tolerance of their absences had stopped there and then and that there would be no more at letting-off," the Director told the committee. As both of them had broken the agreement, Cecchini felt that they should be suspended from the institution. In their joint defence, the students tried to use a legal argument, saying that since January 1962 the new Law of Guidelines and Foundations of Higher Education had come into force which stated that the punishment for not appearing in classes consisted of not being allowed to take final examinations. As they had already taken their examinations – and as an internal ITA decision could not take precedence over a federal law - Birchal and Esmanhoto argued that committee was illegal. In his own defence, Birchal also stated that he had exceeded the limit of absences by only two classes in a single subject – which he had actually passed – and that the only reason he had not attended was through complete physical exhaustion because he usually studied until 4 a.m. For his part, Esmanhoto said that his absences were the result of extra-curricular activities that were all in aid of the Santos Dumont Academic Centre.

"A law is not broken just for the pleasure of doing so, nor for the lack of fear of its being applied, but because the law has been badly formulated in terms of the real needs of the community," he said in his written defence. Finally, both said that their suspension from ITA would be a stigma they would have to carry for the rest of their lives because no other higher education institution would accept their respective qualifications. After hearing both sides, the committee decided to suggest the Montenegro a solution that had the wisdom of Solomon: Birchal and Esmanhoto would remain enrolled but would lose all the advantages of the scholarship they had a right to as ITA students, including help with expenses and the right to live in the CTA. Montenegro felt that this was the right level of punishment:

"Through the application of a certain amount of tact, I managed to reinstate the students who. although encouraged to preach subversion by the government itself, kept the institution separate from the UNE by the decision of the General Assembly," he wrote later.

His nephew Júlio César Montenegro, who was a student at ITA at this time, recalls that his uncle hated the idea of the Santos Dumont Academic Centre becoming affiliated to the UNE. As he was on the side of those defending this affiliation, Júlio had some difficult moments with the *Brigadeiro* on this point. He recalls that his cousin Antonietta would go to the student accommodation to ask him to stay away from their house during that period because Montenegro was still quite prickly on the subject. Pushing a pram – the couple's fifth and last child, Carina, was little over a year old – Antonietta warned: "Casimiro is very fed up with you because of this UNE business."

Júlio César, who had once dreamed of being a film star and living in the United States to study at the famous Actor's Studio which had produced many Hollywood stars, was finally dissuaded from the idea by Montenegro. "Antonietta encouraged me but Uncle Mimiro asked her to stop putting those ideas into my head, saying that I was better suited to study aeronautical engineering," Júlio remembers. Decades later, he would say that the disagreements of those days did not prevent the two of them from remaining great friends.

"I always admired Uncle Mimiro because he was a tremendous person, but I have to recognise that he was a conservative one too. That's why I think it was very good for him to be married to Antonietta, who was open to the world and to new ideas," he observed.

"Mother was always a sophisticated woman but also very political and always voted for Lula. She loves Marcel Proust and is an assiduous reader of the magazines *Carta Capital* and *Caros Amigos*," according to her son Fábio Montenegro. In the end, the arguments between the *Brigadeiro* and his nephew concerning the affiliation of the Santos Dumont Academic Centre to the UNE lost all meaning. On 1st April 1964 the National Union of Students became an abstraction: its headquarters on Flamengo Beach were invaded, sacked and burned in an action led by an ex-student of ITA, *Coronel-Aviador* João Paulo Burnier – the very same person who had spied on the São José dos Campos campus for Eduardo Gomes. In the early hours of that morning a military coup had deposed the President of the Republic, João Goulart. Now, rather than solving conflicts between the ITA authorities and students, Montenegro had to handle a much more difficult task: managing the effects of the coup within the CTA.

Four days after the fall of Jango, Montenegro was called to Rio de Janeiro by *Brigadeiro* Francisco de Assis Corrêa de Melo, 'Melo Maluco', who

was acting Air Minister in place of Anysio Botelho (10 days later Botelho would be investigated by the self-denominated 'Supreme Command of the Revolution', based on Institutional Act No. 1). The Minister opened the game: "Montenegro you're going to have to leave the CTA. I'm going to send brigadeiro Márcio de Souza e Mello of the 4th Air Zone there to do clean-up and arrest the communists there".

"Márcio? But I'm his oldest friend! And I can look after the situation myself because I know the CTBT than anyone, like the palm of my hand…."

"You may know a lot about the CTA but neither you nor I understand anything about communism. Márcio knows all about this business."

The only point in Márcio de Souza e Mello's career that could indicate that he "knew about communism" was his old connection with the extreme right *integralista* movement. However, Montenegro did not give way: "I insisted to the Minister that I should continue to be the head of the CTA, saying that I knew the people well and knew that there were elements who should not stay there on account of their leftist tendencies. But I made it clear that this could only be done through the proper form of investigation".

The following day, when he returned to São José dos Campos, Montenegro was informed by his Chief of Staff, *Coronel* Oscar Spínola that while he had been in Rio, Eduardo Gomes had sent a radio message ordering a search of the dormitories and living quarters of staff and students.

"When he returned from Rio, *Brigadeiro* Montenegro told me that they had asked him at Air Force Headquarters whether or not he supported the revolution. He said he supported it but that he could not allow the CTA personnel to be called communists, especially the students. He therefore agreed to set up an internal inquiry to investigate possible cases of subversion," Spínola remembers. *Brigadeiro* Antônio Guedes Muniz (who had designed the Muniz7, or M7, aircraft), and had been appointed by the 4th Air Zone to perform the less than edifying task of carrying out an 'ideological spring-clean' on the ITA campus, ordered his subordinates to aim their machine guns at the dormitories while the students' rooms were searched for 'subversive material'. At the same time, Muniz ordered military personnel with loaded weapons to protect the houses of the officers living in the CTA against possible 'communist attacks'. Rogério Hilf de Moraes, the son of *Brigadeiro* George de Moraes, remembers that stressful day: "My father supported the 1964 coup. We had a 24-hour security at the door of the house, a serviceman with a machine-gun the whole time. My mother said that there were aircraft ready

to take off if it had been necessary to evacuate the CTA. Looking through the bedroom window we could see the guard down there, holding his machine-gun. That scene had quite an effect on me".

His brother,George Hilf de Moraes, recalls that even his father, who had supported the coup from the very beginning, risked being arrested: "My father had some technical books on metallurgy written in Russian because there were no books on the subject in Portuguese. When these were discovered it was said that he too must be a communist because there were suspicious books in the house that had been published in the Sovit Union".

Montenegro's eldest son, Fábio, who was only nine years old at the time, could only remember that disastrous day in flashes: "I remembered I was coming back from school and two armed servicemen escorted me to the door of our house. When I got there I found everybody in a state of shock and my mother worried about what might be happening to Dad".

In that warlike scenario Colonel Oscar Spínola was still trying to argue with *Brigadeiro* Muniz: "You know that our campus is a cosmopolitan town with instructors from different countries. They're not going to understand the sort of violence. Please, let's wait for *Brigadeiro* Montenegro to get back and decide what to do".

It was no good. "*Brigadeiro* Muniz said to Spínola that he should help him persuade me to carry out his stupid tactical plans," Casimiro Montenegro would later write in his own hand. When he returned to the Technical Centre for Aeronautics and saw what the situation was, he still tried in vain to telephone the Commander of the 4th Air Zone, Márcio de Souza e Mello. "I could not manage to speak to him but I told his chief of staff, *Coronel* José Vaz that I could not allow his interference in the CTA while I was there but that I would take the necessary measures together with the Air Zone to weed out those elements linked to communism," Montenegro also recorded. A Military Police Inquiry (IPM) was opened at Santos where all those from ITA who were suspected of subversion, were sent. Casimiro Montenegro resisted as long as he could. He called to his house the President and Vice-President of the Santos Dumont Academic Centre, the students Sérgio de Magalhães Bordeaux and Hermano Tavares, and tried to calm calm their nerves: "Carry on studying. That's what you have to do," he recommended.

Nevertheless, two days later he summoned them again. This time the news was not good: "Lads, I'm very sorry but there's no way I can control this business."

There were 40 years later Hermano Tavares, who would become Vice-Chancellor of the University of Campinas (Unicamp), would recall that "On the day after that conversation with *Brigadeiro* Montenegro, the first Black Mariah came to ITA." He was referring to the Volkswagen Kombi that picked up the first group of students and instructors – Hermano among them – and took them to the prison in Santos after they had been dragged from their classrooms by Air Force patrols.

Repression at the hands of the military within the teaching institution created such paranoia that one day the rumour ran around the campus that the architect Rosendo Mourão, who belonged to Oscar Niemeyer's group, had been taken to prison in a military armoured car with a Caçapava number plate. In fact several people had seen him leave in the olive green vehicle and the news soon reached the ears of Montenegro, who calmed everyone down: he had 'lent' Mourão to his friend General Zerbini to check on the building work in the Caçapava barracks. Out of courtesy, Zerbini had sent the military vehicle to pick him up.

In October, six months after the coup, the list of crimes discovered by the military went from the exhibition of a festival of Czech and Polish films in the ITA cinema to the unbelievable accusation that the Academic Centre was planning to blow up bridges on the Via Dutra. The Military Police Inquiry concluded by dismissing two instructors - Szmul Jakob Goldberg, better known as 'Professor Kuba', and Arp Procópio de Carvalho – as well as 12 students: César Simões Salim, Cyro de Oliveira Machado, Frederico Birchal Magalhães Gomes, Glício Roberto Amaral Martins, João Yutaka Kitahara, José Arantes de Almeida, José Tomazelli, Luiz Oscar de Mello Becker, Marcos Ajzemberg, Raimundo de Oliveira, Raimundo Rodrigues Pereira and Sílvio S. Salinas. Seven students were suspended for one academic year, among them the student leader Ezequiel Pinto Dias. At the end of that year the traditional graduation ceremony of new engineers at ITA was cancelled. "The photograph of the 1964 graduates, taken in the H13 restaurant, looked more like a picture taken at the funeral," said Luiz Maria Guimarães Esmanhoto, the student who had exceeded his limit of absences from class and had also been suspended for a year.

When General Humberto de Alencar Castello Branco took Office and on 14th April 1964 became the first of the gallery of military men to occupy the post of President of the Republic for 21 years, the Air Ministry came under the direction of *Major-Brigadeiro* Nélson Freire Lavanère-Wanderley, who had made the first Airmail Service flight with Casimiro Montenegro. Another coincidence, this time a tragic one, would mark Wanderley's arrival at the Ministry. His father, Brigadier General Alberto Lavanère-Wanderley, had been

one of the few fatalities during the 1930 Revolution, having been killed by a shot fired by the then *Tenente* Juracy Magalhães. Now, in 1964, Wanderley would participate in one of the only occasions when blood was spilled during the overthrow of Jango. He had been sent to remove from office the Commander of the 5th Air Zone in Canoas (RS), the Jango-supporting Tenente-Coronel Alfeu de Alcântara Monteiro, who reacted vociferously at being arrested. In the ensuing confusion, Alfeu shot at Wanderley but was mortally wounded by a bullet fired by *Coronel* Roberto Hipólito da Costa, a nephew of Castello Branco. The matter was immediately hushed up: *Coronel* Hipólito was sent on a long mission to the United States and Wanderley was put in charge of the ministry by Castello. Whatever the reason, his becoming Air Minister meant that his friend Montenegro would remain at the head of the CTA even though he was the object of accusations that he had not cooporated sufficiently to rid ITA of *all* the elements considered to be subversive.

Montenegro was aware that that was an extremely critical period. The age-old opposition to the Technical Centre for Aeronautics by the more conservative sectors of the Air Force was now added to with accusations that, with his approval, ITA had become a den of communists. "It was the chance they had been waiting for to close down the CTA," Montenegro wrote in his notebook. Because of his concerns, in the first week of December 1964 Casimiro Montenegro wrote a long letter to Lavanère-Wanderley in which he tried to convince him to re-launch the idea of turning ITA into a foundation, thus freeing the institution from the administrative hindrances there had always made it a hostage to changes in the Ministry. This was without a doubt an extremely high-risk game. Are precisely the point when the rage of the CTA's critics had redoubled, Montenegro was once again putting on the agenda a controversial topic that had been hibernating in the National Congress. But he was convinced that, given the circumstances, it was a question of all or nothing. He had not the slightest compunction in calling on the long friendship between himself and the Minister:

> *My Dear Wanderley,*
> *I am writing you this as a private letter to an old friend and my co-pilot on the first Airmail Service flight. But as we cannot separate the man from the post he occupies, this will not only be a conversation between friends, but also a dialogue in which, within the framework*

of the regulations, the Director-General of the CTA is speaking respectfully to the Air Minister. For this reason you may use this letter, if you think fit, as an official document.

I simply hope that in this expression of feeling of an almost old (what an old!) very grumpy ('very' here is a diminutive, 'grumpy' is a nickname) will not go so far as to deserved a gaol sentence, as if I were some disgruntled cadet....

Montenegro re-read the opening of the letter he had just written and, in the second draft, decided to take out the second paragraph to avoid giving the impression that, despite his close relationship with Wanderley, his tone might be considered as too informal in a letter to a Minister. So he continued:

Our friendship is such that I can speak you completely openly, secure in the understanding that you will take my proposition as a sincere attempt to contribute to the stature of our Air Force. I am sure that you will not find any nonexistent hidden intentions in my words, nor at any narcissistic boasting. I am sure you will understand that anything I say that seems to be self-praise is not that, but rather the result of long-held convictions that time and experience have made even more deeply rooted in me, and of a profound knowledge of the subject I am going to write about: I want to ask you to give ten minutes of your attention to the familar question of the 'Foundation'. I could count about a hundred memoranda which, like Joãzinho in the story, I have hammered out of cold iron since 1945 in an attempt to give the CTA a proper structure.

The last sentence would also be cut from the final version sent to Wanderley. However in the following ten typed pages Montenegro would not censor himself in proposing that not only ITA but the whole of the CTA should be turned into an institution with its own legal identity, whatever name might be given to it:

We would be creating, Wanderley, a new type of 'foundation', but without that name - which is already almost a swear word after having

At the end of 1964 thegraduating classes in aeronautical engineering (top) and electronic engineering (above) appear in a photograph “more appropriate to a funeral”. 12 students and two instructors are missing from the group, having been expelled from ITA by the military.

been so long synonymous with a magic wand – or an 'autarchy', or a 'legal entity within public law' or something like it. If this were achieved I could go home in peace, knowing I had completely fulfilled my duty. Without it, I shall live the rest of my life in the constant fear of seeing my life's work misrepresented and feeling that I had not completed my mission and had not properly prepared the ground for those who will follow me. Please listen, my dear Wanderley, to the voice that is already a little hoarse but which carries no less conviction that it had 30 years ago, of your old flying instructor.
With very best wishes from Montenegro

The letter was dated 6th December 1964. Wanderley hardly had the time to read it because a week later, on the 15th, President Castello signed the order dismissing him from the Air Ministry after a crisis in which brigadiers and admirals had jostled for power behind the scenes in the Armed Forces. Ever since the Juscelino Kubitschek Government, when Brazil had bought a second-hand aircraft carrier the *Vengeance*, which was rechristened the *Minas Gerais* in Brazil, the Navy and the Air Force had been at odds. The Navy wanted its own Air Force to put aircraft on the ship. The Air Force replied in the words of the FAB officers: "If it has wings and flies and is not a bird, then it's ours". The temperature in the Castello Branco Government at the end of 1964 returned to boiling point when it was decided that the *Minas Gerais* would take part in Unitas, a joint training operation alongside other countries on the continent. The Navy threatened to put its own aircraft into action. The Air Force replied that if they took off, those aircraft would be considered as Unidentified Flying Objects (UFOs) liable to be shot down by FAB fighters. It was not an idle threat: at about that time a Navy helicopter had been machine gunned on Air Force base at Tramandaí, in the state of Rio Grande do Sul. When Castello put an Army general in charge of investigating the case, even though it fell within the Air Force's area of responsibility, Lavanère-Wanderley felt he had been slighted and asked to be relieved of his post. The crisis would soon affect Montenegro; Castello Branco appointed in Wanderley's place as Acting Minister the commander of the 4th Air Zone, *Brigadeiro* Márcio de Souza e Mello, whose help he had rejected in hunting communists at ITA. But the worst was still to come. Montenegro was even more concerned when, after Souza e Mello had been in place for a month, Castello announced the name of the new Air Minister: *Marechal-do-Ar* Eduardo Gomes. The circle had closed.

Chapter 18 - Dark clouds on the horizon at ITA: Enter Brigadeiro Castro Neves

Casimiro Montenegro no longer doubted that Eduardo Gomes wanted to close down ITA. He was promoted in January 1965 to the highest position of his career, *Tenente-Brigadeiro-do-Ar*, and at the end of the month he was called to the office of the new Minister for a meeting with no agenda. Even though they still spoke to each other informally, using the familiar '*voce*' form of address, the myriad differences between them ended the tone of camaraderie that used to exist between them. Being careful to not name anyone, Montenegro complained to the Minister that there were people interested in playing them off against each other with the sole objective of gaining attacking ITA.

When Eduardo showed indifference to this information, Montenegro made it clearer: "*Coronel* Burnier has been here without authorisation to make trouble between you and me, in a clear act of indiscipline. While I am there I will not allow this to happen".

Eduardo Gomes did not seem to think that it was important and he reacted very coolly: "Montenegro, I called you here to tell you this: you are going to have to step down as head of the CTA".

Without showing how shocked he was by these words, he still tried to resist: "But I started the Centre, am I to be removed as if I were under suspicion? I would like to stay at CTA for a while longer, because we have serious problems there and as I know the place inside out, it's much easier for me to deal with them".

The Minister was not moved by these arguments: "You are already a *Tenente-Brigadeiro*, and this job is reserved for *Major-Brigadeiros*, one rank beneath you".

Montenegro reminded Eduardo Gomes that 10 years earlier he himself had set a precedent which would now benefit him: "Eduardo, in the period following Getúlio's suicide, you were already a *Brigadeiro* and you were head of the Directorate of Air Routes, a position reserved for *Coroneis*".

But he knew that he was wasting his time. The cards were stacked against him and it had already been decided that he would lose. In a last attempt to delay the decision, he made a suggestion: "As I have already put in for leave I am going with my family to Bahia; when I return a month from now, let's talk again. Do you agree?"

Eduardo Gomes got up and, indicating that the meeting was over, held out his hand: "Yes, I agree."

Ten days later the family was comfortably installed in the beach house which the Bahia branch of the Montenegro family kept at Mar Grande, on Itaparica Island off the coast of Salvador. Even though it was a baking hot Friday morning, there were few other people on the beach. Montenegro was sunbathing in a deck chair with his eyes half closed while Antonietta was looking after the children. She was the first to notice the tiny blue figure coming towards them on the pavement which bordered the beach. In a few minutes the dot had become a male figure; yes, it was a man, and he was wearing a blue uniform. It was only when he walked across the sand in her direction that she recognised him as *Major Aviador* Ozires Silva, 34 years old, an aeronautical engineer who had graduated in 1962 and one of Montenegro's old students. He was there against his wishes. The day before *Coronel* Oscar Spínola, the Deputy-Director of the CTA (Acting Director in the absence of the incumbent), had asked him to undertake a prickly mission – he had been chosen precisely because he was on good terms with Montenegro: to go to Bahia immediately and tell him that he had been dismissed as head of the CTA by Eduardo Gomes. The person nominated by the Ministry to take his place was *Brigadeiro* Henrique de Castro Neves who, as it happened, was already on the campus and had installed his belongings in the residence reserved for senior officers until the Montenegros' house could be made available. The Minister's orders had been curt: if he wished, Montenegro could interrupt his holidays, return immediately to São José and hand over his job to Castro Neves. If he preferred to use up his last 20 days' holiday still

outstanding in Bahia, then the handover would be handled by *Coronel* Spínola. The latter had already sent a letter by express mail to Montenegro telling him all this, but he had been afraid that it might be delayed and that Montenegro would find out via the newspapers.

What nobody knew, not even Montenegro, was that on the day of his meeting with the Minister, Eduardo Gomes already had two orders in his drawer, signed by both him and President Castello Branco: one relieving Montenegro of the Directorship of the CTA "by reason of the needs of the service" and the other nominating *Brigadeiro* Castro Neves in his place. Ozires left the same day for Salvador and the next day he took the boat to the Ilha de Itaprica. More than 30 years later he recounted that moment in his book *A decolagem de um sonho: a história da criação da Embraer* (*Takeoff of a Dream: the Story of Creating Embraer*):

> *I landed on the island without really knowing how to approach the subject. I started walking. It was a beautiful day and I had been told the place I was looking for was not far away. Even though it was the height of summer the beach was relatively deserted and in the distance I saw someone sitting in a chair facing the sea. As I got closer I began to make out that well-known white head of hair of our good friend. Nothing I had thought would happen actually did happen. I approached him and the* Brigadeiro *looked curiously at me standing in front of him, and it seemed to me that he did not seem at all surprised. I think he thought it was natural that this* major *should be standing in front of him, even though we were more than 1,000km away from São José dos Campos. With a lot of hesitation and without knowing where to begin, I tried to carry out my duty.*

Antonietta was the first to react: "For heaven's sake, we're in the middle of our holidays…."

Her husband interrupted her to give his decision: "Look, Ozires, I'm not going back. We'll finish our holidays and when we go back I'll go to São José to arrange the move to Rio de Janeiro. I'm not going now. The handover can be done by whoever who wants to do it.

The beach seemed to have lost its allure. Everyone went inside the house where Ozires had lunch and made a hasty exit in order to not miss the boat back to Salvador. When he asked Antonietta to re-read to him the two

pages written in Spínola's handwriting – so small that it was nearly impossible to distinguish an A from a B – Montenegro realised that what had happened was a lot more serious than Ozires had told him. Acting as if he had already taken office *Brigadeiro* Castro Neves told Spínola to gather all the officers, instructors and heads of departments in the ITA auditorium so that he could introduce himself as the new head of the CTA and to inform them that the post would be handed over in five days time, with or without Montenegro present. It was the last paragraph of the letter, however, which led him to revise his decision to not take part in the handover:

> *The idea of I myself having to hand over the leadership of the CTA to* Brigadeiro *Castro Neves is greatly abhorrent to me, but not wishing to influence your decision, I will abstain from making any comment on this issue.*

Spínola finished the letter by saying that whatever Montenegro's decision, on the following day he was going to the office of the Minister in Rio, to submit his resignation "and to find out what my destiny will be". And he observed, with exquisite irony, in one line that practically leapt off the page, that "*Brigadeiro* Castro Neves has brought in *Coronel* Vassalo as the head of his Cabinet…'. Montenegro understood that his absence would result in an 'abhorrent' situation for his faithful friend Spínola, so he returned. In the six days which followed he abandoned the sandy beaches for his desk in the house in Mar Grande preparing, with Antonietta's help, the speech he would give when he handed over his job to the new Director.

Anyone who went to the ITA auditorium on 18th February expecting a bloodbath was disappointed. Those closest to him knew that even though he was being taken away from the work he had dedicated his life to (moreover, on the orders of an old comrade, Eduardo Gomes), settling scores was just not in Montenegro's nature. With his four stars of a *Tenente-Brigadeiro* shining on his epaulettes Montenegro read a speech without a single reference to the crisis which had come to a climax and resulted in his dismissal. It would have been impossible to find a single reference to injury or resentment in those five pages, even with a magnifying glass:

> *Everything I am about to say is the result of long-held convictions which time and experience have only made more ingrained, and from*

> *a profound knowledge of the subject - knowledge which I acquired by working in it, devoting myself to it, and which was not a privilege granted just to me because anyone else in the same circumstances, and with the same good intentions as I had would have achieved as much, or more. I want to highlight above all the celebrated question of the 'CTA Foundation'.*

That was it. Casimiro Montenegro used the last 40 minutes of his military career hitting the same note that had made him a kind of knight errant of Brazilian technology: what could be done in order to save ITA? The solution he then defended was, without changes, the same one he had been talking about since Juscelino Kubitschek took office: the approval of the proposed law turning the CTA/ITA into a public foundation with public funding, administrative autonomy, and freedom for the teaching body. Only in this way would it be possible to protect the institution from political interference, whether civil or military. Polished as always, Montenegro finished his speech with a generous gesture in the direction of the person who would be taking up his position:

> *I would like all my colleagues to give their most dedicated, sincere and loyal co-operation to my official successor, Brigadeiro-do-Ar-Engenheiro Henrique de Castro Neves, an elite officer who is sure to carry out our mission while always keeping in view what is great about the CTA.*

To emotional applause from the instructors and students present, Montenegro took Antonietta's arm and went to his house to supervise the move. A few weeks later he transferred to the reserve. If Eduardo Gomes had imagined that the dismissal of Montenegro and the ideological cleansing carried out by Castro Neves meant the end of the crisis at ITA, he was very much mistaken. The crisis was just beginning.

The majority of people who made up the world of ITA had never heard of *Brigadeiro* Henrique de Castro Neves. What they did know was that he looked like a boxer - in the words of Ozires Silva, he was "tall, with an enormous frame, suggesting he had been a sportsman in his youth". Guarded, he rarely smiled and had gained the confidence of Eduardo Gomes on 27th November 1935. When armed communists

tried to take the Afonsos Field, the first officer to turn up voluntarily at headquarters prepared to fight the uprising was the *Tenente-Aviador* Henrique Castro Neves. Since that episode until the moment he was nominated as head of the CTA, he had had an unremarkable career: he served in the Airmail Service in the Northeast of Brazil, he was Director of the air bases at Recife and Afonsos Field and was Deputy Director for Air Routes. In the 40 years in which he served in the Air Force, there were only two incidents of any interest to the media: the so-called 'ITA crisis' and another, some time later, when he was the General Director of Aeronautical Engineering he caused an international outcry when he vetoed the plan for the International Airport in Brasilia which had been designed by Oscar Niemeyer. Apart from this he had made no lasting impressions throughout his career.

At the request of Montenegro, Director Marco Antonio Cecchini continued in his job even after Castro Neves took office. Everyone's hope lay in the possibility that Congress would vote in favour of the dust-gathering Draft Bill which would establish ITA as a foundation - as the Government had a majority in the Lower House, it only required a *nihil obstat* from President Castello Branco for this miracle to come true. Cecchini, however, soon realised that his involvement with Montenegro and the proposal to create a foundation were not looked upon favourably by his new chief. Even though his personal dealings with Castro Neves were cordial, he complained that "in strictly professional terms it was impossible to have a dialogue with him". Cecchini only stayed at the request of his old friend and mentor. Although he was a chemist, he resorted to a metaphor from physics to explain the difficulties he had relating professionally to the new team: "The military world has a centrifugal structure, that is, there is a commander at the top, and orders are given to those below and are not questioned," he said. "Meanwhile, the academic world has a centripetal structure, in the sense that the teachers are the ones who decide what should be done." While these obstacles remained theoretical it was still possible to try and have a dialogue, but the tone of the conversation changed completely when Cecchini heard *Brigadeiro* Castro Neves saying that he intended to dismiss the new President of the Academic Centre because he "thought he was a communist". With all due care, the Director made it clear that he could not allow this. The situation was becoming critical.

The last straw came in Brasilia late one Friday. In a plenary session that had almost been abandoned, the Deputy for Amazonia, João Veiga, Second Secretary to the Speaker, was presiding over a session in which three stalwarts were reading newspapers or talking to each other from their blue leather chairs. It was the 'washing up' of the business of the day, when projects which nobody objected to were approved (or rejected, according to each case) in principle. The deputy who was presiding over the session was reading, with the speed of a racing commentator, the preamble of the proposition and repeated the standard wording:

"Under discussion. As there is no one registered to debate this draft bill, the debate is closed. Proceed to vote. Those who agree, remain as you are. Approved."

In the middle of the stack of papers which an assistant put in front of him for him to carry out the formalities, Joao Veiga read out, so quickly that it was almost impossible to understand him, a bomb which would explode hours later in São José dos Campos: "For discussion and vote, the message from the President of the Republic to remove Draft Bill No. 2561, dated 1961, to establish the Technological Institute for Aeronautics as a Foundation, with the authority of the Executive Power. As there are no speakers registered to debate this point, the debate is over. Proceed to vote. Those who agree, remain as you are."

Those who were reading newspapers read on.

"Approved."

And there it was: President Castello Branco had ordered Congress to revoke a project on which Montenegro and his team had spent hours of time in interminable meetings and sitting like wallflowers in waiting rooms. Cecchini decided to hear from each instructor separately and two weeks later he sent *Brigadeiro* Castro Neves a two-page document which summarised the prevailing mood in São José dos Campos:

> *One point that everybody I interviewed kept referring to relates to the withdrawal by Congress of the project to establish a foundation. As I have already told you personally, in my opinion this withdrawal was disappointing. Not only in the way it was carried out, but – and above all - for its significance: it reaffirms the status quo, that is, keeping a partial autonomy that is constantly threatened with extinction and maintains the cult of personal rule which is undefined*

and unstable; it preserves a form of leadership which is a façade, with responsibilities but without authority or prestige. In short: it prolongs state of affairs which shows that the Air Ministry has no confidence in ITA and its ability to carry out the objectives which it has been set. The best universities, and higher education institutions, those that lead the way in scientific and humanist developments in the free Western world - regardless of the era or nationality - have one characteristic in common: autonomy.

Instead of making the situation better Cecchini's report made it worse. In a letter sent to Montenegro, the Director told of the difficulties he was facing:

My dealings with the Director-General are always a cause for great upset. I have to defend positions which are contrary to my ideas about education; I have had to go back on certain promises made to the faculty, even though these promises were made with the authorisation of the former Director-General. In short, role of Director has resulted in real torment for me.

The torment continued for another 60 days. In July Cecchini resigned, leaving *Brigadeiro* Castro Neves to immediately appoint to the post Deputy-Director Luiz Cantanhede, a engineer and instructor of new intakes at ITA who was President of the senior teaching body when *Brigadeiro* Ballouisier was in charge of CTA. He wanted to refuse, but the appeals from the other instructors and Montenegro left him no choice: the most important thing was to preserve ITA and in order to do so it was vital to keep the Directorship in the hands of someone who was committed to the original idea of the institution.

The apparent calm ended before the end of the year. Three months after Cantanhede took up his post, *Brigadeiro* Castro Neves received information, passed to him from ITA student-officers that those who were due to graduate from the School of Engineering that year "were preparing an unpleasant surprise" for the graduation ceremony. All he knew was that it had something to do with the choice of class speaker, but in order to "prevent collective and rash attitudes" he decided issue orders to restrict the student's choice of figures eligible to be honoured at the cerimony to five categories:

- Civilian authorities or military officers who were members of the current Federal Government.
- Military officers on active service in the Air Force.
- Active or deceased members of the faculty of ITA.
- Key figures in industry, civil aviation and the national civil service who have worked with the Institute's leaders.
- Members of the gratuating cohort who had passed away during the course.

Leaving aside the mediaeval enormity of the document in itself and the language of the police station in which it was written ("... elements of note ..."), Castro Neves' wording conveyed a specific implicit restriction amongst the generalities. By limiting the choice to 'military officers *on active service* in the Air Force' he removed the natural candidate eligible to receive this tribute with respect to ITA - its creator Casimiro Montenegro. It seemed clear that this would not end well. Once they had received these instructions from the Director of CTA, the graduating engineers held two meetings, at the end of which their choices were announced. The class speaker elected was the Catholic philosopher Alceu de Amoroso Lima, also known by the pseudonym Tristão de Athayde, who had become a strident critic of the military dictatorship. Nominated as persons to be honoured were the 14 victims of the Parliamentary Inquiry the Air Force had ordered in ITA: the dismissed instructors Arp Procópio de Carvalho and Szmul Jakob Goldberg, known as 'Kuba', and the 12 students who had been expelled the year before. To make it clear that they were not prepared to discuss their choices with *Brigadeiro* Castro Neves, at the same meeting they wrote and signed an invitation directly to Amoroso Lima - and posted it immediately afterwards. They had burnt their bridges and left themselves with no way out.

If the students wanted a war then they had chosen a worthy adversary. For *Brigadeiro* Castro Neves "making peace with instructors and colleagues dismissed by the Revolutionary Government" and nominating a writer "known for his anti-revolutionary political position and leftist tendencies" meant collective indiscipline and insubordination towards authority. He was certain that "a small minority had had a pernicious influence on the majority," persuading them to choose names hostile to the military regime, the Director of the CTA decided to hold an investigation to uncover the leaders of the movement, giving the assignment to a man he trusted, *Tenente-Coronel* Fernando Jeolas.

Marco Antonio Guglielmo Cecchini
1960 - 1965

Luiz Cantanhede de Carvalho
Almeida Filho
1965 - 1966 e 1973 - 1976

Charly Künzi
Janeiro / Março 1966

Eduardo Gomes nominates Brigadeiro Henrique Castro Neves (top) to carry out the ideological cleansing of ITA: in six months, three Directors resign: Cecchini, Cantanhede and Künzi

Director Cantanhede acted as peacemaker and used all his moral authority to appeal to the students to reconsider their decision. Another tense meeting was held and because everybody knew that some student-officers were passing information to the Director-General they decided to have another vote, this time a secret one. The result showed that there was still room for discussion: to demonstrate that they had not adopted a vengeful position, they abandoned their efforts to honour the teachers and students who had been punished, but they would not give up their nomination for class speaker.

The vote may have been secret but the meeting was not. According to Castro Neves' informants in the graduates' meeting "the active influence and harmful leadership on the part of Ezequeil Pinto Dias, Luiz Maria Guimarães Esmanhoto and Mário Tokobo" was clear. The first two were repeat offenders, and had already been punished the year before by their compulsory suspension for one year as a consequence of the Military Police Inquiry (IPM) to investigate communist activities in ITA. The report also mentioned a "weak and collaborative attitude" was shown by class representatives Antonio Oliveira Farias, Elmir Germani and Nelson Hochman, recalling that when heard by the Military Police Inquiry in 1964, the first of them "declared himself to be a communist and was not punished for it". Now the time had come for a witch-hunt. Because the inquiry led by *Tenente-Coronel* Fernando Jeolás did not suggest any punishment, Castro Neves, who was in no mood for games, called it a "parallel investigation". He personally interrogated the Director, the Deputy-Director, the head of the student body, the four suspects who were named as the 'leaders', the five officer-students from that year's cohort, the three class representatives accused of leniency and even the civilian students Luiz Antônio de Lassamio Murta and Getúlio Vargas da Costa Gama. In the end Castro Neves had no doubt: the methods used and the people elected were clear indications of "a process of communist-type influence".

On 24th November, a month after the first news about the graduation ceremony had circulated, the Director-General of the CTA prepared a thousand-word, five-page confidential report sent to *Marechal* Eduardo Gomes, the Air Minister. In the space for 'subject' he stated dramatically: "Collective indiscipline and expulsion of students from ITA". After recounting, in detail, the facts involving the engineering graduates and showing Eduardo Gomes that he had personally carried out a parallel investigation, Castro Neves arrived at his conclusions:

Even though the report from the person in charge of the inquiry, which is attached for Your Excellency's information, did not arrive at any definite conclusions about the driving force behind the students' attitudes, which are hostile towards the guiding principles of the March Revolution, this Director-General is certain that the methods they used in the election meetings, the people elected and the student leaders who were disciplined for leftist tendencies, are a clear indication of the fact that there is an ideological influence at work here which is communist in nature.

From the official report and other inquiries that had been carried out, this Director-General concludes that the majority of the cohort were led into committing an act of indiscipline, ignoring or not being able to recognise the ideological origins of their actions. They were led by a misguided sense of independence and an immature reaction towards the actions of those in authority, influenced by dismissed instructors who, in the pre-revolutionary era, had planted the seeds of Marxism, expertly hiding the fact that they were in fact militant communists; guided by leaders who were trained in communist techniques of hiding their actions behind those of innocent groups to shield themselves behind the pseudo-acts of the group over which they apparently had no control.

To conclude all that has been investigated, heard and observed, this Director-General has no doubt in naming the students Ezequiel Pinto Dias, Luis Maria Guimares Esmanhoto, Mario Tokobo and Antonio Oliveira Farias as the inciters of the act of indiscipline and as such directly responsible for it; consequently I am recommending to Your Excellency the expulsion of the students from ITA according to Paragraph H, of Article 60 with reference also to Paragraphs A to L, of article 61 of Regulation 965GM3, dated 24th August 1964, and also in the interests of discipline at the Technological Institute for Aeronautics. I have decided to suspend the students Elmir Germani and Nelson Hochman from taking their final exams according to Paragraph D of Article 60, for not attempting, as class representatives, to avoid collective act of indiscipline after having been informed of the orders issued by the Director and disregarding them after the event, even in the face of the verbal clarifications received directly from the Director-General, according to

Paragraph L, of Article 61 of the regulation cited. I am also informing Your Excellency that I have suspended the presentation of graduation diplomas, with diplomas for those who have the right to them being handed over privately in the Director's office.

As if he was carrying out routine, Castro Neves called his aide and gave him two envelopes: one containing the original report, to be delivered to the Air Minister, and the other with a copy to be delivered to the Director of ITA. After reading the 'inquisitorial' document signed by his superior, Luiz Cantanhede did not even take the trouble to consult his colleagues. He sat down in front of his typewriter and in a five-line message he resigned as Director.

Chapter 19 - The Director-General is taken to a secret meeting - "Be quick, you are going to be talking to the President"

The departure of Cantanhede transformed the Montenegros' apartment in Rio de Janeiro into a meeting place for ITA veterans who were fighting to keep the institution on its feet. In general it was the tenured teachers who had chosen to leave São José dos Campos, uncomfortable at the authoritarian behaviour of Castro Neves. It was through these intermediaries that Montenegro followed, chapter by chapter, the demolition of his life's dream. At eight o'clock in the morning on Friday 26th November, the day after Cantanhede resigned, *Brigadeiro* Castro Neves called the Swiss instructor Charly Künzi to his office, gave him an abbreviated report of the crisis which had resulted in the resignation of the Director and asked him directly: "I would very much like you to take the place of Cantanhede. Would you like to be the new Director?

Confused and surprised, Künzi asked the *Brigadeiro* to allow him time to "think it over before deciding". As he was leaving he heard from the chief of staff, *Coronel* Vassalo, that the dismissal of the four students had been finalised. The news spread around the campus and the instructors, called together by Acting Director Fernando Rebello, had already gathered together in the ITA auditorium to decide what to do. Künzi arrived in time to hear Cantanhede reading the end of his resignation letter. Soon afterwards he asked to speak to his colleagues and told them about the conversation he had just had with Castro Neves. He explained that he had asked for time to discuss with the teaching staff and students what his answer should be.

Handsome, and with an easy smile, the son of a military family and born in Berne, Switzerland, Charly Künzi had graduated in engineering from the Zurich Polytechnic. In 1958, at just over 30 years old, he had received a challenging invitation from the industrial giant Brown-Boveri, the leading company in the Swiss industrial empire: to take charge of building a factory in Brazil – more precisely in the city of Osasco near São Paulo, to produce industrial equipment. Künzi was accompanied by his new wife Beatrice and when the job was finished in 1961 they did not want to leave Brazil. The success of the project led Brown-Boveri to propose undertaking an identical project, this time in Canada, but instead Künzi preferred to accept an invitation to teach in the School of Engineering at the University of Minas Gerais in Belo Horizonte. Beatrice did not even have the chance to finish the art course she was attending three times a week in Ouro Preto, one hour away, in the class of Alberto da Veiga Guignard: less than a year after he had settled into Belo Horizonte, Künzi was invited by Marco Antônio Cecchini to teach at ITA.

The whole of the weekend was taken up with meetings. Künzi invited Deputy-Director Rebello, the President of Senior Staff Committee, Marco Cecchini, and the instructors José Thomaz Senise, Octanny Silveira da Mota, Darwin Bassi and Gustave Rabson, to his house, and asked them the question that had been bothering him since the day before: should he or should he not accept the invitation to be Director of ITA? Those gathered there had already made up their minds; of the six, only the American mathematician Rabson had doubts. All the others were against it. At a second meeting with six other colleagues the result was four to two against accepting the invitation. All of Saturday and Sunday carried on in the same way; no-one slept and no-one reached a conclusion. When the next week started there was no white smoke coming from the chimney of the Director's office. Impatient with the delay and the endless meetings, Castro Neves gave Künzi a harsh ultimatum: "Either you reach an understanding I shall appoint a *Coronel* to be the Director of ITA."

In spite of the threat, it was only the following week, on Tuesday 7th December that Künzi felt able to meet the Director of CTA to give his answer, in his strong Swiss accent: "I can only accept your most gratifying invitation if I have the support of the majority of the instructors and students, including those from overseas, the alumni association and of course, of the Director-General."

Faced with the intransigence of the *Brigadeiro* he concluded: "As you know, in order to gain the support of the students, alumni and instructors, it

would mean looking again at the punishments of the four engineering students. I suggest that as a peace offering, those who were expelled should have to re-take the course, which would already be a severe punishment."

Castro Neves did not object to the initial questions, but in relation to the expelled students, the most he could promise, he told Künzi, was a vague "I'll look at their case later". That was something, at least. With that fragile compromise in hand, Charly Künzi set out to assemble his future management team (he had decided only to take up the post when he had assembled the full team). He only really understood the obstacles he would run into after the first round of invitations. Of the six who were invited, four turned him down: Paulus Aulus Pompeia and Leonidas Hegenberg, considered for the vice-directorship, and Octanny Silveira, who refused the post of Director of the Student Body. Tércio Pacitti continued as the Head of the Data Processing Laboratory and João McDowell accepted the post of Director of the Student Body on condition that he could discuss a few issues with the Director-General. The slow uptake did not dishearten Künzi. His part in defusing the political tensions on campus was the suggestion – which was accepted – that the four students write a letter to *Brigadeiro* Castro Neves stating clearly that they were not communists.

It was already 23rd December and as Künzi had not managed to assemble his management team he had not taken up his post. On that day he managed to set up a meeting with the Director-General and Professor McDowell, his preferred candidate for Director of the Student Body. The Professor required little persuasion to accept the post: he only needed to hear Castro Neves say that he would maintain the Department of Order and Orientation of the Academic Centre, which was under threat of closure. He also hoped to use his meeting with the Director-General to state his objections to his most recent decision: to make the civilian students of ITA undertake military service in a Preparatory Centre for Reserve Officers which had been set up on campus. But, hardly had the orderly opened the door and even before McDowell could give the reasons for his visit, *Brigadeiro* Castro Neves said that he had news: "I must tell you that I am going to propose changes to Decree 964/64, which will mean that the post of Director of the Student Body at ITA can only be filled by a *tenente-coronel* from the FAB."

A *tenente-coronel*? It had taken much effort for Künzi to persuade McDowell to stand and now the post could only be filled by a *tenente-coronel*? Castro Neves had not finished: "And I would also like to inform you that,

again for the sake of order and discipline, I have ordered the construction of porters' lodges in all the H8 buildings, where the student quarters are".

The meeting was over before it had begun. The two instructors left crestfallen and it was McDowell who broke the silence first, on the pavement outside: "I'm very sorry, Charly, but for me it's over", sighed the Professor. "I'm going to resign from ITA".

He was yet one more to swell the ranks of mathematicians, physicists and engineers to say goodbye to ITA because they could not stand the police-state atmosphere Castro Neves had imposed on the campus. But Charly Künzi was a stubborn Swiss and was not about to throw in the towel without trying to reinstate the four students who had been punished because of the selection of the engineering course's class orator. Two of those punished, Esmanhoto and Ezequiel had in fact telephoned for help the day before: asking Künzi if he would accompany them onto the campus to recover their belongings from their old student rooms. They feared being subjected to the same humiliation as the other expelled student, Mario Tokoro, who was accompanied at all times by two Air Force personnel with guns when he went back to collect his belongings.

The ceremony to appoint the new Director was finally set for 6th January, but two days beforehand Castro Neves fell ill and was taken to the Air Force Hospital in Rio. In order not to postpone the ceremony any longer – ITA had been without an official Director for a month and a half – *Coronel* Vassalo presided over the ceremony. Two weeks later, when Castro Neves had returned from São José, Charly Künzi travelled to Rio to introduce himself formally to Minister Eduardo Gomes. Even though the Director of the CTA had insisted that he was accompanied by *Coronel* Vassalo, Künzi was not intimidated by the presence of the officer and spoke openly: "I told the Minster about the problems and difficulties we were having, without leaving anything out. Not even the commitment that circumstances had forced on me and the ITA teaching staff to resign if the punishment of expulsion of the four students were not reduced to re-taking the course".

Even though he was under the constant scrutiny of *Coronel* Vassalo, Künzi still managed to have a brief meeting with *Brigadeiro* Clóvis Travassos, Head of the Air Force General Staff, whose office was in the same building, and to whom he repeated the conversation he had just had with Eduardo Gomes, and he brought up a new problem: imposing on civilian students the obligation to do military service would open up a new focus of discontent.

On the way back to São José dos Campos, Künzi received more bad news: disgusted with the regime *Brigadeiro* Castro Neves was imposing on the campus, Professor Paulus Aulus Pompéia confided that he was thinking of going with the majority and resigning. The news reached the Director-General who took it as a personal insult and reacted brutally. On leaving his home in H17, the following morning, Pompéia found an Air Force truck parked by his front door. One of the airmen came up to him and said: "I have orders to help you with the move". Pompeia explained that there had been a mistake, he was not moving out, but the soldier gave him an official letter "... requiring, on the orders of the Director-General, that you must leave your residence on the campus of this Institution as soon as possible". He had been dismissed the night before, as Castro Neves explained later, "for writing the name of Karl Marx on the blackboard during a lesson". With that, he was the 51st – of a total of 150 – instructor to leave ITA since Montenegro's departure.

Künzi was heading towards a dead end. *Brigadeiro* Castro Neves' harsh treatment of a pioneer like the physicist Pompéia, a married man with three children, reinforced the arguments of those who urged him not to accept the Directorship because they felt this would be a significant step towards the militarisation of ITA. If nothing was done then opposition to the Director's office would soon make the campus ungovernable. Using methods he never revealed, Künzi secured a private meeting with Eduardo Gomes without Castro Gomes knowing. In a long statement given in 2001 to the journalists Pedro John Meinrath (an ex-ITA student from the class of 1959) and Raimundo Rodrigues Pereira (one of those expelled in 1964), Künzi told of his meeting with the Air Force Minster, this time without *Coronel* Vassalo's surveillance:

> *The aim of my meeting was to make an appeal on behalf of the four students who had been expelled. I tried to convince him that the fact that they had named Tristão de Athayde, a devout Catholic, as their chosen speaker was enough not to consider them communists. The half-hour conversation was very cordial, but I was surprised by the strength of feeling the Brigadeiro demonstrated in relation to communists and his determination not to go back on the decision to dismiss the students. He told me: "These students deserve it, they really are communists!"*

I said: "No, they are not really communists. We have American teachers at ITA and they are taking those students to the United States with them."

Eduardo Gomes went so far as to say that Bobby Kennedy was a communist. So I tried to show him the incompatibility of the position of Brigadeiro Castro Neves and the students and teachers at ITA. Speaking quietly and politely he told me: "Brigadeiro Castro Neves is a respected officer. He knows what he is doing and has my total confidence".

Charly Künzi had wasted his journey but did not give up hope. From the headquarters of the Ministry in the centre of Rio he took a bus to the Laranjeiras district where *Marechal* Casimiro Montenegro lived. By chance, he was not hosting a visit from ex-colleagues and only had Antonietta for company:

He was already blind and his wife acted as a point of contact. Antonietta acted as the Marechal's eyes. I told the Marechal everything and asked for his help. Montenegro said very little. He said that he had not got the authority to interfere on the part of ITA. I gave my report to Antonietta for her to read to her husband later. I came away certain that the Marshall would do something.

Actually Montenegro was already doing something. He had received a dramatic letter from Professor Cantanhede some weeks before in which the ex-Director gave a detailed list of the deliberate and systematic destruction of ITA being perpetrated by Castro Neves, with the open support of Eduardo Gomes. Indignant at what he had read, he made a copy and sent it to *Brigadeiro* Travassos, head of the Air Force General Staff (whom he referred to as 'Clóvis'), calling it "a letter from a desperate man from ITA" and making a macabre suggestion to the Minister:

I feel that Cantanhede's intention is that you should have knowledge of this letter. In sending it to you I am simply appealing for it to be used to convince Eduardo Gomes to finish ITA off, to release the laboratories and instructors to go to other similar institutions. It would

be a mercy-killing in the same way that an injured animal is put out of its misery.

As well as trying to convince Travassos to support ITA's cause (a risky tactic, as the head of the General Staff he was the direct subordinate of the Minister), Montenegro considered it equally important to gain public sympathy for the role the Institute played in the development of the country. It was clear that people needed to be alerted to the imminent risk of the disappearance of ITA - or its transformation into a military academy, as Castro Neves desired, which would also mean it would be lost. With the press enjoying freedom, the time had come once again to turn to the journalists. After many discussions with teachers and friends, Montenegro explained his plan to the ex-Deputy Director Fernando Rebello, who was as committed to this battle as he was. The targets were the people who formed the elite at that time, opinion makers such as *Cruzeiro* magazine and the newspapers *Estado de São Paulo, O Globo* and *Jornal do Brasil* – the doors of all of them were already open to him. At the *Estado* he spoke to the art critic Luis Martins who wrote the influential 'LM' column and was married to the writer Anna Maria Martins, a childhood friend of Antonietta's. At the *Jornal do Brasil* he did not have to waste time explaining; the editor, Manuel Francisco do Nascimento Brito (son-in-law of the proprietor Countess Maurina Dunshee d'Abranches Pereira Carneiro) was in the FAB reserve and had been decorated for his service as a pilot bombing German submarines off the Brazilian coast, between 1943 and 1945. He was a long-time admirer of ITA, 'Dr Brito' as he was known, was enlisted with just a phone call. Montenegro had two more names on his list: in *O Globo* a man capable of convincing the proprietor Roberto Marinho was his principal assistant, the journalist Walter Poyares - who had also been to ITA several times. In the absence of Chateaubriand (that little Tsar of the press was in a serious condition in hospital), at the *Cruzeiro* Montenegro spoke to the writer and columnist Rachel de Queiroz, from Ceará like him, who also had another 'virtue': she was a friend of the President of the Republic, Marshal Castello Branco. With the shaky handwriting of a blind man, he wrote in the corner of a piece of paper: "If Chateaubriand were well, his would be a name to be reckoned with because he is a great fan of the CTA."

According to the statement made by Künzi to Raimundo and Pedro John, the last door the Director knocked on was that of Montenegro. A few days later an Air Force officer arrived unexpectedly in the Director's office, weighed down with the four stars of a *Tenente-Brigadeiro-do-Ar*, and identifying himself only by his first name (which Künzi conveniently forgot) gave him an enigmatic message: "Please be in the lounge of Santos Dumont airport on 25th February at such and such a time."

He left as mysteriously as he arrived. Although he was extremely alarmed, Künzi decided to go – at the very least, he thought, he was still a Swiss citizen, and therefore had some immunity. After spending the night on a Cometa line coach, Künzi got out at the coach station in Rio on the Friday morning after Carnival and took a taxi to the airport. Even though he had arrived very early he was soon approached by a man "he was in civilian clothes but had the look of a military man" who said to him: "Professor Künzi from ITA? I'm here to take you to your meeting."

There was no one else in the car they got into, which was driven by the man himself. The car followed the road along Flamengo beach and at Botafogo beach they turned right into "a district with many palm trees, gardens and houses which were like little palaces" until they stopped by the garage door of one of those houses. Security guards - all civilian he noted - opened the doors for their car to go in and park in the grounds of the mansion. The same man accompanied him across a very large room, with antique furniture, and stopped in front of a door, spoke for the second time: "Professor Künzi you are going to meet the President of the Republic, Marshal Castello Branco. Tell him about the problems in ITA but be brief".

It was only years later that Charly Künzi revealed the secret, which he had promised to keep - and which he had managed to keep - for almost half a century:

> *Even though my bus journey to Rio de Janeiro was overnight I had not managed to sleep. I was very anxious. When I found out who I was going to meet I became even more anxious. We went into a very small room: there was the President of the Republic, Castello Branco. The first thing that caught my attention was the fact that he seemed flattened, as if somebody had reduced his height between his thorax and his head, practically eliminating his neck. He was dressed in a dark suit and there were a few papers on the table. He greeted me*

ITA: diretor recebe a carta de demissão

Folha de S. Paulo 19/3/1965

O brig. Henrique de Castro Neves, diretor-geral do Centro Tecnico de Aeronautica (CTA) de São José dos Campos, que ontem regressou de viagem, tomou conhecimento oficial do pedido de demissão do reitor do Instituto Tecnico de Aeronautica (ITA), prof. Charles Kunzl.

A carta de demissão do reitor, apresentada ao corpo docente dia 15 ultimo, deve-se à negativa do diretor-geral do CTA em atender pedido de reconsideração de medida, por ele tomada em dezembro ultimo, que eliminou da escola 4 alunos, responsabilizados por "indisciplina" cometida pelos formandos de 1963.

RESSENTIMENTO

Os professores do ITA ficaram bastante ressentidos com as declarações do brig. Castro Neves a um jornal carioca, em que responsabiliza "um pequeno grupo de professores" pela crise do ITA.

Nesse pronunciamento, o brig. Castro Neves denuncia esse grupo, como causa da "indisciplina de fundo ideologico comunista", ocorrida em novembro do ano passado, e os classifica de "falsos lideres, frustrados, perfeitamente dispensaveis, por serem professores ultrapassados e estagnados cientificamente, por falta de atualidade, e por estarem prejudicando o acesso dos mais jovens e estudiosos".

Reitor demissionario e professores do ITA estimaram essas declarações e as consideraram "falsas e injuriosas".

"PELO BEM DO ITA"

O eng. Jessen Vidal, presidente da Associação dos Antigos Alunos do ITA, declarou que a Associação está "altamente preocupada com a crise e seus integrantes, vão [illegible] no sentido de uma solução feliz".

O eng. Jessen ressaltou que a Associação "não visa quaisquer interesses politicos, mas unicamente o bem do ITA com a criação de um clima propicio para o estudo e a pesquisa".

EXODO DE PROFESSORES

O coronel Newton Vassallo da Silva explicou o exodo de 51 professores do ITA, como "uma busca de melhores condições salariais em organizações universitarias e de pesquisas dos paises de moeda forte, contra as quais o ITA não pode competir".

O eng. Jessen Vidal concordou em parte com as razões apresentadas pelo cel Vassalo, mas frisou que os professores «só aceitam ofertas externas, por não encontrarem no ITA condições internas para desenvolverem seus trabalhos de magisterio e pesquisa».

Acrescentou que o problema salarial atinge mais os «auxiliares de ensino» e os «assistentes» que os professores «plenos» e «associados», de quem depende o ensino e a pesquisa. «A falta de professores — continuou — vem prejudicando profundamente as materias chamadas optativas e os cursos de pós-graduação».

SOLUÇÃO

O cel. Vassalo declarou que a solução da crise virá com o restabelecimento do clima de confiança entre a direção geral do CTA e o corpo docente e discente do ITA». Contudo, não disse como isso se conseguirá.

Os professores vêem a crise como algo de mais profundo e como uma «questão principalmente de filosofia». O prof. Marco Antonio Cecchini, presidente da Congregação dos professores, disse que não vai se afastar do ITA e que trabalhará com a mesma energia, mesmo que as condições não sejam as ideais.

O professor Charles Kunzl, reitor demissionario, declarou que a solução da crise será simples, desde que o reitor tenha autonomia administrativa e financeira para que possa executar o curriculo programado conforme lhe faculta a autonomia academica.

«No entanto — ressalta o prof. Kunzl — isso não quer dizer que seja preterida a supervisão do ITA e do CTA pelo Ministerio da Aeronautica».

Pronunciamento oficial do corpo docente será elaborado na reunião da Congregação de professores marcada para o dia 21, às 16h30.

16 — O ESTADO DE S. PAULO

O ITA apela para Castelo

Delegados

Debandada

Montenegro works with friends in the newspapers to try to save ITA: the problems reach beyond the campus walls; they spill over into public opinion and knock on the doors of the Planalto Palace.

politely but without any warmth. We sat on a sofa and an armchair that was in the corner of the room. And he asked me: "So, Director what's happening in ITA?"

For the fourth time I told my sad story. I did not mention the four pupils who had been expelled because by this time the fate of ITA was immensely more important in my mind than that of four students. He let me speak without interrupting, without asking any questions. He only said: "Director, this meeting never happened, and if necessary I will deny that it happened."

He got up. I said: "Mr President, I have prepared a report on everything that I have told you, but with more detail and with documentary evidence."
I took the report from my briefcase and he answered: "Give it to my assistant."

That was how I knew that the man who had accompanied me was the President's assistant.

Two weeks after the meeting with Castello, Künzi received, from a new and equally mysterious messenger, an invitation to go to the Air Ministry at ten o'clock on the morning of 10th March. On the day in question the Director woke early, flew from São José to Rio and walked from the Santos Dumont airport to the Ministry building. On the way he learned that the first shot had been fired in Montenegro's campaign: the editorial in the *Jornal do Brasil* that day was dedicated to ITA. Entitled "Cultural Regression", the article attacked the Castro Neves administration. The first lines of each of its three paragraphs reveal the tenor of the article:

We are disappointed to hear the recent news about the Instituto Technologico de Aeronautica, the famous ITA, of São José dos Campos, which in a short space of time has become one of the most important centres of higher education in Latin America...

This is because the Institute has been guided in this direction by Brigadeiro Castro Neves, who was not prepared for the specific

responsibilities of this project. The Air Ministry should have appointed someone from among officers who were specialists in teaching...

Now all the technical and cultural capital which has been built up is threatened with ruin ...

The newspaper seemed to burn in his hands. Arriving at the Ministry, Künzi was taken to the tenth floor by a sergeant. An officer showed him into a room with a large meeting table around which were seated many *brigadeiros*. "I had never seen so many general officers of the Air Force in one place in my life", Künzi recalled, "but *Brigadeiro* Eduardo Gomes was not present". He did not know if it was to show disapproval of the editorial, but no one said a word to him and no one offered him a chair to sit on. Then, the *tenente-brigadeiro* who was seated at the head of the table repeated in a loud voice the question which Künzi was already tired of hearing and having to answer: "Professor, what is happening in ITA?"

For forty minutes, standing, with his briefcase under his arm, Charly Künzi repeated chronologically, detail by detail, everything that had happened at ITA since the dismissal of *Marechal* Montenegro. He was not interrupted even once, not even to be offered a glass of water. At the end of his narrative the same official asked him: "What do you suggest, Professor?"

Künzi was not intimidated: "Remove Castro Neves from his post and replace him with an officer who has graduated from ITA."

For about ten minutes the *brigadeiros* spoke in low voices while Künzi remained standing with his briefcase in his hands. From time to time he heard references "to the name of a certain *Coronel* Paulo Vítor". The discussions stopped, they all fell silent and the same *brigadeiro* who had spoken previously spoke to him again: "Professor, you have to understand that nothing can be done which would bring the Air Force into disrepute unless there is a very strong reason for it. You are the third director since Castro Neves took office. If you resign it would create a situation which would justify measures being taken to resolve the problems at ITA".

Expressed in those terms it could be seen as a very complicated proposition, but at that moment Künzi understood exactly what the officers were suggesting: his head for that of Castro Neves. End of discussion. All he needed to do was make sure that was what they were asking: *"Brigadeiro*, I will resign. But what if the problems are not resolved?"

"We will resolve the problems. Thank you, you are dismissed."

With nobody even accompanying him to the lift, Künzi caught a taxi to Copacabana and spent more than an hour walking along the pavement to relax and reflect on what had just happened. He came to the conclusion that he had made the right decision: he had not managed to reverse the expulsion of the four students so it was better to offer his head in exchange for the salvation of ITA. But the overwhelming feeling was one of relief – the certainty that Castro Neves' days were numbered, which eased his conscience a great deal. Künzi began his journey back to São José dos Campos trying to work out what would be the most appropriate moment to fulfil his side of the mysterious bargain he had made with the officers. The campus was alive with speculation about the *Jornal do Brasil* article.

Castro Neves called a journalist from the *Jornal do Brasil* to refute the allegations in the editorial. Without knowing anything about the meeting that had taken place that morning in Rio, he began the interview by stating: "The current Director, a Swiss citizen employed by the previous administration, was appointed as Director by the current Director-General". After showing data and graphs which showed that everything was functioning "to its full potential", Castro Neves explained to the journalist where the roots of the campaign against CTA/ITA came from: "The wave of communism that has been spreading throughout this country since 1964 has reached deep into ITA, the loss of discipline, disregard for ethics and moral commitments, all these have opened the doors to corruption and chaos. Of course, this situation has been helped by the actions and omissions of the previous administrations".

There had only been one 'previous administration' after the coup of 1964: that of Casimiro Montenegro. As if the target of his criticism was not sufficiently clear, the *Brigadeiro* explained what he was talking about: "On top of these problems, a small group of teachers, believing themselves to be in charge of ITA, planned to set up a foundation that would involve the elimination of other elements of the CTA and the removal of the military".

The *Brigadeiro* also complained about the fact that more than 10 million *cruzeiros* had been set aside for adult literacy classes outside CTA "which was proved to have been for preaching communism following patterns formulated by the old UNE". On the following day the *Folha de São Paulo*, which had also entered into the argument, sent a reporter to São José dos Campos to listen to the Director of CTA. Castro Neves appeared

JORNAL DO BRASIL

Rio, 10 de março de 1964

Diretores:
M. F. do Nascimento Brito e Celso de Sousa e Silva

Diretor-Presidente:
C. Pereira Carneiro

Editor-Chefe:
Alberto Dines

RETROCESSO CULTURAL

São desalentadoras as notícias recentes sôbre o Instituto Tecnológico da Aeronáutica, o famoso ITA de São José dos Campos, que em pouco tempo se transformou num dos mais importantes centros de altos estudos da América Latina. Informa-se, agora, que o ITA está em franca desagregação e que poderá até ser extinto qualquer dia dêsses. Tudo porque a atual administração da Aeronáutica decidiu militarizar e burocratizar o Instituto, suprimindo-lhe o papel de órgão municiador do nosso processo de desenvolvimento. O que se tornara um centro de estudos, de especialização e de pesquisas para tôdas as finalidades do avanço tecnológico e científico, sem distinção do caráter civil ou militar, passou a sofrer um rígido enquadramento de objetivos, com o propósito final de destinar-se exclusivamente à atividade aeronáutica.

Para a direção do Instituto foi nomeado o Brigadeiro Castro Neves, que não estava preparado para as responsabilidades específicas da missão. O Ministro da Aeronáutica deveria ter feito a sua escolha entre oficiais dedicados ao campo do ensino. Infelizmente, além de descuidar-se nesse ponto, o Brigadeiro Eduardo Gomes não se preocupou em dotar o ITA dos recursos necessários, a fim de manter o seu corpo docente de alta categoria — muitos dos professôres recrutados de Universidades estrangeiras — e dar continuidade ao programa de instalações e equipamentos, que sempre estiveram ao nível das melhores instituições do gênero. Por falta de verbas, mas sobretudo de uma filosofia de direção adequada às suas verdadeiras finalidades, o Instituto enfrenta hoje o problema da evasão dos bons professôres e da frustração dos alunos. Várias dezenas de candidatos à admissão no ITA têm desistido dos exames ou do ingresso, quando verificam que já não se trata de um estabelecimento de altos estudos, projetado para o presente e o futuro, de uma escola universitária modêlo, mas sim de uma instituição educacional rotineira, com a peculiaridade do engajamento militar. No entanto, até há pouco tempo o Instituto Tecnológico da Aeronáutica era procurado por diversas categorias de engenheiros que queriam especializar-se nas técnicas mais avançadas do ramo. O parque industrial brasileiro, ninguém ignora, conta no corpo dos seus departamentos de planejamento, produção e pesquisas com numerosos diplomados em São José dos Campos, que assim se dispensaram de recorrer a cursos e treinamentos no exterior, economizando divisas para o País e aqui podendo fazer um aprendizado já em função da realidade nacional.

Agora todo êsse patrimônio técnico e cultural está ameaçado de ruir. Vê-se o Govêrno com sobra de lazer e de apetite para o tratamento estéril de temas políticos que nada acrescentam ao acervo das nossas realizações. Entretanto, os centros de altos estudos — não só o ITA, mas também o Instituto de Pesquisas da Marinha, o Instituto Rio Branco (Itamarati), a Universidade de Brasília e tantos outros — são entregues a um inconcebível processo de deterioração. Para êles, nem atenções, nem planos, nem recursos. Haverá algo mais contraditório do que agir dêsse modo e, ao mesmo tempo, falar em mobilização nacional para as reformas de estrutura e para o desenvolvimento?

Together with Nascimento Brito, an ex-FAB pilot and Editor-in-chief of the Jornal do Brasil, Montegro puts together the editorial that puts the knife in and starts the process of removing Castro Neves as head of the CTA/ITA.

to be still thinking about the editorial in the *Jornal do Brasil*: "The responsibility for the crisis in ITA rests with a group of instructors motivated by indiscipline based in communist ideology. They are fake leaders, frustrated by being overlooked for promotion and stagnating scientifically."

To be accused of stagnating professionally by a stranger to science did not make the least bit of difference to the majority of the instructors. It was more serious that they had been called communists by a *brigadeiro* at the height of a military dictatorship. The first to come forward to prevent any future difficulties was the ex-Director Marco Cecchini, he quickly asked for – and succeeded in getting – a written acknowledgement from Castro Neves that he was not a communist, typed beneath the coat of arms the Republic, on official Air Force stationery, copies of which Cecchini personally took to the journalists who published the accusations. It was a one-page document:

To Professor,
Marco Antonio Guglielmo Cecchini
I - I hasten to respond to your oral request regarding the article on ITA published by the newspaper O Globo today, which repeated allegations in the article from the Folha de São Paulo on the same subject, in the text of which your name is cited as leader of the group of instructors engaging in communist activity. This information has already been refuted by me...
II - I reaffirm here, as I said to the reporter of the latter newspaper, that I do not consider you to be a communist, and that in my view you are a democrat and a Catholic.
III - I authorise you to use this declaration in whatever you see fit.
Brigadeiro Henrique de Castro Neves
Director-General

On the morning of March 15th, five days after the meeting in Rio, Charly Künzi carried out his part of the pact he had made with the *brigadeiros* and handed in his resignation - not to Castro Neves, who was travelling to the base at Barreira do Inferno in Rio Grande do Norte, but to his deputy, *Coronel* Vassalo. Some days later Künzi received an invitation to go to the *Brigadeiro*'s office as the latter had just returned to São José. The now ex-Director found there not only the Director-General and *Colonel* Vassalo, but also the CTA

MINISTÉRIO DA AERONÁUTICA
CENTRO TÉCNICO DE AERONÁUTICA
São José dos Campos, 25 de março de 1966

MEMO — De: Diretor Geral
12-DG/66 — Ao: Professor MARCO ANTONIO

I - Venho com preteza atender à sua solicitação verbal, em reparo à matéria sôbre o ITA publicada pelo O GLOBO de hoje, que transcreveu artigo da FOLHA DE SÃO PAULO, [illegible] no assunto, em cujo texto o nome de V. S. é citado como líder de um grupo de professôres exercendo [illegible]

II - Reafirmo aquí, tal como declarei ao repórter dêsse último jornal, que não lhe considero comunista, e que em meu conceito V. S. é democrata e católico.

III - Autorizo a V. S. fazer desta declaração o uso que julgar conveniente.

Atenciosamente

Brig HENRIQUE DE CASTRO NEVES
Diretor Geral

HCN/JAM

Diretor Geral

HCN/JAM

The ex-Director Marco Antonio Cecchini (left) succeeded in getting from Brigadeiro Henrique de Castro Neves an incredible statement that he 'is not a communist, but a democrat and Catholic'.

chaplain. Castro Neves offered him coffee and chided him about the contents of his resignation letter (a list of all the mistakes and arbitrary decisions made since Montenegro had left) and, when they all got up to leave, he said he still had "a small formality to complete". He unfolded a piece of paper on which were typed 14 questions and handed it to a surprised Charly Künzi:

"Before leaving you have to respond to this questionnaire. There are 14 questions. You just have to answer 'yes' or 'no' to each question. And you have to do it now."

Nobody had heard of anything like it. The Director of one of the most important universities in the country was subjected to the humiliation of having to answer a bureaucratic questionnaire full of banal questions such as ("Did the Director of the CTA fail to buy any item on behalf of ITA?", "Director, when you made changes to the administration rooms of ITA, did you have to ask for authorisation from the Director-General of the CTA?") Even ridiculous questions such as "had the Director ever made any comment" on the way in which Professor Pompéia had left ITA. Without knowing how to react, but confident that Castro Neves was on his way out, an indignant and perplexed Künzi scribbled 'yes' or 'no'. The *Brigadeiro* even demanded that he sign both copies and that those present also sign as witnesses.

That was Castro Neves' parting shot. Less than two weeks later the officers carried out their part of the bargain: on 12th April a short paragraph of less than 30 words in the *Diario Official da Uniao* finally put an end to the most serious crisis in the history of ITA:

> *The president of the Republic has resolved to relieve the Director of the Centro Técnico da Aeronáutica, Major-Brigadeiro-do-Ar Henrique de Castro Neves of his duties. Brasilia, 12th April 1966*
> *H. CASTELLO BRANCO*
> *Eduardo Gomes*

Coronel-aviador Paulo Vítor was nominated as an interim replacement for Castro Neves. This was the same rebel from Jacareacanga, founder and first President of the Santos Dumont Academic Centre and who, by the end of his term of office as Head of the CTA, was known as 'the Peacemaker'. He stayed on as an interim replacement for seven years, a

length of time unequalled by any permanent Director, with the exception of Casimiro Montenegro himself. It is true to say that the Technological Institute for Aeronautics was never the same as it was under Montenegro, but the institution had survived to tell the tale.

Chapter 20 - Even at his death Montenegro gives a lesson: civilians and military gather together at his side

Marshall Casimiro Montenegro Filho lived on for another 34 years. After completely losing his sight he secluded himself in his apartment in the Águas Férreas building at No. 550, Rua das Laranjeiras, Rio de Janeiro, and his country house in Itaipava in Petropolis. He only left the house on special occasions, for example to attend the numerous tributes he continued to receive. Close friends and family never got used to calling him *Marechal* and continued to call him '*Brigadeiro* Montenegro' – it is said that none of his tributes made him feel more satisfied than his Honorary Doctorate from the University of Campinas, Unicamp, an institution which took in many of the teachers and students who left or were expelled from ITA during the crisis of the 60s. One detail, of that day, 2nd December 1975, which caught the attention of everyone, was that despite having sent out dozens of invitations to high-ranking officers from the Air Force and the other armed forces, the only military presence in the audience was one of his former aides-de-camp. At Christmas that year Maria Antonietta Montenegro received a card from her friend Laura Labarte Rebello – Lolita – the wife of the engineer Fernando Pessoa Rebello, who had taught at ITA since the beginning of CTA, written in a tone of indignation and outrage:

Dear Antonietta,
What a shame for the Air Force, the CTA, and above all Brazil to be deprived of the contribution of an official whose inner vision, is greater than most of the outer and inner vision put together of a good many

people, a contribution grows in value more and more each day. I'm not just flannelling, you know, and only those who live in the CTA of today and lived in that of yesterday can judge the incredible difference and feel the loss we feel of the intelligence, vision, understanding, real patriotism (understated) and relaxed attitude which, in today's CTA is so inconceivable as to be almost comical.

The absence of military personnel at the Unicamp ceremony is another 'cause-célèbre' that will enter the folklore of ITA, along with the other stories of Brigadeiro Montenegro which the students pass on from year-group to another, and which strain their belief so much that they often ask the older teachers to confirm them. The well-deserved pride we feel for having been a part of those days keeps us still in the hope that ITA will survive this stupidity and mediocrity, the low-flying partridges that think they are eagles. The worst of it is that the partridges procreate without recognising limits and multiply as if that is the only law of God they know and obey. But at Christmas we have to show compassion: Father forgive them, for they know not what they do.

In 1978, when Professor Fernando Rebello decided to retire after 25 years working for ITA, Antonietta Montenegro received another letter from her friend Lolita:

Antonietta, my dear friend,
I never thought that Fernando would choose to retire from ITA, his roots here are very deep, but to my surprise he did and he doesn't seem to regret it. He is tired of the disillusions the changes in ITA have caused him, the dreams worn out by time and circumstance, the inability to adapt to new paths of a process which does not offer much hope. I don't know how I will feel when we leave the CTA after 25 years, whether it will be sadness or relief. The children are not very happy with the change, which for them is of great significance. For them it represents the end of a happy childhood, like few others, in an ideal atmosphere of space, freedom and security.

One of the last military tributes Montenegro received was in October 1971, when he was decorated by the then President Emilio Garrastazu Médici

with the Grand Cross of the Air Force Order of Merit in a ceremony held at the end of the 'Wings Week' celebrations that year. As well as Montenegro, who received a medal for his part in the first flight of the Airmail Service, others were rewarded with the same commendation, amongst them *Marechal* Eduardo Gomes. The businessman, Carlos Augusto Salles, who was married to one of Montenegro's nieces, recalls that the *Brigadeiro* repeated, insistently, the same thing in the last years of his life:

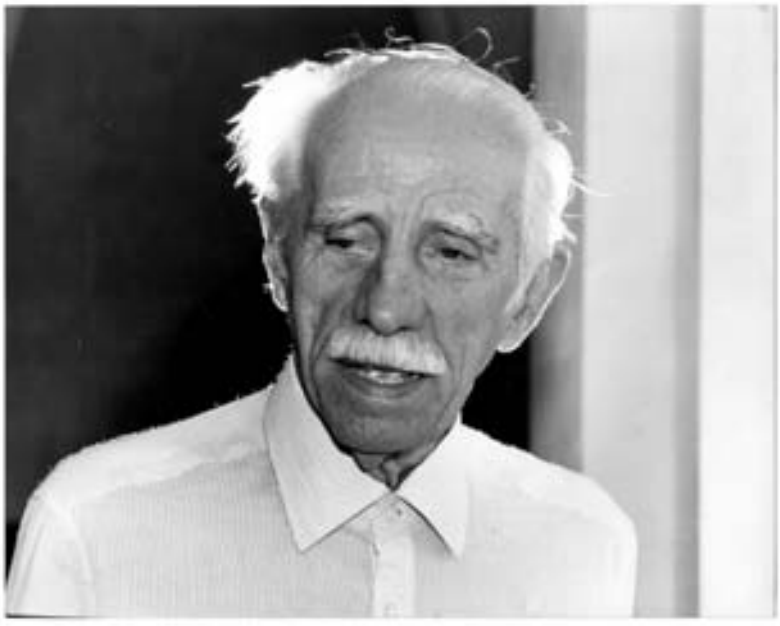
"The only thing FAB remembers and understands is my part in the first flight of the Airmail Service. The most banal thing in my career is the most important one for the FAB. Can't they see that what I did that day was what any cattle-driver did? It was just a case of getting a plane and following the railway down below. Nothing more, but for them it's the greatest achievement of my life, they never really understood the importance of ITA.

By this time, the very landscape of the CTA had already undergone many great changes. "The last time I went there, they almost didn't let me in, they had put up a gate with armed soldiers, there was none of this before; people came and went freely", said Violet Leal, widow of Oswald Leal. "The first thing that changed was the gate", remembers George Hilf de Moraes, son of *Brigadeiro* George Soares de Moraes. "The atmosphere had changed. They put a patrol at the entrance, put up a fence and nobody could get in any more. We found it very strange."

In 1982, the CTA authorities finally decided to do him justice and from 20th October that year the campus was officially named *Campo Montenegro*. In 1986, at the suggestion of the then Director of the Ministry of Aeronautical Engineering, *Major-Brigadeiro* Tercio Pacitti, ex-student, ex-teacher and ex-Director of ITA, Casimiro Montenegro was made patron of Air Force Engineering, he was the first patron of the armed forces to receive the honour while still living.

But again it was the civilian world that gave the old *Marechal* the tributes that touched him most. In 1981, on the 30th anniversary of the founding of the Coordinating Body for the Improvement of Higher Education Personnel (CAPES) the Ministry of Education granted him the honour of the prestigious Anísio Teixeira Prize, for the "model and innovative school in terms of teaching research" that ITA had represented and recognising him as an educator – something for which Montenegro said he wanted to be remembered after his death.

In 1983, at 89 years of age, he also won the Moinho Santista Prize for his work in establishing ITA. "I went with him to receive the prize in the Bandeirantes Palace and he was euphoric," remembers Carlos Augusto Salles.



Although he had completely lost his sight, Montenegro did not become an invalid. He took part in public occasions and received tributes all over the country. (Right) With Antonietta, he is receiving a model of the 'Frankenstein' from Minister Sócrates da Costa Monteiro. (Facing page: top right) Receiving a medal in Fortaleza alongside the composer Luiz Gonzaga (in white). (Centre) Major figures in Brazilian Aviation and (below) being decorated by President Itamar Franco.

"Montenegro was not a man to show his emotions in public; if he was sad, happy, angry, content or not, he always restrained himself. But on this occasion he allowed his happiness to show. These honours towards the end of his life did him a lot of good."

At all these ceremonies he was accompanied by his wife, Maria Antonietta. The couple's eldest son Fábio observed: "My mother, who was much younger than my father, was always a great admirer of his. As he became older and already blind, she became better at administering my father's life. Because of this she also made more public appearances. Up until then, he was the great man and she was he wife who made the cakes and organized the family parties and ITA meetings. Suddenly she became an intellectual, who managed *Marechal* Montenegro intellectually, who guided him around at public events, told him who to greet, who not to, who was there and how many steps away were each of the people he knew. All done with great discretion and elegance. She gave him a complete description of the scene and guided him.

At one of these public ceremonies which they took part in, Casimiro Montenegro came face to face with an old opponent, *Brigadeiro* João Paulo Burnier. But while the latter was being introduced to the wife of a military colleague seated next to him, Antonietta discreetly began to speak to Montenegro so that he could avoid realising he was close to Burnier, and thus avoided an embarrassing scene. "Casimiro would certainly have greeted him politely, but I knew that he had been shocked to discover, a few years earlier, a move of Burnier's while in the Air Ministry to include his name on the military regime's black list," observed Antonietta. "*Brigadeiro* Clóvis Travassos was the one who spoke up when Burnier's group wanted to blacklist me," Montenegro later confirmed.

In the same way that the *Marechal* did not want to believe that his name was on the regime's blacklist, he also refused to believe that political torture had also stained the reputation of the Air Force as the accusations were being made here and there.

"It's not happening, it's a communist story!" he burst out when his nephew Julio Cesar Montenegro, an ex-ITA student and future editor of the alternative magazine *Movimento*, told him that people really were being tortured in the barracks.

Ironically, Montenegro changed his mind on the very day on which he was decorated by President Médici – considered the harshest of all the military presidents. After the ceremony, he and Antonietta went to Galeão to collect a relative arriving on a flight. In the foyer of the airport he was approached by an

official who had been his subordinate at the Directorate of Procurement, who said something to him confidentially. Outside the airport, Montenegro called his wife over and, in distress, told her the story: "Antonietta, I'm mortified. Do you know what a chap has just told me? He was taken up in an aeroplane to a place above the ocean, very far away from the shore, and they threatened to throw him out if he didn't turn in his colleagues who had been accused of subversion."

After this Montenegro isolated himself even more, refusing invitations to official tributes from the Air Force. He spent his days in the house, in the same armchair, with the radio tuned to the news and the games of his beloved football club, Botafogo. Antonietta read the newspapers and great works of literature to him. "I think that Montenegro, although he was very intelligent, was never one for reading much; I think he read more when he was blind," joked the writer Anna Maria Martins. "I'm reading the classics", laughed Montenegro on the telephone, to the surprise of friends called to ask what he was doing.

The loss of his sight did not make him an invalid. In the beginning, to enable him to navigate his way around the house he attached strings from one point to another in each room which served as a guide so that he would not bump into the furniture. But he soon gave that up and calculated the exact location of each object in the apartment in order to get about without any sort of help. On the few occasions when he left the house the most help he would accept was Antonietta's arm and she in turn avoided treating him like a helpless old man. "Casimiro, five degrees," she would say, for example, quietly, in front of a staircase, because he rejected any attempt to help him or guide him with too much attention. Once, in Itaipava, Montenegro misjudged his footing and fell in the swimming pool in the garden of the house. No one dared to help him. He swam out and with his clothes completely drenched got to his feet on the other side. In home videos made at weekends in Itaipava, Montenegro can be seen walking confidently around, and crossing a stream running near the property, alone, with water up to his knees and avoiding the rocks. George Hilf de Moraes recalls with delight the day his friend Fábio Montenegro was trying to repair a motorcycle the engine of would not start and was helped by his blind father who told him: "Have a look at the carburettor; take it apart and put it back together again. I'll tell you how to do it. The problem's there. In the fuel injection."

Minutes later the engine was working again. George was astonished, but Fábio never doubted that his father knew what he was doing. Fábio was used to seeing him resolve intricate mathematical equations on the blackboard when helping his children with their homework. Even though he could not see anything Montenegro

would pick up the chalk and scribble down the solutions on the board, often he would be so engrossed he would forget the exercises and go on to talking about the intricacies of the working of the combustion engine mathematically, explaining how an object heavier than air managed to take flight. There were also moments in which his son would be very surprised at the abilities his father had learnt since losing his sight: "Once I bought a little house with his help in Campinas and said I was thinking of doing it up before living there. When my father came to visit he walked around touching all of the walls of the house. A few days later he sent me a complete plan of what I had to do to improve the house. Everything was laid out: knock down a wall here, build another there. Everything was drawn on tracing paper. It was difficult to believe it had been done by somebody who was completely blind".

To those closest to him, as well as the image of stubborn independence, Montenegro also left memories of someone with a great sense of humour who never lost the verve that characterised his nature. His nephew José Maria Montenegro remembers the day when his uncle, on one of the rare visits he paid to a military establishment after he had joined the reserve, took him to the Training School for Air Force *Sargentos*, where his friend was the Commandant. Casimiro Montenegro arrived at the gate and asked the guard to tell the Director of the school that the *Marechal* was there to see him.

"Excuse me sir, but which Marshal?" inquired the soldier, not recognising Casimiro Montenegro.

"Marshal Deodoro da Fonseca," he replied.

The two visitors could not help smiling as they heard the soldier inform the Director that there in front of him, in flesh and blood, stood the founder of the Republic. An ex-teacher from ITA and also an ex- graduate of the Institute – *Brigadeiro* Pedro Ivo Seixas, recalls with emotion the last time he saw the former Commandant the CTA, Casimiro Montenegro: "He was blind, in the reserve, and I was still active. He was with his wife, Antonietta. I was piloting a plane, a Bandeirante, with him in the passenger seat. He had had a vision, decades before, that one day we would fly in a plane made in Brazil. Everybody thought he was mad. And there I was with all the honour and pleasure of flying him on board a quintessentially Brazilian Bandeirante."

The abrupt parting of Montenegro from the command of the CTA, in 1965, overlooks the fact that he oversaw the first Bandeirante take flight from the hangars of São José dos Campos. In that year the institute for research and development (IPD) was forced to suspend, on the orders of Minister Eduardo Gomes, the IPD-6504 project which foresaw the development of a sturdily built turboprop aeroplane

able to transport up to nine passengers, capable of dealing with the difficult conditions involved in operating on the airstrips in the interior of Brazil. The Minister argued that research into the construction of a Brazilian air fleet had already drained too many resources from Air Force and cited the project of the convertiplane (which by this time had already been abandoned), as an example of a resounding failure. Activity on the IPD-6504 still progressed slowly however, with funds borrowed from another project which involved exchanging the engines of the heavy old Texan-6 aircraft for a new propulsion system. It was only at the end of the Castello Branco Government, after Eduardo Gomes had left the Ministry, that IPD-6504 once again took off. According to the researcher Cosme Degenar Drumond, the first prototype was ready after 110,000 man-hours, 12,000 technical drawings and 282,000 manufacturing-hours. It was officially unveiled to the public on 27th October 1968, and at the request of the Director of the CTA, *Major-Brigadeiro* Paulo Victor da Silva, was baptised the Bandeirante. To enable the mass production of the plane, the Empresa Brasileira de Aeronáutica (Embraer) was formed which, 35 years later is one of the largest and most respected commercial aircraft manufacturers in the world. During this time the utopia Montenegro imagined in 1945 had already produced more than 4000 aircraft of various types which operate in 65 countries on all five continents. There are 17,000 employees and the company finished 2005 with a value of $9.1 billion and a profit of $708 million; between 1995 and 2005 it had exported products and services worth $20 billion and contributed more than $8 billion to the country's balance of trade.

After leaving the Air Ministry in March 1967 Brigadier Eduardo Gomes dedicated himself to good works. He died on 13th June 1981, the day after attending a mass to commemorate the 50th anniversary of the first flight of National Airmail Service. In 1975 he had received from Dom Eugênio Salles the São Silvestre Medal granted to him by Pope Paul VI for the "example of the Christian life which he always showed in his public activities and private life".

Brigadeiro Joao Paulo Burnier was compulsorily transferred to the reserve by President Médici. In 1971 the student Stuart Angel, son of the dress designer Zuzu Angel, had been killed at the airbase in Galeão, which was under the jurisdiction of Burnier, at that time Commandant of Air Zone III. Burnier was also the main suspect accused in the 'PARASAR case', a terrorist plan which consisted of blowing up the Rio de Janeiro gasometer and the assassination of dozens of politicians, amongst them the ex-Governor of Guanabara, Carlos Lacerda. The crime was to be attributed to left-wing guerrillas. In his notebook, in tremulous handwriting, Montenegro left notes which followed Burnier's activities from a distance:

The *Marechal*'s 90th birthday party in 1984: (Left to right) Silvinha (today Fábio's widow), the children Marcelo and Carolina, Maria Antonietta, Casimiro Montenegro, Marcos, Roberto (Carolina's husband), Fábio, Bebel and her husband Luiz.

Brigadier Eduardo Gomes gave great backing to Burnier and his group. They grew so powerful that they became the torturers of Air Force. During that time Eduardo saw the mistakes that had been made in the 'PARASAR case'. When he discovered that Burnier was paranoid it was already too late and he had already given too much support to him and the others. The consequences had already happened. When Eduardo sought out President Médici to talk to him about Burnier's group and the torture, Brigadeiro Marico (de Souza e Mello) was the Air Minister and Medici dismissed him and put Brigadeiro Araripe in his place. Burnier's group was thrown out of the cabinet.

João Paulo Burnier always denied the accusations. In 1995 he tried to stop the publication of a book *O Calvario de Sônia Angel* (*The Calvary of Sônia Angel*), written by Lieutenant-Colonel João Luís de Morais, Stuart Angel's the father-in-law. Burnier died in Rio de Janeiro, on 13th June, 2000.

In June 2003, three years after the death of Montenegro, ITA began the process of publicly recognising the arbitrary nature of the political punishments handed out between 1965 and 1975 to Professors Arp Procópio de Carvalho and Jakob Szmul Goldberg, "Kuba" (deceased), and the students César Simões Salim, Ciro de Oliveira Machado, Clóvis Goldenberg, Frederico Birchal de Magalhães Gomes, Gílcio Roberto Amaral Martins, João Yutaka Kitahara, José Arantes de Almeida (deceased), José Tomazelli (deceased), Luiz Oscar de Mello Becker, Marcelo Moreira Ganzarolli, Marcos Gorelick Ajzenberg, Raimundo Rodrigues Pereira, Raymundo Theodoro Carvalho de Oliveira, Silvio Roberto Salinas and Waldyr Luiz Ribeiro Gallo.

ITA then called on the Federal Government's Amnesty Committee to review the charges and recognise the right of six students who had completed the course to receive their degrees and also guaranteeing that those punished had the right to have their academic records examined to decide under what conditions they might finish their courses.

In June 2005 ITA held a public graduation ceremony for Antonio Oliveira Farias, Esquire Pinto Dias, Luis Maria Guimarães Esmanhoto, Mario Tokoro, Osvair Vidal Trevisan and Sergio Salazar. On the invitation was written: "We do know of any other institution of higher education that has made a gesture of this magnitude. This is a civic innovation for an institution which has always been an innovator in the teaching of engineering studies".

Less than one month after graduation, Director Michael Gartenkraut who, in 2001, had led the reparations process of those who had been punished, was relieved of his duties and replaced by the *Tenente-Brigadeiro-do-Ar* Reginaldo dos Santos.

After being dismissed from the Air Ministry during the Castello Branco Government, Montenegro's companion on the first flight of the Airmail Service, *Brigadeiro* Nelson Freire Lavanère-Wanderley, was appointed Director of Civil Aviation and, in 1966, head of the General Staff of the Armed Forces. Before joining the reserve in 1969, he was Brazil's military attaché at the UN. He died on 30th January 1985 and in the following year was named patron of the National Airmail Service.

Promoted to *Major-Brigadeiro-do-Ar* on the same day on which he was dismissed as Director of the CTA, Henrique de Castro Neves continued to be General Director of Air Force Engineering until 1970, when he was transferred to the Department of Civil Aviation (DAC), having been promoted to *Tenente-Brigadeiro*. He went into the reserve in 1972 and died in Rio de Janeiro in 1984, at the age of 75.

Fábio Montenegro, the son of Antonietta and Casimiro Montenegro, died of cancer at the age of 51, on 17th June, 2006.

Marechal Casimiro Montenegro died at the age of 95 in Petropolis, in the early hours of 26th February, 2000. A few minutes after his death *Brigadeiro* Tércio Pacitti who had recommended in 1982 that he be made the patron of Air Force Engineering, received a telephone call from Antonietta. After telling him the news of her husband's death she informed him that there would be a simple funeral the following day, in Petrópolis. *Brigadeiro* Pacitti asked her to give him a few moments and began to make some telephone calls in the middle of the night, refusing to allow *Marechal* Montenegro to be buried without honours. The first person who was roused from his bed was the Commander of Air Zone III, *Tenente-Brigadeiro-do-Ar* Flávio de Oliveira Lencastre.

"Hello Commandant, *Marechal* Montenegro has just died and I think he needs to be buried with full military honours" argued Pacitti.

He received an answer born out of the letter of the law: "Was he a Minister? No. Did he die in combat? No. Then and he does not have the right to one".

Brigadier Tercio Pacitti did not give up. He then called the head of the Air Force, *Tenente-Brigadeiro* Carlos de Almeida Baptista, to

convince him that Montenegro's career justified a funeral with all the honours of a Minister of State. And that is how it was done. At the funeral the coffin of *Marechal* Casimiro Montenegro Filho was carried by six students from ITA. On one side - three civilians in jacket and tie and on the other three officers in full dress uniform. "It was the last message Montenegro left: civilians and military together, side by side," recalled Pacitti.

Montenegro's body rests in the Airmen's Crypt in the São Joao Batista Cemetery in Rio de Janeiro. Next to the tomb of Eduardo Gomes.

At the funeral of Marshall Casimiro Montenegro Filho his body is carried, with full military honours, by six students from ITA, three civilian and three officers - demonstrating the unity which he spent his life trying to achieve.

About This Book

This book began to be conceived on 27th February 2000, one day after the death of Marechal Casimiro Montenegro - a person who, in my ignorance, I had never heard of. I was living abroad and on opening my e-mail that freezing Sunday I saw a message sent by my good friend, the businessman Marcio Valente: "Yesterday a *Marechal-Do-Ar* died here in Brazil who had a tremendous story: he made the first flight of the National Airmail Service, fought in the 1930 Revolution, he was captured in the 1932 Revolution and he created ITA… I think all that would make a great book."

Actually, the idea was not really his but that of a mutual friend, an ex-ITA student Pedro John Meinrath. Tempting as the story was I could not take it on as I was in the middle of completing my book *Coracoes sujos* (*Dirty Hearts*). Some time later, when I was back in Brazil, I was accosted in a lift by a nine-year-old girl, Ana Luiza Cecconi who, in the way of modern life, had become the half-sister of my half-granddaughter: "You know, my grandmother Antonietta would love you to write a biography of my grandfather?" By one of those inexplicable coincidences (again, because of modern marriages) Ana Luiza's mother had been married to Marcos, the third son of the *Marechal-do-Ar*, which made her also a half-granddaughter of Casimiro Montenegro. The approach was made and from then on I decided to write the story, guided by his eldest son, Fábio, who opened the doors to

me both of the intricacies and endogamy of the Montenegro family as well as of his father's old friends in Air Force.

The joy of completing this book should be shared with the dozens of people who helped me both in the interviews and research prior to the writing as well as in putting together and editing the final text. At least two of them - the lawyer Antonio Sérgio Ribeiro and the writer Lira Neto - deserve special gratitude. The former, known in the research world as 'Serginho the Phenomenon' is an expert who has the ability of knowing by heart, for example, the day-to-day goings-on in the Vargas Governments (and if he does not know, finds out where the information is), watched over me from the first page to the last, looking for mistakes, incorrectly written names and wrong dates. Lira Neto, the established author of two important biographies (*Castello – A marcha para a ditadura* (*Castello the march towards dictator*) and *José de Alencar – O inimigo do Rei* (*José de Alencar - the friend of the King*), has helped me as a researcher for more than ten years. This time, after helping with the interviews, Lira installed himself in my studio for five weeks to help me organise the mountain of videos, documents, photos and statements until the final text could at last be set down on paper. The responsibility for everything on these pages is mine naturally, but without the help from my collaborators this book would not exist.

I would like to thank the ex-Director of ITA, Professor Michal Gartenkraut, a real inheritor of the spirit of *Marechal* Montenegro.

Thanks are also due, finally to Adenir Siqueira Viana, Armando Perigo, Arno Cabral, Camila Morais Cajaíba, Carina Morandi Gomes, Cássio Taniguchi, Cosme Degenar Drumond, Dino Ishikura, Emanuela Coelho, Fernando Pontes, Firmina Ribeiro Santos, Gustavo Aoyagi, Hernani Fittipaldi, Isabel Montenegro, J. F. Guerreiro Barbosa, Jorge Leal Medeiros, Joseph Choi, Juliana Perigo, Lúcia Haddad, Luiz Carvalho, Luiz Sérgio Alves de Oliveira, Marcelo Montenegro, Marcos Montenegro, Maria de Barros Figueiredo Ferraz, Maria do Carmo Mendes, Marília Morais Cajaíba, Marisilda Valente, Maurício Eirós, Pedro Braz, Reinaldo Morais, Ricardo Schwab, Simone Menocchi, Wagner Homem e Zeferino F. Velloso Filho.

Fernando Morais
Maresias, 2006

Persons Interviewed

Adolfo Alberto Leirner
Ana Lúcia Montenegro Bastos
Anna Maria Martins
Ana Maria Melo Montenegro
Antonietta Montenegro
Antônio Telmo Nogueira Bessa
Cândido Martins da Rosa (coronel)
Carlos Augusto Salles
Carlos César Moretson Rocha
Davi Montenegro
Delson Siffert
Eduardo Joaquim de Carvalho Jr.
Elza Vilela
Eric Nepomuceno
Fábio Montenegro
Fernando Venâncio Filho
George Hilf de Moraes
Glauco Rebelo
Guido Fontegalante Pessotti
Hugo de Oliveira Piva (brigadeiro)
Isabel Montenegro

Jessen Vidal
João Verdi Carvalho Leite
José de Araújo Nogueira (tenentecoronel-aviador)
José Maria Montenegro
José Meira de Vasconcelos (brigadeiro)
Júlio César Montenegro
Laura (Lolita) Labarte Rebelo
Márcia Vilela
Marco Antônio Cecchini
Maria José Montenegro
Maria Mirtô Montenegro Bastos
Milton Segalla Pauletto
Octanny Silveira da Mota
Oscar Niemeyer
Oscar Spínola (coronel-aviador)
Oswaldo Fadigas Fontes Torres
Otávio Júlio Moreira Lima (brigadeiro)
Paulo Ernesto Tolle
Pedro Ivo Seixas (brigadeiro)
Pedro John Meinrath
Roberto Hilf de Moraes
Roberto Julião Lemos (brigadeiro)
Rogério Hilf de Moraes
Rosendo Mourão
Sérgio Ferolla (brigadeiro)
Sônia Maria Montenegro Nogueira
Sônia Montenegro
Tércio Pacitti (brigadeiro)
Tibério Aboim
Violet Leal
Yedda Grillo

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PN: Publicidade & Negócios

Revista Brasileira de Ciências Sociais

Visão

About the author

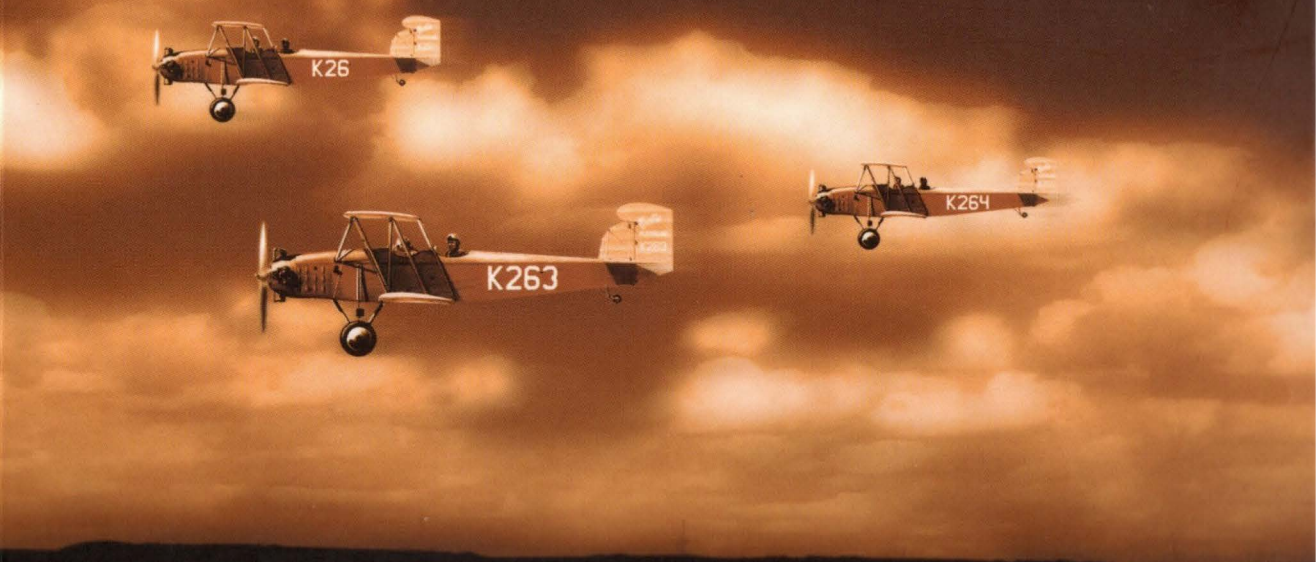
Fernando Morais was born in Mariana in the state of Minas Gerais, in 1946. He has been a journalist since 1961. He has worked on editorial staff of the *Journal da Tarde, Veja, Folha de São Paulo* and *TV Cultura*. He has won the Esso Prize on three occasions and the Abril Journalism Prize four times. He was a state deputy for eight years (for the MDB in São Paulo and then the PMDB in São Paulo) and Culture Secretary (1988 –1991) and Education Secretary (1991-1993) for the State of São Paulo. He is a member of the Editorial Committee of the magazine *Brasil de Fato* and of the Board of Directors of *Telesur*, Latin American public TV, which was created in July 2005 by the Governments of Argentina, Cuba, Uruguay and Venezuela. He is a founding member of the Literary Academy of Mariana, where he occupies Chair No. 13, which had previously been held by President Tancredo Neves. He has also written scripts for the mini-series *Brasil 500 Anos* (*Brazil 500 Years*) and *Cinco dias que abalaram o Brasil* (*Five days which shook Brazil*), shown on the GNT/Globosat channel. He has written, amongst other books, *Transamazônica* (Brasilense, 1970, with Ricardo Gontijo and Alfredo Rizutti), *A Ilha* (*The Island*) (Alfa-Omega, 1975, reissued by Companhia das Letras in 2001), *Olga* (Alfa-Omega, 1985, reissued by Companhia das Letras in 1993), *Chatô, o rei do Brasil* (*Chatô, the King of Brazil*, Companhia das Letras, 1994), *Corações sujos* (*Dirty Hearts*, Companhia das Letras, 2000), *Cem quilos de ouro* (*One Hundred Kilos of Gold*,

Companhia das Letras, 2002) and *Na toca dos leões* (*Within reach/ the touch of Lions*, Planeta, 2004). His books have been translated in nineteen countries. In 2001 *Corações sujos* received the Jabuti prize for non-fiction book of the year. In 2004 *Olga* was made into a film by the Director Jayme Monjardim, was seen by 3 million viewers in Brazil and was submitted as the Brazilian entry for the Oscar in 2005. At the moment Fernando Morais is writing a biography of the writer Paulo Coelho.

Format	*15.5 x 22.5 cm*
Printed area	*12 x 18,3cm*
Paper	*pólen soft 80g (inside), duo design 250g (cover)*
Fonts	*Times New Roman 17/20.4 (headings),*
	12/14 (texts)

ISBN 85-7631-251-4
9 788576 312512

In this incredible biography Fernando Morais tells the story of a hero who turned his dream into reality. The story of a young, blue-eyed lieutenant who dropped his bombs on the barracks in Minas Gerais of forces holding out against the 1930 Revolution. A year later, with a flight made on instruments alone he would initiate the National Airmail Service. In 1932 he was imprisoned in São Paulo by the Constitutionalist forces. But at the age of 95 and holding the rank of Air Marshal, Casimiro Montenegro said that these achievements were what "any cattle-driver did". The great work of his life, in fact, would be the creation of ITA – the Technological Institute for Aeronautics – in São José dos Campos, modelled on the famous MIT in the United States. This stimulating book shows how, in spite of the opposition of presidents of the Republic, ministers and even his military colleagues, Montenegro turned his dream into one of the greatest centres in the world for producing knowledge - ITA.



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