The Axis Powers' lost opportunity:
The failure to develop an air service between Europe and the Far East 1942-5

Ray Flude

Submitted for the award of PhD
De Montfort University
April 2000
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Abstract

The Axis powers failed to collaborate as effectively as the Allies during World War II. Collaborative planning and activity could have changed the course of the war. A major difficulty was the inability of high level officials from Germany and Japan to meet face to face to form relationships, develop collaborative planning and to focus the effort of the war. An exchange of materials and people was maintained between Europe and the Far East but given the distances involved and the time taken an air service could have provided a more effective means of communication. This thesis demonstrates that such a service was feasible given the available technology. Each of the three Axis powers involved themselves in the air service project at different points during the war in order to try to meet their own varying objectives and with varying levels of enthusiasm. The failure to develop an air service was the result of diplomatic factors and inability to coordinate activity. This failure was both a symptom and a continuing cause of the unsuccessful alliance. The failure left the Axis relying on the ability of their representatives in each other's capitals and on communications methods which were open to interception by the Allies.
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Introduction
It was 20th September 1942. The two giant flying boats, the Blohm und Voss Wikings, each with six diesel engines roaring, flew low in the dusk across Tokyo Bay towards Yokohama. Crude rising suns, rapidly applied to avoid any risk of misidentification, barely obscured the crosses and swastika emblems of the Luftwaffe. The flight commander, Rudolf Mayr, eased back on the controls and the hull of the leading aircraft gently kissed the water. He carefully taxied the aircraft to the seaplane moorings while his colleague Walter Blume, in the second aircraft, circled overhead awaiting his turn to land. The flight had come from Europe, starting, as far as the Japanese were informed, at Constanza in Rumania on the Black Sea, refuelling at Rangoon and Singapore before arriving, at last, in Tokyo Bay. There were no crowds to welcome the flight, although the sight of the giant aircraft circling in Tokyo Bay had drawn people onto the streets. The crews were welcomed only by Japanese guards and by the German Ambassador Eugen Ott and the Air Attaché Wolfgang von Gronau. The two aircraft now belonged to the Japanese Empire, having been purchased from Germany, and the German crews would now unload the spare engines which they had carried, maintain their aircraft and wait in seclusion to carry a Japanese delegation back to Europe. Discussions had taken place about who might be part of that delegation and the names put forward included some of the highest ranking members of the Japanese government and Armed Forces.

Or

It was late in the evening of July 10th 1943. The secrecy had been so effective that few people at the airfield realised what they were witnessing as the unfamiliar aircraft descended through the cloud layer over Tempelhof. Soon its shape could be clearly seen through the rain showers. Long thin wings painted grey with a yellow stripe on the leading edge and carrying twin engines were set low on an unpainted, cigar shaped, fuselage. On the sides of the fuselage and the underside of the wings the rising sun emblems seemed to glow through the gloom. The Japanese aircraft, the Tachikawa Ki 77, had completed the final leg of its journey from Tokyo to Berlin. It
had stopped once at Singapore and again at Sarabuz, in the Crimea, covering 8,500 miles and flying for over forty five hours. The longest leg from Singapore to Sarabuz alone had taken thirty-four hours non stop and now, as the aircraft circled and the undercarriage was lowered, the crew's faces could be seen at the cockpit window and the true measure of this immense and dangerous journey began to sink in. The aircraft touched down and taxied towards the small group waiting to receive the crew and passengers. The crew were unsteady on their feet as they clambered down the steps in their bulky flying suits. The aircraft had flown at increasingly high altitudes on the last stage of the journey and the crew had survived by breathing oxygen for many hours. Condensation had frozen across the windscreens and around the interior of the cabin. Apart from the flight crew Nagatomo, Kawasaki, Tsukagoshi, Nagata and Kawashima there were also three Army officers including Lt Col Shozo Nakamura. They were greeted as heroes by the Japanese Ambassador, Oshima Hiroshi, and by Joachim von Ribbentrop, the German Foreign Minister, and then hurried into the car which would take them to meet the Führer himself. The Japanese Army's Project "Seiko" or, in English, "Success" Project, had indeed been successful. The test flight had taken place and the feasibility of the air route was proven. The way was now open for high ranking delegations of Japanese officials to make the journey to Europe to plan and manage the war.

Or

On 21st July 1942 the Italian aircraft finally touched down in Rome after completing the final leg of the journey from Tokyo. The crew had flown from Tokyo to Pao Tow in northern China and then on to Odessa on the Black Sea coast. On the outward journey they had refuelled at an Italian Air Force base at Zaporoshe just behind the German lines on the Eastern Front and flown on to Tokyo using Pao Tow as the staging point. They had spent twelve days in Tokyo and while there they had met Admiral Balsano, the Italian Military Attaché, and a Japanese technical commission. Colonel Antonio Moscatelli was at the controls as he taxied the plane towards the rostrum crowded with the official welcoming party which was led by Mussolini
himself and by Admiral Abe, the head of the Japanese Military Mission in Italy. The five man crew climbed wearily down from the aircraft, Moscatelli with the other pilots Curtio and Magini, Mazzotti the radio operator/Navigator and Leone the flight engineer, to be embraced by Il Duce, while flash bulbs popped and the spectators applauded.

Only one of these stories is true. Only the last described, the Italian flight actually took place. But every detail of the other "counter factual" stories and all the facts mentioned, including the names of individuals, are drawn from plans and actual events. Both the other flights could have been carried out and if these links had been created, as they have been described, they might well have changed the course of the second world war. If either of these flights had succeeded, if the Italians had been able to set up a regular service, or if any of the other attempts planned and discussed had been successfully carried out then the next step would have been a shuttle of flights carrying, particularly, Japanese leaders to Germany to plan military co-operation and to try to persuade Hitler to settle the war on the Eastern Front without victory so that the full force of the German war machine could be brought to bear against Britain and the USA. If military collaboration could have been developed in the summer of 1942 or even a year later, and if Germany had effectively stepped aside from the war with the Soviet Union as a result of Japanese efforts, it is likely that the outcome of the conflict would have been very different.

After December 1941 the war had become a genuinely global conflict. On both sides partnerships had had to be created to manage the spreading activity and to focus the military effort to best effect. Britain and the USA with their shared culture and language were much more successful in carrying out this project. As several authors have demonstrated the Axis powers failed to collaborate to anything like the same extent(1). A range of reasons for this failure can be identified including the effects of language, of racism, of the lack of agreement over objectives and the effects of the distance between the partners.
As a result of the failure to collaborate the Axis partners did not take advantage of opportunities for joint action which might have altered the outcome of the war. Although more effective collaboration on the Axis side would have affected the conduct of the war at any time various writers have identified the spring and summer of 1942 as a time when better co-ordinated action, particularly by Germany and Japan, could have caused the Allies enormous problems through combined naval activity in the Indian Ocean or by a linkup of the Axis partners in the Middle East. Although the final outcome of the war might still not have been different if this collaboration had been more effective the journey to that outcome would have been even harder and more costly.

How might the Axis powers have acted differently if there had been close, regular, contact between key figures in the same way that the key representatives of the Allied powers met and planned together? Could decisions like the Allied plan to unify command and concentrate all efforts on defeating Germany first have emerged from similar discussions between the Axis powers? Could resources have been maximised and planned and co-ordinated at crucial times like the spring of 1942? It is possible that activity of this kind could have led to military initiatives which might have severely troubled the Allies and particularly Great Britain at a time when resources were stretched very thinly. Writing in 1996 about the situation around Easter 1942 Professor H P Wilmott says

"One instinctively dismisses the suggestion that Britain could have been forced from the war after the United States had entered it, but a Japanese occupation of Ceylon and rampage through the western Indian Ocean could well have brought down the Raj, severed the only route to a theatre where the Allied powers were in overland contact with one another, cut Britain's access to its oil supplies, and broken Britain's supply lines with its forces in Egypt. There was precious little that the British could have done to counter a Japanese move in what was perhaps the Allied "centre of gravity" at a time of crippling weakness, and it may be that a Japanese effort in this theatre, by adding to the defeats of the previous four months, would have driven
Richard Overy writes, "Hitler was determined to complete during the summer of 1942 the job that had eluded him the year before....Victories in North Africa, which brought Field Marshal Erwin Rommel to within striking distance of the Suez Canal and the vast oil reserves of the Middle East, and Japanese victories in the Far East against American and British Empire forces made him much more ambitious. His aim was to drive Soviet forces from the southern steppes and the Caucasus region so that Axis forces could link up in the Middle East." (3)

It is clear that without the advantage coming from the possession of ULTRA intelligence the Middle East would have fallen to the Axis in the summer of 1942 and it is clear from the same source that the Axis authorities themselves expected Rommel to take Cairo. Decrypts showed that at the beginning of July 1942 the Panzer Army was requesting maps of the chief Egyptian cities, the Italians were preparing to escort troop convoys to Egypt and Hitler had ordered exceptional steps to ensure that Rommel received more troops. (4)

The difficulties the Axis powers faced in bringing about a link up of forces in the Middle East included: "The enormous distances involved in such an effort, the need [for Japan] to have co-ordinated this endeavour with a corresponding German undertaking in the eastern Mediterranean" (5)

Willmott believes that even success in April 1942 could not, in the long run, have won the war for Japan because of fundamental industrial weakness in the face of overwhelming US power. But this view comes with the benefit of hindsight and that outcome could have taken a very long time to arrive. What difference would close frequent discussion and planning face to face by major decision makers have brought to this situation in 1942? Professor Masland, writing closer to the time in 1949, fresh from three years working in occupied Japan as a member of the staff of the Government Section, GHQ, SCAP in Tokyo, believed the Allies had over rated the
possibilities for a military link up by the Axis in 1942 at the time, but in looking at this he cites the inability to establish face to face collaboration as one of the main reasons for the failure of Germany and Japan to take advantage of the potential of their position. "The principal obstacle to combined or co-ordinated operations was the inability of the governments of the two powers to maintain direct consultation. Certainly the success of Allied collaboration was in large measure the outcome of the personal contact established between the chiefs of state and general staffs of the USA and UK..... It was impossible for the high authorities of Japan and Germany to hold similar meetings and such contact as was maintained was limited to the activities of liaison officers. Under these circumstances there was no real chance of co-ordinating the war plans of the two powers, and such collaborative ventures as were attempted were subject to restriction or change by either party in the light of its own independent operations"(6).

Perhaps the key practical obstacle to collaboration for the Axis partners was the lack of any ability to transport key people quickly between the partner countries for planning or face to face consultation meetings. The meetings between the Allies at all levels, although no guarantee of harmony, at least reinforced the common purpose and led to a considerable amount of collaboration and joint planning. If a means of transport had been available which could have facilitated meetings of the "high authorities of Japan and Germany" it is conceivable that joint planning and collaborative, prioritised use of the resources available, could have followed and the world picture in 1942 could have been quite different as a result.

There had been an effective method of transportation available to the Axis namely the Trans Siberian Railway but on June 22nd 1941, Operation Barbarossa, the German invasion of the Soviet Union, had severed this overland transport link between Japan and her European partners. The railway had provided a rapid and effective means of transport for people as well as the bulk goods which needed to be exchanged by the Axis. The journey to Europe from Japan took only a few days and the route had been used by high officials including Matsuoka the Japanese Foreign Minister who had
travelled to Berlin together with Eugen Ott, the German Ambassador in Tokyo in March 1941. Hitler had expected that normal service on the railway to the Far East would be resumed following a rapid victory over the Soviet forces but it soon became clear that there would be no quick resolution of the conflict on the Eastern Front and the need to develop alternative transport links between the European and Far East branches of the Axis became an urgent issue. The three partners, Germany, Japan and Italy had different views on the priority for the re-establishment of such links but all agreed, for different reasons, that they were needed.

In addition to the need to promote military collaboration the other reasons why continuing links seemed desirable to the partners were:

the transport of goods:

- economic contact and particularly the transport of essential raw materials. Germany's requirements from the Far East were the more important.

- technology and expertise transfer particularly the exchange of weapons systems, plans, parts and expert personnel. Japan saw this as a primary aim of the alliance.

the transport of people:

- sending Subhas Chandra Bose to the Far East. Bose, an Indian Nationalist leader of high standing, escaped to Germany where he had hoped to stimulate activity which would support insurrection and independence for India. When Japan entered the war he wished to travel to the Far East where he felt he could have more influence by joining with other Indian groups in South East Asia and by leading the developing Indian National Army.

- improving representation in Berlin. There was a concern over the quality of Japan's representation in Berlin. Oshima Hiroshi, the Japanese ambassador in Berlin, was too
close to the German viewpoint and too convinced of Germany's likely success on the Eastern Front to represent Japan's interests properly. As a result there was a desire on the part of the Japanese to send delegations of significant individuals to Germany to exert influence:

- to negotiate a separate peace. The desire by Japan to mediate or encourage a peace settlement between Germany and the Soviet Union in order to allow Germany to focus her resources on the defeat of Britain and the USA and to reopen transport links across the Soviet Union. This was a continuing theme until 1945.

At the same time there were particular factors within the Axis relationship which made the development of links difficult:

- Japan's Neutrality Pact with the Soviet Union which was one of the strongest continuing themes in Japanese policy and which affected the choice of available routes for transport links

- German economic activity and ambitions in the Far East and Japan's determination to prevent Germany having any economic foothold there.

- the feuding between the different leaders of the German air services over the priority for the use long range, heavy, aircraft

The alternative methods of transport available to replace the overland rail link each had particular strengths. Blockade runners, either surface ships or submarines, between Europe and Japan made a significant contribution to the German war economy and a belated contribution to the transfer of weapons technology to Japan. Some important passengers made this long and dangerous voyage but sea journeys could not have provided support for the exchange of important decision makers to take part in face to face negotiations to plan and manage the war. The time delay involved of up to three months for a journey in each direction meant that most of the
key people in position in Berlin or Tokyo as representatives in June 1941 stayed there to the end of the war. The other available route overland via Turkey and the USSR was only available to diplomats.

An air service could have solved the problem of transporting people and, as this thesis shows, such a service was technically feasible but its development was stifled by diplomatic and political factors. Each of the active partners in the air service project had their own agenda. In Germany Lufthansa were trying to continue their commercial route expansion by other methods while the Luftwaffe, with few long range aircraft at their disposal, initially gave priority in their use to supporting U boats in the Atlantic. Only late in the war was there an interest in flying scarce raw materials to Germany and key Luftwaffe personnel to Japan. The Japanese had as their primary objective, at least until the end of 1943, the transport of a high ranking delegation to Berlin to negotiate an end to the fighting against the Soviet Union on the Eastern Front and the creation of opportunities for the transfer of weapons technology from Germany to Japan. The Italians were interested in flying Subhas Bose to the Far East and in demonstrating their ability to play a part in the Axis partnership.

The potential value of an air service is not just a view which has been constructed with the benefit of hindsight. The need for an air service to support collaboration was recognised, at the time, by, for example, the Japanese Ambassador in Berlin, Oshima Hiroshi, when in a message to Tokyo in July 1943 he explained how desperately important it was to continue working on an air service between Europe and Japan despite recent setbacks: "If you say that we don't have to worry immediately about establishing air liaison with Germany, you are wrong. If we cannot do so, precious time will be lost and my people cannot keep up with their work. I'm at my wit's end already. This is no time to give up the idea. We've got to start it again. You should understand that, and I hope that you will not lose a moment in getting down to real business this time. In my messages so far I have told you that I cannot put down in messages all these delicate yet very important points. Now we've got to consider real
joint warfare; and unless we can get in touch by word of mouth, misunderstandings and mistakes are going to be made."(7)

Similarly Morikiri, the Japanese ambassador in Italy, reported "It is definite that Japan, Germany and Italy should establish air liaison" to facilitate "frequent reciprocal trips" by authorities concerned with military and economic propaganda. Axis co-ordination and communications on these issues is "scattered and infrequent" "now it seems that the war may turn out to be a very long one" "this one weakness may gradually assume gigantic proportions" (8).

Despite all this it is important not to overstate the extent to which a successful air service could have brought about a higher degree of collaboration. The communication problems which existed between the Axis powers went far beyond the simple physical problem of the loss of the transport link with the Far East in June 1941. The intriguing question is whether the possibility of regular face to face contact between key players would have done anything to alleviate the problems and brought positive planning and management of the war effort. It has to be said that there is some evidence to suggest that closer contact would only have exacerbated the problems and highlighted the differences. Some examples of the deep seated problems include:

- There was a clear lack of understanding of each others' aims and capacity. Japan was much more concerned and influenced by events in Europe than Germany or Italy were by events in the Far East. Knowledge on all sides was limited and expectations were faulty. Germany expected much more of Japan than she was able or willing to deliver particularly over involvement in the Indian Ocean or by invading Siberia. Germany never understood the deep rooted concerns of Japan over a possible war with the Soviet Union or, even worse, war with the Soviet Union allied to US air power. The Japanese expected the Germans to be able to thrust to the south east and into the Middle East during the winter break on the Eastern Front but at the same time they failed to understand Hitler's deep seated commitment to destroying the Soviet
Union and hoped, throughout the war, to mediate a separate peace on the Eastern Front.

- All three major Axis partners seemed unwilling to tell each other the truth or take part in prior consultation. As a result they continually created problems for each other and also ensured that there was no sense of reality about any of the joint planning or discussion of joint plans.

Germany had not known beforehand about Japan's intention to intervene militarily in China in 1937. The development of the "Incident" crucially limited Japan's ability to play a full role as an ally. German attempts at mediation had no effect and in order to stay reasonably loyal to the Japanese link Germany gave up considerable influence and economic leverage in China.

In February 1941 when Italy moved forces into the Balkans Hitler was told by Mussolini only as the attack took place. The need to provide additional support to the Italians caused a fatal delay to *Barbarossa*.

Japan had been similarly taken by surprise by the German/Soviet Pact in 1939 which was signed while Japanese troops were fighting against the Red Army in the Far East. The Kwantung Army suffered 55,000 casualties and massive numbers of men were taken prisoner at Nomonhan while Germany and the Soviet Union signed agreements on collaboration in Europe.

The Japanese were deliberately kept in the dark by direct order of Hitler about the plans for *Barbarossa* in 1941 and, in the same way, although there were some advance indications that war was coming, the Pearl Harbour attack was a surprise to the Germans.

By August 1942 the Germans were still expecting Japan to focus on cutting the Indian Ocean supply routes because they were not aware that Japanese naval, air and ground
forces were being drawn in and destroyed at Guadalcanal. Germany was not made aware of Japanese losses at the Battle of the Coral Sea and Midway and Japan still believed during 1942 that Germany would be able to advance through the Caucasus and support a junction of forces at Suez although by September of that year the Germans were admitting to themselves that the attempt had to be put off at least until 1943.

Japan permitted massive quantities of aid to the USSR to pass to the north of the Japanese islands and into Vladivostock to be used to support the Soviet war effort. The ships used were leased to the USSR by the USA and did not carry arms but the traffic began in August 1942 with fifty three cargo ships and six tankers being given to the USSR and between July 1943 and the end of the war 940 ships left the west coast of the USA bound for Vladivostock. 9.23 million tons of US supplies travelled this route, an amount equal to all the other lend-lease routes combined. Over half a million tons were chemicals and explosives, over one million tons of petroleum products and over half a million tons of trucks and other vehicles. This was a substantial contribution to the Soviet capacity to carry on the war against Germany, Japan's ally, on the Eastern Front, but Japan preferred to honour her Neutrality Pact with the USSR and to play down the importance of the levels of aid whenever the Germans asked for the route to be closed(9).

- There were problems within the alliance as a result of the perceived arrogance of the Germans and their attitudes towards the other partners

On February 22nd 1942 Mussolini explained that he would prefer Japan on the Persian Gulf to Germany. This was a reaction to the treatment of Italian nationals in Czechoslovakia by the Germans(10). On February 25th 1942 Mussolini upset by Ribbentrop's arrogance called him sarcastically the "Grand Master of the Triple Alliance"(11).

- There were problems of communication arising from a lack of cultural
understanding and problems which arose from the inherent racism of the German leadership and the stereotyped reactions of both the Germans and Japanese to the Italians.

On August 23rd 1939 when Hitler was briefing his generals on the Nazi-Soviet Pact he said, "The Japanese Emperor is a companion piece for the late Czars of Russia. He is weak cowardly and irresolute and may easily be toppled by revolution...Let us think of ourselves as masters and consider these people as lacquered half monkeys who need to feel the knout"(12).

Hitler was ambivalent over the success of the Japanese in the Far East at the expense of Europeans. When Singapore fell on February 15th 1942 Ribbentrop was forbidden to make any propaganda capital out of this. Similarly when Prince Alberto von Urach, a Ribbentrop aide, visited Rome on March 10th 1942 he actually expressed regret about Japanese victories over the white races(13).

The attitudes of the Germans to the Italians were not conducive to good collaboration. Hitler often claimed that the Italians could not be trusted with secrets and on March 24th 1942 he told Ambassador Oshima that he wished he had the Japanese fleet not the Italians with him in the Mediterranean(14). Similarly on July 27th 1943, following the disaster at Kursk and the resignation of Mussolini, Oshima reported to Tokyo that the loss of the Italian ally was now likely and he went on to assert that this would probably turn out to be a strength in helping Germany fight through to victory!(15)

- There were also problems arising from communication within the Axis governments. In Germany there was continual friction in the late 1930s between the Foreign Office and Ribbentrop's Dienstelle and as Foreign Minister Ribbentrop did little to resolve the confusion. On 13th May 1941 Otto von Bismarck, Counsellor in the German Embassy in Rome, attended a meeting with Count Ciano and Ribbentrop. After the meeting he confided to Ciano, of Ribbentrop, "He is such an imbecile that
he is a freak of nature".... "Let's hope they all crash and break their necks"(16).

In Japan there was also internal disagreement. The Army and Navy had quite distinct aims which did not always match with those of the Foreign Office. The Japanese Navy was very reluctant to consider any land warfare against the Soviet Union and, for example, made clear to the German Naval Attaché in Japan that they understood the reasoning behind the German/Soviet pact and that it would make no difference to covert collaboration between the two Navies. At the same time the Japanese Foreign Office felt betrayed and publicly considered the German/Soviet agreement a breach of the Anti-Comintern Pact(17).

The Military Agreement signed on January 18th 1942 by the three Axis powers is a particularly good starting point for this study because, on the one hand, it committed the three partners to developing transport links and explicitly an air service but, on the other hand, examination of the process which led to the agreement demonstrates assumptions and ways of operating which were to characterise and limit the relationship between the Axis partners throughout the war. The agreement, while committing the partners to supporting, among other things, an air link which might draw them together and support planning and co-operation, also shows up the weaknesses in their attitudes and understanding which would make the development and establishment of that air service, in the long run, an impossibility.

In December 1941 the Allied and the Axis powers faced similar situations. As a result of the Japanese attack at Pearl Harbour, and the flurry of declarations of war which followed, new arrangements of active allies had come together on each side and there needed to be rapid and clear agreement about how each grouping was to work together to prosecute and win the war. The leaders of the Allies came together at the ARCADIA Conference in Washington and made, in general terms, two difficult but vital decisions which formed the framework for the strategy of the alliance when they agreed to deal with Germany first and to operate with a unified command structure.
As far as the Axis powers were concerned the military agreement signed in January 1942 paralleled the decisions made at the ARCADIA Conference but the path to the eventual signing of the agreement demonstrated the far reaching communication problems which existed between the Axis partners and the agreement itself did not provide a framework for waging a collaborative war.

On December 15th 1941, following a plenary meeting in Berlin which drew together the various commissions of the Tripartite Pact, the Japanese Ambassador, Oshima Hiroshi, put forward a draft military agreement to Ribbentrop, the German Foreign Minister. There had been no discussion before the draft was prepared and presented and, in fact, both Germany and Japan had involved themselves in conflicts on a world scale without any joint planning in advance about how the effort of the Axis powers would be co-ordinated. Despite the rhetoric which they used at various times the Axis powers had not planned for a long drawn out war. It was expected that after an initial campaign to gather territory a settlement could be made which would allow them to hold their gains. The Germans tried to hold their position in this way both after the Polish campaign and after the fall of France. Hitler certainly expected that the war on the Eastern Front would not last long enough to cause a major interruption to overland traffic with Japan. The Japanese appeared to believe that, having established the perimeter of the new empire, they would be able to defend it or make a peace which would allow them to keep what they had gained. Germany and Japan suddenly became active allies in the midst of war and because both partners expected a rapid end to hostilities there had been no long term planning for links.

It was the Japanese who took the initiative in proposing a military agreement in order to make the three-way alliance, which had been in existence since September 1940, into a focus for military planning. Once the Japanese proposal had been received by Germany, Admiral Groos, as chair of the military commission of the Tripartite Pact, was given the task of gathering views on the draft from across the different arms of the German military establishment.(18).
The draft agreement put forward by Japan had three parts:

Firstly a division of the world into zones of operation. Japan was to play the lead role in waters to the east of longitude 70 degrees east and as far as the west coast of the United States and on the Asiatic land mass east of 70 degrees east. Germany and Italy were to play the lead role in waters to the west of 70 degrees east and up to the east coast of the United States and on land in the Near East, Middle East and in Europe to the west of the 70 degree line of longitude.

Secondly a general plan of operations. Japan was to capture the bases of Britain, the United States and Holland in Greater East Asia, to occupy their territory and to eliminate United States and British forces in the Pacific and Indian Oceans. If the British and the US fleets were to move into the Atlantic, Japan would step up the war against shipping in the Pacific and Indian Oceans and send their fleet to the Atlantic to assist. Germany and Italy were to do the same in the Near and Middle East and in the Mediterranean and Atlantic working to destroy enemy trade. If the US and British fleets moved into the Pacific both Germany and Italy would similarly step up the war against shipping and move their fleets to the Pacific to support Japan.

Thirdly an outline of the main features of military co-operation. These were seen as -

mutual liaison over operational planning,

co-operation in the war on shipping - liaison over planning,

the exchange of information, the parties were to inform each other if they planned to act outside their agreed zones,
co-operation on the collection and exchange of information

taking joint measures in undermining the enemies military morale

creating military signal links

co-operating to establish a military air link between Japan, Germany and Italy and to restore shipping routes and transport by sea across the Indian Ocean. (19).

The proposed Japanese agreement did not fit in with the views which had been put forward by the German Navy about how a joint approach to the global war could be developed. In a memorandum of February 4th 1941 the Navy had outlined a plan for co-operation with the Japanese in which they sought to subordinate everything else to the war against the Allies' supply lines and shipping (20). Japan's role would have been concentrating on the destruction of Allied trade and shipping in the Pacific and East Indies and the only place where joint action was possible on this was the Indian Ocean. The plan had suggested that Germany and Italy should drive to control the Middle East while Japan moved with great force into the Indian Ocean. The German Navy saw landings and occupying territory as a waste of the resources of the Japanese Navy.

The German plan, which does not appear to have been shared with Japan, took no account of Japanese naval policy which had always assumed that after the occupation of South East Asia by Japan the US fleet would move across the Pacific to confront them. It was expected that a decisive fleet-to-fleet battle would then take place and, in order to support this strategy, the need for Japan's fleet to remain superior to the US fleet and the need to attack the US fleet as it moved across the Pacific remained the
foundations of the fleet construction policy and submarine doctrine. It was expected that the long range Japanese submarine force would reduce the strength of the US fleet as it crossed the ocean. The pre-emptive strike at Pearl Harbour was merely an attempt to carry out this task of weakening the enemy fleet by another means.

Similarly a Japanese view about collaborative military activity within the Tripartite alliance had been developed in November 1941. The plan was entitled "Basic principles for the rapid conclusion of the war against the United States, England, Netherlands and the Chunking Regime"(21). The Japanese planners believed that only Britain could be defeated militarily and that it would be necessary to deprive the USA of the will to fight and force her into a negotiated peace by fleet action and by cutting off US trade with Asia. Japan expected Germany and Italy to take the lead in Europe and the Middle East while Japan took action in the Far East and South East Asia. It was expected that military action would lead to a link up in the Indian Ocean area. In making these plans the Japanese took no notice of Germany's preoccupation with achieving victory against the Soviet Union and the way that this would distort the overall strategy.

Neither partner had shared their thoughts with the other before December 1941 and neither was putting forward any view on how the war might be successfully brought to a conclusion. The draft agreement was not shared with Italy until 27th December which was after the Italians had themselves put forward their own plan for tripartite military collaboration on 24th December(22). The need to involve Italy in discussion of the Japanese draft came to the Germans almost as an afterthought in amongst the various messages passing between German sources on the issues which concerned them in the Japanese draft.

The Japanese proposal was assessed and discussed by the German military and by the Foreign Office and it is clear that there were problems on some issues because the strategic emphases of the two allies were quite different. The main issue of concern was the demarcation of zones of operations and both the German Navy and High
Command were unhappy with the political implications. Vice Admiral Nomura, who led the Japanese Military Mission in Berlin, had claimed, from the Japanese side, that the draft was a very generalised document needed by Japan to carry through Imperial support but some Germans saw the division of responsibilities along the line 70deg East as a preparation for some future division of the world. In addition there were detailed problems with the division on that line arising from the distribution of raw materials in parts of the Soviet Union which the Germans expected to control in the future. India was also the focus of concern since, although it would be largely in the Japanese zone of interest, Germany and Italy were concerned that they also had a role to play in destabilising the British presence in the sub-continent(23).

Despite all the detailed discussion and objection the Germans felt that, in the end, the draft could be accepted as a political statement without any negotiation. Ultimately it was felt that the detail could be forgotten or dealt with later because the main aim was the political value of the agreement. It seems clear that the Germans were not really concerned with the details of military collaboration partly, at least, because they were not really committed to collaboration as essential for victory. It was potentially helpful to have Japan on board as a fighting ally and there were, at times, great hopes for the effect which Japan would have as an active partner in the Axis. It is also true that the discussion about the draft in Germany stresses areas where Japan could have an effect. There would be no point, for example, at this time in the year in a Japanese attack from Manchuria but it would be profitable for Japan to keep troops there to press the Soviets and prevent the withdrawal of troops to the west. It was also expected that Japan would cut the supply line to Vladivostock and be prepared to come into the war with the Soviets when the southern advance was complete. But there was, however, no detailed forethought about how any joint action could develop and no great desire, on the German side, for a collaborative effort.

On January 18th 1942 the agreement was signed with full ceremony and speeches. The German Navy had stressed in conversations that the demarcation lines would have to be treated flexibly particularly if major forces began to be committed to the
Indian Ocean but the only two alterations made to the Japanese draft, despite all the misgivings, was firstly the insertion of the word "approximately" to refer to the demarcation line so that German surface raiders and later U Boats could retain freedom of action and secondly the phrase "in so far as technical considerations allow" into the clause about developing air links. This clause which is, in a sense, the starting point for this study, then read:

Section III 6 - "Co-operation to bring about a military air link between Germany, Italy and Japan,[in so far as technical considerations allow] and to open sea connections and sea transport across the Indian Ocean".

It is interesting in the context of the present study to note that the Germans were willing to accept a de facto division of the world without any real discussion but unwilling to make an unequivocal commitment to operate an air service between Europe and Japan.

The process of negotiation is more revealing than the Military Agreement itself about the nature of the Axis relationship. In summary it can be said that:

1 Japan made the running and produced the first draft. Italy also produced a draft in isolation before this one was agreed. Both Japan and Italy took the initiative in looking for collaboration and this tended to be the case throughout the war.

2 The nature of the draft proposal is significant. It was not joint planning or strategy but a division into areas of responsibility and zones of influence. This was a way to fight parallel wars without the partners having to compromise their own interests or negotiate at all on matters of priority.

3 The draft and the final agreement do not mention the Soviet Union as an opponent. This draws attention to the problems which the neutrality agreement between Japan and the Soviet Union caused the Axis partnership.
4 The only collaborative clause with any real commitment to practical activity ie the air service clause, was modified and weakened still further on technical grounds by the Germans as a result of the lack of agreement between Milch and Goering within the Luftwaffe.

5 There was no real negotiation and exchange of views between the partners. There was much disagreement within the German side about the basis of the document but the draft of the military agreement was accepted almost intact as a politically advantageous move. To a considerable extent this was a cosmetic exercise. Oshima and Ribbentrop expected the Allies to announce joint command and joint plans after the ARCADIA Conference and they felt a need to match this with announcements from the Axis side.

6 The Italians were included in the process almost as an afterthought and only because they had put forward a draft of their own in late December.

There were, therefore, considerable underlying tensions within the Axis partnership. The failure to carry through the development of an air service was both a symptom and a contributing cause of the failure of the Axis as a partnership. The rifts within and between the member countries of the Axis inhibited the development of collaborative ventures like an air service but it is possible that the rifts themselves could have been healed by the better and closer means of contact which an effective air service would have provided.

As well as preventing the development of effective collaboration, the failure to develop a rapid and effective means of holding face to face discussions between leaders increased dependence on the intermediaries who represented the powers in each others' capitals who were not always reliable and who did not always have the same agenda as their governments and it also increased the Axis partners' dependence on signals traffic which could be intercepted and decoded by the Allies.
The attempts to create an air service between Germany, Japan and Italy and Japan have not been looked at before as a coherent and extended pattern of activity. What references there have been to long distance flights has been in the technical literature without any academic underpinning and these references have been to single flights or single attempts without drawing in the full strategic or diplomatic context and without any understanding of the sequence of activity concerning this project between December 1941 and May 1945.

Gerhard Weinberg 1994, in a work which drew together current knowledge about the war with the full range of sources from all sides, mentioned the flights project in two places(24). He concluded that "The interminable discussion of this abortive project at the highest levels does show, however, the importance attached to it by the Germans, Japanese, and until their surrender in 1943, the Italians." In correspondence with Professor Weinberg he has indicated that the flights project "seemed of interest ... as illustrative of the problems [between the Axis powers] and [had been] neglected by others." He encouraged me to research the full extent of the air service project by saying, "I hope that you will proceed to remedy this problem by publishing a full account."

To summarise the argument: It is clear that once the overland link between the European and Far Eastern partners in the Axis was cut there were strong reasons to search for alternative ways to remain in contact and transport goods and people. The alternative means of transport available, although able to meet some of the needs for delivering raw materials and technology, could not provide the close contact between key people required to collaborate effectively in managing the war. The inevitable problems of collaboration between Germany, Japan and Italy were exacerbated by the difficulties of transport. An air service could have provided a link but the inherent communication problems between the Axis powers and the contradictory agendas of the partners created barriers which effectively prevented the development of such a service. The aim of this thesis is to demonstrate the feasibility of an air service at that
time and to create a coherent and reasoned narrative of the efforts on the part of all three Axis partners to develop such an air service. This narrative is set into the diplomatic, economic, technical and strategic context in order to attempt to explain the ebb and flow of activity and the shifting of the initiative from one partner to another at different points in the war.

Guidance to references
The first reference to a source is described in full then the author's name plus date of publication are used.

Abbreviations
ADAP refers to Akten zur deutschen auswartigen Politik 1918-45 Series E – published German Foreign Office documents - the reference gives volume and document number.

Bletchley Park refers to the archives held by the Bletchley Park Trust at the Park. For this thesis the reference is to a particular card index JMA 108 which holds subject and personnel file cards for Japanese Military Attaché messages. The references to actual messages cannot now be traced.

DGFP refers to the series of published Documents in German Foreign Policy 1918-45 Series D - the reference is to the volume and document number.

GFM refers to the microfilm version of German Foreign Ministry Documents held in the Public Record Office at Kew - the reference gives series and frame numbers.


IMTFE refers to the International Military Tribunal (Far East)
NARA refers to National Archives and Records Administration, Washington

PRO refers to the Public Record Office at Kew

RG 457 refers to Record Group 457 within NARA holdings - the reference gives the type of document eg SRNA - Naval Attaché - and the page number

SRS refers to the Intelligence summaries produced on a daily basis for the highest levels of US Government using intercepted Japanese material. These were declassified in 1980 and have been published on microfilm as "The MAGIC Documents". Reference is to the number of the report and where possible the date the summary was issued.

Notes to the Introduction
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20 Meskill 1966 op cit p 51

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23 ibid pp 921-971

24 Weinberg (Gerhard L) A World at Arms London 1994 p 402
Chapter 1

The technological capability to create an air service

As we have seen on January 18th 1942 a military agreement was signed between Germany, Italy and Japan. The first draft of this document had come from the Japanese in mid December 1941 and it was signed by all three of the Axis partners but, although Japan and Italy supported the commitment to bringing about an air service, Germany could not accept the original, very positive, clause and had to insert the phrase, "in so far as technical considerations allow". This suggests that the capability to develop an air service was not available. It is difficult to tell from the documentary evidence whether the change in the clause of the Agreement was required because of a lack of determination to put any effort into such links or because of a genuine doubt about the technical feasibility of the project. There is some evidence to suggest that Goering took a personal interest in weakening the commitment in the military agreement but again it is not clear whether this was to protect against the risk of failure, a rational desire to avoid dispersing the resources of the Luftwaffe or a continuation of his prejudice against long range, strategic bombers(1).

In order to determine whether the air service project could have been achieved it is necessary to evaluate whether the project was feasible with the equipment, expertise and experience available at the time. Were the Japanese and Italians being over ambitious? Did all the German groups involved agree with Goering about the level of difficulty of the undertaking? The project was certainly not an easy venture because the establishment and maintenance of an air link between Europe and the Far East required the carrying out of flights over distances and terrain which stretched the existing technology and skills to the limit. The introduction of a successful service between Europe and the Far East required a number of conditions to be met. These included:

- the availability of a sufficient number of aircraft with adequate range, ceiling and load carrying capacity. One definition of "sufficient" comes from a Lufthansa opinion in 1943 that four aircraft would be needed to guarantee a weekly service(2).
- the availability of crews experienced at long range flight

- the existence of ground systems of radio beacons and accurate weather forecasting over the route

- agreement on a route which was acceptable diplomatically and which could be flown regularly with some confidence that the aircraft and their passengers or cargo would not be threatened by enemy action

If an air service was to make an impact on the conduct of the war it would, although this may seem paradoxical for an activity developed in wartime, have to be reliable and relatively safe. Success would be measured by the ability to do more than simply carry out pioneering adventures because, by definition, the cargoes which would be worth the effort of transporting, whether people or goods, would be of very high value.

It is clear, in retrospect, that although much discussion took place, plans were formulated and flights and attempts at flights were made, these did not result in the development of a "military air link". At the same time Lufthansa and the Japanese were convinced from January 1942 onwards that a service could be introduced with available resources and the Italians actually made a successful inaugural flight in July 1942. The aim of this chapter is to determine whether the failure to achieve the establishment of an air service was the result of a lack of the appropriate resources, experience and expertise or whether it was brought about by other factors.

To assess the feasibility of the project it is necessary to look at the developments and activity in long range aviation which had been carried out by the Axis partners in the 1920s and 30s. This work created the base line of equipment, experience and expertise which could have been available to the air service project. The only previous serious analysis of the claims regarding long range wartime flights was carried out by Professor Kenneth Werrell. He was particularly concerned to test the validity of claims concerning flights to Manchuria by German aircraft in 1944. After discussion of the evidence he
accepted that the flights were to some extent technically feasible in that the aircraft had
the range but that the flights did not take place. Although his conclusion - that the reports
of such flights were faked - is probably correct, his reasoning is suspect because his view
was, at least in part, the result of his own post war military experiences flying weather
reconnaissance missions over the Pacific in WB 50s developed from the wartime Boeing
B29. He recalled that, "Although the average mission was 12 hours long, two flights of
unusual duration stick out in my mind. On the first, I flew non-stop from Tokyo to
Honolulu, about 3,400 nautical miles, taking about 17 hours. On another occasion, I
stayed aloft for 17.5 hours and still landed with more than adequate fuel
reserves.....Compared to the flights described herein [long range German flights] however
our task was far simpler....Our navigation equipment was much more capable.......better
gasoline, weather information and flight instrumentation.....far superior flying
performance than any long range aircraft of World War II."(3)

Werrell's view is that since he, personally, found long range flights with a duration of 17
hours exceptional that therefore earlier, and, in his view, more primitive aircraft, could
not have done better. Rather than looking back on wartime flights from the perspective of
post war achievement and the levels of comfort and safety expected in peacetime, if we
look at the experience and expertise gained during the 1930s, which was available to be
further developed during the war, we get a totally different picture. Professor Werrell
ignored, or was unaware of, the fact that there were flights in the 1930s which lasted
almost three times as long as his "unusual duration" missions and that there were pilots
and air crew experienced and capable of flying and navigating over very long distances.

The aim of this chapter is to evaluate the situation in the period 1942-5 in the light of the
development and creation of the essential prerequisites during the 1920s and 30s. The
argument of this thesis is that the creation of a "military air link" was feasible in terms of
the technology, systems, personnel and route knowledge, both available and developing,
between January 1942 and May 1945, but that the project was prevented from reaching a
successful conclusion by diplomatic and political factors within the Axis relationship.
The following sections deal with each of the preconditions for the air service and show
that they were actually satisfied or could have been satisfied during 1942 or in the period up to May 1945.

1 The aircraft
The possible sources for an ultra long range aircraft would have been the conversion of a strategic bomber, an existing commercial airliner or a specially built record breaking aircraft. All three were discussed as options at different times between December 1941 and May 1945 as negotiations on the air link between Europe and the Far East continued.

a) A converted strategic bomber

Germany
In Germany the development of a strategic bomber had been proposed in the 1930s but the failure to develop such a weapon was the result of a number of factors including restrictions on resources, the focus on short term goals and the infighting endemic within the Nazi hierarchy.

The specification for a strategic bomber, nicknamed the "Uralbomber" had been issued by the Ordnance Office in 1933 and Chief of Staff General Wever became an enthusiastic supporter of the programme(4). He had been impressed by the work of Douhet who believed that wars could be won by strategic bombing and whose work was first published in Germany in 1935(5). Douhet had imagined wars fought and won by overwhelming fleets of heavy bombers which could not be prevented from reaching their targets. This view was questioned in Germany during the 1930s as people gained a clearer picture of the limited accuracy of navigation and bomb aiming and as air defence techniques developed. At the same time, for financial reasons, it was questioned whether a fleet of strategic bombers was the best focus for the development of the German air arm. It was becoming clear that the economic position in Germany even after the Nazi seizure of power meant that there would have to be careful prioritisation amongst the various conflicting needs identified by the Luftwaffe. As Eberhard Spezler put it the Reich "was so limited with regard to raw materials and gasoline that her production capacity and, in turn, her war potential simply did not permit the construction of
sufficient numbers of heavy bomber fleets. She had no choice but to limit herself to medium and light bombers with the highest possible degree of hitting accuracy."(6)

The strategic aim was for the Luftwaffe to have aircraft capable of carrying out bombing missions beyond the Urals and by May 1934 the "Uralbomber" programme had high priority with plans for a mock-up by the end of June, prototypes by July 1935, pre-production in 1937 and production on a large scale by 1938. Both Dornier and Junkers had been given the development task and the four engine Dornier Do 19 and the Junkers Ju 89 were the result. Again for reasons of economy, and as part of the concealed development of the Luftwaffe, a strategic bomber had to be designed to serve a dual purpose as bomber and commercial transport for Lufthansa. Flight tests took place in late 1936 but by that time there was growing uncertainty for the reasons cited above about the wisdom of continuing the programme. The Junkers company asked for permission to use components of the Ju 89 in a fully commercial transport as a way of insuring that they would get value from the development even if the military pulled out and their reading of the situation was confirmed when on April 17th 1936 a new specification was issued which looked for a strategic bomber with twice the speed and range. By this stage commitment to production beyond the prototype stage for both the Do 19 and Ju 89 had already been withdrawn.

Wever, the firmest supporter of the project, died in a flying accident on June 3rd 1936 and all the doubts came into the open. Wever was replaced by Kesselring who was much more interested in air support for the Army. Hitler's policies were taking the country down an aggressive route which might well lead to war at a far earlier date than anyone had expected and this meant there was a need to concentrate on those projects which could make an impact in the short term. All three key figures, Milch, Udet and Kesselring were in agreement that it seemed wiser, at that stage, to postpone work on the heavy bomber until the balanced force of the Luftwaffe was in place. The propaganda value of the size of the Luftwaffe was also important as a threat to other nations. Goering asked "How many twin engine aircraft can we make for each four engine one?". The reply was about two and a half to one and Goering's view was that "The Führer does not ask me
how big my bombers are but how many there are."(7)

In addition to these arguments it is clear that engines with sufficient power were not available in Germany at this time to support a strategic bomber programme. When the decision was finally taken to continue work on the development of a strategic bomber the designers had to come up with "creative" alternatives to a conventional four engine layout and they dreamed up the idea of paired power units linked into single units on each wing. This layout was used for the He 177 and the fire hazard which this arrangement caused was a constant source of problems and delays in bringing this aircraft into use(8).

As we have seen the immediate practical value of a strategic bomber was also being questioned. Udet, from his own flying experience, was a strong advocate of the dive bomber as a more flamboyant and accurate delivery system. At the same time the war aims of the Reich were, at least initially, concerned with limited land wars in continental Europe and the implementation of these plans would require close air support for its armies in the near future. Experience in Spain had shown the value of the dive bomber in this role. The success, in practice, of the dive bomber and the medium bomber, as aerial artillery in support of the Blitzkrieg in Poland and the West, also helped to limit the pressure for the development of strategic bombers because it appeared that significant victories could be achieved without them. It appeared, early in the war, that targets which might have been considered "strategic" could, in fact, be attacked by medium bombers. Pressure on production facilities and the needs of the tactical planning for war may have made this a wise decision at the time but the controversy lingered on and Kesselring still felt the need to defend his part in the decision as late as 1954 when he issued a statement on the subject of "Luftwaffe policy and the question of a German four engine bomber"(9).

For the manufacturers it was a question of what could be salvaged once the "Uralbomber" project collapsed. The prototype developed by the Dornier company had always been inadequate and under powered and disappeared from view once doubts arose about the project but on January 1st 1937 Junkers were given the permission, which they had
requested, to develop the Ju 89 for use by Lufthansa as a commercial transport which would be known as the Junkers Ju 90. The four engine Ju 90 transport first flew on August 28th, 1937 and production deliveries to Lufthansa began in late 1938 as a passenger aircraft to carry 40 people.

Most of the Junkers Ju 90s were taken into the Luftwaffe when war broke out but the company continued development work on a heavier version which finally emerged as the Junkers Ju 290 at the end of 1942. Immediately on production these aircraft were incorporated into a special unit established under the command of Hauptman Heinz Braun on January 1st, 1943 especially to operate these and other four engine transports for the Luftwaffe. It was planned that this unit would be equipped solely with Ju 290s and it was soon designated Lufttransportstaffel 290 but because of production priorities it never had more than two of these machines available for action. Because of the desperate need for transport aircraft to maintain the supply line to von Paulus' army, surrounded at Stalingrad, even the prototype and first production Ju 290s were thrown into the airlift with severe losses.

The further development of the Junkers Ju 290 was supported by the need for a successor to the Focke Wulf Condor as a maritime reconnaissance aircraft. This need was becoming clear early in 1943 as the Condor became increasingly vulnerable to the air defence deployed to protect Allied convoys. The Junkers Ju 290 was an ideal basis for a replacement aircraft and the first conversion took place in the summer of 1943 when a new unit Fernaufklärungs Gruppe 5, or FAG 5, was set up to operate the aircraft. Hauptman Braun was transferred to this unit and LTS 290 which had by July 1943 lost its last Ju 290s was renamed Transport Staffel 5. Progressive development added more and more military equipment and defensive and offensive armament to the original aircraft and a further redesign, the Junkers Ju 290B, was intended to create a heavy bomber version.

The Junkers Ju 290, as the successor to the Focke Wulf Condor, operated as a maritime reconnaissance aircraft in the Atlantic with the main unit based at Mont St Marsan near
Bordeaux. Operational use of the new aircraft in this role began on October 15th 1943. When FAG 5 was disbanded, as the Luftwaffe lost its bases on the Atlantic coast following the Allied invasion in 1944, the remaining Junkers Ju 290s were transferred to KG 200.

The Junkers Ju 290 was therefore available in sufficient numbers to mount an air service between Europe and Japan from the beginning of 1943. With a normal range of over 4,000 miles and an endurance of around 23 hours the aircraft were capable of covering the distance required by the route to the Far East. In practice there would have been problems over priority between the need for the aircraft over the Atlantic and on the air service to Manchuria because probably only 47 of these aircraft had been produced and put into service by July 1944. But the aircraft had the capacity to fly long range routes and the crews of FAG 5 and KG 200 had the capacity to navigate precisely enough over those distances. On most occasions after January 1943 when flights to the Far East from Germany were discussed the aircraft identified for the mission was the Junkers Ju 290.

As we have seen the Junkers Ju 290 had grown out of the Ju 89 prototype for the "Uralbomber" but Goering had formally cancelled work on the strategic bomber on April 29 1937. This may well have been a wise decision given the pressure on production capacity and the need to prioritise but the real failure was not to follow through effectively with development for a next generation of strategic bombers. Confusion followed. The "Bomber A" specification appeared in December 1937 and in late spring 1938 Heinkel's proposal, which became the He177, was accepted for production in two years time. The He177 had had a very long and difficult development mainly as a result of problems with the engine layout. As we have seen the aircraft had four engines but these were paired into a single housing on each wing causing overheating problems and frequent fires. The coupled engine idea was seen as a way to get the benefits of having four engines while reducing the drag arising from having four separate engine housings. The engines available were still not really powerful enough to do the job. Again debate and confusion over roles intervened and the aircraft had to be redesigned and strengthened in order to be able to carry out both dive bombing and maritime
reconnaissance missions in addition to its original role as a strategic heavy bomber. The increase in weight together with the unreliability of the coupled engine design doomed the aircraft as an effective part of the German armouy.

The failure of the He 177 as a strategic bomber was eventually recognised but as a result the next generation of German heavy bombers was only at the design competition stage in the spring of 1942. A Luftwaffe feasibility study in April 1942 makes it very clear that strategic bombing and long range transport, including the feasibility of links with the Far East, were seen very much as facets of the same problem(15). The specification for the next generation of strategic bombers called for these aircraft to be capable of attacking the continental USA from bases in Europe. The outcomes of this design brief were the Junkers Ju 390 which was a further development of the Ju 290, the Messerschmitt Me 264 and the Focke Wulf Ta400. None of these was developed beyond the prototype stage although versions were built of the first two(16).

The Messerschmitt Me 264 was developed as a response to the strategic bomber specification requiring sufficient endurance to strike at continental USA and it had a design range of 9,315 miles. The design was based on work carried out to prepare the Mé 261, a twin engine, long range aircraft intended to fly non-stop from Berlin to Tokyo carrying the Olympic torch in 1940. The Me 264 was a four engine aircraft and three prototypes were built. The first, the Me 264 V1 RE+EN, was completed in late 1942 and flown for the first time in December 1942. By this time it had been overtaken in the "Amerikabomber" contest by the Junkers Ju 390 because the Luftwaffe now required a six engine aircraft. Accepting this limitation, two further prototypes of the Me 264 were commissioned to explore the possibilities of the machine as a long range maritime reconnaissance aircraft. The revised specification for the second prototype, the Me 264 V2, was not ready until March 1943 and the machine was destroyed in an air raid in late 1943. The third prototype was cancelled before completion. Therefore only one aircraft survived and it was assigned to Transportstaffel 5 which operated most of the Luftwaffe's four engine transports. There is an unsupported claim in the technical literature that the aircraft was made ready to fly Hitler to Japan in 1944 if the military take over following
the July 20th assassination attempt had succeeded. The aircraft was certainly still in existence in August 1944 because it was designated at that time as the test bed for an aerial steam turbine project but it was reported as destroyed in an air raid during 1944. Interestingly this was one of the German aircraft which the British planned to build and test after the war.

The Junkers Ju 390 was a six engine development of the Junkers Ju 290 again intended to satisfy the specification for a bomber which could attack the USA - the Amerikabomber. The basic Ju 290 fuselage was lengthened by about nine feet to 102 feet and extra wing sections added to mount two additional engines, taking the wingspan to 165 feet. The first prototype, intended to be a long range transport, was ready for testing in August 1943. There is a highly speculative account, often repeated, that a second version was intended to be a maritime reconnaissance aircraft and was equipped with full armament when it was delivered to FAG 5 at Mont de Marsan for evaluation. This aircraft is reported to have flown in January 1944 to within a few miles of the coast of the USA and returned as a demonstration of its capability(17). It is difficult to find any firm evidence to support this contention and Kössler and Ott put forward strong evidence that the flight could not have fitted into the test programme for the Ju 390 and that there was no second prototype. The third version was to have been tested as a heavy bomber but it was also not completed although in the autumn of 1944 the Japanese Army acquired a manufacturing licence and drawings were scheduled for hand over on February 28th 1945. No record exists of this exchange taking place(18). It is recorded that there were rumours within the Luftwaffe that the Ju 390 flew non stop courier missions to Tokyo. The editor of the USAF Historical Studies who recorded the rumour could find no evidence to support it(19). There is evidence to suggest that the first prototype was used by KG200 which was a Luftwaffe unit which, it is claimed, took on special and unusual missions including attempts to link with Japan. There is a photograph of the aircraft at Prague-Rusyne airfield as part of a KG200 squadron in Spring 1945(20).

Japan
In Japan the emphasis had also been on what were, by comparison with the developments
undertaken by the Allies, medium bombers supporting the Navy and Army. In 1938 it became clear that there was a need for a strategic bomber with a range of up to 4,000 miles and, since the Japanese aircraft industry had no experience of four engine aircraft, the prototype Douglas DC4E, a four engine airliner, was bought from the USA in August 1939, ostensibly by Japan Airlines, as a basis for development(21). The aircraft was turned over immediately to the Nakajima manufacturing company who had experience with Douglas designs having earlier bought licenses to build the DC2 and DC3 in Japan. Effectively as a result of the design development the DC4E's wings were mated to a new fuselage and tail unit to form the Nakajima G5N1 Shinzan which flew for the first time on April 10 1941. Despite various redesigns the aircraft turned out to be overweight and under powered and the project was cancelled.

Four of the G5N1s were built together with two G5N2s. The two G5N2s and two of the G5N1s with new engines were converted into transports in 1943 and renamed the Shinzan Kai Model 12 Transport GN52-L. The range of the bomber version is quoted as 2,700 miles. It is possible that a converted transport version could have carried additional fuel but the evidence is unclear.

Three years later Nakajima developed another four engine bomber the G8N Renzan which, although a much more successful aircraft, was too late in the war for mass production.

A parallel development by the Tachikawa company was the twin engine Ki74 long range high altitude bomber which was code named Patsy by the Allies(22). This aircraft which was originally conceived in the late 1930s was intended to be capable of bombing Russia west of Lake Baikal and used the results of the work with the Tachikawa Ki77 - see below. It was designed to fly at a maximum height of 30,000 feet with a range of over 4,500 miles. By the time it first flew in May 1944 it was hoped it would be able to bomb the United States mainland. It is said that one of the sixteen prototypes was modified to carry out non stop flights to Berlin but by the time it was ready Germany had capitulated.
Italy

At the outbreak of the war Italy had, like the Germans and Japanese, a bomber force almost entirely equipped with medium bombers. The only aircraft in service with a more strategic role, the Piaggio P108, which had flown for the first time on November 24th 1939, was outstandingly different in appearance from the classic three engine Italian model and was nicknamed the "Italian Flying Fortress". It was designed by Giovanni Casiraghi who had worked in the USA in the 1920s and early 30s and as a result the aircraft had a more conventional four engine layout. The Piaggio P108B was an all metal, heavily defended bomber with a range of around two thousand miles and the first squadron, the 274th Squadriglia Bombardamente Grande Reggio, was formed with four aircraft on 28th May 1941. On the 7th August Bruno Mussolini, son of the Duce and an experienced long distance and trans Atlantic flier, was killed on a proving flight and the unit was renamed after him. Extended development work delayed the first operational flights until June 1942 and it appears that only 24 of the type were built. A military transport version, the P108T, was developed which first flew on 7th September 1942 and a passenger version, the P108C. A total of nine transports and five passenger versions were built and most were taken over by the Luftwaffe after September 1943 and became the core of Transportstaffel 5 which specialised in four motor transports. (23) There is no suggestion in any of the sources that the P108 was considered for the flights from Europe to the Far East.

Summary - Strategic bombers

There was, therefore, no strategic bomber conversion available to the Axis before the end of 1942 with the necessary range to form the basis of an air service between Europe and Japan. The picture was different after the spring of 1943 and certainly by the autumn of 1943 when the long range version of the Junkers Ju 290, became available in numbers. It was around this time that the results of the "Amerikabomber" project, the Junkers Ju 390 - one aircraft - or the Messerschmitt Me264 - one aircraft, also became available and could have been used for missions of this duration. In reality only the Junkers Ju 290 existed in enough numbers to provide any secure service and it is this aircraft which
appears to have been considered whenever such missions were discussed. The development of the Ju 290 was an unplanned outcome of the Uralbomber fiasco in the 1930s and the decisions taken by Goering at that point had deprived Germany not only of a strategic bombing weapon but also of the long range transport capacity which could have linked the Axis partners.

Neither Japan nor Italy had developed any machines from a strategic bomber which could have provided the basis for an air service.

b) Commercial aircraft, crews and experience over the routes
There were commercial airliners and mailplanes which might prove suitable for an air service to the Far East because of the development of their use in the 1930s and during the early part of the war. This pre-war commercial experience would also be a source of expert long range pilots, navigators and engineers.

Germany
Germany, in particular, barred from developing military aircraft and expertise during the 1920s, had used commercial developments as a training ground for professional flyers. Deutsche Luft Hansa was formed on January 6th 1926 and, in Germany, much of the record-breaking fervour which captured other countries during the 1920s and 30s was channelled into the exploration and testing of new commercial routes(24). The airline, as an arm of the Nazi state, gained in importance and prestige in the 1930s and continued the development and extension of routes as a way of furthering national prestige while also following commercial priorities. By 1931 the company had routes covering most of Europe but was also the German partner in the Deutshe-Russiche Luftverkehrs with routes to Moscow and Leningrad and was involved in a similar partnership in China with the Eurasia Aviation Corporation. The interconnection of the state airline with the German aircraft industry supported the world-wide marketing of German civil aircraft. The growth of the company and its leadership in technical development can be seen from the fact that on 28th September 1934 DLH logged its one millionth passenger and in 1938 two four engine aircraft were introduced - the Focke Wulf Condor and the Junkers
Ju 90. The Ju 90 had arisen from the failure of the "Uralbomber" project. The Condor carried only twenty six passengers compared to the Ju 90's forty but its greater range made it the choice for long range proving flights across the Atlantic and to the Far East. It was the world's first successful four engine commercial landplane.

In August 1938 the prototype Focke Wulf Condor - D-ACON - named "Nordmark", flew, with its cabin packed with additional fuel tanks, to New York non-stop from Berlin, 3,942 miles, in 24 hours 56 min returning in 19 hours 55 min. The average speed east to west, against the wind, was 158 mph and on the return with wind assistance 199 mph. There was no possibility of opening up commercial routes because of the political climate at this time but this was the first commercial non-stop crossing by a modern airliner.

When discussions about links by air between Europe and Japan took place during the war, the Focke Wulf Condor was certainly discussed and offered from the German side as a suitable vehicle. The Condor, in its airliner version, had already demonstrated its ability to fly to Japan although it had made refuelling stops at Basra, Karachi and Hanoi, the first two of which were no longer accessible to the Axis. The proving flight to Japan had taken place in November 1938 using the same Condor which had flown non-stop across the Atlantic from Berlin to New York, now named "Brandenburg". The aircraft made the trip from Berlin to Tokyo in 46 hours 18 mins flying time at an average speed of just over 200 mph. The machine had created great interest in Japan and five transport versions were ordered together with one machine to be prepared as a long range reconnaissance variant for the Japanese Navy. None of these aircraft was delivered because of the outbreak of the war in Europe but the maritime reconnaissance variant designated FW 200v10 became the prototype for the FW200C which was used to great effect in that role by the Luftwaffe from the outbreak of the war. These aircraft had an endurance of 15 hours at a steady 150 knots and carried an expert astro navigator if they travelled more than 500Km from land and beyond the range of radio beacons. There were therefore many Condor crews with experience of navigation for long distance journeys.

There appears to have been a development of the Condor with an extended range which
became available during 1942. Kössler and Ott described the development work by Kurt Tank in May 1942 to create a version of the Condor with a range of 3,700 miles using Jumo 207 engines. This was described as C-4/U4. Green talks about two special transport versions of the Condor built in 1942 - The FW 200 C-4/U1 and U2 Werks No 137 and 138, The U1 version carried 11 passengers and the U2 version 14. These were used as transports by the Luftwaffe(27).

In the discussion on routes and aircraft for the air service to the Far East it was also suggested that commercial flying boats could be used and in one Japanese message there is a reference to the proposed aircraft having "Blom Foss floats"(28). This message had been intercepted, decoded and translated, probably by non-specialists. It is probable that the reference is to the Blohm und Voss BV 222 Wiking and this aircraft was frequently referred to alongside the Condor and the Ju 290 as the most suitable aircraft for the Far East air service. It was a very large six engine flying boat designed to meet a Lufthansa specification for a trans Atlantic passenger aircraft. Three prototypes were ordered by the airline in September 1937. Delayed by the outbreak of war the first flight took place in September 1940 and the aircraft were taken on by the Luftwaffe in December 1941. Transport and maritime patrol versions were built with a normal range approaching 5,000 miles and there seem to have been a dozen of these aircraft in service at different times.(29) In September 1942 there were endurance test flights by ex-Lufthansa captains, Walter Blume and Rudolf Mayr, using the BV 222 V1 which lasted for 28 hours(30). Normal patrol endurance was estimated at 33 hours. The aircraft had been designed with a range which was sufficient for a commercial flight from Hamburg to New York non stop with all the safety margins that civilian flights would have entailed. A further development of the BV 222, the BV 238, was the largest aircraft in use by either side in the war. Only the prototype was completed and it was never used in action. A land plane version the BV 250 was also planned.

Italy

Italian aircraft manufacturers were developing long range airliners to work over the routes to North Africa and Ethiopia, following the expansion of the Italian Empire, and
on the transatlantic route to South America. Fiat developed an ultra long range version of the Fiat G12, a classic three engine Italian design, which had flown for the first time in October 1940 and then been rapidly developed as a military transport carrying 22 passengers. Variants were produced to fly to Abyssinia - the Gondar - and for service with LATI, the airline flying Rome to Rio de Janeiro. In late 1942 and early 1943 the G12 RT or "Roma Tokio" and the G12 RTbis were prepared. The RT version had a range of 4,968 miles and the RTbis a range of 5,590 miles(31)

Italy, therefore, as a result of its commercial airline activity had ultra-long-range commercial aircraft, albeit in small numbers, available to support Europe/Asia links in early 1943. At least one of the aircraft was designed specifically for the purpose and Italy also had air crew experienced at long range and over water flights. On the 4th June 1940, when Italy entered the war, the commercial airlines were absorbed into the Servizi Aerei Speciali(SAS) which took over the aircraft and crews and used them for transport purposes through the period of hostilities. In the period between June 1940 and December 1942 the service carried 504,000 passengers(32).

**Japan**

Commercial developments in Japan in the 1920s and 30s, on the other hand, did not provide very much help for long range links with Europe. One interesting point is the involvement of Asahi Shinbun, a newspaper which supported a number of other air developments, in the establishment of early airlines in Japan. This newspaper seems to have been particularly "air minded" and keen to sponsor and invest in aerial activity. During the 1920s and 30s in Japan airline routes were established linking the home islands with Japanese holdings in Korea and Dairen and in 1939 the state airlines merged again to form Greater Nippon Airlines - Dai Nippon - which linked in long over-water routes to Palau and Saipan and in 1940 began a Tokyo to Bangkok service(33).

**Summary - Commercial aircraft, crews and routes**

Aircraft developed to meet the needs of airlines were available to support an air service to the Far East. Two possible German aircraft - the Condor and the BV 222 Wiking - were
available in sufficient numbers from soon after the outbreak of the war and the Italian long range transports - the variants of the Fiat G12 - were available from early 1943. The Japanese had very little to offer from this source to the development of the air link.

c) Record breaking and research aircraft and their crews
The third source of suitable aircraft and experienced crew was the development and use of aircraft for record breaking flights and research projects. All three Axis powers, as emergent nations, anxious to flaunt the power of their "New Orders", had been major players in the record breaking activity of the late 1930s and they therefore had aircraft designed as long distance record breakers available to be used as courier aircraft.

Germany
Much of the development work which in other countries was carried out by private individuals to break records was, in Germany, sponsored by Deutsche Lufthansa as part of route development activity and this has been referred to in the appropriate section.

Japan
In Japan various long distance record breaking efforts, took place in the 1930s. The initial impetus seems to have been a desire to emulate Lindbergh's non-stop crossing of the Atlantic by a non-stop crossing of the Pacific which turned out to be a much more difficult task(35). A first project in the 1920s failed to produce a possible aircraft and in 1930 a prize of $150,000 was offered in conjunction with Asahi Shinbun for the first Japanese pilot to cross the Pacific and a smaller prize of half that amount for any successful foreign aviator. Several attempts were made and an American pilot won the foreigner prize but no successful Japanese flight was made.

The Japanese were, however, involved in successful long distance flying. On April 9th 1937 two Japanese airmen Masaaki Iinuma and Kenji Tsukagoshi landed at Croydon in an aircraft named "Kamekaze", sponsored again by Asahi Shinbun, having left Tokyo on April 5th. The journey had taken 3 days and 22 hours having flown via Formosa, Hanoi, Calcutta, Karachi, Baghdad, Athens, Rome and Paris(36).
Research continued and under the leadership of Dr Kimura the Japanese created an extremely successful approach to the problems of very long range flight. Between May 13th and May 15th 1938 the "Koken", a single engine research aircraft designed by the Aeronautical Research Institute of Tokyo University, set Japan's first FAI recognised aerial record (The name "Koken" is an abbreviation for the name of the Institute). The single engine aircraft flew 7,239 miles around a closed circuit course in 62 hours 23 minutes(37). The same team led by Dr Kimura worked on the design of the Tachikawa A26/Ki 77, originally intended as a record breaking aircraft, which would have flown from Tokyo to New York non stop in 1940 as a celebration of the 2600 years of the Japanese Imperial Dynasty. The aircraft was at first designated A26 because the project was once again sponsored by the Asahi Shinbun newspaper and the 26 came from the 2600th anniversary. The Japanese Army who took over the project during the war called it the Ki77. Dr Kimura in his design, drawing on the experience of the "Koken", was attempting to meet three key specifications - a range to exceed 9320 miles without refuelling, a speed of over 186 mph and an ability to fly in the sub stratosphere to allow research for a future stratospheric transport. As a result of difficulties with the construction of a fully pressurised cabin the plan was for the aircraft to be able to fly at 27,000 feet with the crew on oxygen throughout the flight. Detailed design work began in the autumn of 1940 but the build up to the Pacific war meant that Tachikawa had to concentrate on military aircraft. The project was speeded up by the Army in the summer of 1942 and a flight attempted in July 1943 to Berlin. After the loss of this aircraft, which was the second prototype, some work continued with the original A26/Ki77 but no further flights to Berlin were attempted. On July 2nd 1944, in a return to its original purpose, the aircraft took off from Sinking and flew around a triangular course in Manchuria for 57 hours 12 minutes covering 10,212 miles non-stop and proving the effectiveness of the design. At the end of the war the aircraft was taken back to the United States and scrapped without any further testing(38).

Italy
The Italians were very enthusiastic about record breaking flights and any activity in the
air which had a high publicity profile. "Storia dell'Aeronautica" an Italian survey of the history of flight published in 1939 has a six page list of records held at that time by Italian aircraft and fliers and the introduction states: "L'Albo d'or dei primati nel campo individuale e rico di nomi italiani" - "The golden list of world records is rich with Italian names"(39).

In 1920 Gabriele D'Annunzio, who had been a successful air leader during the war as well as a poet and politician, planned a mass flight to the Far East. He did not fly himself but eleven aircraft left Italy on February 14th and travelled via Baghdad, Calcutta and Canton. Only one piloted by Lieutenant Ferrani survived to make the final landing in Tokyo on May 31st(40).

Other particularly significant long distance flights are the formation crossings of the Atlantic by General Italo Balbo, Minister for Air, firstly in 1930 with twelve flying boats to Brazil and then with twenty four SM55X seaplanes across the North Atlantic to mark the tenth anniversary of the Fascist regime in Italy in 1934(41). One of the flight engineers, Ernesto Leone, on the aircraft captained by Borghetti on the latter flight was the engineer on the successful Italian flight to the Far East in July 1942(42).

Sixteen special versions of the Savoia Marchetti SM 79 were prepared in 1937. Of these eleven were to be used for transatlantic flights and five for air races and record attempts. The first three places in the Istres, Damascus, Paris Air Race were taken by these Italian aircraft in 1937. This race was created to replace the planned transatlantic, Paris to New York, race and the victors were Cupini and Paradisi, third place went to Bruno Mussolini and also among the competitors before the outbreak of war was Captain Antonio Moscatelli who later commanded the successful Italian flight to the Far East in 1942(43). The Savoia Marchetti 75, designed as an airliner carrying 18-24 passengers, had already been proven over long ranges. On July 30th 1939 a modified version produced in response to a request by the Regia Aeronautica and designated the SM75 PD - Primato Distanza or distance record - set a long distance and endurance record over a closed circuit between Fiumicino, Capo, Palinuro and Livorno by covering 8,038 miles without
refuelling in 57 hours 35 minutes. The same aircraft had, on January 10th 1939, set a speed record over 1250 miles carrying 10,000 kilos of cargo at an average speed of 205mph. For the long distance flight the record breaking aircraft was equipped with Alfa Romeo 128 RC 21 1,000 hp engines and additional fuel tanks and it is likely that this particular machine was used for the Roma/Tokio flight in July 1942 since another source identifies the Roma/Tokio machine as having Alfa Romeo 128 engines. The standard Savoia Marchetti 75 had three Alfa Romeo 126 engines rated at 350 hp and a range of only around 1400 miles (44).

Summary - record breaking and research aircraft
The record breaking and research activity of the Axis powers during the two decades before the outbreak of the world war meant that there were aircraft available capable of flying the Europe/Asia route. These were probably only available in small numbers - three Savoia Marchetti 75PDs, two Tachikawa Ki77s. As well as aircraft capable of very long distance flights there were, again, very capable fliers available with navigation, long distance and endurance experience.

2 The routes and support
a) Pre-war up to January 1942
The available routes to the Far East were clearly understood by the time the Military Agreement was signed in January 1942 and these routes had already provided the focus for Lufthansa route development work during the 1920s and 1930s. From the end of the first World War German airlines had been shut out of many attractive commercial routes and were forced to consider ways of flying to the Middle and Far East without crossing French or British colonial territories. Initially the Germans worked with the Soviet Union on this project, as they did on a number of activities in which their direct participation had been limited by the Peace of Versailles.

There were three possible routes under consideration - a northern route across Siberia from Scandinavia to Manchuria, a middle route across the Pamirs to China, via Kabul and a southern route across Northern India to Rangoon and then on through South East Asia.
via Singapore to Japan. The Germans worked through Lufthansa on these three possibilities in the 1920s and 1930s and also, at the same time, developed expertise and equipment which would prove invaluable for long distance work through their work on trans-Atlantic flights.

Development work on the northern route to the Far East began on 23 July 1926 when two Junkers G 24s, on an expedition led by Dr Robert Knauss, explored the route to Peking via Moscow. The aircraft flew in seventeen stages over seven days with inaccurate maps, no weather reporting service and no source of spare parts. This expedition built on development work by Aero-Lloyd, one of the companies absorbed into the creation of Lufthansa in 1926. The aim was to develop a route from Berlin via Konigsberg and Moscow to Peking(45).

More work was done on the interim stages for this route and in the summer of 1928 a Junkers W33 made two test flights to Irkutsk. As the parts of the route were slowly assembled the aim was to fly from Berlin to Moscow and then to fly from Moscow to Irkutsk. The journey on from Irkutsk to Manchuli, on the Manchukuo border, would have used the Trans Siberian railway and the route from Manchuli on to Peking and Shanghai would have been handled by the Eurasia Aviation Corporation. This airline, Eurasia or more correctly Chinesische-Deutsche Luftverkehrsgesellschaft, was created in 1930 with the Chinese government providing two thirds of the capital and Lufthansa providing equipment and technical assistance. All the aircraft used were German and the routes which were put in place ran from Hong Kong into northern China including Peking and Pao Tow(46).

The Germans had gathered additional experience of this northern route when the Graf Zeppelin had taken the direct route across the Soviet Union in its round the world flight in 1929. The airship had passed over Vologda, Yakutsk, the Sea of Okhtosk and crossed the Pacific coast at Ayan on its way to Japan. The airship journey from Berlin took one hundred hours and covered 7,000 miles(47).
The Berlin to Peking air route, operated with the support of the Soviet Union, ran for only a short period before diplomatic problems between the USSR and China brought it to a halt in 1933. Negotiations by the Germans with the Soviet Union for a formal air traffic agreement had dragged on for some time before being finally dropped. But deliveries of the aircraft from Germany to the Far East for the Eurasia Corporation had given the opportunity for the exploration and investigation of linking possibilities between the European, Middle East and Far East routes. In 1933 three Junkers W34s were delivered over the northern route via Siberia and on August 29th 1934 a Junkers Ju 52 under the command of Captain von Gablenz was delivered over the southern route via India in nine days.

A competitor airline to Eurasia called the CNAC (China National Aviation Corporation) was also set up in 1930 with a mix of Chinese government money and American expertise. The expertise was provided, after 1933, by Pan American Airways. As, what the Japanese termed, the "China Incident" developed after July 1937 and Japanese armies moved into East China the major Japanese airline, Keizu Koken Konsu, established routes behind the advancing armies and CNAC was forced to withdraw services in the war zone. Eurasia Aviation was left in a less clear position because of the uncertainty of German links to Japan but Eurasia also finally shut down services on July 2nd 1941.

The section of the route across China had always been dangerous with territorial control shifting between different warlords and following the collapse of the working relationship between Germany, China and the Soviets in 1933 the Germans had to find an alternative way to the Far East and they turned to the central route. Work on the central route via Kabul would have created a shorter more direct linking route between the European network and Eurasia. The aim was to make use of a strip of territory which had been established by a nineteenth century treaty as a buffer zone between Russia and India. By following this "Afghan Corridor" over the 16,000 foot high Wakhan Pass it was possible to arrive in China without infringing either Indian or Soviet air space.

Following pressure from Oshima in Berlin, in 1936 a team set out to investigate this
route from Kabul across the Pamirs and into China. This first exploration and establishment of a weather station was followed by a major expedition led by von Gablenz. The journey required the crossing of the Pamirs and other territory which was hardly mapped and without any external navigational aids. The team left Kabul in a Junkers Ju 52 on 24th August 1937 heading for Sian and travelling through the Wakhan Pass at over 18,000 feet between the Pamirs and the Hindu Kush. The expedition very nearly reached Soochow but they fell short through running out of fuel. von Gablenz took off from Sian on the return journey and after a forced landing resulting from engine problems the crew of the aircraft became caught up in fighting between rival warlords at Lob Bazar near Chotan. After being held prisoner for a month the crew were allowed to continue their journey and returned to Kabul, being hailed as heroes on their eventual return to Berlin in October 1937(50).

Building on this work on 29th October 1937 Lufthansa opened up a mail and freight route to Baghdad and on April 1st 1938 this was extended to Teheran and on to Kabul in order to be ready to link to China by the more direct route. This route from Kabul into China through the strip of Afghan territory only required a 2,000 mile flight from Kabul to Pao Tow in North China. It was much the shortest and most direct of all the routes available but its accessibility to the Axis depended on the political situation in Afghanistan. Relationships were strong between Germany and Afghanistan during the 1920s and 30s. From 1919 Afghanistan had become an independent state and the German infiltration which had taken place throughout World War I continued into the 1920s and 30s. Germany appeared to be an attractive associate for the Afghan government because Germany had none of the colonial ties and history which made Britain unattractive as a partner and Germany also had the benefit of not being as close and as threatening as the "godless" USSR. German technical 'know how' was made available and the relationship was backed by the German government. During the rule of King Amanullah between 1919 and 1929 links to Berlin developed. Seventy two technicians arrived in December 1923 with the first charge d'affaires and a specialist trade company was set up called DACON - Deutsche/Afghan trade company.
In 1926 a Treaty of Friendship with Germany led to a spate of scientific expeditions all of which contributed to the links and in 1928 the Afghan government signed a large economic deal worth RM6 million. In January 1929 King Amanullah was driven into exile in Rome which led to a disturbed three year period until Zahir was settled on the throne in 1933. But German influence was maintained and in 1935 another large economic deal for 6m RM was signed. In addition the Afghans were looking for an arms deal worth 18m RM and negotiations went on through 1936 with visits by Afghan delegations to the Berlin Olympics ending with the signing of an agreement in October 1936 for 15m RM leading to deliveries planned up to the end 1938 from the company Rheinmetall.

In October 1937 a treaty was signed with the Todt organisation which gave the Germans control over road building in Afghanistan. The air service links began to develop within this atmosphere of co-operation between Germany and Afghanistan. Junkers had developed an airline in Persia in 1925. In 1928 the Afghans had suggested the development of domestic routes within the country to Junkers and in 1936 Lufthansa started work on the Berlin to Tokyo route via Kabul.

In parallel with the exploration by von Gablenz of the routes from Kabul to China, Ernst Milch from Lufthansa, later to become Field Marshal Milch, visited Britain to discuss the diplomatic implications of the route to Kabul and possible routes on from Kabul to the Far East. In May 1938 the British agreed to allow the flights to Kabul but, at the same time, they also offered the Germans permission for flights over India to Delhi and on to Rangoon trying to persuade them to adopt a route to the Far East from Teheran to Karachi, Delhi, Rangoon rather than flying through Afghanistan. In return the British looked for reciprocal links between Imperial Airways and Eurasia Aviation over routes in China. (51). The Germans, however, persisted with the Kabul plan and weekly flights to Kabul from Berlin via the Persian Gulf continued from May 1938. But after the von Gablenz test flights and the establishment of the weather station in the Hindu Kush the Soviet Union had become suspicious and this, coupled with the unrest in China, made Lufthansa halt development of the route at Kabul and look at other possibilities for the
full air route to the Far East.

Attention then turned to the southern route and work began on this late in the 1930s. On 22nd April 1939 a survey flight, again led by von Gablenz, flew on from Baghdad down the Persian Gulf and across India to Bangkok using the route agreed with Britain. A full route to Bangkok opened on 25th July 1939 using Junkers Ju 52s but only three flights were made before the outbreak of the war (52). To show what might have been possible on 28th November 1938 a Focke Wulf Condor under the command of Captain Henke had flown via Basra, Karachi and Hanoi to Tokyo in 42 flying hours. This was intended to be part of a round the world flight but the US Government would not allow the aircraft to fly on across the USA.

The northern route became feasible again when the German/Soviet Pact in 1939 improved relations between the two countries and reopened the possibility of flights across Soviet territory. Discussions between Germany and the Soviet Union in March 1940 broke down because of the poor relationship between Japan and the USSR. Yamashita returned to the topic while he was in Europe in the Spring of 1941. The plan would have been for the revival of the linked air route to China and Eurasia put in orders in anticipation for four Focke Wulf FW 200-B Condors but the route possibility collapsed again with the German invasion of the USSR in June 1941 and the severing of diplomatic links with the Kuomintang in China in July 1941 and, as we have seen, Eurasia Aviation ceased to operate at the same time (53).

The air route through the Gulf to Kabul was a sign of the continuing relationship between Germany and Afghanistan. The creation of ancillary services to support this route brought more Germans into the country, fuel depots were established, Lufthansa looked at other airfields and in 1939 a broadcasting station was built by Siemens which was audible across Northern India. The link to Germany continued to strengthen and in August 1939 a further arms deal was signed to cover a 10 year period and worth 55m RM. Germany's share of the Afghan trade can be seen from the fact that in 1938/9 Afghan machinery imports were 69% from Germany, 20% from Czechoslovakia and
only 4% from Britain. After the signing of the German/Soviet Pact the situation became more uncertain. Britain became concerned about Soviet moves into Afghanistan with German support, there was some rapprochement between Afghanistan and Britain and, at the same time, Afghan links to the Soviets and to Germany weakened after the outbreak of war, but Britain was unable to commit substantial military aid to the area. At the peak of German success in Europe, in May/June 1940, there was a new influx of German technicians to Kabul but the German/Soviet pact did not give the Germans a free rein in Afghanistan. The USSR would not allow Germany to send arms through Soviet territory and this broke the major element of the link between the Germans and Afghanistan.

In February 1941 Lufthansa became active again establishing a radio station at Herat. Britain asked for an air link across Afghan territory at this time but the Afghan government refused on the grounds that they had already turned down a Japanese request for a route via Kabul and India and therefore could not accept the British request (54). After Germany attacked the USSR in June 1941 Britain began to move to protect the area north of India in co-operation with the USSR. Britain wanted German nationals expelled and tried to make a deal with the Afghan government but Britain was initially preoccupied in securing Iran. It was not until October 1941 that the Germans were finally expelled from Afghanistan and the government took the decision that no country would be allowed to use their air or land routes. This action closed the door on the shortest central route to the Far East.

All these test flights and the development activity over these specific routes towards the Far East gained experience for German aviators, manufacturers and engineers which could help to support a wartime air service to the Far East. The same three main route possibilities form the basis of all the plans and discussions between December 1941 and May 1945 for the wartime service.

The second area of route exploration which relates to the later development of the Europe/Far East air route is the Atlantic crossing which required aircraft with extended range and needed the skill of navigation over water for long stages. Both these would be
essential supports for a long range air service to the Far East. Germany again linked its
record breaking and adventuring with sound commercial value. In August 1930
Wolfgang von Gronau, at the time chief instructor at the German civil aviation school but
later Air Attaché in Tokyo for most of World War II, led a flight sponsored by Lufthansa
across the North Atlantic to explore a possible air route via Iceland, Greenland, Labrador,
Halifax, Nova Scotia(55). Von Gronau was the navigator and the Dornier flying boat
landed safely in New York after forty seven hours flying time. A year later, in August
1931, they flew the same route, again sponsored directly by Lufthansa, and in 1932,
having repeated the crossing of the Atlantic safely for the third time, went on to complete
a round the world flight.

Lufthansa also sponsored a circumnavigation of the Atlantic by the giant twelve engine
seaplane Dornier Do X in 1932 as a proving and route testing exercise and in February
1934 the company started the first trans-Atlantic mail plane service to Rio de Janeiro.
This flew alongside and complemented the Zeppelin passenger service which had started
in 1932 and which was brought to a halt in 1937 following the Hindenburg disaster(56).
The aircraft route was supported by catapult depot ships which were established at
Bathurst and Fernando de Noronha on the African and Brazilian coasts. These ships were
designed to launch the seaplanes into the air when heavily loaded without using up
precious fuel and therefore increasing the range of the aircraft.

In South America Lufthansa had an associate in Sindicato Condor which operated
services in Brazil from 1930 using German aircraft. The transatlantic mail plane link
meant that a route was now available from Berlin to the Pacific coast. From June 1939
Focke Wulf Condors flew on the sections of this route within South America(57).

A similar crossing service was introduced on the North Atlantic route in 1937 where the
aircraft were again launched by catapult from depot ships in order to save fuel and extend
the range(58). The depot ships "Schwabenland" and "Friesenland" were based in the
harbour of Horta in the Azores and off Long Island and the air route ran from the Azores
to Port Washington, the seaplane harbour of New York. The service was brought to a
halt only because the USA withdrew the license to operate the mail service from Lufthansa for political reasons and the Blohm und Voss Ha 139s moved to the South Atlantic route until the outbreak of the war(59).

On March 27th 1938 a Dornier Do 18 seaplane was catapulted from the depot ship "Westfalen" anchored in Start Bay, Devon. The pilot, Hans Weiner von Engel, was seconded from Lufthansa to the Dornier company for the non-stop flight which ended at Caravellas in Brazil forty three hours and five thousand miles later(60).

In addition to having tried and tested aircraft available from commercial aviation which might prove suitable for a Europe/Japan air service the route exploration work undertaken by Deutsche Lufthansa in the 1920s and 30s meant that there was knowledge and experience of the routes to Asia in question. von Gablenz, who had carried out exploratory flights in the 1930s to the Far East, represented Lufthansa alongside Milch in discussions with Oshima Hiroshi, the Japanese ambassador in Berlin, about the feasibility of different routes(61). By May/June 1942 von Gablenz was a Major General operating as chief executive of Lufthansa. In one of the Japanese Ambassador, Oshima's, messages to Tokyo he mentions that von Gablenz had flown over the central route and passed "all of his observations, weather charts and other material" to Italy which "has already instituted a central route". The experience gained by Eurasia Aviation on the availability of airfields and weather would also have been useful. Eurasia aircraft flew into Pao Tow, for example, which was one of the likely stopping places for a Europe/Far East flight in the North China, Manchuria area. Paradoxically the fact that this knowledge was gained by commercial involvement in air routes in China in the 1930s became a block to development because the Japanese were very wary of further German economic infiltration of China and the Far East.

Italy was also involved in commercial airline development of routes requiring the navigational skills which later played a part in the Europe/Asia air link during the war. Ala Litoria was formed as the state airline in March 1935 again as an arm of the fascist state with a prestige role in showing the flag everywhere in Europe and developing new
intercontinental routes wherever possible(62). The airline was particularly involved with traffic to North Africa and Abyssinia in the wake of the Italian conquests and in 1939 LATI - Linee Aeree Transcontinentali Italiane - was formed to fly across the South Atlantic from Rome to Rio de Janeiro. The route was Rome, Seville, Rio de Oro, Cape Verde Islands, Natal, Recife, Rio de Janeiro using initially Savoia Marchetti SM 83 land planes. The company was set up by Bruno Mussolini following a successful proving flight by three aircraft from the Regia Aeronautica in January 1938(63). One of the other pilots was Captain Antonio Moscatelli who later became the Commander of the successful Italian Roma/Tokio flight and by 1942 Moscatelli had made twenty-two transatlantic flights(64).

b From January 1942

When it became timely to consider the establishment of an air service from Europe to the Far East after the signing of the Military Agreement in January 1942 the same three principal routes were considered.

A Lufthansa feasibility study in December 1941/January 1942 dealt with the same three routes and expected that the BV 222 and FW 200 could cover them.(65)

A Luftwaffe feasibility study in April 1942, already referred to, identified the same basic routes. The study maintained that of the three alternatives the northern route was the only reasonable option.

Again when the Japanese Ambassador in Berlin began to discuss the possibilities early in 1942 the same three routes were discussed. Oshima and the Germans were still particularly enthusiastic about the northern route outlined by Oshima in a message to Tokyo on April 25th 1942 which ran across the northern Soviet Union from Scandinavia or Finland to Tokyo with a stop at Sakhalin or in Manchuria if needed.(66).

The northern route was favoured to such an extent that it was identified by the Luftwaffe as "Luftweg 1"(67). Later in the war the northern route was refined to take account of
Japan's sensitivity about over flights of Soviet territory and in 1945 the proposal became effectively a transpolar route from Norway to the Japanese owned islands south of Sakhalin passing down the Bering Straits between Siberia and Alaska.

The central route was still actively being considered. As we have seen there had been some Lufthansa development work on this route and at least one flight by von Gablenz across the Pamirs. His experience and the passing of his records and materials to the Italians is mentioned by Oshima in a message to Tokyo June 18th 1942 (68). But the Wakhan corridor providing the shorter route from Kabul to Pao Tow was no longer available when the Italians flew in July 1942 and they had to go north to the Odessa area and fly across to Pao Tow to the north of the mountains.

There was only one further occasion when the situation in Afghanistan could have allowed a reopening of the direct air route. After the fall of Tobruk in July 1942 the Afghan government again became interested in working with the Axis. The Germans were very sceptical but Japan were interested. The proposal was that they would get information about Britain and the USSR, the Afghan government would support rebels in India and offer facilities for air transport links from Europe to Asia (69). Talks continued in a haphazard way until August but nothing came of this.

Both these routes, the northern and the central, had the same basic problem which was that, after the closure of the Kabul route, they inevitably involved intrusions into Soviet airspace and this caused the Japanese anxieties because they wanted, almost above all else during World War II, to preserve their Neutrality Pact with the Soviet Union.

For this reason the Japanese government favoured the third possible route which was the southern route across northern India to Rangoon and Singapore identified in the same message of June 18th 1942(70). This southern route had been flown as a regular service by KLM from Amsterdam to Batavia since 1931 originally taking ten days and 81 flying hours! Lufthansa had also opened up the route to Bangkok with exploratory flights on to Japan just before the outbreak of the war(71). The southern route became possible for
consideration as a linking route from Europe to Japan from the time when Japan controlled central Burma in April 1942 but it still required aircraft to fly through the Bay of Bengal, Arrakan and Calcutta areas on the way to Rangoon or Singapore.

In addition to the distances involved and the natural hazards which threatened aircraft the British defences of India and Burma were continually being improved. Until November 1943 the fighter squadrons at Alipore, Chittagong and on the Burma front were equipped with Hurricane IICs. As an indicator of their capability as interceptors the Mitsubishi Ki46, code named Dinah, a fast, high flying Japanese reconnaissance aircraft, which flew over the area at a speed over 360mph and above 34,000 feet had been effectively untouchable. But from November 1st 1943 Spitfires were located in the area and on the 8th November they intercepted and destroyed a Ki46 mission, the first of three intercepted and shot down in a nine day spell. With radar controlled interception and with Spitfires available enemy flights through this area became very dangerous(72). Robert Mikesh believes that fighter records suggest that the Tachikawa Ki77 was shot down by British fighters in July 1943(73). Certainly from January 1944 northern Burma became a very active war zone, which would again have made over-flights very difficult. Oshima already believed this route was dangerous in July 1943 when he said in a message to Tokyo, "the contact men do not like the long southern route so strictly guarded by the enemy. I think we had better immediately return to the idea of the land[northern] route"(74). When the discussion between Germany and Japan began on flying Luftwaffe Lt Gen Ulrich Kessler to the Far East in August 1944 the southern route was not considered an option, "Technically the only route open to us is the Northern one.....by this route we find it most convenient to leave from Finland."(75)

3 Weather

In addition to the man-made problems all the routes had their own weather problems. The southern route was particularly affected by the monsoons and although, from mid October to mid June the weather could be relied on to be reasonable, from July to September there was a risk of storms and heavy cloud up to 30,000 feet which would have created considerable problems for aircraft, given their operational ceiling, at this
time. On January 28th 1943, in a message from Tokyo to Rome, the Japanese assured the Italians that the weather would be all right for a flight on the southern route until May 1st (76). The weather on the other two routes across northern Russia and Siberia or through the mountainous Pamir region was also dangerous in its own way.

4 Navigation
An important part of the feasibility of the routes was the navigation systems available. There was expertise available from the pre-war long distance flying and there are two well-documented examples of extended flights by Junkers Ju 290s during and just after the war. Following the D Day landings FAG 5 had been disbanded from their base near Bordeaux and most of the aircraft had become part of KG 200 which had responsibility for all sorts of special flights. On 27th November 1944 a Ju 290 captained by Hauptmann Braun flew from Vienna on a circuitous route across German occupied Hungary, Yugoslavia and Greece then direct to a point south of Mosul in Iraq where agents were dropped by parachute. The flight then went on to land on the island of Rhodes which was still held by the Germans at this date where they rendezvoused with another Ju 290 carrying fuel. The flight, which took place at night, is described by an author who was himself a KG200 pilot. He explains how for the first part of the flight the navigator could use German transmitters and radio beacons to check his position but from then on it was a question of astro-navigation and dead reckoning checked by occasional ground sightings. When moon and stars were invisible through cloud the navigator reverted to any available radio transmitter. The flight from Vienna to the dropping point in Iraq and back to the island of Rhodes took nearly thirteen hours (77).

Another example of long range accurate navigation came just after the war. On the 6th May 1945 the same Hauptmann Braun flew a Junkers Ju 290 A7 from southern Czechoslovakia to Munich to take a cargo of refugees from risk of capture by the Russians to safety behind the American lines. The aircraft, PJ+PS named "Alles Kaputt", was selected for further testing and evaluation by the Allies and it was decided to fly it to the USA where this testing was to take place. In July 1945 it, therefore, flew the Atlantic via the Azores and Bermuda to Wright Field (78).
The approach to navigation was a mix of astro-navigation and dead reckoning with the use of fixed navigational aids, either commercial broadcast transmitters or radio beacons, to confirm positions and headings. The messages exchanged particularly in the run up to the July 1943 flight by the Japanese aircraft demonstrate that both parties were aware of the need for carefully pre-planned radio discipline, accurate and timely weather forecasting and information on radio transmissions which could be used to confirm positions (79). The second Italian flight in the Autumn of 1942 appears to have been held up and finally cancelled, at least partly because of the absence of a radio beacon on the right wavelength at Rangoon (80). Other messages demonstrate a concern to establish alternative landing sites, quantities and types of fuel needed to replenish aircraft en route (81).

5 Pilots and crews
Experienced pilots and crew were available. A small group of ex-Lufthansa pilots appear and reappear as we work our way through this story. Walter Blume, Rudolf Mayr, Heinz Braun. They carried out long endurance flights with the BV 222 in 1942, were earmarked for flights using the Junkers Ju 290 to Manchuria in 1944 and for flights over the pole in 1945. Heinz Braun was the pilot in the two examples of long distance navigation cited above. From the Italian side there was Lt Colonel Antonio Moscatelli who commanded the Italian flight to Tokyo in July 1942. Although he began his career with the aerobatic team, he flew long distance missions from 1938 pioneering routes from Rome to Rio de Janeiro and flying the Atlantic twenty two times. The engineer on the Italian Far East flight, Ernesto Leone, had flown on the transatlantic expedition led by General Italo Balbo.

6 Conclusion
The above material shows that the technology, systems and personnel were available to support an air link between Europe and Asia and that this was increasingly the case after the end of 1942. There were aircraft available with adequate range and ceiling on the German side from the beginning of the war with the Focke Wulf Condor and the BV 222
and from the Italian side the SM 75PD. In fact availability improved during the war with the introduction of the Junkers Ju 290 from January 1943 onwards, the Fiat G12 from early 1943 and the Tachikawa A26/Ki77 from June 1943. The Messerschmitt Me 261 and Me 264 and the Junkers Ju 390 could also have been used.

There was already a great deal of knowledge of the potential routes. von Gablenz with Lufthansa and von Gronau as Air Attaché in Tokyo had considerable knowledge and personal experience about long range flights and both were ideally placed to give advice on any plans. Lufthansa development towards Asia had given knowledge of the routes and the airline had, in addition, long distance experience over the Atlantic. Italy also had considerable experience with flights across the South Atlantic and with long distance record breaking flights. As a result there were experienced air crew available with the ability to navigate over long distances.

The problems with the development of the air link came about because of political issues namely Japan's concern that any air service should not intrude into Soviet air space by over flying the Soviet Union. This meant that the only politically acceptable route was the southern route via Rangoon which was also the most dangerous route and which was effectively closed off by the Allies from November 1943.

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Maps

1. Map provided by Lufthansa 25th October 1943 showing the alternative routes being considered at this time

Using the same Lufthansa base map -

2. Map showing the northern route from northern Scandinavia to Manchuria and Japan

3. Map showing the central routes from Kabul to Pao Tow and Tokyo and from Odessa to Pao Tow

4. Map showing the southern route from Rhodes or the Black Sea to Rangoon

5. Map from the Schwenke report - see note 15 - showing graphically the scope of the review of possible uses for long range aircraft. The places with numbers attached are potential targets for bombing.
Maßstab: Äquator 1: 100 000 000

1. Kirmenes - Sechzin  Seeflugzeug  rd. 6.400 km
2. Kemi  "  Landflugzeug  "  6.340 "
3. Kirmowrad - Pasow  "  6.125 "
4. Odessa - Bantow  "  7.000 "
5. Odessa - Andamanen  Seeflugzeug  "  7.000 "

Deutsche Lufthansa AG
Köln
Firmenarchiv
1 Enisei Delta
2 Sakhalin Island
3 Paramushiro Island

Deutsche Lufthansa AG
Köln
Firmenarchiv
Specifications and Photographs of the Aircraft

Focke Wulf FW 200 Condor

_Engines_  4 x Bramo 323

_Length_  78 feet

_Span_  108 feet

_Cruising speed_  201 mph

_Ceiling_  21,981

_Range_  1900 miles

Savoia Marchetti SM 75 – standard airline version

_Engines_  3 x Alfa Romeo AR 126

_Length_  71 feet

_Span_  97 feet

_Cruising speed_  202 mph

_Ceiling_  23,000 feet

_Range_  1,450 miles

Junkers Ju 290

_Engines_  4 x BMW 801

-Length_  93 feet

_Span_  136 feet

_Cruising speed_  225 mph

_Ceiling_  20,000 feet

_Range_  5,000 miles
Junkers Ju 390

Engines 6x BMW 801
Length 112 feet
Span 165 feet
Cruising speed 220 mph
Ceiling over 20,000 feet
Range 6,000 miles

Blohm und Voss Bv 222 Wiking

Engines 6x Jumo 207 or Bramo 323R
Length 118 feet
Span 149 feet
Cruising speed 200 mph
Ceiling 21,000 feet
Range 4,600 miles

Tachikawa Ki 77

Engines 2x Nakajima Ha 105
Length 55 feet
Span 105 feet
Cruising speed 200 mph
Ceiling design 27,000 feet and above
Range 10,212 miles – record breaking flight 2nd – 4th July 1944
Chapter 2

Beginnings: The drive for a separate peace and the decision to send Bose to the Far East: June 1941 - April 1942

From the outbreak of war in the Far East until the autumn of 1943 the Japanese exerted continuous pressure on Germany and on Italy to develop an air service between Europe and the Far East. Their aim was always to improve their representation in Berlin in order to persuade Germany out of the war with the USSR - a war which the Japanese were convinced the Germans could not win. Once the war against the Soviet Union had been drawn to a close Germany would be able to concentrate her efforts, alongside Japan, against the British and Americans. Until the end of 1943 the Japanese had to try to persuade the Germans, who were in the ascendancy on the Eastern Front, to consider a cease-fire. After the winter of 1943/4 it was obvious that the Soviet Union was in the ascendant and the Japanese switched their efforts to Moscow where they tried to convince the Soviets to bring an end to the fighting. As far as the project to develop flights was concerned this means that until the summer of 1943 all of the pressure for flights came from the Japanese. They found an ally in Lufthansa and the ex-Lufthansa personnel in key positions within the Luftwaffe, who wished to continue the work, which had been begun in the 1920s and 30s, on developing commercial air routes to the Far East. A continuing aspect of the air service project between December 1941 and May 1945 was the attempt by the Germans to resurrect the Eurasia airline operation in China as part of a full air link to the Far East. After the end of 1943, where there was continuing interest in flights, it was largely from the German side and for other reasons, including the movement of key German personnel and valuable raw materials.

When one considers the possibilities latent in the war situation during 1942 there should have been pressure to use an air service for the support of military co-operation but, in fact, although this was sometimes given as the reason for flights, neither side seriously desired close military liaison. Very little joint activity actually emerged even at the period in 1942 when the Allies were vulnerable in the Indian Ocean. Before December 1941
there are some examples of collaboration between the two Navies to support German surface raiders and to exchange intelligence. After December 1941 the Germans initially wanted support from Japan through an attack on Manchuria but perhaps more practically they looked for assistance in the Indian Ocean to cut the allied supply route to the Middle East around the Cape and to the Soviet Union via the Persian Gulf. The Japanese Navy carried out the large scale raid into the Indian Ocean in April 1942 followed by major submarine activity but there was no exploitation of the raid and although there was spasmodic activity later in 1942 and in 1943 the Japanese submarine strategy and tactics prevented a systematic focus on cutting off supplies. The establishment of German submarine bases in Penang and Djakarta eventually provided the force Japan was unwilling and unable to commit and these U boats were relatively successful in sinking allied ships.

But fundamentally the Axis partners were following different agendas. The lack of communication and mutual understanding became a symptom and a cause of the failure of the air service. Japan's priority was her desire to bring about a peace settlement between Germany and the Soviet Union on the Eastern Front. This was based on a rational and considered assessment of the situation by Japan. From as early as August 1941 some elements in the Kwantung Army believed that Germany had already lost the chance of victory over the Soviet Union(1). Tsuji Masonobu maintained that he and his colleagues, ex-Kwantung Army Staff, involved as Unit 82 in planning the attack on Malaya and based in Taiwan, were all certain very early on that Hitler had attacked too late in the year. This group was knowledgeable about the Soviet Union, had studied the Red Army and had been planning for Japan to fight such a war for several years(2). Tsuji, himself, had been heavily involved in the fighting at Nomonhan in 1939 (3) and he wrote about Hitler's invasion of the Soviet Union, "if he could seize Moscow and Stalingrad and attack the Urals before the winter he might win. But at the end of October snow would fall over the Russian battle area and I did not think he would be able to settle matters by that time. I knew from my own experience of the life and death struggle at Nomonhan that victory over the Soviet would not be an easy matter"(4). Hitler's armies did not, of course, meet this objective and the strength of Japan's certainty about what Germany
could achieve against the Soviets can be seen by the fact that, at this early stage in the conflict, Japan started to move Kwantung Army veterans away from Manchuria and to prepare to use them for her own "Strike South". It had already been decided that German progress would not be advanced enough to make a Japanese attack from Manchuria into the Soviet Union a reasonable or profitable option.

The Allies also believed that a peace settlement might come about on the Eastern Front and the British were particularly aware of the implications of a rapprochement between Germany and the Soviet Union. On the 18th September 1941 Brendan Bracken told a US journalist "The possibility of a separate peace between Stalin and Hitler is the constant pre-occupation of the government" (5).

The Japanese had begun to make positive overtures with the aim of mediating a separate peace quite quickly after the German offensive on the Eastern Front began. On October 4th 1941 Tojo as War Minister and Sugiyama as Chief of Staff approached Ambassador Ott on the issue but if the message was passed to Ribbentrop and Hitler the reply was negative. As far as the Germans were concerned they were poised to take Moscow and they had no interest in any talk of peace(6). On the 15th November 1941 a Liaison Conference within the Imperial Government agreed that Japan should offer to mediate between Germany and the USSR. A proposal was put forward to both participants called "A Plan to bring about an end to the war", but there was no response from either Germany or the USSR(7). Despite the lack of response Japan kept up the pressure. On 21st November 1941 a message from Tokyo to Berlin told Oshima to keep an eye on developments and pointed out to him that Japan would welcome peace between Germany and Russia and would be willing to mediate if necessary(8).

At around this time, on December 5th 1941, the German advance stalled for the winter outside Moscow and it was then that the idea of developing an air service between Europe and the Far East was resurrected by Japan. It was clear that there would be no lightning victory over the Soviet Union and, as a result, there would be no quick and easy resumption of traffic between Europe and the Far East over the rail link. At the same time
the Japanese requirement for technological assistance and imports had become even more pressing as they opened their own theatre of war in the Pacific and Far East. Only a separate peace between Germany and the USSR would allow the re-opening of overland transport and only the overland route could satisfy the requirement for the transport of bulk items which the Japanese needed. At the same time only an air service could move the key people to Germany so that they could exert pressure to bring about an end to the fighting on the Eastern Front. As a result, early in December 1941, the Japanese Army and Navy Ministers approached the German Air attaché in Tokyo about implementing an air service to Japan but received no answer from Berlin(9).

Trying to achieve the same objective by another route, on December 15th 1941, as we have seen, the Japanese put forward the first formal draft for a military agreement between the three Axis powers. In that very first draft the commitment to establishing an air service by all three Axis partners was listed as an item(10). There was no enthusiasm for an air service from Goering and the Luftwaffe. On December 24th 1941 a message went from Ambassador Ritter to Ribbentrop's Secretariat to report that Admiral Groos, Chair of the Military Commission of the Tripartite Pact, who had been delegated to collect responses to the Japanese draft military agreement, had recorded that "The C in C Luftwaffe has simply emphasised that the proposed restoration of an air force link between Germany/Italy and Japan is not possible because the range of available or planned aircraft is inadequate."(11)

This was the first tangible sign of the disagreement between elements of the German hierarchy, which consistently hampered any action on flights to the Far East. In general terms the Foreign Office was enthusiastic about links because Ribbentrop was the major protagonist of the Japanese alliance within the Nazi hierarchy and those in key posts within the Luftwaffe who had emerged from Lufthansa were also keen to support the development. In a sense they were wanting to continue the commercial developments of the 1930s by other means. But what might be called the "army faction" within the Luftwaffe consistently refused to support the project seeing other more important uses for the scarce long-range aircraft. The very fact that successful long range aircraft were
scarce in Germany was itself, as we have discussed in Chapter 1, an outcome of Goering's opposition to the development of a strategic bomber and of four engine aircraft in the late 1930s and the victory of the "army faction" in the "Uralbomber" controversy. It appears from later comments that there was also concern over the appropriate roles for military/civilian air services and that such a mission to Japan might be considered an improper use for military aircraft and resources. It was only in 1944 that the Luftwaffe became very enthusiastic about an air service as a way to send their own Air Attaché to Japan.

The Italians were also keen to see a separate peace between Germany and the Soviet Union. On December 28 1941 a report of a conversation with Prince Konoye came to Rome from Indelli, the Italian ambassador in Tokyo(12). Japan wanted to bring about a separate peace between Germany and the USSR. Count Ciano, the Italian Foreign Minister, and Mussolini were both interested because they could see that such a move would free Germany to focus efforts against the USA and Britain in the Mediterranean. A victory in Russia was of no real value to Italy. Mussolini decided, however, it would not be tactful to discuss this proposal with Hitler(13).

Despite, or because they were already aware of, the watering down of the commitment from Germany in the discussions on the Military Agreement, the Japanese continued to exert pressure on the German representatives in Tokyo to bring about an air service which would allow them to send a delegation to Europe. On December 31st 1941 Eugen Ott, German Ambassador in Tokyo, sent a message to Berlin explaining that at his regular meeting with the Japanese Foreign Minister and Heads of General Staffs, an approach had come from Japan "There was urgent need for the restoration of direct connection between Germany and Japan. If an air service was not possible at this time, why not send a German aircraft of the largest kind to Japan, this would be a visible expression of the solidarity of Germany with her Japanese ally". Ott had replied that "at the end of the day Germany would decide"(14).

Work was also proceeding to establish the practical basis for an air service. Messages
decoded at Bletchley Park suggested that the Japanese Military Attaches were being asked to investigate the purchase of Focke Wulf Condor aircraft and Junkers Jumo 207 engines. The Attaches were monitoring the development of a "stretched" version of the Condor with an extended range(15). Lufthansa had also been investigating the possibilities for re-establishing an air route to the Far East and on January 5th 1942 von Gablenz sent a summary report to Goering. The report directly contradicted the argument which Goering had put forward in the discussion surrounding the acceptance of the Military Agreement. Goering was recorded as having maintained "that the proposed restoration of an air force link between Germany/Italy and Japan is not possible because the range of available or planned aircraft is inadequate"(16). On the contrary the Lufthansa report identified possible routes for landplanes leaving Kirovgrad/Smolensk in Russia or Kemi in Finland and arriving at either Tsitsikar in Manchuria or Bauto in Mongolia - also known as Pao Tow. A sea plane route could have run from Kirkenes to Dairen or on to Tokyo. The suitable aircraft identified were the Focke Wulf FW 200 Condor for the landplane routes and the Blohm und Voss BV 222 as the flying boat. The point was made that both were civil aircraft built for long distance commercial flights and with experience in service. The Condor would have needed to overload with fuel from 17.5 tons normal take off weight to 23 tons and this could have been managed. The BV 222 would have needed 2.5 tons overload to fly direct to Tokyo. In summary the report stated categorically that "An air service between Europe and Japan is possible with presently available equipment....the best route for an air service between Europe and Japan is Kirkenes to Dairen or Tokyo using the BV 222".(17)

On the 29th January 1942 a further very detailed report, running to eleven closely typed pages, was produced by Lufthansa backing up this summary. It suggested that a seaplane landing place in the Sakhalin Islands would also be useful and it went into great detail on the weather conditions at different times of the year and how much of the flight would be in daylight. Careful thought was given to the insulation and heating of the cockpit and crew rest room of the BV 222 and the provision of facilities for cooking and eating meals on the long flight. A particular technical problem was identified which became a crucial point later in the discussions. The BMW 323 engines used by the BV 222 required
replacement and major overhaul after 30 to 40 hours of flight and since the flight to the Far East would take between 25 and 30 hours this meant that facilities for engine replacement and spare engines would need to be available in Japan. Despite these issues Lufthansa, with all their pre-war experience, were already fully confident that an air service was possible by following a route across the northern Soviet Union direct to Japan(18).

Another major factor which affected the efforts to develop an air service early in 1942 was the desire of Subhas Chandra Bose to travel to the Far East. Bose had been a highly significant Nationalist leader in India in the pre war period. In 1921 he had resigned from a privileged position in the Indian Civil service and embarked on a career as a political activist. He was arrested ten times in the 1920s for civil disobedience, at 27 he was Mayor of Calcutta, at 31 President of the All India Congress. He was an opponent of Gandhi within the nationalist movement and was unable to subscribe to the non-violent approach because he believed in accelerating the pace of change by a social revolution. In January 1938 Bose was elected President of the Indian National Congress, for the second time, succeeding Nehru in that position and at that time he was considered the equal of Nehru in the Congress Party although he was eight years younger. He and Nehru were at that time the best-known young Indian politicians in Europe(19). But, having been elected President of the Congress against the opposition of Gandhi, he was forced to resign by the active non-cooperation of Gandhi and other leaders. Once outside the Congress Bose then established the radical "Forward Bloc" as a focus for his work and he believed either Soviet or German help would be needed for the liberation of India.

Various attempts to draw groups together within India all failed and, after war broke out, in July 1940 he was imprisoned for organising an anti-British demonstration in Calcutta. This was his eleventh arrest and having undertaken a hunger strike in gaol, he was sent home under house arrest at the end of November 1940 to recover. He began to plan to leave India and in January he managed to escape, arriving in Kabul, Afghanistan, in February 1941. Bose's first choice as a base for his activity was the USSR and he first tried to make contact with the Soviet authorities in order to arrange to go to Moscow but found that they had no real interest in supporting him. Failing this option Germany and
Italy then arranged a transit visa for him to travel through the USSR to Germany. The Italians were the prime movers in this because their war was consciously anti-Imperial and anti-British and travelling on an Italian passport, under the name "Mazzota", Bose arrived in Berlin in the first week of April 1941.

As a long term opponent of the British, Bose was seen, once he had escaped to Germany, as a potential focus for activity which was intended to subvert the British control of India. The sub-continent was of vital importance to the Allies, not least as a great source of manpower: India provided 2.25 million men for the Allied armies between 1939 and 1945. Therefore any possibility of breaking British control of India was worth exploiting by the Axis powers. But being based in Germany did not prove helpful to Bose in his campaign to free India. Bose had traveled widely in Europe in the 1930s and had made some contacts among the Nazis, although both Hitler and Ribbentrop had refused to meet him. He was much closer to Mussolini and his associates and Bose often told how it was the Germans who had not treated him with respect in the 1930s. Bose had attended meetings in Germany and with German agents in India where he complained about anti-Indian statements in Mein Kampf and asked for them to be withdrawn. There was quite a strong current of anti-Nazi activity in India in the 1930s including a boycott of German goods and as a result the Indian people were unlikely to see the Nazis as helpers in the struggle for freedom. Once in Germany Bose began to discover that, although they found him useful as a propaganda weapon against the British in India, he could not persuade the Germans to actively assist in the violent overthrow of British rule. At heart Hitler still had respect for Britain and the Empire and considered the Indians to be a quite inferior race. He told Bose, when they eventually met in May 1942, that it would be centuries before India was ripe for self-rule. Hitler's views about Indian Independence had not changed since a conversation with Halifax in November 1937 when he advised the British Government to: "Shoot Gandhi and if this doesn't suffice to reduce them to submission, shoot a dozen leading members of Congress; and if that does not suffice, shoot 200 and so on until order is established. You will see how quickly they will collapse as soon as you make it clear that you mean business." (20)
Bose had three particular objectives. Firstly, he wanted to establish a Free Indian Government in exile and he quickly found that the Germans would not allow this. Secondly, he wanted to encourage the Axis governments to make a public declaration of their support for Indian Independence, but he found that although the Germans, Italians and Japanese were all at different times supportive, the time was never right, for one reason or another, to make a joint Axis announcement of support. In Bose's view such a Declaration was vital because otherwise any Axis moves against India would appear as invasion and conquest rather than liberation. Thirdly, Bose wished to create an Indian National Army to fight alongside the Germans and Japanese in the liberation of India. He did eventually find some support for this in Germany.

Since direct support was lacking Bose did not want to compromise his independence and position in India by being seen to be part of a German approach which did not deliver any action on liberation. He recognised the continuing strength of anti-German feeling in India and decided to keep his presence in Germany secret for the time being.

Bose's position worsened in June 1941 when Operation Barbarossa took place. He was visiting Rome at the time and he initially felt there was no point in going back to Germany. At that time he had still not been received by Hitler and the German aggression against the Soviet Union caused Bose great anxiety because, in many ways, the Soviets and even Imperial Russia had a better history of support for Indian nationalism than the Germans and because he realised that the Left in India, who would have been his allies in the nationalist movement, would now identify Nazi Germany as the main enemy and could certainly not see the Germans as potential allies and liberators.

More pressure came from the activity of a rival for the leadership of the Indian movement in exile. In Italy an office, Ufficio India, was set up on October 4th to co-ordinate Indian issues as far as the Italians were concerned. The Italians had their own nationalist leader, a Muslim called Shedai, who ran a very successful propaganda radio station called Radio Himalaya. There were some efforts in the next few months to draw the two nationalist leaders together. Shedai was more amenable and sociable and worked well...
with people but Bose had greater political strength in India. Collaboration was difficult because of the fundamental disagreement between the two leaders over the Pakistan issue and when Japan entered the war against Britain in December 1941 Bose began to consider a move to South East Asia. He knew that the Germans had no real commitment to the liberation of India and that the Indians were considered racially inferior. It had also become clear that Hitler was not going to win the rapid and crushing victory over Russia that he had claimed and would not be able to switch forces towards India in the near future. Japan had for many years been a refuge for exiled Indian nationalists and there was certainly an anti-colonial tendency within the Japanese rhetoric on the Co-Prosperity Sphere. On December 17th 1941 Bose had a meeting with the Japanese ambassador Oshima Hiroshi and asked for help and support from Japan in his efforts to go to the Far East to lead the insurrection in person.

But it was not necessarily going to be easy to get Japan's support as a leader of the Indian movement or for his journey to the Far East. Bose had taken a strong anti-Japanese line over Japan's invasion and continued military involvement in China. As President of Congress in 1938 and in 1939 he had made strong declarations of solidarity with China against Japan. The Japanese were unsure about Bose as a potential leader. They had already discussed him on March 27th 1941: "He may be of some value to us, but we must bear in mind that he is of a rather light calibre. He is not one who could execute big tasks" (23). The Germans saw Bose going to the Far East as a loss of possible leverage in India and the Far East to Japan. Japan was working to shut Germany out from any involvement in that region in all ways possible. The January 18th 1942 military agreement slid India into the Japanese sphere of influence and on economic matters the Japanese had erected a solid wall against any involvement in trade from Germany.

Meanwhile the situation in the Far East was developing rapidly. The Japanese were not planning to include India in the build up to war during 1941 but as they began to work in Burma and elsewhere with those who might provide support for Japanese invasions they sent Major Iwaichi Fujiwara to Bangkok to make contact with dissident Indian groups in South East Asia. The aim was to undermine the loyalty of Indian troops and organise
Indians in the region against Britain to prepare the way for Japanese troops. The Fujiwara Kikan worked with Pritam Singh's Independence League of India and an agreement was signed on December 4th 1941. Japan would support Indian Independence and provide assistance while the Indians would support Japan. Contact was to be established with Bose in Berlin. It is not clear whether this was really official government policy or whether the commitment of the Japanese activists to anti colonialism outran their brief. A rival Indian group which believed India should be liberated by Indians and not by Japan formed an Indian National Council on December 23rd 1941 and this group grew in strength very rapidly. The only area of agreement between this Indian National Council and Japan was over the need to destabilise the British Army. The INC wanted any Indian prisoners of war to join the Indian National Army which should be under Indian command. The Japanese, on the other hand, saw the Indian National Army as useful auxiliaries but not as a liberation force. The fall of Singapore and the influx of prisoners of war into the fledgling army changed the scale of the operation and Mohan Singh agreed to work with Japan while leading the Indian National Army and keeping it under Indian control. This arrangement was not backed by the Japanese High Command.

Bose's presence in the Far East was now being requested by groups who actively wanted to prevent Japan using Indian nationalism for their own ends. Bose and others wanted to see India win her own independence perhaps with help but not to be given it or have it withheld by invaders. Despite the work of Fujiwara the Japanese Army were still very sceptical of the possibilities for a revolution in India. The only positive public gesture to come from all this was on 26th December 1941 when Rash Behari Bose, a veteran Indian nationalist figure in Tokyo, persuaded the Japanese to make a proclamation appealing to Indians to throw off British rule and not fight against Japan. The broadcast was probably not heard in India.

Bose saw the need to travel to the Far East and there were dissident Indian groups in the Far East eager for him to lead them but for Bose to actually arrive in the Far East would require Germany to grant permission, Japan to invite him to travel and for a means of travel to be found. During the first half of 1942 the Germans gradually accepted the fact
that Bose would leave Europe and travel to the Far East and that they would lose
influence over him, but although the German view changed the Japanese were not easily
convinced that Bose was the right person for them to use as a focus for the anti-
Imperialist movement in India. It was the Japanese, from their position on the Indian
frontier in Burma and with easy access to large numbers of Indian PoWs, who could do
most in a practical sense to support Bose and use him against the British but they were
still not sure that, from their point of view, he was the best leader for the Indian
movement. They tried several times to build links with other Congress leaders who had
remained in India before finally agreeing to Bose travelling to the Far East. In this
extended process there were several occasions when it was agreed Bose could travel but
because of the Japanese uncertainty the approval was given without any supporting
agreement on the means to be used for the journey.

In the end there was a question mark over how serious the Japanese were about a war of
liberation in Asia and the Far East. The New Order and the Greater East Asia Co-
Prosperity Sphere, Dai Toa Kyoeiken, was basically an economic device to gather all the
raw materials of the area to serve Japan but ideological ambitions became attached for
some participants. There were research groups associated with the project and it became a
focus for radical anti-colonial ideas. Matsuoka had officially proclaimed the Sphere on
August 1st 1940 as part of the new Konoye government. The signing of the Tripartite
Pact recognised Japan's pre-eminence in the Far East but the pact did not cover India. The
Military Agreement of January 1942 had then put India into Japan's sphere of influence,
but it was still not clear that Japan ever had great ambitions to invade or occupy the sub-
continent. India could easily have become another China if the Japanese made the
military moves because they had insufficient forces available. The Navy had an interest
in the Indian Ocean and the link with Germany but the Army was not interested in trying
to take and hold India. The Army would not even contribute troops to the expedition
against Ceylon. India was three weeks sail from Japan and major forces were still tied up
in China and Manchuria. Essentially Japan needed raw materials not markets.

On January 2nd and 3rd 1942, while the development of the Military Agreement was
proceeding, Oshima met with Ribbentrop and then both met with Hitler. They discussed the possibility of a Declaration of Indian Independence and while Ribbentrop and Oshima agreed that it should be three way, when the time was right, Hitler ignored the issue altogether because, in his view, the time would not be right until Germany had crossed the Caucasus. At the same meeting, for the first time, they identified that as the Germans advanced towards Moscow it would become possible to make linking journeys by air as the range decreased. The journey from Moscow to Manchuli or from Rhodes to Bangkok would be about 4,400 miles (24).

In mid January Japan turned down Bose's request to travel to the Far East (25) and on January 18th Ribbentrop, following Japan's decision, also refused the request.

The Military Agreement signed on January 18th 1942 was a victory for Japan in its recognition of a Japanese sphere of influence which included India but, at the same time, Japan realised that the agreement on its own was not a very secure base for future action. Japan, therefore, kept on looking for a joint declaration with Germany and Italy to legitimise her position. A joint declaration would have supported Japan's role in India but could not be achieved in 1942. This should not detract from a recognition of Japan's victory in negotiating the military agreement. In an incredible diplomatic achievement the Japanese had managed to sign a military agreement with Germany and Italy about how the war was to be fought which did not mention the Soviet Union although both Germany and Italy were fiercely involved in fighting the Russians on the Eastern Front. The Japanese had, as a result, safeguarded their Neutrality Pact with the USSR, which was so essential to their long-term war aims.

At the same time the Japanese were still persisting in trying to bring about mediation between Germany and the Soviets. In January 1942 Togo met Soviet ambassador Smetanin as he was preparing to go on leave to Moscow and sent a message to Molotov - "The present nature of Japanese/Soviet relations in the midst of a world conflict resembles a ray of sunlight shining through a rainstorm; and I hope it will illumine the world. If the Soviet Government wishes for peace to be re-established, Japan is ready to
offer herself as mediator and to use all means at her disposal." (26)

The request from Japan for a German flight to start off an air service and, effectively, to carry forward the separate peace project, already made twice in December 1941, was repeated in February 1942. Discussion was obviously very active in Japan because on 5th February von Gronau asked if there was any progress on the issue of air and airmail services raised on 19th December 1941 and also on January 15th 1942(27). On the 12th February Kido Koichi, the Lord Privy Seal, recorded a conversation with Tojo and the Emperor in which it was agreed that they would ask for the Germans to send a long-range bomber to take Tojo to Berlin to meet Hitler and discuss peace. Tojo was instructed by the Emperor "to not lose any opportunity for ending this conflict....I want you to take into account the present and future sensibilities of the Anglo Americans whom we cannot ignore. It will also be necessary for you to ascertain the Russo-German relationship and look forward to its outcome"(28).

Foreign Minister Togo Shigenori explained in his evidence at the Tokyo War Crimes trial "When I reported to the Emperor in July 1942 on the refusal of the German request to go to war against the USSR and discussed with him steps to be taken to ensure that his desire should be correctly conveyed to the German government without interference by the military authorities, he also mentioned his desire to see an early restoration of peace. I then discovered for the first time that the Emperor had expressed this desire to Premier Tojo as long before as February."(29)

Tojo spoke with Ambassador Ott on this matter. The message was only to be passed to Hitler and Ribbentrop and specifically not to Oshima. There was already concern over Oshima's role. Oshima had been appointed to return to Berlin as Ambassador during the Konoye government with Matsuoka as Foreign Minister when Japan was much more strongly pro-German. His appointment had been very well received by the Germans since he was a long time friend and supporter but he was so closely tied to the German view that it was doubtful if he could properly represent Japan. It appears that Tojo was willing to fly to Berlin to join a joint peace initiative if Hitler would supply a long range bomber
to take him to Berlin but Hitler was unwilling to risk Tojo crashing in a German plane and he was also not receptive to the idea of a peace move.

Despite the interest shown by Japan and Lufthansa's confidence in the practicality of the venture the Luftwaffe was not willing to work on the project. On 12th February 1942 the decision was delivered from Kramarz, Luftwaffe, to the State Secretary, "Following a communication from the Air Attaché in Tokyo the Reichsmarshall has not approved the plan for an air service to the Far East"(30). This was a general rejection of all the requests so far but the Japanese would not stop working on the idea and the Italians were moving much more quickly and positively towards creating a viable air service. Italian activity began in February 1942 and this initial activity was described in a message sent from Tokyo to Rome on June 3rd 1942 which summarised activity between Italy and Japan up to that date. The Italians had responded quickly to the military agreement of January 18th and the Italian military had suggested that they should work on an air service to assist collaboration between Germany, Italy and Japan. At that time they had asked for collaboration by the Japanese military to help them carry out an experimental flight. (31)

As well as being more active in supporting the idea of an air service Italy was also generally more supportive than Germany of Indian Independence. Mussolini and Bose had met in the 1930s creating some personal link and Italy generally had a stronger anti British stance than the Germans. As Bose began to look for ways to travel to the Far East, and as the Germans showed themselves as unwilling, and possibly unable, to meet his requests, he turned more and more to Italy for help.

Meanwhile the pressure in the Far East for a decision and a positive move over the leadership of the Indian movement increased. On February 27th 1942 Bose broadcast from Germany and finally revealed his presence in Berlin. He had hoped to use this gesture as a lever to exert pressure on the Axis powers and force them into a Declaration of Independence. Certainly all three Axis powers had agreed to the broadcasts and this, in itself, was a recognition of Bose's position and by implication a recognition that Japan had some rights on Indian issues. Bose began to feel more strongly that he should go to
the Far East and he particularly wanted to go to Rangoon to set up a radio propaganda station to broadcast to India. He began to talk about flying, "Bose has a burning desire to fly to Rangoon as soon as possible.......the German government has concerns about danger to his person"(32). But still neither the Germans nor the Japanese were wholehearted in supporting Bose in this desire. The Germans continually emphasised the danger to his person arising from such a flight and the possibility of capture by the British and at the same time the Japanese side continued to be uncertain about Bose's role in their policy on India. In March 1942 Ott believed Japan was still not sure which Indian group to link with. There was still the problem of credibility for any particular leader of an insurrection coming from outside India.

At this time Hitler was still refusing to see Bose and the situation in India was becoming more and more unstable leading up to the mass unrest in July and August 1942. In the second week of March 1942 there was a conference in Tokyo, which drew together the various groups active in South East Asia in the movement for a free India. Japan was pushing Rash Behari Bose as leader. He had been a long time exile in Japan in the cause of Indian independence and was effectively a puppet of the Japanese. There were some concerns over Japanese manipulation and Japan was uncertain over which way to go. The most outspoken opponents of Japanese control were conveniently killed in an air crash on the way(33).

Meanwhile Japan was continuing to work on the theme of mediating a separate peace. On March 7th 1942 at another Imperial Liaison Conference Togo Shigenori, the Foreign Minister, stated very fiercely that mediation between Germany and the Soviet Union was one of the most important tasks for Japanese diplomacy. Again a proposal, this time entitled "Fundamental directions for the war", was sent to both Germany and the Soviet Union(34). Despite little response to these official overtures the Japanese continued to work any possible avenue to get their message to Berlin. Following the aim of the Liaison Conference representatives of the Japanese Navy spoke, on 14th March 1942, to Admiral Wenneker, the German Naval Attaché in Tokyo. The Navy believed a German/Soviet peace was essential to save Germany. The Soviet Union had congratulated Japan on her
victories and the Japanese believed the Soviets would be receptive to Japan's mediation. Ott passed the message on, "The Japanese official concerned pointed out that the desire of the Japanese Navy that Germany should postpone her differences with Soviet Russia stemmed from the wish that Germany could then use all her efforts to destroy British forces in the Far East and the British position in the Eastern Mediterranean and in this way and as quickly as possible implement a direct collaboration between the Axis powers and Japan." (35)

The reply came rapidly on March 17 1942 in a message from Berlin to Tokyo following a discussion between Ribbentrop and Oshima "Germany has no intention of making a separate peace with Stalin and there is no way to solve the Soviet problem except by force of arms"(36). As a result Wenneker was criticised for being defeatist.

There was still no progress on the diplomatic side of the Bose issue. Again on March 27th Japan opposed Bose going to the Far East and so Ribbentrop, in turn, refused him permission to travel(37). Bose's position in India as a leader of the Independence movement was becoming tarnished by his link to Germany and Japan because the Indian nationalists were not wanting to simply exchange British domination for Axis domination. On 6th April 1942 the Indian Independence League meeting in Tokyo (38) agreed that Rash Behari Bose was to be a stand-in leader in place of Subhas Chandrar Bose. There was now great uncertainty over the leadership. The Germans accepted that Subhas Bose should be the leader but he was in the wrong place to exert any leadership. In early April the Japanese, in their turn, suggested a Declaration of Indian Independence and a draft text went to Germany and Italy. The Japanese believed that the timing was now right. They now had a secure position on the Indian frontier in Burma and they were aware of the rising unrest in India. They also wanted to link that disruption in India to their April 9th raid into the Indian Ocean and the air raid on Trincomalee. This was the high point of the threat to the British position in India and the Indian Ocean by Japanese forces. The threat seemed very serious at the time but it is now clear that although this was a high profile naval raid it did not destroy the British fleet and carried no invasion troops because the Japanese Army would not support the operation. There was, therefore,
no landing on Ceylon, for example and the Navy alone could not really exploit their dominance to the full.

Following this demonstration of power in the Indian Ocean, after a joint meeting of the Army, Navy and Foreign Ministries on April 17th 1942 Japan agreed to accept Bose in the Far East but the means by which he was to travel was not made clear. This was still not really wholehearted agreement and Japan was still testing out alternative leadership possibilities. Since they did not agree a means to travel this was effectively just a hollow gesture. Hitler also agreed that Bose could go on 17th April although he also vetoed the Declaration of Independence in a response to Japan's request in early April on the grounds that there was "no point in adhering to such a declaration just when the Japanese want it ....after they had needed months to examine earlier German proposals." (39).

Therefore, Germany and Japan had both agreed that Bose could travel to the Far East but neither had made any positive steps to assist in that journey. Bose was, himself, attracted by the idea of flying but the Luftwaffe were not supporting the German project and as a result the Japanese desire to send a delegation to Berlin to mediate peace on the Eastern Front was also not progressing. It appeared that Italy might provide a way to make a breakthrough on the project.

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Chapter 3
Planning the route: The Neutrality Pact April 1942 to June 1942

The "Doolittle" air raid on the Japanese homeland on April 18th 1942 changed the war situation drastically. The realisation that US air power could strike at the home islands pushed Japanese strategy towards the attempt to bring the US fleet to a decisive battle. This decision removed any real chance of Japan invading India and led to Japan's defeat at the battle of Midway. Japan now aimed to create a "cordon sanitaire" around the home islands which would enable them to hold the perimeter of their acquisitions. But this strategic re-alignment did not alter the determination of the Japanese to make an effective link to Europe which could be used to mediate some form of cessation of hostilities on the Eastern Front. Detailed discussions were still going on about the possibility of a flight from Europe to the Far East. Ambassador Oshima was involved in these discussions and reported to Tokyo in a message on April 25th 1942(1). The US Intelligence Analysts identified this as the first positive German response to Japanese initiatives about creating an air service and noted that it focussed on the northern route. In the proposal Oshima followed very closely the view put forward by Lufthansa in their January 1942 feasibility studies (see Chapter 2). He talked about flying boat routes, following the Lufthansa proposal that the Blohm und Voss BV 222 would be a suitable aircraft, and landplane routes suitable for the Focke Wulf Condor. Only fragments of the full message were intercepted and of these one part dealt with the requirements for weather forecast information about the conditions in Manchuria which would be needed in Germany three to five days before any flight and the other dealt with lengths of possible routes, the particular landing field requirements and fuel dumps. There were four routes identified: One route for land planes and three for flying boats. The three routes for flying boats described in the message were the same as those identified by Lufthansa and all four were versions of the Northern route. The proposals were:

- a landplane route from North Scandinavia to Tokyo via Tsitsikar (or Tsitsihar) in Manchuria - a total journey of 7560 Km

- three flying boat routes - North Scandinavia to Tokyo via South Sakhalin 7201 Km,
North Scandinavia to Tokyo direct 7030 Km, North Scandinavia to Tokyo via Dairen 7690Km.

All four routes followed the "great circle" across the globe and the longest leg of the journey for landplanes was 5700 Km and for flying boats 6-7000 Km. Oshima gave details of the fuel requirements, the landing strip specification for the landplanes and the water depth required for the flying boats and he also gave details of the specification for the radio links required to manage the air route. The favoured route, Oshima claimed, was from Finland to Manchukuo because it was the shortest route and crossed "friendly territory". It is surprising that Oshima should have considered a route across the northern Soviet Union to be across "friendly territory" since a German aircraft, civil or military, flying to Japan by that route would have been certain to risk interception with considerable risk to the status of the Neutrality Pact between the Soviet Union and Japan. This may be evidence of the extent to which Oshima had become out of touch with the concerns of the Japanese government and closer to understanding and accepting German views. His personal view was that the Soviet Union was the enemy and he had worked hard in the 1930s to draw Germany into an active alliance against the USSR.

At around the same time as Oshima's proposal, on 27th April 1942, a Luftwaffe feasibility study was produced by Oberstingenieur Schwenke entitled "Einsatzaufgaben fur Fernstflugzeuge"(2). The Luftwaffe's interest was in long range aircraft in general and particularly in strategic bombing. Targets for bombing were identified beyond the Urals and possibly in North America and Africa but the study also identified possible aircraft, flight times and loads for long distance transport flights

It seems that the information gathering which contributed to this study also affected the specification for the "Amerikabomber" and influenced manufacturers. The design of the Junkers 390 project for a six-engine version of the Junkers 290 grew out of these discussions. It was in March 1942 that the first planning discussions on this aircraft took place at Junkers headquarters in Dessau and they particularly addressed the issue of transporting raw materials from the Far East(3). The uses identified for the Ju 390 at this
stage were, long range reconnaissance, as a carrier for fighter aircraft and bombers and as a long range bomber and long range transport.

Schwenke's study arose from the need, in the spring of 1942, to re-assess the Luftwaffe position and capability for strategic bombing(4). There was a continuing debate within the Luftwaffe over the relative value of heavy and medium bombers and the value of strategic bombing as opposed to army support. These had become personal disagreements particularly between Jeschonnek and Milch. Jeschonnek was particularly sceptical about strategic bombing. There were, as a result, conflicting requirements for aircraft production and the kind of long range aircraft needed for strategic bombing would also have provided long range transports. The failure of the Heinkel He 177 had left a serious gap in the development cycle for new weapons.

The Luftwaffe study dealt with a number of topics and several reasons for long-range flights were identified. Interestingly, the first category dealt with in the report was transport for scarce materials. Obviously from the German point of view this was becoming a primary aim. The study worked through the range of possible imports and identified those which would be worth transporting by air. Rubber was definitely excluded. Wolfram was a possibility because the price of wolfram from Spain and Portugal was very high as a result of the competitive bidding for the unallocated amounts. Britain was trying to pre-empt all the stocks and shut down any supply to Germany. Schwenke quotes the price having risen from RM4,800 to RM60,000. British sources quoted prices in Portugal rising by 300% in the period from October 1st to November 31st 1941 from £2,000 to £6,000 a ton and in Spain from £675 per ton in February 1941 to £4063 per ton by March 1942(5). Schwenke pointed out that the price in Europe was twelve times that in the Malay Archipelago and therefore transporting some wolfram by air from the Far East might make some impact on the price of wolfram from European sources. Schwenke estimated that six flights per month by the BV 222 would provide a sufficient supply. In June 1942 the German Minister in Portugal was claiming that after the end of that year all stocks for Germany would be obtained from the Far East(6). In addition Schwenke maintained that air transport would be best for platinum, osmium and
iridium. The possibilities were calculated in terms of possible monthly loads for the He 177 or BV 222.

There was some discussion of the possibility of transport links to South America particularly to Argentina and Chile who were sympathetic to Germany. There was also a discussion of routes to Japan. Those considered possible as routes to the Far East were:

- Berlin/Petsamo - 2100 Km - train/ship/air
- Petsamo - Tsitsikar - 5650 Km
- Tsitsikar - Nagasaki - 1650 Km

This route was shown on the map in the study and, as a seaplane route, made use of large inland areas of water at Manchouli (1200 square Km) and Tstisikar (2000 square Km).

A possible southern route could have been -

- Berlin - Constanza - 1600 Km - train/air
- Constanza - Penang - 7800 Km

As far as aircraft were concerned by the end of 1942 the Luftwaffe expected to be able to cover the route between Petsamo and Tsitsikar with

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td>He 177</td>
<td>13.6 hours</td>
</tr>
<tr>
<td>Fw 200 unarmed</td>
<td>17.7 hours</td>
</tr>
<tr>
<td>Bv 222</td>
<td>18.8 hours</td>
</tr>
<tr>
<td>Ju 290</td>
<td>16.6 hours</td>
</tr>
<tr>
<td>Me 264</td>
<td>16.15 hours</td>
</tr>
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and in 1943/4 they expected to have available -

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td>FW 300</td>
<td>16.9 hours</td>
</tr>
<tr>
<td>BV 238S</td>
<td>18.2 - seaplane version</td>
</tr>
<tr>
<td>BV 238L</td>
<td>14.9 - landplane version</td>
</tr>
<tr>
<td>Ju 390</td>
<td>16.6</td>
</tr>
</tbody>
</table>

The study included charts and information on the useful load which could be carried by each type of aircraft and there was also some investigation of other possibilities using long-range aircraft including reconnaissance and bombing across the Soviet Union. The study identified targets beyond the Urals and in Siberia for strategic bombing by He 177s. There was also some discussion of potential targets in Africa, the western Atlantic and the USA including Allied ferry routes and targets on Iceland and Greenland. The east coast of the USA could have been reached by the Me 264 but also by the BV 222 or the He 177 with refueling.

As far as flights to the Far East were concerned Schwenke's study mainly dealt with the northern and southern routes. The only middle route on the map ran from Smolensk to Tsitsikar and it was clear that the route through Kabul was now impossible.

On May 12th there was a discussion of the Luftwaffe study between Schwenke, Milch and Jeschonnek (7). Schwenke repeated the discussion of what it was sensible to try to carry and he also commented that the "Southern route is fundamentally unsuitable". This was a view which the Germans returned to whenever this option was suggested. There was also a suggestion that He 177 could "shuttle bomb" targets in the east of the USSR by landing in Manchuria. Interestingly Jeschonnek's comments are only on the direct military matters and particularly the poor quality of information about Russian targets including arms factories and other facilities. Milch, of course, as a result of his long involvement with Lufthansa was an enthusiast for flights to the Far East. The meeting which included this discussion of Schwenke's study also included a lengthy examination of the merits of the different long range aircraft being developed or considered for
development and their current stage of development including the Me 264, Ju 390 and the BV 238.

By this stage the Germans, essentially Lufthansa, had, therefore, proposed flights over the northern route and Oshima was in agreement with the Germans over that choice. The Luftwaffe had considered the value of long range aircraft for transport and for offensive operations and Lufthansa now awaited the response from the Japanese government. Meanwhile aircraft developments were under way which could support the flights. In May 1942, according to Kössler and Ott, Kurt Tank had been working on a redesigned Condor with a stretched range to 6,000 Km using Jumo 207 engines which would be able to carry a useful load of 1.2 tons(8). As we have seen the Japanese Military Attaches had been monitoring this development.

Bose asked Ribbentrop again in early May to help him with the journey to the Far East and he was supported in this by Oshima but again Oshima was not working in harmony with his government in Tokyo and was more enthusiastic about Bose going to the Far East than his government were about receiving him. In the same way Oshima was more enthusiastic for military intervention in the USSR from Manchuria than the Japanese government. In the discussion which ensued Oshima asked Ribbentrop for permission for Bose to travel to the Far East and Ribbentrop agreed(9). At the same time on May 3rd 1942 Bose traveled to Rome and had meetings with Mussolini and Ciano over the Declaration of Independence. This was his first meeting with Mussolini in the war and he had still not met with Hitler. It was at this meeting that Mussolini offered Bose the possibility of a flight. Bose discussed his plan to go to the Far East with Mussolini and was told it should be possible to fly in an Italian plane from Rhodes non-stop to Rangoon(10).

The Italian representative on the Military Commission in Berlin, General Marras, had announced the plan for a flight by an Italian aircraft in March 1942.(11) According to US Intelligence reports written in June, daily conferences on an Italian experimental flight from Rome to Tokyo had been taking place at least from May 2nd 1942. On 27th April
1942 a Japanese Military attaché message from Rome to Tokyo was logged at Bletchley Park containing a report on the "projected flight by an Italian aircraft to Japan" (12). These statements and discussions were all following up the initial contacts between the Italians and Japanese in February 1942 intending to implement the clause on aerial links in the Military Agreement. Also on 12th May a Japanese Military Attaché message from Rome to Tokyo was logged at Bletchley Park on "the prospects of an Air Liaison flight between Italy and Japan" (13).

Tokyo had not yet replied to the message outlining the German flight plans sent on April 25th and on May 17th 1942 Oshima and Ribbentrop met (14). Ribbentrop said, "I agree with you completely on this aerial liaison. Tomorrow I am going to the General HQ and I will bring this up with Chancellor Hitler immediately. I will also urge Goering to make haste in this matter." At this point Ribbentrop, a long-term supporter of the Japanese alliance, reflected the view of the Foreign Office who were generally in favour of the air service. A message received at Bletchley Park from the Military Attaches in Berlin reported this meeting on 18th May (15).

On the 21st May Italy formally presented plans on a flight to Japan (16). The Germans were aware of this progress and there was some concern at being left behind but there was still no reply from Tokyo to their own proposal sent via Oshima. On 21st May 1942 Woermann made notes for Ribbentrop on the air situation so far: "Following a report from the Air Attaché in Rome of May 6th 1942 the preparations of the Italian Air Ministry for an air service to Japan are on target, the test flight can begin in 2-3 weeks. The route is the Middle East - Odessa - north of the Kaspian - Uruntsi, Peking. With relations as they are at this time a German air service to Japan should be followed up. The Japanese Army and Navy Ministers have, soon after the entry of Japan into the war, approached the Air Attaché in Tokyo to express an interest in the implementing of a German air service to Japan. In the same way Tojo approached Ambassador Stahmer at the end of December last year; he commented that even if a regular service could not be established, perhaps a German aircraft of the greatest type could be sent. The matter was at that time with the Air Ministry and the Reichsmarshall (Goering) awaiting a decision.
on whether it could be done. On the 12th of February an announcement came that an air service to East Asia was not approved. On the 26th February Weizsäcker had asked Milch to get his view on the possibility. On 29th April the Air Ministry told me that the decision on the implementation of a German air service to the Far East made by Reichsmarshall and Hitler in the light of Italian evidence was that it should be put back and delayed. With consideration of the available aircraft for the time being the flight would not be possible. The matter will be followed with special attention by the Air Ministry.

The ambassador in Tokyo is going to be informed. Ambassador Oshima has made it clear that the [Japanese] government wishes to see the earliest possible establishment of an air service. For the German flight the northern route would be selected Kirkenes, Dairen, Tokyo a distance of about 7,000 Km. The Blohm und Voss flying boat in 28 hours without stopovers with 1000Kg can do this."

Woermann pointed out that Goering had now turned down flight proposals twice despite Japan's enthusiasm and asked Ribbentrop to follow this up and to attempt to get the decisions between Hitler and Goering [12th February and 29th April] looked at again(17). Woermann had correctly identified the route the Italians planned to follow to Japan using information from the German Attaché in Rome. It is not clear that the Japanese had the same understanding of the likely route.

Meanwhile Bose continued to try to put together the package he needed: German approval, a formal Japanese invitation and a means of transport to the Far East. On the 22nd May Bose wrote to Ribbentrop wanting help to get to the Far East(18). "Our common goal - the final defeat of Anglo-American Imperialism - demands that I should now go to the East and, from close quarters guide the Indian revolution towards the goal. Not only the cause of India, but our common cause as well will be best served by my presence in the East, at a place as near to India as possible. .....maintain activity in Germany...It is now technically possible to travel to the East and both the German and Italian governments are in a position to afford me the necessary facilities in this
connection......I therefore confidently trust that Your Excellency will be good enough to provide me with the facilities necessary for travelling to the East....."

Because he began to see control of Bose slipping to Japan or Italy Woermann urged Hitler to see Bose (19) and as a result on May 27th Bose met Ribbentrop in the morning and Hitler in the afternoon. Ribbentrop offered assistance but warned him off travelling in an Italian aircraft. He suggested Bose find another way to travel because it was a long journey and there would be a problem if he fell into the hands of the English. Ribbentrop insisted that Hitler had said he would find a way to transport Bose to the Far East and Bose should trust him. Ribbentrop had nothing against the Italian Airline, LATI, just that it was an untried route. A U-boat could take him directly to Rangoon. Was Bose sure Japan would welcome his arrival? Oshima may have said so but would the Japanese government?(20)

It was becoming obvious to Bose at this time that he would stand more chance of influencing events in India in collaboration with Japan than with a Germany led by Hitler and the Nazis. This view was reinforced by the meeting with Hitler later on the same day but, although he gave Bose no encouragement on the cause of Indian independence and actually queried whether Indians were able to govern themselves, Hitler did agree to facilitate Bose's journey to the Far East. He, like Ribbentrop, advised against the air route but agreed to place a submarine at Bose's disposal for the sea journey which would be safer(21). Bose described the meeting to Alfieri who passed the information to Ciano(22).

While the Germans were procrastinating the Italian plans were progressing(23). Plans for an experimental flight between Italy and Japan were acceptable to the Japanese and the conditions they had established appeared acceptable to the Italians and as a result preparations were going forward to put this service into effect by the end of June 1942. Because this flight would have significance for Japanese/Italian relations generally the Japanese Ambassador to Rome needed to clear flight arrangements with Foreign Minister Ciano and confirm to him that the Japanese government agreed to the plans. The message also explained that Germany had been notified of the plan and that plans were also under
consideration for flights between Germany and Japan. Importantly the message referred to a separate Japanese Circular 974 which was titled "Essential features for establishing a Japan-Germany and a Japan-Italy air service" originating on June 3rd 1942. This was the definitive statement of the Japanese view on preconditions for flights at this time. The essential factors identified were:

"[flights are] necessitated by the military situation and thus call for being put into effect as an experimental measure immediately"

"we expect German and Italian preparations to keep pace with our own"

"Concerning the route Japan desires it to follow a line connecting Pao Tow, Kabul and Rhodes or a course to southward of this line. Airfields ... have been designated as ....Pao Tow, Rangoon, Tokyo. Seadromes - Dairen, Rangoon, one in Japan(still undecided)......This air service will be kept a strict secret." (24)

The US Intelligence analysts' view on flight proposals was explained on June 13th 1942 (25). This referred in part to the message from Foreign Minister Togo to Oshima on June 3rd. The summary explains that Foreign Minister Togo had argued in Circular 974 for going ahead "as an experimental measure" on the grounds that "these air connections are necessitated by the military situation". However the prestige and psychological angles of establishing air connections were also an important consideration as indicated by the recent remark by Oshima to Ribbentrop "it is a sorry sight to see England and the US flying all round the world".

It is clear from Circular 974 that the Japanese were not expecting any Italian flight to cross Soviet territory and they were expecting the flight to be kept highly secret. The Japanese were taking a consistent line because, also on June 3rd 1942, Tokyo finally responded to Oshima's message of April 25th on German plans for flights to the Far East and effectively vetoed the northern route(26). The reply talked about the German plan as
an "informal proposal" which took some of the sting out of the rejection, but the message made clear for the first time that the route across Soviet territory could not be accepted because of the Neutrality Pact with the USSR. Because there would inevitably be emergency landings an air route could not be kept secret and "There is a danger that it [the German plan] might have an influence on the exceedingly strange Japanese/Soviet relations". Japan had already taken the line following the Doolittle Raid that British or American planes flying over Japan and landing in the USSR constituted a breach of the Neutrality Pact. To reinforce the importance of the rejection it was stated that the decision to "take a course which as far as possible would avoid giving rise to troublesome issues with Russia" was the result of an Army, Navy and Foreign Office joint conference. To follow up, "as the opinion of Germany is not yet clear concerning the air service" Oshima was asked to consider the points in Circular 974 and discuss them again with the Germans. The Rangoon route would require some time because of "danger of war" and preparations. Using other ways a route could be ready by end of June. "We are negotiating with Italy about these same points. She has no objections and expects that the arrangements for putting this into effect will be ready after the end of June." Again the Japanese seem not to be aware that the Italian flight proposed to take a route across Soviet territory.

This message was among those given to Churchill as part of his frequent packages of original decrypts from Bletchley Park. He wrote across the document "This is significant". He obviously realised this would be a severe limitation on the prospects for German liaison with Japan and also took this as a sign that if Japan was so unwilling to allow any flight to risk upsetting the Soviet Union then Japan was not likely to be seeking an armed confrontation with that country(27).

The maintenance of the Neutrality Pact with the Soviet Union was the key continuing strand of Japanese foreign policy from its signing on April 13th 1941 until its final breach by the Soviets in 1945 which led to the end of the war. For much of the twentieth century Japan had relied on Russia and later the Soviet Union being pre-occupied with European matters and thus leaving Japan with a relatively free hand in the Far East. Japan wanted
this situation to continue even when that European pre-occupation was a colossal struggle with Japan's supposed ally, Germany, on the Eastern Front. The Japanese wanted to avoid a war with the Soviets. This desire was partly the result of the experience at Nomonhan in 1939 and in other border skirmishes which had shown that the Japanese Army could not compete with the mechanised and powerful Red Army. But a much more important reason was the fear of a war with the Soviet Union allied to the USA when American air power could be projected against the Japanese home islands from bases in the maritime provinces and Siberia.

The initial agreement in April 1941 committed the Japanese to giving up the concessions they still enjoyed in the oil fields and fisheries of North Sakhalin and eventually giving up South Sakhalin. Japan believed that the Pact would remove Soviet aid from China. Both parties found the pact invaluable as a way to avoid fighting on two fronts and the Pact was upheld by both despite the German invasion of the Soviet Union three months later and despite the attack on the Soviet Union's ally, the USA, in December 1941.

The difficulties in Japan's position can be see from the following statement made to the Soviet government following the invasion of the USSR by Germany(28). "...Japan necessarily feels deep concern with the German-Soviet war that has unfortunately broken out. To be frank, Japan finds herself in the most awkward position faced with war between Germany and Italy her allies, on the one hand, and the USSR, on the other, with whom she has but recently begun to improve relations in a sincere desire to promote and maintain good neighbourliness. Japan is, therefore, most anxious to see the termination of hostilities at the earliest possible date, earnestly wishing that they may at least be confined to regions not immediately adjacent to the Far East where she possesses vital interests. The Japanese Government takes this opportunity to state that they do not at present feel compelled to modify their policy towards the USSR...."

In order to preserve the Pact Japan stood by while over nine million tons of supplies for the USSR were carried in US ships leased to the Soviets around Japan's northern coast and into Vladivostock. The trade began with aviation spirit in US tankers in August 1941
and, after Pearl Harbour, continued in leased US ships under the Soviet flag. In August 1942 53 cargo ships and 6 tankers were given to the USSR and between July 1943 and the end of the war 940 ships left the west coast of the USA bound for Vladivostock. 9.23 million tons of US supplies traveled this route, an amount equal to all the other lend-lease routes combined. Over half a million tons were chemicals and explosives, over one million tons of petroleum products and over half a million tons of trucks and other vehicles. This was a substantial contribution to the Soviet war effort against Germany, Japan's ally, on the Eastern Front, but Japan preferred to honour her Neutrality Pact with the USSR and to minimise the importance of the aid whenever the Germans asked for the route to be closed(29).

Japan repeatedly checked out the Soviet position on Neutrality in the months preceding Pearl Harbour and again later in the war when the US re-took the Aleutians in 1943. The Soviets confirmed that they would not allow US aircraft to use Soviet bases. There were constant disputes from the Doolittle raid onwards about US aircraft crash landing on Soviet territory but Japan could never force Soviet action(30). The importance of the Pact can be seen by the frantic efforts Japan made to re-negotiate and extend the life of the agreement during 1943 and 1944. In March 1944 they gave up all rights in North Sakhalin but kept trying to re-negotiate the Pact up to the end of the war(31).

The desire to mediate a separate peace between the USSR and Germany on the Eastern Front links very closely to Japan's position on Neutrality. The work to achieve this peace had been active from June 1941 and the Japanese were continuing to press for a way to bring about an armistice in the spring and summer of 1942. On June 11th 1942 another Liaison Conference in Japan considered sending Prince Konoye, the former Prime Minister, to Europe on a peace mission and looked again at the need to bring about a separate peace(32).

Ambassador Ott in Tokyo became aware of the Italian plans for a flight to the Far East and asked why the Germans were not as active(33). On the 8th June Oshima looked for further guidance from Tokyo about the problem of using the northern route for an air
service. He seemed unable to accept the need to preserve the Neutrality Pact with the Soviets - perhaps because he personally believed Japan should be attacking the Soviet Union and not maintaining neutrality. He also would have had difficulty in explaining to his German colleagues that their plans were being turned down although Japan was pressing for flights to take place. Oshima was asking what to do in the negotiations if Germany insisted on using the northern route while leaving the southern route to Italy and he asked "is there anything for us to do but refuse?" Oshima, himself, saw no problem with commercial German planes flying over Russia and he explained that it was common in Europe for neutral territory to be overflown by belligerents and by commercial flights. Oshima had seen the Germany/Japan flights as "purely commercial" but Tokyo was now saying they were "based on military necessity" in their Circular 974. Oshima asked what they meant by this. Although German views expressed were unofficial it was clear that if Japan also wished for it the German government was eager to put the proposals into effect speedily. Oshima also recognised the differences between the Luftwaffe and the Foreign Office and the element led by Milch and von Gablenz within Lufthansa. "There are various views on flights in Germany if we are lukewarm and just welcome a German flight if it comes it will make the realisation very difficult" (34)

Ribbentrop and Oshima had now agreed on Bose's trip to Asia but there was still no formal Japanese invitation (35). On June 15th the Bangkok Conference took place between the Indian Independence League and the INA under Mohan Singh. These groups were still requesting Bose to lead and Japan was still maintaining their support for Rash Behari Bose as leader. The meeting demanded safeguards against Japanese domination or control. Japan failed to answer the demands and there was still a problem over who was to be their puppet leader.

Meanwhile on the 15th June a very clear response came from the Foreign Ministry in Tokyo to Oshima to answer his concern about how to handle negotiations with the Germans over the use of the northern route(36). The message stressed the need to balance advantages and disadvantages and since the focus of Japan was on the southern war "it is
our desire to prevent needless friction with Russia." Therefore "If Germany persist in adhering to the northern course there is nothing to do but abandon the project. On the other hand if the southern course is selected we will make all the preparations we can to facilitate the commencement of the service." Togo pointed out that they were already working with Italy on this. It would not be helpful to use an unarmed plane. Russia could still create an incident in International Law over an unarmed flight. "Therefore we can have nothing to do with it".

Togo explained that they wished to handle the problem "on the basis of military necessity and leave the question of future air service to be handled as a separate issue". He explained that they would claim flights were civilian if there were any problems but only the southern route would be acceptable. As a result of Japan's concerns Lufthansa came back to Oshima and suggested they could accept a southern route. Oshima described the meeting(37). He had been asked to make clear to the Germans that the Japanese government was very anxious to make contact by the southern route. von Gablenz, representing Lufthansa, was only able to give a personal view because the decision would have to be made at the highest level by Hitler, Goering, Ribbentrop. He felt that from previous investigations the Germans had reached the conclusion that the northern route was the most direct but since Japan had misgivings from a political standpoint Lufthansa had finally come to support the southern route. Since Italy had already instituted a central route via the Pamirs Germany wanted the course to run to Rangoon. Oshima recorded that von Gablenz had himself flown the central route. All of his observations, weather charts and other material which Germany held had been turned over to Italy. (von Gablenz had explored the Pamir route to the Far East in 1937 as part of a route exploration mission for Lufthansa - see Chapter 1)

Although there needed to be consideration over whether to use land or seaplanes the present opinion was that "Fokkers" landplanes should be suitable. This was a reference to the Focke Wulf Condor. Von Gablenz confirmed at the meeting that he would like to see the flights carried out by Lufthansa commercial planes. The Lufthansa discussion continued over the next few days and the choice of aircraft shifted to using the BV 222
over the seaplane route via Rangoon and Singapore and on June 24th Oshima met von Gablenz again(38). Oshima could then report that Lufthansa had been considering the proposals and "[They] hoped very much that the southern route would be put into operation. They felt they had sufficient talent for making this a real success." Lufthansa had thought through how they would proceed. "In order to avoid the strong anti-aircraft positions in Mosul(Iraq) for the protection of the oil fields they would start from the Island of Rhodes, fly over the Arabian desert, fly very high across India(India would have to be crossed at night) and would arrive at Rangoon....over 7300 kilos[Kms?] requiring 24 or 25 hours. The planes would have Blohm Foss floats". This is clearly another reference to the BV 222 Wiking a six engine flying boat with sufficient range which had made its first flights in 1941. The decision to use the BV 222 was re-considered and re-confirmed at meetings with Field Marshal Milch on 7th and 18th August 1942 - see Chapter 4. Oshima went on to explain in his report of the meeting that, "They [Lufthansa] wanted.......to set up "airfields" with facilities for emergency landings at Akyab as well as at Rangoon. If Turkey recognises the right of transit of Germany and Italy they would like to start at Lake Van on the eastern border. This would shorten the trip by 800 kilos." (kilometers) "The planes would be absolutely civil types. They would have no armaments. The passengers[crew?] would wear suits [uniforms?] made by the Lufthansa company." The stress was very much that this would be a commercial flight.

Oshima finished the message by explaining that he had discussed this issue with Ribbentrop at the Foreign Minister's party. Ribbentrop had already talked the point over with Goering but obviously felt that Japan's concerns over the Russian route were not widely understood and that "the desire of Japan for the southern course had better be urged again to Goering."

At this point everything was moving steadily forward with the Lufthansa proposals looking as though they might become reality over the southern route although no real commitments had been made. The Italian project was also moving forward and planned to fly, again, as far as the Japanese were concerned, over a southern route. On 24th June a Japanese Military Attaché message was logged at Bletchley Park which referred to the
"completion of Japanese preparations for the Italian experimental flight to Japan"(39). It was when all this looked like becoming real that things began to come apart - mainly for reasons which did not relate to technical capability, availability of aircraft or the skills and experience of crews. Lufthansa personnel who had all the experience of the pre war route development were convinced the flights were feasible even by the southern route. They were enthusiastic but it is clear that the enthusiasm hid a desire to restart commercial routes to the Far East against Japanese wishes. This issue was still important for both Germany and Japan and highlights another area of disagreement within the Axis which made the development of an air service more difficult. The Germans saw the re-establishment of the Eurasia airline in China as a natural link to the development of an air service to the Far East. On June 24th 1942 Tokyo sent a briefing to Oshima to advise him about how to react to such German requests to re-establish Eurasia Aviation with rights to run air services in China. The arrangement requested by Germany was intended to support a contract to develop commercial aviation with the Nanking government which was a Japanese puppet. But the Japanese held a very strong view that leadership in the New Order in East Asia should stay with Japan and they were uncomfortable about any possible German intrusion which attempted to rebuild German commercial and trade interests in China. They were also reluctant to take a strong overt line against Germany and therefore Oshima was advised to hedge and delay(40).

Notes to Chapter 3
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6 Medlicott 1952 op cit vol 2 p 6
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27 Public Record Office, Kew, London, Government Code and Cypher School: Signals Intelligence passed to the Prime Minister. PRO HW 1/635 and 665 seen by Churchill 10th July 1942
28 Statement for Ambassador Tatekawa to deliver on July 2nd 1942 quoted in SRS 669 July 31st 1942
29 Herring 1973 op cit and Jones 1969 op cit passim
31 Lensen 1972 op cit
32 International Military Tribunal (Far East) - IMTFE evidence of Kido 31066
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34 NARA RG 457 SRDJ 23486/9, diplomatic telegram, Berlin to Tokyo, No 734, 8th June 1942
35 ibid SRDJ 23353, diplomatic telegram, Berlin to Tokyo, No 715, 4th June 1942
36 ibid SRDJ 23931/2, diplomatic telegram, Tokyo to Berlin, No 472, 15th June 1942
37 ibid SRDJ 23901/2 diplomatic telegram, Berlin to Tokyo, No 789, 18th June 1942
38 ibid SRDJ 24232 diplomatic telegram, Berlin to Tokyo, No 813, 25th June 1942
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Chapter 4

The First Test: The Italian flight and the German plan July 1942 to September 1942

In the period July to September 1942 there came the first real test for the air service project. In these few months the first flight by an Italian aircraft between Europe and the Far East took place providing proof of the feasibility of the concept and in the same period there was a test of the German political will and technical ability to make flights. Both the successful Italian flight and the German preparations indicated, as Lufthansa had maintained throughout, that the flights were technically possible but further progress was made difficult by disagreements between the partners over diplomatic issues.

The Italian preparations had been continuing and they tried to arrange for Bose to be a passenger on their first flight. On June 16th 1942 Count Ciano asked Alfieri, the Italian Ambassador in Berlin, to offer Bose a seat on the experimental flight which would be leaving shortly. He explained that there was an "obvious level of risk", and that Bose would have to travel alone and without luggage. Depending on Bose's answer Alfieri was asked to establish agreement with the German and Japanese governments that Bose would be allowed to travel on the flight(1). Bose accepted with enthusiasm on the 17th June (2) and the ambassadors in Berlin and Tokyo were then asked to gain the approval of the two governments to Bose's journey(3). On June 24th 1942 Weizsäcker noted that the Italians had formally asked if Bose could go on the first non-stop flight from Rhodes to Rangoon and confirmed that Bose needed permission from Germany to make the journey and that the Italians needed an early decision because the flight was planned to take off shortly(4). This became a test of the ability of the Axis to collaborate on an issue with considerable strategic implications.

There was still confusion on the German side about the exact route the Italians planned to use. Weizsäcker's colleague Woermann had correctly identified the route earlier in the year from Italian information and as we shall see the actual first flight did follow the route across Central Asia north of the Black Sea. The Rhodes to Rangoon route is often
mentioned and it is possible that this had become the accepted shorthand for the air route. This does raise the question of whether the Italians kept their chosen route secret from the Japanese. If they did so it makes the Japanese reaction to the flight in August 1942 more understandable.

On June 24th Oshima and Ribbentrop met and, among other topics, discussed Bose and his journey to the Far East. Oshima thanked Ribbentrop for agreeing to Bose travelling and seemed to suggest that the Japanese would welcome Bose in the Far East. He pointed out that Bose had been offered a place by the Italians on the "first non-stop flight from Rhodes to Rangoon". Ribbentrop was reluctant to agree to Bose travelling in this way because Bose had already been promised by Hitler that Germany would look after such matters for him and because the Foreign Minister was concerned over safety and would not have let Bose travel by air even on a German plane with a German crew. Under pressure from Oshima Ribbentrop agreed to discuss this further with Ambassador Keppler but on the same day Keppler sent his comments on Bose's request to Ribbentrop and Weizsäcker. He advised that Germany should not give permission for Bose to fly. In his view "our Brown Friends" already knew the score. Italy had been dealing with this issue in secret while Hitler had told Bose at their meeting that he would arrange the journey and that he considered a flight would be too dangerous. Bose's request now went against all this.

Following Keppler's comments Ribbentrop made a formal reply through the German Ambassador in Rome on the 26th June and explained that he had reservations about the journey. He maintained that safety was his prime concern and he repeated that he would not even consider allowing Bose to travel by air in a German plane. Germany formally refused to allow Bose to travel on the Italian flight on safety grounds. The next day Ciano had to tell Alfieri that, regardless of the German position on Bose travelling on the flight, the Japanese Foreign Office were not, in any case, prepared to receive Bose in the Far East at that time and that Bose had been asked to delay his journey. Oshima who had actively encouraged Bose seems again to have been out of touch with his masters in Tokyo.
It would, therefore, have been feasible for Bose to have traveled on the first Italian flight in July 1942 but neither Germany nor Japan felt, for their own different reasons, that the time was right and neither would support the journey. The Italians accepted the situation and agreed there would be a need to seek another way to transport Bose which would meet the German reservations about safety but there was no urgency about the situation because of the Japanese view(9). The Italians made the point to the Japanese, through Indelli, that Bose was serving no purpose in Europe and that his absence from the Far East was damaging his reputation with his own supporters(10).

Preparations for the flight continued and a message decrypted by Bletchley Park on 29th June requested "Please inform wireless stations of the progress of the Italian aircraft flying to Japan"(11).

On July 1st 1942 the Italian flight, the RomalTokio test flight took off from Rome, without Bose. The aircraft was a Savoia Marchetti SM75PD which had been adapted for long range record flights in 1939. According to Kossler and Ott the Italians had two more versions of this aircraft available(12). The aircraft landed at Zaporozhe behind the German lines on the Eastern Front near Stalingrad and then again at Pao Tow in North China on the route to Tokyo. A number of Japanese Military Attaché messages were logged at Bletchley Park concerning this flight. On the 3rd July a message from Tokyo to Rome confirmed the arrival of the Italian aircraft in Tokyo (13). On the 13th July a message reported Italian views on the experimental flight of the A plane (14). (The Italian aircraft in the Europe/Asia air service project were always called the A plane). On the 13th July the departure of the A plane from Tokyo was postponed(15) and on the 16th July the Japanese Military Attaché in Rome was informed of the eventual departure of the A plane (16). On the 21st July the Military Attaché in Rome reported to Tokyo on the safe return of the A plane to Rome(17).

On the 7th July the German Attaché Office recorded information from the Italian Air Attaché in Tokyo via the Italian Foreign Ministry about the Japanese pleasure at the
successful Italian flight which made the development of an air service seem very likely (18). On the 15th July Woermann noted more news from Tokyo, "The Italian East Asia aircraft, the Savoia 75, flew on the second of the month to the Chinese airfield at Pao-Tow and, according to the German Ambassador, landed in Tokyo on the evening of July 3rd in spite of unfavourable weather. The leader of the flight is long distance flier and frequent companion of Bruno Mussolini, Captain Moscatelli. By sending him, the Ambassador notes, the Italian Air Force has raised the interest in flights amongst the Japanese leadership. At the reception in the Italian Embassy the Vice Chief of the Admiralty and Navy Minister were present and in his speech the Navy Minister spoke of the historic importance of the first air service flight of the war with powerful strategic implications. The Air Attaché in Tokyo has told me recently that the Japanese wish the flight to be kept a close secret." (19)

After spending twelve days in Japan the aircraft and crew returned with stops at Pao Tow and Odessa before landing in Rome on July 21st 1942. The distance of the longest leg from Zaporozhe to Paotow was over 4,000 miles which was well within the capacity of the SM 75PD which had set a distance record of over 8,000 miles non stop from July 30th to August 1st 1939. The longest leg of the flight would have taken over 20 hours.

Zaporozhe was certainly in use as an Italian Air Force base in the campaign on the Eastern front. In November 1941 there were three flights of fighter aircraft based there together with an observation flight and a command centre (20). There is a detailed account of the flight by a participant in a US Intelligence Report dated 21st March 1944. This is an account of an interview with an Italian Air Corps Officer who states that he made a trip by air from Italy to Japan in July 1942. The source who was interviewed was a field officer in the Italian Air Force, who was considered reliable and who had co-operated closely with the Allies since the Italian armistice. The interview notes give the dates and route and describes what the officer saw during his twelve days in Japan. He had met von Gronau the German Air Attaché and Admiral del Balsamo, the Italian Naval Attaché. Various points were noted on the morale and attitudes of the civilian population, the strength of Japanese defences and knowledge of radar (21).
As we have seen the German Air Attaché was aware that the Japanese wished the flight to be kept secret. While the plane had been on the ground in Tokyo, on 5th July, the Foreign Ministry in Rome sent a message to the Italian Ambassador in Tokyo. The message suggested that it was unfortunate that the success of the flight could not be used for propaganda purposes both in Italy and abroad because of "Japan's well known caution towards Russia". Indelli was asked to explore whether the secrecy could be dropped "As it is obvious that it is perfectly useless to [keep secret] the routes followed, which in any case can, of course, be made to pass completely outside Soviet territory". Indelli's reply on the 9th or 10th July was garbled in decoding but suggested a negative response from Japan to the idea. He also recorded that a request had been made by the Japanese to send an officer on the return flight, "obviously for the purpose of studying the special techniques of our pilots." (22)

On the same issue of secrecy on 23rd July a message to the Military Attaché in Rome from Tokyo was logged by Bletchley Park which carried "Instructions to the Japanese Military Attaché in Rome on the secrecy of the A plane"(23). This may well have been a response to the Italian query made via Indelli between 5th and 10th July. Earlier on June 11th a Japanese Military Attaché message from Tokyo to Rome had also been logged at Bletchley Park concerning the "secrecy of the proposed trial flight from Italy to Japan" (24).

Ominously, in the light of those messages from Japan about the need for secrecy and Japan's rejection of the Italian's request to make propaganda capital out of the exploit, another firm source of evidence for the flight is an article discovered in Il Popolo d'Italia for July 26th 1942(25). This full-page article is headed:

"26,000 KM di volo: Roma-Tokio e ritorno. Il saluto dell'Italia in armi recato da un nostro aereo al popolo giapponese".

There is a photograph of the plane and crew and the story tells of the flight to and from
Japan. The important point is made that the flight was over hostile territory but although this obviously adds to the propaganda value of the story by underlining the bravery of the Italian airmen this fact was to cause problems with the Japanese later since the hostile territory was the Soviet Union. With a great fanfare for Italian flying skill the story gave details of the welcome by Il Duce and Admiral Abe the head of the Japanese military mission in Rome. There were also biographies of the five crew which indicated that the commander Antonio Moscatelli was a very experienced long range flyer with twenty-two Atlantic crossings to his credit and that the engineer Ernesto Leone had flown in one of the mass formation trans Atlantic flights led by General Balbo in the 1930s.

The Italian flight in July 1942 is the only fully authenticated, successful, round trip flight between the European and Asian branches of the Axis during the war. In some ways the most important point to understand is why this was not repeated although such flights could have been very valuable as an aid to face to face contact between important figures in potential peace negotiations, war planning and military co-operation. At least part of the problem lay with the attitude of the Germans and Japanese towards the Italians who were clearly seen as lesser partners and unreliable in a crisis. As a result the Japanese preferred the idea of a German operated air service to an Italian one. As we shall see, despite their overwhelming desire to make air links, even while the successful Italian aircraft and crew were on the ground in Tokyo, the Japanese approached the Germans to start up links and it seems that it was only when the Germans finally failed to follow through that request in mid September 1942 that the Japanese turned back to the Italians for help (see Chapter 5 - Trying again 1).

The arrival of the Italian plane in Tokyo, as we have seen, rather than inspiring enthusiasm for the Italians, rekindled interest in the establishment of a German air service. It is possible that a contributing factor here is the limited load carrying ability of the SM75. But also the continuing trust in the German's ability to deliver despite accumulating evidence to the contrary arose from the pre-war inter service links between the Japanese Army and the Germans.
The Japanese were still continuing their efforts to promote a separate peace between Germany and the USSR. As we have seen a Liaison Conference had taken place in Japan on June 11th 1942 and according to the testimony of Kido Koichi the idea of promoting a peace between Germany and the USSR had been reiterated and there had been discussion of Prince Konoye, the ex Prime Minister, going to Europe on a peace mission(26). Berndt Martin suggests that the fall of Tobruk on 21st June 1942 also created in the minds of the Japanese government an opportunity to re-consider how Japan and Germany could work together in the Middle East since it appeared some link-up of forces around Suez might become possible(27).

On July 7th, following the Liaison Conference and probably influenced by the fall of Tobruk, Nagano met with the Emperor and discussed these issues. On the same day, via an Army intermediary, Lt Col Tsuji, a message went to Ambassador Ott, which was to be kept secret even from Oshima. The message was a request for a plane to fly out from Germany to Japan in order to carry back a "Tenno" mission to Germany with representatives of the Army, Inner Cabinet and Emperor. The description "Tenno" signified that the delegation was to be seen as representing the Emperor. This was always, technically, an unofficial contact although, as various German officials in Japan tried to point out, it was not an unusual way for the Japanese to operate. This fact as well as the uncertain nature of Japan's objectives gave rise to considerable confusion and concern on the German side(28).

Two strands of Japanese policy came together here. From the Japanese point of view if there were to be military co-operation it should be working towards a focus of power and a junction of forces around Suez and in the Indian Ocean rather than an attack on the Soviet Union. The fall of Tobruk to the Germans made this seem more possible. At the same time, again from the Japanese perspective, the energy of Germany was being wasted in the war against the Soviet Union and unless the war on the Eastern Front was halted Germany would not be able to play a full part in any joint action in the Indian Ocean area. The "Tenno" flight initiative through the German Embassy in Tokyo was matched by instructions to Sato Naotake, the new Japanese ambassador in the Soviet
Union, who was told by the Foreign Minister to go from Kuibyshev to Moscow to try and promote peace between Germany and the USSR (29).

The request for German support for a delegation to Europe was incorporated into a message from Ambassador Ott on 7th July to Berlin which explained that he had been approached by an intermediary who was following up the long standing desire for a link and proposed a delegation of important figures to travel to Germany. Ott himself said he would welcome the chance to return for a personal briefing since he felt he had been isolated for the last eighteen months. The request came from the Japanese Army and was not to be shared with the Japanese Navy or other Japanese figures (30). The information was definitely and explicitly not to be shared with Oshima in Berlin although he was, of course, himself, a link to the Army. The fact that Oshima was to be excluded from the negotiation is strong evidence for the mission being primarily about separate peace between Germany and the Soviets rather than about military co-operation. If the subject of the negotiation and the delegation had really been military co-operation there could have been no reason to exclude Oshima since he was firmly in favour of more active Japanese involvement to support Germany against the USSR. At the same time his views in opposition to the idea of negotiations on separate peace must have been well known in Tokyo. Ribbentrop, at least initially, honoured the Japanese request. He met Oshima on July 10th but did not mention the approach from Tokyo (31).

Similarly Erich Kordt, a Counselor at the Tokyo Embassy, who was closely involved in these discussions, was certain that the motive for the mission was to attempt to negotiate a separate peace between Germany and the USSR. He made this clear in his account of events published shortly after the war ended. He claimed that he and Ott had advised the Japanese to insist they wished to talk about military collaboration because they knew this would be an acceptable subject in Berlin whereas mediating a separate peace would not be accepted. He described the Japanese Army Staff as being convinced of the need for a "special peace" on the Eastern Front and also convinced that "Germany will bleed to death in Russia" (32).
Following up on the message on the 9th July Ott sent a further message to Berlin for the attention of the Foreign Minister concerning the German air link. He suggested sending a representative of the "Tenno" delegation back on the returning Italian flight as a sign of good faith(33). It is possible that the Japanese officer that the Italians had been asked to carry back with them was this representative? (See below - July 5th) The Italian aircraft and crew were still on the ground in Japan at this time but the Japanese did not consider building on the Italian initiative until all avenues had been exhausted with the Germans.

The first response to the proposal from the German government came on 13th July in a message from Ribbentrop to Ott. He queried all the details of the proposal, the name and background of the source, whether it was solely an Army initiative, who would be in the delegation, would it be political with military advisers, why not use the Tripartite Commissions, what is the motive?(34) This was a very wary response to an approach from an ally desiring to make closer contact!!

On 15th July Ott tried to answer the questions from Ribbentrop. He identified Tsuji Masonobu as the link and explained that Tsuji was a friend of Kaumann the Lufthansa representative in Japan. He mentioned a likely team for the delegation - Yamashita, Kuhara maybe Yamamoto(35). The status of the approach may have caused some confusion in Berlin. Lt Col Tsuji Masanobu had a position of considerable influence which was not reflected in the rank he held. This is reflected in his war time career. The influence was probably the result of his links to the Imperial family.

Other activity shows the way that Japanese pressure for an air service was continuing to grow. On 17th July, according to Kössler and Ott and the Milch archives(36), the Japanese Military Mission was looking at Focke Wulf Condors at Cottbus with a view to purchasing two. Martin (37) also suggests Japan wanted to buy two aircraft at this time to institute an air service.

It is likely that these were the two special transport versions of the Focke Wulf Condor developed during 1942 according to Kössler and Ott 1998 and Green 1970. (See Chapter
1) It would seem from the reference in Kössler and Ott that the designation was C-4/U4 - Green refers to two aircraft - C-4/U1 and C-4/U2 being prepared in 1942(38).

The purchase of German aircraft by Japan might have been a way to get round the problem of the Neutrality Pact with the Soviet Union. Would the Japanese have then negotiated for the passage of their own unarmed, purchased, aircraft over Soviet air space between Germany and Japan? The Germans also saw advantages in the sale of aircraft in that they would not carry the responsibility if an aircraft were lost while carrying a high ranking delegation. This ploy might also have avoided the difficulty of gaining the release of aircraft from Goering and other figures within the Luftwaffe who clearly felt this sort of mission was a distraction from military matters.

Meanwhile on the 19th July Ribbentrop rejected the visit of the Delegation and told Ott in an initial response that the proposed "Tenno" mission flight was not possible on technical grounds. They were working in Germany on long range aircraft for the air service but the aircraft were not yet ready. A "Tenno" delegation would be welcomed when it was possible(39).

At the same time on July 23rd 1942 Ribbentrop held firmly to Hitler's line and told Tokyo that Bose should travel to the Far East by sea(40). But on the very same day Bose wrote to Ribbentrop wanting to be in India in August and saying that he was willing to fly in an Italian plane "In view of the internal developments in India I would like to be in the Far East in the first week in August if possible". His desire to travel and the pressure of events was over-riding German objections and issues of safety(41).

On 23rd July Tokyo sent instructions to the Military Attaché in Berlin on the German liaison flight between Asia and Europe. Bletchley Park logged this message (42). The rejection of the Japanese request for an aircraft and a "Tenno" flight on technical and safety grounds was not well received in Japan by the Japanese or by German officials. On 25th July Ott wrote to Ribbentrop in response to Ribbentrop's initial rejection of the "Tenno" flight. After a general recapitulation of the arguments about the need for a flight
because the war situation was at a crucial point Ott indicated that the Japanese were sceptical about the reasons given, "He[Tsuji] thanks you for the report on the construction of suitable long range aircraft for an air service with Japan. The Italian flight having taken place it is hoped that such difficulties can in some time be overcome. It is regretted that the target time of the end of August should be postponed." Tsuji hoped that technical difficulties would not get in the way of the project(43).

Ribbentrop was still convinced, it seems, that Bose should go to the Far East by sea but the Japanese were not willing to co-operate. They had a submarine, I30, arriving in France in early August but they created reasons why Bose could not be a passenger on the return trip. Oshima had to explain this to Ribbentrop at one of their regular meetings on July 30th 1942. Oshima explained that the Japanese Navy did not want Bose to travel to the Far East on I30 because the return would be an operational trip back to Singapore which might involve sinking ships. It would be inappropriate for a civilian to part of such a mission. The use of this argument was probably a cover for the fact that Japan was still not sure that Bose was the Indian leader they wanted to work with at this time. German liaison officers made the point that Bose held military rank as commander of the Indian National Army and would not therefore be out of place on an operational voyage.

Although unsuccessful at this time the same argument was acceptable for travel on the U boat and the Japanese submarine used in February 1943 when Bose finally traveled to the Far East. This again was an operational voyage and Allied ships were sunk(44).

Oshima explained at the same meeting that discussions with von Gablenz suggested there might be a German flight before the end of August. Oshima's view was that "Bose would probably not go on the first flight but soon after". The Lufthansa view, for which von Gablenz was the spokesman, had been consistent in supporting the feasibility of a flight over the northern or southern routes. Oshima had been told specifically at meetings with von Gablenz on June 18th and 24th that a flight over the southern route was feasible with the BV 222. It was the Lufthansa plan using the BV 222 which remained consistent right through to the cancellation of the project in mid September. This plan depended on a Japanese purchase of German aircraft.
It is important to reiterate that the proposed flights were all part of a concerted push by Japan on the separate peace issue with the aim of extracting Germany from the pointless war with the Soviets so that she could put her energy into the war against Britain and the USA. The German victory at Tobruk had seemed to leave her poised to take Egypt if only forces could be concentrated. As we have seen on June 11th the idea of a Konoye mission to promote a separate peace was discussed (45) and now the "Tenno" flight initiative from Japan was matched by an approach to the Soviets on peace moves. In July 1942 Sato Naotake, the new ambassador to the Soviet Union was told by Togo to go from Kuibyshev to Moscow to try and promote peace between Germany and the Soviets(46). This whole sequence of activity was the result of the co-ordination conference - Army, Navy and Government - which took place in June 1942.

The Germans had begun to accept the inevitable over Bose flying to the Far East, possibly after the Japanese had turned down the idea of his travelling on the submarine I30 and on August 2nd 1942 Ribbentrop wrote to Bose in reply to his letter of July 23rd. The Foreign Minister had changed his mind and now agreed that it would be acceptable for Bose to fly since alternative ways did not seem possible. Since no German flight was available, Bose could have permission to use the next Italian flight(47). The German government informed the Italians and the Japanese of their decision. The Germans were obviously expecting a repeat of the Italian flight during August and now that a successful Italian flight had taken place it was difficult to prevent Bose travelling. The Japanese also seemed to expect that a second flight would take place during August(48).

But problems were arising over a repeat of the Italians' successful first flight. Although the Italians were given the background material from the flights which von Gablenz had made across Central Asia they had not been able to follow his route exactly by flying over the Wakhan Pass and staying within Afghan territory as he had done. It was no longer possible to follow this route because the Afghan government had expelled Axis nationals in the autumn of 1941 and now refused to allow overflights by any of the belligerents. The Italians had, therefore, had to fly a more northerly route from Rome to
Tokyo, across Soviet territory, staging at Zaporozhe just north of the Black Sea on the outward leg to Pao Tow and using Odessa on the return. This was directly counter to the route specified in the Japanese Circular 974 which spoke of the acceptable route being that via Kabul or one to the south of that route.

As a result although the Japanese had been very pleased that the Italian flight had taken place they had been very displeased about the publicity which revealed the route. As we have seen there had been at least two messages to the Military Attaches in Rome, on 11th June and 23rd June, stressing the need for secrecy. The Italian Foreign Office had also tried, without success, to persuade the Japanese to allow them to make propaganda out of the flight. But the fact that the aircraft traveled over "hostile territory" - clearly the Soviet Union - was emphasised in Italian newspaper stories. It seems that the agreement which the Japanese believed they had entered into required the Italians not to make any announcements at all and certainly not to have a full-dress welcoming ceremony with press photos!

The first clear indication of Japan's displeasure came from Tokyo to Rome on August 2nd 1942. This was an "Army secret wire"(49). The Ultra intercept is summarised in the Bletchley Park card index as "Reports of the special flight to be withheld, action to be taken in the event of a Soviet protest, plans for subsequent flights". This document is quoted in full because it is crucial to an understanding of succeeding events:

"(Part 1)

Re the matter of the A-plane

1 We made representations to the Air Ministry which in turn made the statement quoted below regarding Italy's announcement made without warning.

(Part 2)
The Air Ministry's statement was as follows:
In this matter of aerial liaison the Italians did not consult us in Rome. As far as their having made the announcement is concerned, arrangements had been made between Japanese and Italian officials to handle the matter with utmost secrecy and not to make any announcements or give out any information. In view of these facts, this has been something deeply regrettable and we are calling the attention of the General Staff to the situation. We hope that careful attention will be paid in future in the handling of such matters.

(Part 3)
2 In view of Italy's announcement, we are going to conduct ourselves as follows:

i) For the present we prohibit all announcements and information

ii) If there is a protest from the Russians over this flight we will reply with the Air Ministry's statement

iii) Flights after the second flight will be conducted as below. This is for your information only. If details are decided upon we will report them to you.

(Part 4)

i) We are requesting a second flight, using an Italian plane.

ii) The route will be the southern course (Italy-India-Burma). (In case the first flight takes the northern course it will necessarily have to fly through Russian skies. If by some chance there is a forced landing we are afraid that problems will arise with Russia and it is our wish to avoid this.)

(Part 5)
iii) On the return trip we are going to send the people and the non-secret documents which both countries wish to send.

iv) Our preparations for the southern course are almost completed. As far as the plan for the early part of September is concerned, the situation is such that it is impossible to have a flight anywhere around August 10th."

The Italians' approach to publicity and the reaction from Japan forced a shift in plans to the southern route with no possibility of an immediate and direct repeat of the July success. But, at the same time, the Japanese continued to keep the pressure on for flights to take place. They did not cancel the whole project despite the importance of the Soviet Neutrality pact to their whole position. This shows the value they placed on developing air links. The implications of the route change which the Japanese required seem to have forced a delay and it seems that disagreement between Italy and Japan over shifting to the southern route continued until at least the end of September 1942. The Japanese had expected to have their part of the preparations on the southern route completed by September.

The German officials in Tokyo became aware of the Italians' problems and were careful to warn Berlin to be very wary when the German "Tenno" flight seemed likely to take place in September 1942. (See below September 15th.) They were still looking at the issues arising from the Japanese request for the "Tenno" delegation to travel to Berlin and the possibility that Japan could purchase two German aircraft. On August 7th 1942 Milch had discussions with von Gablenz and other senior staff concerning long range aircraft in order to try to determine which type of aircraft should be used to start the service. The plan required two aircraft to be given to the Japanese and the General Staff had requested that there should be a test flight. This would seem a logical response to Ribbentrop's statement that the aircraft were not technically prepared in July. The debate in Milch's meeting covered the relative value of the BV 222 and Condor. It was made clear at one point that they were discussing the "stretched" Condor. Milch: "This is not the old Condor ...it is a lot heavier". They eventually agreed on the BV 222 as the best option in
all circumstances and that one of the two aircraft would be available for tests from August 23rd. Milch and his team discussed the implications for the project of Japanese demands that aircraft which overflew Soviet territory should be interned following the Doolittle raid. It was suggested that the route could be flown at night but the flight would take about 24 hours. They discussed how the Soviets might learn that German aircraft had overflown Soviet territory and agreed that propaganda was the problem. This was a clear reference to the problems the Italians had already caused. Milch stated that he wanted no propaganda at all, "When people have returned an announcement must naturally be made to the effect that an aircraft has carried the greetings of the Emperor of Japan and the Führer." But the crew would have to say that they flew over India. The crew could say that "they had seen from above how little the Indians love the British yoke". The team were convinced that a seaplane provided the safest option in the event of a forced landing and Milch was keen to go for a grandiose project - a non stop flight to Tokyo from northern Europe - to improve on the Italians' achievement.

Discussion about the flight was all to do with the northern route and it is clear that the Germans intended, with or without Japanese agreement, to fly the northern route and try to persuade everyone they had used the southern route. There was a debate about deciding on the crew and the name Engel was mentioned as a potential captain for the flight. Milch agreed to inform Reichsmarshall Goering (50). At this time there were eight BV 222s in service.

As we have seen the German officials in Japan had been very unhappy with Ribbentrop's initial rejection of the Japanese Army's request for an aircraft to be sent. On 13th August Weizsäcker noted that he received a phone call from Erich Kordt in Tokyo trying to restart negotiations on the "Tenno" flight. Kordt wanted to know what was behind the refusal of the flight. He pointed out that this kind of ad hoc grouping and decision taking was not unusual in Japan. He wanted to know if the technical refusal was well founded. Weizsäcker told him it had arisen out of a desire not to disturb existing responsibilities. Kordt said that people in Japan found the rejection a surprising and embarrassing decision. Weizsäcker advised that there would need to be new facts and a different
As far as Bose was concerned things had begun to look brighter. On August 17th approval finally came from Japan for Bose to travel by Italian aircraft to the Far East (52).

(The continuation of the Bose flight project is told in Chapter 5 - Trying Again)

Meanwhile the "army faction" in the Luftwaffe were still very clear, with Hitler's agreement, that they were not interested in long range flights unless a real and regular service could be established. In a sense this was a withdrawal from the effort to find a way forward since this meant that they were not willing to play a part in development. On 17th August von Grote made notes on a discussion which had taken place concerning the plan to fly to Japan. The Luftwaffe General Staff comments, supported by the Führer, were that they were only interested in flights if they knew they could institute a regular service. They were not interested in single flights for prestige or propaganda. The journey was too long and the whole project too risky (53).

But Milch and von Gablenz seem to have continued with preparations. On the 18th August in a lengthy discussion of long range aircraft, production plans and engine developments they looked again at the BV 222 plan. Milch made it clear that he had suggested the BV 222 although there was still discussion about the Condor. They looked at the present status of the BV 222 with a clear target of flying in August. Again all the discussion shows that they intended to use the flying boats over the northern route. The V1 (first prototype) was due for a series of tests but would be ready on the 23rd August. The V2 (second prototype) would be clear to fly after the 25th August. There might still be work to be done on the water injection system to give more power for take off with extra loads. The methanol and water injection system was not, in fact, finally installed until the spring of 1943 (54). The name Meyer was mentioned, for the first time, in the discussion of possible crew although von Gablenz said that Meyer had no real knowledge of the plane. Milch undertook to inform the Reichsmarshall. Milch was pleased that they would be outdoing the Italians by flying Kirkenes to Tokyo without a stop (55).
It is clear that Milch and his staff were following through with the plan they had outlined on August 7th which was to fly the northern route and pretend to all comers that they had traveled to the south over India. All other evidence suggests that the Japanese, at least in public, expected the Germans to conform to their wishes and that the German flight would arrive over the southern route via Singapore and Manila.

The plans to fly seemed to take on a life of their own despite Ribbentrop's objection and the lack of co-operation from within the Luftwaffe. It seems the Japanese in Germany and in Tokyo were exerting pressure and almost willing a flight to take place and it was the Lufthansa plan which seemed likely to come to fruition. On 18th August a message from von Gronau and Ott went to Berlin about Japan's purchase of two aircraft. The Japanese Military Attaché in Berlin had reported to Tokyo on the purchase of two long range aircraft for the air service to be delivered by German crews. This deal was outside the current economic negotiation ie the long running Wohltat negotiations which took until January 1943 to reach a conclusion. In the case of the aircraft the negotiations had been overridden by pressing military necessity. The Japanese also reported German test flights planned to Tokyo. Von Gronau's request was to "please put us in the picture"(56).

The purchase of planes by Japan would, as I have said already, have been a logical outcome of the Luftwaffe's unwillingness to take part in the air service project. The "Lufthansa" approach would still have needed the release of aircraft from the Luftwaffe. But the German officials in Japan were only finding out about plans via the Japanese channels and what is more likely the officials in Japan were engineering the situation to encourage the Delegation project. In this they were following Weizsäcker's advice to Kordt and trying to restate the case. On the 20th August Ott replied to Ribbentrop in support of the flights project. He gave a very strong review of the military situation and pointed out Japan's strategic vacuum in the Autumn of 1942. Japan had problems of transport capability and the continuing problem of China. Ott maintained that it was vital for the Germans to have their fingers on the pulse of Japanese politics. Japan still wanted personal contacts and explained that representatives of the Foreign Ministry and senior representatives of Army and Navy would be able to travel. He encouraged the sending of
the delegation and discounted the dangers of flying pointing out that risks had to be taken. Ott also made a "new" suggestion which had come from the German Attaches. Already on 5th August the Military Attaché Kretschmer had told Berlin that the Japanese had offered to send two officers with experience in Landings - beach landings - "this can only be carried out by the air route, overland route is not in consideration and blockade runners take too long and are time consuming". Now the Attaches suggested that the two aircraft purchased from Germany should be used to carry the two officers and the delegation back to Berlin. Ott was sure Japan would accept this.

On August 24th disaster struck the whole German air service project when von Gablenz was killed in a plane crash. The impact of his death on the development of the project cannot be over stated. His loss removed from the arena a prime supporter of the flights to the Far East, a man with enormous personal experience of the routes and the conditions that would be met and who was convinced of the feasibility of the project. German policy and decision taking depended to a large extent on personal influence and connections and von Gablenz's death removed a very powerful advocate for the Lufthansa vision of an air service. His role in the development of Lufthansa in the 1930s is recognised in the fact that the street on which the Lufthansa HQ in Cologne is located is called von Gablenzstrasse.

Meanwhile doubts had also begun to surface in Berlin about the objectives that Japan had for the "Tenno" flight. It was becoming clear to the Germans that the Delegation would be mainly interested in mediating a separate peace between Germany and the Soviet Union and not in planning military co-operation for an attack on the Soviets. On August 25th 1942 Oshima was being pressed by Shigemitsu to try out the idea of a separate peace with Ribbentrop. Oshima's reaction on the 26th August was that Germany would certainly reject the idea and Oshima wanted to know if there had been any response to the similar overtures to the USSR. As a result of his growing disquiet on 31st August 1942 Ribbentrop drew in Oshima for discussions over the proposal for the "Tenno" flight despite the explicit instructions against this sent via the German embassy. Ribbentrop stressed to Oshima that these were unofficial contacts and both Ribbentrop and Oshima
decided they wanted a clear statement from Japan on what was intended to be the basis for discussion. It was pointed out that there was still a group in Japan who wanted a separate peace but neither Oshima nor Ribbentrop were interested in this. Ribbentrop considered the idea "utopian" and Oshima positioned himself alongside the German view. In addition to his antipathy to the idea of a separate peace there was the strong possibility that such a powerful delegation would undermine his personal relationship with the German hierarchy. Ribbentrop suggested that the Japanese Generals were lacking in courage. Oshima was still convinced that Germany was able to defeat the Soviets. On a technical point it was clear from the discussion that Ribbentrop recognised the need to use the flying boats because the Italian aircraft could not carry enough passengers and it was clear that the scheme Ribbentrop was describing depended on the purchase, by Japan, of two Blohm und Voss BV 222s from Germany. Ribbentrop's view was that the aircraft still needed further testing.

In Oshima's report to Tokyo of the meeting he told how Ribbentrop had told him "The rumour in the world of a separate peace between Germany/Russia has not died down. Unfortunately Japanese sources are nourishing the rumour. It gives strong support to Stalinist propaganda and he uses it to spur the British on to greater efforts". If Japan was using this rumour as cover, to lull the Russians into false security before attacking them then Ribbentrop had nothing against it. But if this was not the case could Oshima tell his government that the "rumour of separate peace merely helps the enemy."(59) Ribbentrop had also objected to the efforts Sato was making to achieve the same objective in Moscow.

On September 1st 1942 there was a change in personnel in Tokyo when Togo resigned as Foreign Minister and was replaced by Tani. Also on the 1st September Ribbentrop wrote to Goering about the possible flight. He explained the request from Japan for a "Tenno" flight to take place as soon as preparations could be made. Japan wanted to buy two long range aircraft to do this. This had been discussed with Hitler and it was agreed the delegation should be welcomed but Japan had no suitable aircraft and the Italian Savoia could not carry a delegation of 6. (We have already seen that Bose could not take any
colleagues or even luggage if he had taken the Italian flight) The idea of two aircraft to be put at Japan's disposal was useful because the Japanese would take the responsibility for the flight and associated risk. Ribbentrop needed to know when the aircraft could be ready and how many people the two flying boats could carry. Oshima had explained that the flight must be along the southern route via airfields in Egypt, the Arabian peninsula, across South India to Rangoon or Bangkok. Ribbentrop now wanted an early reply to these questions and the whole thing should not be delayed on foreign policy grounds. The detail was to be sorted out by a representative from the Foreign Office and one from the Air Ministry. Ribbentrop nominated Wiehl. The flight would give the opportunity to send a torpedo specialist to Japan(60). Ribbentrop must have been aware of the Luftwaffe view on the suitability of the BV 222 since he again explicitly mentioned flying boats in this message to Goering. It seems likely that the torpedo specialist would be one of the BV 222 test pilots. This expertise is mentioned later.

The Japanese submarine I30 left Lorient on September 9th 1942 without Bose and the plan for a German flight to Japan continued with its own momentum while Ribbentrop and Oshima became even more opposed to the idea for diplomatic reasons. From the 5th to 12th September there was further test flying of the BV 222 in Germany. One endurance test flight lasted 22 hours and 44 minutes which was long enough for a flight to Japan. Rudolf Mayr and Walter Blume were involved in this flight. Both were long distance experts and ex-Lufthansa aircraft captains (61) (See mention of pilot named Meyer in the Milch/von Gablenz discussion on August 18th.). The BV 222 had already flown many times to Kirkeness and to Greece demonstrating its long distance capability. The aircraft had originally been designed to fly non stop to New York from Hamburg.

It seemed, in Japan, as though the German flight was becoming a reality. On 11th September 1942 a telegram was sent from Ott and von Gronau in Tokyo to Berlin. They had been informed by the Japanese Navy Ministry that a report from Japanese officials in Berlin said a test flight would be taking place using the BV 222. The Japanese Navy were asking Oshima specific questions about the aircraft - size, route, air traffic control and guidance, stop-overs, fuel requirements. The flight was expected to arrive at the end of
September(62). Again the Germans in Tokyo were learning at second hand through the Japanese but a flight did seem about to happen and the rumours in Japan were strong. On 12th September a message from von Gronau to Berlin said that the Japanese Navy expected a flying boat to arrive at Singapore on 14th September. Captain Lieutenant Seimiy was leaving for Singapore to be the contact agent. Von Gronau wrote "I have advised against the departure because I know nothing of the flight. The [Japanese] Navy claim that it took off yesterday morning...." Von Gronau asked Berlin to keep him up to date(63). In Berlin there was less confidence. There was a note made about this message suggesting that the flight was uncertain and that von Gronau should not make a comment(64). It is not clear whether the message was sent. If it was it cannot have reached von Gronau before he and Ott, beginning to accept the reality of the unfolding events, sent a very detailed message to Berlin to the Air Ministry Attaché group explaining that it was necessary to go into very careful planning with the Navy Ministry in Tokyo on the diplomatic handling of crew and aircraft after the flight. They should use Yokohama as a landing point because it was equipped for heavy flying boats. The aircraft would need to display Japanese emblems as well as German from Penang or Manila to Yokohama. The crew would be treated as on the Italian flight with strict secrecy. The aircraft would be open to inspection by the Army and Navy. The Italian flight had led to clashes over these issues. The flying boats would remain under German guard. The Italian flight did not take Kurierpost and this had become a weakness in the project. This was another reference to the limited load carrying possibility of the Italian aircraft. It was important to get a clear and rapid understanding about the flight(65).

There was a clear expectation that the flight would arrive in Japan after flying via Manila or Penang. There was a suggestion that a liaison officer should go to Singapore to receive the flight. At the same time all the evidence from the Milch discussions is that the Germans intended to fly the northern route across Siberia. The officials in Tokyo were still not sure what was happening. On the 16th September 1942 a message went from Ott and von Gronau to Berlin wanting to know what the chances for a flight were. They had been told by the Japanese Navy that the Reichsmarshall and Oshima and the Air Ministry and the Japanese Naval Attaché had all agreed to the flight. There was a need to register a
flight plan three weeks before take off, "because things move slowly here. It will take time to prepare." (66)

On the 17th September in Berlin it was recorded that the Italian embassy understood from the Italian ambassador in Tokyo who had it from the German ambassador that a German flight would be going to the Far East. The Italians wanted to know if this was true(67).

Again on the 18th September in Berlin as a follow up from the previous day it was noted that the Italians had also had the information about a possible German flight from a Japanese source in Tokyo (68). But on the 18th Ritter sent a message to Tokyo warning the staff that the whole matter looked very unlikely(69) and the rising excitement in Tokyo finally proved to be without foundation. On the 17th/18th September Oshima and Ribbentrop met. Oshima stated the importance of the flight and the arrival of the delegation in Germany. Ribbentrop had discussed this with the Führer and they also welcomed the idea of the delegation but still considered it too dangerous to bring important Japanese dignitaries to Germany by air. Goering had been consulted and although he was willing to supply aircraft he could not guarantee the flights. This was another example of the Goering/Jeschonnek split with Milch and Lufthansa over flights. "The flying boats are not proven over such long distances" there were possible problems over repair and maintenance in Japan after the outward flight - a reference to the need to change engines? The Führer had told Ribbentrop and Oshima that flights could not proceed until the flying boats were tested and checked. "The possibility of the delegation crashing in a German aircraft is not personally acceptable to the Führer". Ribbentrop also stated that a separate peace was not an option. He stressed the importance of Japanese Naval support in the western Indian Ocean to link with German moves in the Caucasus. If Japan became more active in that area only then would be the right time for a delegation to travel(70).

This discussion made it clear that the German "Tenno" flight would not go ahead and that technical and safety grounds would be the excuse. Ribbentrop had understood by then that the objective of the delegation would have been to negotiate a separate peace between Germany and USSR. Oshima was not keen to support this proposition in general
and personally because any delegation would erode his own position with the German leadership. Receiving a flight and delegation would anyway now be conditional on Japan agreeing to reopen attacks in the Indian Ocean.

On 18th September a Japanese Military Attaché message from Tokyo to Berlin was logged at Bletchley Park concerning "doubts over the flight of the RU plane"(71). RU was the code name for the German flight to the Far East in the same way that the "A plane" always referred to Italian flights and the "SE plane" referred to Japanese flights. And on 19th September the message went to Ott, "Ostflug verschoben"(72). On 21st September when Oshima and Ribbentrop met again (73) Ribbentrop told Oshima, "sur Zeit der Flug einer Delegation des Tenno von Japan nach Deutschland wegen zu vieler technischer Schwierigkeiten nicht möglich sei".

Tsuji expressed concern at the rebuff by Germany but accepted that Japan would make no moves to mediate peace unless requested by Germany. This undertaking was not kept. Kordt says that Tsuji was then given a command outside Japan. From other sources it is clear that he arrived on Guadalcanal on the 24th September 1942 again on Imperial business with the task of attempting to rally Japanese resistance to the US forces. The importance of the "Tenno" flight to the Japanese is demonstrated by the role played by Tsuji. Although only of middle rank he was a key Imperial representative carrying important messages to the Army on a number of significant occasions.

Oshima, following a conversation with Ribbentrop, went back over the position in a report for the benefit of the Japanese government (74). He gave a rather different slant to the reasons for the plans rejection. He explained that Hitler had agreed in principle to the flights and instructed Goering to draw up plans with Lufthansa. Then Japan had insisted that the flights should be operated by the military and the whole matter had been passed to the German Air Department. This would seem to be referring to the statements about "military necessity" in Circular 974 and other messages from Japan during June. A new study had then taken place, carried out by the military (Luftwaffe) and the report which went to Hitler had found that the planes were not capable of sufficient altitude and the air
officials could not bear responsibility for their safety. Hitler's response to this report was "Well if the air officials can't take the responsibility, we will have to drop it, that is all". This was the basis for turning down the flight proposal at this time. Ribbentrop was still anxious to see the plans put into effect and asked Goering to "get the planes in shape".

According to Oshima Field Marshal Milch and Lufthansa were still very eager to see the idea put across. Milch and the Lufthansa representatives had "begged" Oshima to help them. The central point of the thrust for the flights was now coming from Lufthansa with the support of the Japanese. However the German Air Arm, and particularly Chief of the General Staff, Jeschonnek, always took the view that war planes and their crews could positively not be used for any other purpose save war. It was to get around this objection that Oshima claimed he had worked with Ribbentrop, Milch and von Gablenz to get an understanding with Hitler. Oshima claimed he had been working on this "even before Field Marshal Milch and General Gablenz made their private requests to me". But the Japanese Army and Navy had upset everything by demanding that the flights should be military. Lufthansa had had to drop the project and the Air Arm (Luftwaffe) took charge. The project was at a standstill and nothing could be done.

To clarify this -

The Japanese were concerned that German civilian flights to Japan and China might be a stepping stone to the redevelopment of German commercial interests in the Far East. As we have seen there was a German funded airline called Eurasia operating in China in the 1930s and there had been approaches from Germany to re-open the contract with the Nanking government. The Japanese Army had therefore wanted to see German military aircraft covering the route. It is clear that Lufthansa were making all the running from the German side and Japanese apprehension may well have been justified.

But the most "military" arm of the Luftwaffe represented by Jeschonnek and backed by Goering did not see the air route as a justifiable use of resources at this time and would seek to find reasons against. By putting the emphasis on the military/civil issue Japan had
given the decision to the Luftwaffe and allowed them to raise the issue of technical preparedness as a way to defeat the project. All the enthusiasm for the air service was coming from the Lufthansa connection. But as we can see from the later discussion between Milch and his staff on October 20th 1942 (75) there was a legitimate priority to be given to using long range aircraft in supporting the U boat effort in the Atlantic.

There was thus a deadlock even without considering the reason for the delegation to be travelling. The suspicion that this would be a delegation about mediating a separate peace would be enough to weight any decision on the German side in favour of refusal. If one of the prime reasons in Germany for the rejection was the issue of negotiation over a separate peace then Oshima was at least concealing this aspect from his own government.

On 22nd September 1942 Woermann noted that following the Italian enquiries of 17th/18th September they had now been told that the German flight was not going to take place (76) and on 26th September Oshima was also formally told there would be no "Tenno" flight(77).

On 3rd October 1942 Ribbentrop sent the ambassador in Japan an explanation of the sequence of events which had stopped the "Tenno" delegation and flight. Berlin would "Welcome delegation but...". "Technical preparations not in place". "Reichsmarshall was not able to guarantee the aircraft". "No delegation possible until aircraft tested". "Idea of Tenno delegation crashing in a German aircraft personally unacceptable to the Führer". It was suggested that if the Japanese wished to continue with the idea then U boat links were possible or Lufthansa should take the flight issue forward(78). Ott was unconvinced and made a lengthy response on 7th October 1942. After a survey of the war situation he stressed the need for closer links. There was a particular need to work together because of the US build up of weapons. Japan hoped to receive industrial and economic help. Japan, on her part, would be trying to do all it could to meet German desires. Ott explained that they had heard nothing since the end of August about the German flight and that the Japanese Army was disappointed after the success of the Italian flight. They wanted personal contact and agreement on joint operations with their
But despite this progress was difficult because Hitler had withdrawn his support over flights. He had never been an enthusiastic supporter of this means of transport for the Far East route as we can see from the remarks made to Bose in May 1942. It would be difficult to restart the activity unless Hitler could be persuaded but Japan still considered the flights and the contact important. There had been no change in the Japanese determination to try to stop the war on the Eastern Front. On the 21st of September a Supreme Council meeting in Japan had discussed what to do if Germany changed her mind about a separate peace and on September 30th 1942 a follow up meeting in the presence of the Emperor confirmed their determination to press on for separate peace. It was agreed that it was an essential aim to end the war in the next year, the USA and Britain should be the main target for Japanese forces, they should maintain contacts with German and Soviet governments at all costs with the objective of taking any opportunity to bring the war in Europe to an end(80). This decision was followed up by putting pressure on Oshima to return immediately to the flights issue in Germany. The aim was still to get a delegation to Europe and the Japanese exerted continuing pressure for German flights but also, at the same time, turned back to the Italians with a view to sending the Delegation on the return leg of the second Italian flight (this is described in Chapter 5 - Trying Again 1)

On October 7th 1942 (81) Tokyo gave Oshima instructions to continue putting pressure on the Germans. "With the successful round trip flight of an Italian plane between Europe and Asia an air route joining Europe and Asia appears to have materialised. For our part, such a connection is very essential to the joint prosecution of the war and from now on we feel it is especially needed in dispatching documents and personnel.....You do your best through Foreign Minister Ribbentrop and Air Minister Goering to stir up an interest in this plan on the part of the military". The message from Foreign Minister Tani also agreed that Lufthansa could be encouraged if necessary, "while it has been our intention from the first to have this air connection between Europe and Asia controlled and developed by the military, if Germany wants Lufthansa to work out the plan, we see no
objection." In reply (82) Oshima wrote "Re your 741 - Just as I was about to take up your message with them discussions came to an end because the German military and naval men were not particularly enthusiastic over the proposition that military planes be operated over the proposed route.....8 lines garbled..... "It is hard to understand just why you keep bringing up this question of military planes to the Germans. The matter of whether or not military planes are to be used and also whether the army and navy are to be responsible for their operation can come up for agreement in an appropriate time."

"I do not know what the Foreign Office thinks about it but an objection has already been raised by the Army to the use of military planes on the ground that the advance of German air power in the Far East should be banned."

"....it seems to me that it is not only absurd to keep harping on this question of military versus civilian planes, but it becomes very clear, considering the importance of maintaining communications for the sake of victory, we can very well afford to yield on some points."

"Now the matter has been passed over to Hitler and if he had made a decision then the difficulties would be greater than if they had begun discussions with a clean slate".

Oshima asked if the Japanese government were still adamant about not using the northern route or whether it would be possible to use agreement to the easier, overland, route to gain German favour and support. He also added, "The visit of the Japanese submarine I 30 [left Lorient September 9th] had a very salutary effect." He believed air links could have the same impact.

Despite the setbacks Oshima continued to build on the stronger link with Lufthansa which seemed more likely than the Luftwaffe to deliver some outcome and on November 5th 1942 Oshima told Tokyo (83) about a recent discussion with Lufthansa. Lutz, who had replaced von Gablenz, was now managing director, and also at the meeting were President Fitsch head of the Civilian Air Bureau in the Air Ministry together with Milch
and Hoffman as vice presidents of the company. Lutz pointed out that they had come very close to realization of the plans before negotiations broke down. Now Hitler had withdrawn support Lufthansa still wanted to go on but it would be unreasonable to try to change Hitler's decision so soon after he had made it. They would therefore plan for a flight around March 1943. They felt it was important that the military were not involved. Again Lufthansa were making the running and wanted Japanese support. The representatives explained that when the time was right they would look to Oshima for help.

There was also discussion about an Air Company. Oshima very carefully explained that he spoke on the basis of a telegram from Tokyo (84) which had made clear what Japan wanted in terms of control of German economic involvement in the Far East. He said that Japan had a real enthusiasm to put this Eurasian Air Communication into operation in the future in concert with Germany, and that *without disregarding Germany's rights in China*, Japan's desire was to control only the planes flying within the borders of China. Oshima got the impression that the Germans did not have any special desire to operate planes in China but they did want to make a further study of Eurasian Air Communication.

The Japanese government kept on pressing to re-activate the German project and on December 10 1942 (85) Tani replied to Oshima's message of October 13th "It was unfortunate that the German military pigeonholed our plans. However since the time we first put out our trial balloon the situation has changed considerably. I told you in my 741 why we are so anxious to put this into effect. So I would like for you to take this up again. In view of Chancellor Hitler's decisions I know how embarrassing it will be for you but it is a very important matter and I want you to do your best"

Since the problem earlier had been with the German military Tani suggested Oshima explain to them why air links were so vital "explain to them fully the significance of such an undertaking. Do your best to deepen their interest and enthusiasm for this aerial liaison". Tani understood now that there was more chance of success with Lufthansa,
"Lufthansa and Japanese Air Lines should work out schedules, numbers of aircraft and routes for the governments to consider."..."Please inform the Germans also that we might favourably consider flights over China but we would wish absolutely no local lines to be established there" This is a very clear reference to the importance Japan attached to preventing the Germans from developing civilian air routes in the Far East.

Oshima was being asked to go back and try to overturn Hitler's decision not to support flights to the Far East but meanwhile the Italians and Japanese had continued to work on flights following the Italian success in July 1942.

Notes to Chapter 4

1 I Documenti Diplomatici Italiani Nona Serie 1939-43 – published Italian Foreign Office documents. IDDI vol VIII document 624, diplomatic telegram Rome to Berlin 16th June 1942

2 IDDI vol VIII 680, diplomatic telegram, Alfieri in Berlin to Rome, 17th June 1942, reference in documents says 642

3 IDDI vol VIII 642, diplomatic telegram, Rome to Berlin and Tokyo, 22nd June 1942


5 Akten zur deutschen auswartigen Politik 1918-45 Series E – published German Foreign Office documents. ADAP E vol III document 35, notes on a meeting between Oshima and Ribbentrop, 24th June 1942

6 PRO GFM 195/139708 memorandum from Keppler, 24th June 1942

7 PRO GFM 195/139717/8 diplomatic telegram Berlin to Rome, No 2623, 26th June 1942

8 IDDI vol VIII 660, diplomatic telegram, Rome to Berlin, 27th June 1942

9 IDDI vol VIII 662, ibid Berlin to Rome, 27th June 1942

10 IDDI vol VIII 661, ibid Rome to Tokyo, 27th June 1942

11 Bletchley Park Archive. This is a card index logging messages intercepted and decoded between the Japanese Military Attachés in Berlin and Tokyo. Bletchley Park JMA 108 card index ref to E27273
12 Kössler and Ott 1993 op cit p 204
13 Bletchley Park card index JMA 108 ref to HIS 130/247
14 ibid ref to HIS 309/737
15 ibid ref to HIS 313/278
16 ibid ref to HIS 159/271
17 ibid ref to HIS 336/742
18 National Archives, Washington, NARA Microcopy T82 Roll 113 Frame 257749,
Attaché Office memorandum, 7th July 1942
19 ibid Frame 257748, note by Woermann, 15th July 1942
20 Santoro (Giussepe) L'Aeronautica Italiana Nella Seconda Guerra Mondiale Rome
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21 NARA Entry 77 Box 2413 F16 9900 Japan. I am grateful to Professor Gerhard L
Weinberg for a copy of this report and the reference.
Intelligence passed to the Prime Minister. PRO HW 1/774 message 15th July 1942, seen
by Churchill 22nd July 1942
23 Bletchley Park card index JMA 108 ref to HIS 146/295
24 ibid ref to HIS 182/219
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26 International Military Tribunal (Far East) - IMTFE evidence of Kido op cit
27 Martin 1969 op cit p 114
28 Kordt 1950 op cit pp 419/20
29 Boyd 1993 op cit p 148
30 ADAP E III 68, diplomatic telegram, Tokyo to Berlin, No 2049, 7th July 1942
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82 ibid SRDJ 027377, ibid Berlin to Tokyo, No 1201, 13th October 1942
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Chapter 5

Trying Again 1: The fate of the second Italian flight and Bose's journey to the Far East September 1942 to May 1943

As we have seen the Germans finally rejected the idea of sending a flight to the Far East to collect a high ranking Japanese delegation in mid September 1942. This rejection shattered Japanese expectations of being able to exert some pressure on the German government in Berlin in order to mediate a peace on the Eastern Front. Ribbentrop turned down the use of a German aircraft on "technical" and "safety" grounds but the Japanese demonstrated the strength of their desire for an air link by immediately starting the planning to send a similar delegation with the return leg of the proposed second Italian flight. At the same time the Italians, once they had got permission from Germany and Japan, returned immediately to the idea of flying Subhas Bose to the Far East on the outward leg of the same planned second flight.

The second Italian flight could not have been a direct repeat of the successful first venture because the route which had been followed across the southern Soviet Union was no longer acceptable to the Japanese. The route for the second flight had to be Europe to Rangoon, possibly via North Africa, and then on via Singapore to Japan. The three Axis partners slowly put the plan together during the early Autumn of 1942. A series of messages show the stages of the arrangements for the flight as they were made and some of this activity overlaps in time with the German involvement in the "Tenno" flight which had been cancelled in September 1942.

The position on Bose using the next flight had been clarified on August 2nd 1942 when Ribbentrop had sent a letter to Bose, replying to Bose's letter of July 23rd and, explaining that the Foreign Minister's view now was that it would be acceptable for Bose to travel by air since alternative ways did not seem possible. As we have seen the Japanese had refused to take Bose on the return voyage of the submarine I30. Since no German flight was available, Bose could have permission to use the next Italian flight. The German government informed the Italians and Japanese of their view (1).
Although the Germans and Italians had made the decision that Bose could fly to the Far East collaboration between the Axis partners on this issue was still weak. There was no agreement on the strategic, long term, use to be made of Bose and the movement to free India. Japan's position was still not clear and it was not yet certain that the Japanese were reconciled to the idea that Bose was the best person, as far as their interests were concerned, to lead the Indian Independence movement in the Far East. A Japanese decision was essential before plans could be developed further but it was not possible to move forward until Oshima returned to Berlin when he would be personally able to send a telegram requesting permission. According to the July 23rd 1942 SRS (2) Oshima had been expecting to go on a tour of the Eastern Front from July 24th lasting for ten days. He had then been asked by Tokyo to postpone leaving because he needed to be available to receive and pass to the Germans an important message due in Berlin on 25th July. This message was the clear statement from Tokyo that Japan would not invade the Soviet Union(3). Because of this delay Oshima had not actually left Berlin until the 29th July and flown to the front from Warsaw on the 30th. He was therefore unable immediately to send the telegram asking for permission for Bose to travel. The conversations which took place in Berlin with the Japanese Embassy during this hiatus revealed the lack of direction and the uncertainty among the staff about the policy being adopted towards Bose by the government in Tokyo. On August 3rd 1942 Kawahara, an official in the Embassy in Berlin, had to admit that the instructions that the embassy were getting from Tokyo on the Bose matter were unclear and that the Military Attaché, Yamomoto, was dealing with these issues(4). In another message also on August 3rd, while Kawahara was still awaiting Oshima's return, he pointed out that he had now established current Japanese thinking on the Bose situation. The view was that Japan was not against a Bose journey to the Far East but not especially in favour either (5). This confusion matches in tone and political line the Indelli telegram to Ciano on July 1st (6) quoted earlier. The Japanese were still not willing to commit to Bose as the right leader for their purpose. Oshima would have to establish the Japanese government position and in the SRS of August 5th 1942 it was reported that Oshima, quoting German and Italian sources, believed the Indian situation was at crisis point. Oshima asked for clear guidance on Japan's policy on India in order to help establish what Bose's contribution could be but
the only answer was a response from Togo that they would try to stir up the Congress Party if it decided to turn pro-British(7).

On August 8th 1942 the debate was still going on and Ernst Woermann made notes of a discussion with Oshima who had now returned and sent a telegram to Tokyo requesting permission for Bose to travel(8). Eventually on August 17th 1942 approval came from Japan for Bose to travel to the Far East using an Italian aircraft. The Military Attaché Yamomoto was to travel also and all negotiations from then on were to be directly between Tokyo and Rome(9).

Yamomoto was the Military Attaché who had acted as liaison for Bose and he was able to travel overland across Turkey and the Soviet Union using his diplomatic status in order to join Bose in the Far East and maintain the relationship by continuing to operate as his liaison officer. His departure was planned for August but actually took place in December 1942. It seems that arrangements had already been made for visas to be requested from the Soviet Union for Yamomoto to travel overland to Japan. The August 11th 1942 SRS (10) reports that the Japanese minister in Ankara had been asked to obtain Soviet visas for a list of officials to travel to Japan. The list included Colonel Bin Yamomoto but his journey overland was no more trouble free than Bose's efforts to travel by air. In the October 9th 1942 SRS (11) there is a report of the dispute over visas to travel across the USSR to Japan. The agreement to allow the visas had been dependent on the Japanese allowing 43 Russian sailors to travel from Hong Kong though Manchuria to the USSR. By 18th September the Russian sailors had only reached Shanghai and could see no way to travel on. The Japanese would not allow them through unless Russia made visas available for overland travel back from Europe. The impasse seems to have lasted for some months because the Japanese party only left Europe in December 1942 and arrived in Tokyo in January 1943.

Meanwhile the information about the new arrangements for Bose to travel were passed to the appropriate officials. On August 19th it was noted that the Japanese government approved of the Italian flight (12), and from then on the German government acted as
intermediaries in channeling messages to Bose and were observers of the Italian preparations but, on some occasions, they "observed" by intercepting and decoding their allies' messages.

Although there was now an agreement at a diplomatic level about Bose travelling to the Far East by air there were still many issues to do with the flight itself which had to be resolved. On the 22nd August 1942 a message from the German Ambassador in Italy to Berlin explained that problems were continuing between the Italians and the Japanese over the choice of route and the risk of infringement of Soviet air space. The Germans had learned that it was the Italian publicity about the July flight and the press coverage in *Il Popolo d'Italia* which was at the heart of the problem. The Ambassador reported that "this reluctance comes from the announcement of the previous Italian flight in the local press". The Ambassador also made it clear that it would not be possible for "Mazzotta" (Bose) to take a companion and that he must limit his baggage. The codename Mazzotta was often used for Bose because Mazzota was the name on the Italian passport Bose used to cross Soviet territory on his original journey to Berlin in 1941. (See Chapter 2) The end of September was identified as the most likely date for the "Mazzotta" flight because of the weather conditions [monsoon] and because it was politically desirable (13).

The Ambassador's information was confirmed in Berlin on 24th August 1942. It was noted that there would be a delay to the Bose flight because of the route change and weather conditions. The Japanese had originally expected the Italians to fly again during August as they explained in their August 2nd note - see Chapter 4 - but in fact the monsoon would have made this timing dangerous (14). On 26th August a Japanese MilitaryAttaché message from Rome to Tokyo dealt with the "special flight to link Japan and Italy by the southern route - by Rangoon" and confirming from another source that this route was now the focus of attention(15).

Things seemed to be moving forward despite the unresolved details of the route. On September 9th Oshima reassured Alfieri, in Berlin, that Japan definitely wanted Bose in
the Far East and expected him to use the Italian aircraft (16). On 10th September 1942 a Japanese Military Attaché message from Tokyo to Berlin and to Rome covered "arrangements made about carrying out the second flight of the A plane" (17).

A sign that preparations were moving rapidly came on 11th September when Bose was advised not to go to speak to Indian PoWs in Libya because officials in Rome were "awaiting day by day the decision of Japan on the flight" (18). At the same time, although no longer directly involved, the Germans were observing the Italian preparations by intercepting and decoding their messages! As an example on 24th September 1942 a telegram went from Rome to Berlin which was an account of intercepted messages between Italy and Japan. These intercepts show there was still concern over the route for the next flight and continuing discussion over the risks. The Italians still preferred the more northerly route, across Central Asia, which they had used successfully in July. In their view there would be "in the current season a lot less risk", a reference to the monsoon over the Bay of Bengal. The more northerly route was also shorter. The Italians were still debating the route change at the end of September (19).

These intercepted messages also held other information. According to the German's sources an intercepted Italian message between their Foreign Ministry and their ambassador in Japan mentioned that "the Japanese air attaché says Japan will want to send people on the return leg of the Italian flight", the Japanese again stressed the need to use the southern route and the need to avoid any infringement of the Neutrality Pact with the USSR (20). The continuing Italian anxiety over the southern route was shown on the 24th September in an intercepted message between the Italian ambassador in Japan and the Foreign Ministry in Italy (21).

Vyas in his account of this period when he was a close associate of Bose (22) claims that on 3rd October 1942 an Italian plane proved the feasibility of the southern route by flying from Libya to Burma. No corroborative evidence has been found for this. The route for the second Italian flight according to Vyas was to be Rome to Burma with a staging point in Libya.
On the 3rd October Lanza d'Ajeta in Rome told Alfieri in Berlin "We are still not in a position to obtain from the Japanese a precise answer about the departure by air. We assume however that the flight across will be able to take place in the second fortnight of this month". Bose was asked to delay his return to Rome until then(23). On the 4th October a Japanese Military Attaché message from Tokyo to Rome covered "negotiation with the Italian Government about the second A plane"(24). Bose was eager to make a move and unhappy about delays and on 5th October Alfieri, in Berlin, told Ciano that Bose was disappointed about the delay in his return to Rome because he had wanted to meet with Mussolini and Ciano. Bose was worried that this delay was a sign of a wider rejection of his plans but he was assured by the Italians that this was not so. He was told that Italy had no lack of interest in the Indian issue or in him and his personal role. Bose was anxious because he wanted to discuss with Mussolini and Ciano representation for the Indian cause in Italy after he had gone to the Far East and the continuation of radio propaganda. He was probably also worried about the future position of his own organisation vis a vis that of Shedai who represented the Moslem/Pakistan wing of the Indian Nationalists and who was actively recruiting PoWs to his own rival military organisation at this time with Italian support(25).

The Japanese were themselves becoming more positive about the use they could make of the second Italian flight and on 5th October a Military Attaché message from Tokyo to the office in Rome informed them that "a Japanese officer would be joining the plane at Rangoon" (26). Following meetings of the Supreme Council on 21st and 30th of September in the presence of the Emperor the Japanese had re-affirmed their commitment to work for a separate peace(27). They now moved to use the planned Italian flight as a way to send a delegation to Europe which would take on the same role as the delegation which it had been planned to send on the "Tenno" flight in the summer of 1942.

Priority had originally been given by the Japanese to developing flight links with the Germans and we have seen elsewhere anti-Italian bias from the other two Axis partners, but, since the German efforts had come to nothing and Hitler now appeared to have
withdrawn his support for flights, Japan had shifted attention to the Italian project. As forecast in the intercepted Italian message to their ambassador in Japan on September 22nd the Japanese now asked to send a delegation on the return leg of the planned Italian flight(28). Tani, the new Foreign Minister, told Oshima that the Italian return flight would be coming and that following "a joint conference of the general headquarters and the government on October 3rd" the aim of the flight was "to send representatives as soon as possible and to keep in closer touch with you and the Ambassador to Italy together with our military and naval attaches and to give them assistance in studying world conditions and especially those concerning the Far East and centring around Japan. They will also verify Japan's actual position since the outbreak of war and work out a policy of cooperation among the three countries for the prosecution of the war from now on." Tani, in the message indicates that the mission would be using "a special Italian plane". This marks a rapid return to the objectives of the "Tenno" flight rejected by the Germans in September. It is also quite a damning statement of loss of confidence in the representation of Japan in Europe. This is more evidence which supports the view that Japan was very aware of the need to supplement or replace Oshima's voice in Berlin.

On October 15th 1942 the SRS summary (29) carried a full translation of Tani's message to Oshima. (This is an interesting example of the timing involved in the MAGIC operation. The original message from Foreign Minister Tani was dated Tokyo, October 7th. The record shows that it was intercepted on the 8th October, translated on the 11th October and an analysis of the message was in the Summary circulated in Washington on 15th October.)

The October 20th SRS (30) refers to a circular from Tani to all the ambassadors in Europe instructing them to remain aware of the possibility of mediating peace between Germany and the Soviets. This coincides with the message to Oshima about the forthcoming delegation. It is reasonable to assume that this is also an outcome of the same high level liaison conference which repeated the desire to mediate a separate peace. But also on 7th October Tani wrote to Oshima recognising for the first time that the Italian flight might not go ahead and wishing to develop options. He explained that the
Italian flight in July appeared to have met Japan's objective of "an air route joining Europe and Asia", and that "for our part such a connection is very essential to the joint prosecution of the war and... especially... in dispatching documents and personnel". As he had described in his other message of October 7th (31) the Japanese were hoping to use the next Italian flight and they were "in the midst of preparations... but various difficulties are holding up a realization of the plan". Therefore Tani asked Oshima to return to the issue with Germany and particularly with Ribbentrop and Goering "to stir up an interest". Tani was willing to make concessions to re-activate the German effort. He accepted that although the Japanese intention had been to have the service developed by the military because of their fear of German economic infiltration - "if Germany wants Lufthansa to work out the plan we see no objection" (32).

Meanwhile work continued on the Italian flight although the Japanese may have been losing confidence. On 9th October Ciano wrote to Alfieri asking him to inform Bose that the flight would leave after the 15th October. If Bose wished to fly he must travel alone and without baggage. Alfieri was instructed to give Bose formal reassurances about Italy's attitude towards him (33). In response on 10th October Alfieri wrote from Berlin to confirm that Bose would be ready to leave any day after 15th October and that he would like to see Mussolini and Ciano before the flight left (34). On the same day Lanza d'AJjeta confirmed to Alfieri that the Air Ministry had been informed that Bose would be ready, the German embassy had been told and the Japanese had been informed. He seemed anxious to check out and confirm once again the hard won agreement between the three powers. Alfieri needed to make sure that Bose was in Rome on 15th and that the flight was to be kept top secret (35). From the German side there was also confirmation on 10th October when the Germans recorded that the Italians had asked Bose to go to Rome for a flight after the 15th October. The actual time of take off depended on favourable weather reports from the Japanese (36).

Ernst Woermann, who was still the main liaison officer with Bose from the German side, noted on the 12th October receipt of information from the Italians and confirmed that Bose would try to be in Rome by the 14th in order to be ready for take off on 15th (37).
But also on 12th October it became clear there was a timing problem. Bose needed to meet Ribbentrop to make his official farewell on the 14th which meant that he would only be able to arrive in Rome on a scheduled flight on the 15th (38). This was a relatively minor issue but other more awkward difficulties were also appearing. A breach of security about the flight took place on this date although it was not apparent to Germany, Italy and Japan at this time. On October 12th an item was published in the Daily Sketch on page 2 in the section headed "Inside Information"(39). After other items of war gossip including Hitler's inauguration of a new religion, Social Catholicism, the article went on to say, "Bose, Indian quisling, is leaving Berlin shortly for Bangkok, Siam, to form there the nucleus of a 'National Government of India', to operate for propaganda purposes and to be in readiness to take over the country when the time is ripe. He is taking with him a number of followers, and will be in touch with the Japanese, with whom Germany has apparently arranged this stunt. Neutral diplomatic circles in Berlin believe that this is really a German Foreign Office method of getting rid of Bose, who has proved more trouble than he has been worth. His broadcasts to India have had poor results. His subsidies have been increased and frittered away. The Wilhelmstrasse want Japan to take responsibility for him." This was clearly a leak about Bose's planned journey but it is unclear who was the source and how the British found out about it. Unaware of this leak the domestic arrangements between Germany and Italy went ahead and on 13th October Woermann noted that he had told the Italians Bose could now expect to be in Rome for the 16th October(40).

Because Oshima had been shut out of all this activity he had to ask Keppler, on 14th October, for information about Bose and his journey. Keppler recorded having explained what was happening. Arrangements were obviously, as planned, being made directly between Rome and Tokyo without including Japan's representative in Berlin(41).

On October 14th Bose met Ribbentrop for his official farewell at the Foreign Minister's headquarters on an armoured train in the Ukraine. Ribbentrop was still unhappy about the idea of Bose flying to the Far East but there was not much in the conversation which would have changed Bose's mind about the wisdom of moving his centre of operations to
the East and having more chance for support from the Japanese. It was clear that Ribbentrop did not feel India was ready for revolution and that, in his view, neither Germany nor Japan intended to invade India. The Foreign Minister felt that both countries would await an uprising before making any move (42). Bose later discussed his meeting with Ribbentrop with the Italian embassy staff and Alfieri sent an account to Ciano on the 16th October. Alfieri saw Ribbentrop as the representative of "anti-Britishness" in the heart of the German government whereas Hitler still had not forgotten his nostalgic "pro-British" leanings (43).

Meanwhile, as the Japanese had suspected might happen, the first suggestions of technical difficulties with the Italian flight plans began to arise and on his return from the Ukraine to Berlin Bose was told that the flight to the Far East was to be delayed for forty-eight hours (44). Bose was keen to go to Rome as quickly as possible but everyone else considered that he should stay in Berlin where security was tighter until the flight was rescheduled. On the 18th October Ribbentrop told Mackensen in Rome that Bose expected to arrive in Rome on the next day to travel to the Far East having been received by Ribbentrop at his field HQ (45) but following this information Alfieri contacted Ciano on October 20th to say that, although Bose wished to leave the next day because the Germans had assured him this was expected, Alfieri would not allow him to do so until he was sure the flight was ready (46). On the same day Woermann noted that he had been made aware of the delay and the need to keep Bose in Berlin for security and safety reasons.

The delay began to look more serious when, on the 20th October, Mackensen told Berlin that there was another postponement for the "Mazzotta" journey. "The flight has run into difficulties from the Japanese side needing a postponement of at least ten days... it will be best for M[Bose] to stay in Berlin and be available on 48 hours notice for the aircraft departure" (47)

To complicate matters further the Germans then became aware of the security problem arising from the Daily Sketch item published on the 12th October. On the 23rd October
Keppler noted this and since the news was in England before Bose had been told of the flight Keppler felt the problem must be in Italy and the finger of suspicion was pointed at the Italian News Agency. This would have begun to put the flight in doubt and became another reason for postponement since the Germans and Italians became aware of it within the delay period brought about by technical problems. It would surely be unwise to fly with the enemy knowing? (48)

It is probably not correct for Keppler to say that Bose did not know and could not have leaked the information because it was published before he was told. He knew in August that he was to be allowed to travel to the Far East and he seems to have been told on October 3rd if not earlier that the flight would be in the second part of the month. Keppler was assuming, as was usual practice for the Germans and Japanese, that the Italians were at fault.

Japan was still continuing to take a positive part in the planning of the flight and a Military Attaché message to Rome concerned the "arrangements for the flight across India"(49). Then despite all the efforts to keep him in Berlin Bose traveled to Rome and on the 6th November Mackensen had to deal with the Italians displeasure at his unplanned arrival. Despite the plan "Bose had arrived today with company". This had not been well received since the arrival was unexpected and the matter of flights to Far East still unresolved(50). Despite protests Weizsäcker refused to become involved and said on the 7th November that the Italian upset was unjustified. Bose had checked with a member of the Embassy in Berlin before travelling and wanted to sort out the Propagandabüro and the movement of Indian PoWs to Germany(51).

Bose's personal presence made no difference to the developments and it now became clear what was at the heart of the delay in the flight's take off for the Far East. There was a dispute involving the lack of appropriate radio navigation equipment in the Rangoon area. On the 12th November it was reported that discussions between the Italian and Japanese air forces were continuing over the Italian's desire for improved technical support on the southern route. The Italians had identified that they needed a radio beacon
on medium wave as well as short wave to be available in Burma(52). On 13th November a Japanese Military Attaché message from Rome to Tokyo gave the "reply from the Italian Air Ministry concerning the second flight by the A plane"(53). But the problem could not be solved quickly and on 15th November 1942 Woermann noted that he had been informed that the Italian East Asian flight was postponed for several months and that Bose would return shortly to Berlin(54).

There were a number of reasons for the delay and eventual cancellation of this flight. There was a possible breach of security from an unknown source, the radio beacon on the right wavelengths was definitely not ready at Rangoon and there were suggestions later reported by Oshima that the Italians lost courage after the TORCH landings and the spread of fighting towards Tunis. The fact that this was seen as an additional problem tends to suggest that the route identified by Vyas for the aircraft namely Rome, Libya, Rangoon may have been correct. If this was the way the Italians expected to route the flights then TORCH and the El Alamein battle really did close down the opportunity. Vyas says that the cancellation of the flight avoided the risk of running into Allied aircraft over North Africa as a result of the follow-up to TORCH and El Alamein. It was on November 4th that Montgomery broke through at El Alamein and on November 8th 1942 that the TORCH landing took place in North Africa. But, on the other hand, Japan and Italy were still talking in January 1943 about a second flight which must have been planned for a more direct route to Rangoon not using North Africa.

It seemed, at the time, as though the problem on the southern route could be solved although there would be a delay. On 16th November 1942 the German ambassador in Rome indicated to Berlin that there would be a three to four month delay in the flight because the "indispensable radio beacon on the medium wave" would take that long to establish(55). But on the 19th November a Japanese Military Attaché message from Tokyo to Rome explained that "Italy was withdrawing men and materials connected with the second A plane" (56). Ott, in Tokyo, was informed of the problems and wrote on the 26th November to the Foreign Ministry taking the view that the Japanese government had not allowed the technical help that the Italians wanted at the airport in Rangoon. Ott
expressed the desire to Ribbentrop that they should return to the idea of developing the air service with German planes. He took the opportunity to point out that nothing had happened since the beginning of September to bring about German flights which would respond to the wishes expressed by the Japanese Army (57).

Foreign Minister Tani who had been trying to get the delegation to Europe in order to counterbalance Oshima's views seems to have been holding back on criticising Oshima directly while the successful arrival of the delegation seemed possible but when it was clear that the flight was delayed and as the news arrived about the encirclement of von Paulus' Sixth army at Stalingrad he gave Oshima a clear view of his feelings. On November 28th 1942 (58) he pointed out that Oshima had been saying there was no chance of Germany wanting to make a separate peace with the Soviets throughout 1942 and that Oshima remained very optimistic about German chances for victory. Tani criticised this view severely and he made a number of very strong statements criticising particularly Oshima's judgement that Germany was well prepared and capable of defeating the Soviet Union, "As for Germany having succeeded in preparing herself for a long war through obtaining essential military materials, what about oil, as just one instance? ....I don't see how you can say she is so prepared." ....."Stalingrad hasn't fallen has it? And the fact that the Germans were unable, with all their might, to take that city is an evil omen." ....."I myself doubt if Germany could even demilitarise the Caucasus; but even if she did, I think we would have slight chance of penetrating into the Near East." The force of this criticism supports the view that Tani was reacting to the failure to get stronger personal representation in Berlin through the inability of the Italians and Germans to deliver an air service. He was also possibly reacting to the part Oshima played in supporting Ribbentrop in damaging the possibility of the "Tenno" flight in September 1942.

After the postponement of the Italian flight Bose was ill for a short period then on December 5th, in a letter to Ribbentrop, he returned to the issue and asked the Germans again for help to travel to the Far East (59). "It is naturally a disappointment for me that at the eleventh hour, my journey to the Far East had to be abandoned, owing to reasons that
were purely technical, though everything possible had been done from the side of the German government to help in the matter. Nevertheless I remain an optimist and have an intuitive feeling that a way will be found to make the journey possible.

I believe that it is technically possible for the German Government to help me travel to the Far East - either by aeroplane or by ship. There is a certain amount of risk undoubtedly in this undertaking but so is there in every undertaking. That risk I shall gladly and voluntarily take....I would be profoundly grateful to Your Excellency and to the German Government for the necessary help in this matter- regardless of the difficulty or risk or inconvenience entailed thereby. And the sooner I could travel the better it would be for India and for the common cause."

After the failure of the Italian flight Bose was turning back to Germany for help. He therefore acknowledged that "Everything possible had been done from the side of the German government to help in the matter."

On December 7th a Japanese Military Attaché message to Rome and Berlin seems to have reviewed the present position on flights between Germany and Japan and between Italy and Japan. This was probably the source of the information which Oshima relayed to Ribbentrop on December 11th (60). It was clear there was still some uncertainty about the value of Bose in Japan and the same uncertainty in dealings with INA and ILL had left the Indian movement in disarray. Japan still wanted to work with Congress and the failure of the Cripps mission and August uprisings had given them more confidence.

At this point the Germans got a fuller picture of the reasons behind the postponement of the Italian flight when Ribbentrop and Oshima met in Berlin on December 11th. Oshima passed on the views of Shimizu, the Japanese military attaché in Rome. According to him the Italians had decided they needed the radio beacon at the last minute. Shimizu thought they could have gone ahead with the existing beacon but Italy wanted one hundred per cent safety. The final rejection of the flight followed the US landings in North Africa when the Italian Air Force lost courage. Oshima was still sure that Japan wanted Bose
and still appreciated his value for the subversion of India. Yamomoto had already left that
day for Tokyo travelling overland and expected to arrive in mid January 1943 and would
be able to represent the "Bose issue" until Bose himself arrived there(61). As we have
seen already the visa delay had held back Yamomoto's departure from August 1942 until
December 11th.

At the end of 1942 Japan was still wanting to press on with the idea of their own
delegation to Berlin. Ribbentrop, in his evidence at Nuremberg, claimed that at this point
"Japan had for a long time desired a compromise between the USSR and Germany which
would allow the Reich to put all its war power against the Anglo/Americans and allow
Japan to consolidate her conquests"(62). According to Mourin a General Uchigawa was
sent to Berlin at the end of December 1942 carrying a proposal by the Japanese that they
should mediate (63) Ribbentrop is said to have asked Japan to contact the USSR about
this but Hitler's response was immediate "This would be a treason against the principles
to which I have consecrated my whole life"

The second Italian flight had been postponed and this delay followed hard on the
footsteps of the cancellation of the German flight in September. Japan continued to press
for news of that second Italian flight and in reply to these enquiries on January 13th 1943
(64) the Embassy in Rome reported that at the end of the year [December 1942] the
Japanese Naval Attache had asked the Secretary to the Air Ministry whether Italy
intended to carry out her second flight. The Italians had apparently not given up the idea
and still intended to make the flight as soon as Japan had completed preparations. The
Italians still felt they needed the beacon station at Rangoon. From their side Japan was
saying that preparations could take 4/5 months and could not give a definite time. Now
the Japanese officials had heard that the Italians wanted to fly at the end of February
having ignored the time scale Japan had set but there was no real progress.

As far as the question of transporting Bose to the Far East was concerned on January 14th
1943 Woermann and Oshima finally sorted matters out with Japan and it was formally
agreed again that Bose was to go to the Far East and now more practically and positively
it was agreed that the Germans were to be asked to take responsibility for working out the form of transport to be used. Woermann's minute (65) recorded the agreement of the Japanese government. "The Japanese government has agreed that Bose should go to the Far East. Until approximately August last year the Japanese government hoped that Nehru or Gandhi perhaps would fit in with their Indian policy. Either is now hopeless and Bose is the only one in contention. The Japanese government asks Germany to find a way to bring Bose to East Asia. On the question of an air service with Japan using the Italian aircraft the Japanese Embassy has the view that the matter is not going forward. There is the particular problem of the radio beacon. The discussions between Japan and Italy on this question are still not complete. So a definite decision is not known."

Japan was still keeping the pressure on to persuade the Italians to make the second flight and had obviously speeded up work on the Rangoon radio beacon because they knew that whatever means the Germans used to carry Bose to the Far East would probably not help the Japanese delegation to get to Europe. But although there were exchanges of messages there was no real sign that the Italians were any nearer making the flight. On January 28th Tokyo explained (66) "re second flight of plane A it is our purpose to have our part of the preparations completed by the end of February". Tokyo had answered other Italian questions on the beacon at Rangoon. The weather would be good until May 1st. According to a message to the Military Attaches in Berlin on 13th February 1943 "Light illuminations, short wave direction finders and beacon offices are being set up at Rangoon"(67) but on the same day it was recorded in a message from Tokyo to Rome that there was "Italian disapproval of the plans for building an aerodrome at Rangoon"(68).

In the absence of the Italian flight, the issue was finally resolved by the Germans and Bose traveled to the Far East by U boat. On 2nd February 1943 Weizsäcker noted that the Japanese Navy was planning to send a submarine close to the African coast to meet with a German submarine and exchange materials. This exchange would take place in April 1943 but there was still some uncertainty at this stage as to whether Bose was intended to be part of this operation (69). There was some precedent for this link up in that the
Japanese had sent a submarine, I30, to Europe in the summer of 1942. The meeting between a U boat and a Japanese submarine was needed because at this time the German U boats did not have the range to go all the way to the Far East. Therefore on February 8th/9th 1943 U180 left Kiel with Chandra Bose and his secretary Abid Hasan Safrani(70).

On February 8th 1943(71) a message to the German ambassador in Rome from Weizsäcker told him that Bose had left on "another route to the Far East - arrival will take some time". The fact of Bose's departure was known only to a small circle. Records of speeches were to be played over the radio to give the impression that Bose was still in Berlin. The cover story would be that Bose was on a sight-seeing tour. The Ambassador was instructed about who could be told.

Eventually on April 26/7 U 180 successfully rendezvoused with I29 in the Indian Ocean off Madagascar and Bose and his aide transferred to I29 during a 10 hour meeting while 2 passengers and gold for the Japanese embassy in Berlin were also transferred to U180. The Japanese passengers heading for Europe included Lt.Cmdr Tomonaga Hideo, expert in submarine construction, who committed suicide at the end of the war in May 1945 on U234 attempting to return to Japan. On May 6th I29 sailed with Bose into Saban where he met up with Yamamoto, the military attaché who had arrived from Berlin, having taken the overland route as a diplomat. On May 16th Bose reached Tokyo. His journey onwards had been delayed because Japan was still testing out support for him in the Indian movement but finally on June 10th 1943 Bose met Tojo and shortly after the meeting Tojo made a very positive speech in his support which finally legitimised Bose's position at the head of the Indian movement with the support of Japan. Eighteen months had passed since Japan had entered the war and Bose had first approached Oshima about going to the Far East. It had not been possible to gain agreement between the three powers on whether Bose could be allowed to leave Europe, on whether he would be welcomed in the Far East and on what form of transport should be used. It is possible that the delay in agreeing to use Bose and to transport him to the Far East meant that the opportunity had been missed to de-stabilise British rule in India at a time of crucial
importance in the war effort.

A submarine had been used as the alternative to get Bose to the Far East but this method still did not satisfy the Japanese need to exert influence in Berlin. There was still no movement on the Italian second flight. Transporting Bose to the Far East was only part of the package for Japan and had a much lower priority than getting the delegation to Berlin.

As we have seen overland travel for diplomatic personnel could be arranged with the Soviet Union although there had been a prolonged dispute and delay during 1942. It would be possible to send a delegation of sorts overland and this was the next step in Japan's efforts to get a firm voice to Berlin to encourage the Germans to consider peace with the Soviet Union. An overland mission led by Okamoto Kiyotomi traveled to Europe across the Trans Siberian Railway from Manchouli on the Manchurian border to Krasnovodsk on the Caspian Sea, across the Sea to Baku and then to the Turkish border and into Germany via Switzerland. It seems that the first decision to send Okamoto to Europe was taken in October 1942 (72). It is likely that visa problems caused the delay. On 8th March 1943 Woermann noted that Okamoto, a former military attaché in Berlin, was on his way from Japan to take up the same position in Berne and to brief attaches in Berlin and Rome(73).

On 10th March the Okamoto party left Manchuria and arrived at the Turkish border on 30th March. The party included the new ambassador for Rome. This was a trip of considerable importance for intelligence gathering but also had the aim of bringing particular issues to the attention of Oshima and Ribbentrop and through them to Hitler. The basic line to be taken by the delegation was that explained by Tani in his October 7th 1942 message to Oshima. On 13th May 1943 Gottfried noted the arrival of the Okamoto mission and that they wanted to meet Ribbentrop. He was concerned about how they would return home because a return overland would not be possible. Gottfried suggested they would need to go by submarine and he noted that Nomura and Woermann had gone this way recently [on U511] and that four engineers were already planned to go on the next submarine (74).
On May 19th 1943 there was a meeting of Oshima and Ribbentrop with Okamoto Kiyotomi(75). The Okamoto mission was to improve links and push for a separate peace but the meeting notes show the lack of mutual understanding. Oshima had to explain that Japan was not willing to attack the Soviet Union but would prefer to mediate peace between Germany and the Soviets. At the same time Ribbentrop urged Japan to attack somewhere because a new attack was needed on the Soviets to relieve the eastern front. Ribbentrop denounced Sato, the Japanese ambassador in Moscow, for urging peace between Germany and the USSR but Oshima had to admit that Japan doubted Germany could beat the USSR and urged her to declare the independence of the Ukraine and the Baltic States as Japan had done with the Philippines. Ribbentrop rejected the idea. Germany did not recognise the true situation in the Pacific and Japan's concerns about the Soviets while Japan never fully understood that racism and expansionism to the East were the key to German policies with no chance of compromise.

Okamoto went on to visit the Eastern Front 8th - 12th June 1943 (76) and Oshima tried to carry these messages forward to a meeting with Hitler on 30th July. Oshima suggested that Germany should "adopt the policy of making peace with Russia". Hitler considered this unthinkable. Hitler's closing remarks as reported by Oshima show the depth of the misunderstanding between the Axis partners and the level of unreality. Italy was likely to pull out of the alliance and Hitler responded:

"That Italian situation is utterly lamentable, but in any case we won't worry too much since our neighbour is all right in peace but weak in war. What an Ally! If we had only had you Japanese in the position of Italy we would have already surely won this fight. Ah well, it only goes to show that the only Soldatenvolker left in this world...[are] the Germans and the Japanese. We strong Japanese and Germans are separated by 10,000 kilometres it is true, but taking the long view this is marvelous....From now on we are going to overcome every difficulty before us and there shall be no fear of a clash of interest - absolutely none. We must stick closely together during war, and in the future we are going to have occasion to work in very intimate unison".
Oshima recorded that he replied: "The Japanese government feels exactly as you do" and that "I told him that a number of times"(77).

So much for an independent presentation of Japan's position in Berlin! Oshima's confidence was untouched by the criticism he had received from the Foreign Minister.

Notes to Chapter 5
1 Public Record Office, Kew, London. Captured Germany Foreign Office documents
PRO GFM 195/139767/8, letter to Bose from Ribbentrop, 2nd August 1942
2 National Archives Washington Record group 457 MAGIC Summaries – daily summaries of significant Japanese messages intercepted and decoded. SRS 23rd July 1942
3 Supplement to SRS July 30th 1942 and SRS July 31st 1942
4 PRO GFM 195/139769/70, memorandum from Woermann, No 531, 3rd August 1942
5 PRO GFM 195/139771, memorandum from Woermann, No 535, 3rd August 1942
6 I Documenti Diplomatici Italiani Nona Serie 1939-43 – published Italian Foreign Office documents. IDDI vol VIII document 667, diplomatic telegram, Tokyo, Indelli to Ciano in Rome, 1st July 1942
7 SRS August 5th 1942
8 PRO GFM 195/139787, memorandum from Woermann to Ribbentrop, No 550, 8th August 1942
10 SRS August 10th 1942
11 SRS October 7th 1942
12 PRO GFM 195/139839 and IDDI vol IX 45, diplomatic telegram, Berlin to Rome, 17th August 1942
13 PRO GFM 21/13605/6, diplomatic telegram, Rome to Berlin, No 3125, 21st August 1942
14 PRO GFM 195/139868, memorandum by Etzmannsdorf, No 57, 24th August 1942
15 Bletchley Park Archive. This is a card index logging messages intercepted and decoded between the Japanese Military Attachés in Berlin and Tokyo.
Bletchley Park card index JMA 108 ref to ZIP 781
16 IDDI vol IX 111, diplomatic telegram, Alfieri, Berlin to Rome, 9th September 1942
17 Bletchley Park card index JMA 108 ref to ZIP 1315
18 IDDI vol IX 117, message to Bose from Rome, he should not go to Libya, 11th September 1942
19 PRO GFM 23/14369, diplomatic telegram, Mackensen, Rome to Berlin, No 3638, 24th September 1942
20 Message ref 729 September 22nd 1942 quoted in PRO GFM 18/10789, Rome to Tokyo, No 729.
21 PRO GFM 18/10791, diplomatic telegram, Tokyo to Rome, No 621, 24th September 1942
22 Vyas (MR) Passage through a turbulent era Bombay 1982
23 IDDI vol IX 182, diplomatic telegram, Rome to Alfieri, Berlin, 3rd October 1942
24 Bletchley Park card index JMA 108 ref to ZIP 1148
25 IDDI vol IX 188, diplomatic telegram, Berlin, Alfieri to Rome, Ciano, 5th October 1942
26 Bletchley Park card index JMA 108 ref to ZIP 778
27 Krammer 1976 op cit p 5
28 NARA RG 457 SRDJ 27037, Tokyo, Tani to Berlin, No 740, 7th October 1942
29 SRS October 15th 1942
30 SRS October 21st 1942
31 NARA RG 457 SRDJ 27037 op cit
32 ibid SRDJ 27065, diplomatic telegram, Tokyo, Tani to Berlin, No 741, 7th October 1942
33 IDDI vol IX 201, diplomatic telegram, Rome, Ciano to Berlin, Alfieri, 9th October 1942
34 IDDI vol IX 203, diplomatic telegram, Berlin, Alfieri to Rome, Ciano, 10th October 1942
35 IDDI vol IX 205, diplomatic telegram, Rome to Berlin, Alfieri, 10th October 1942
36 PRO GFM 195/139946, diplomatic telegram, Rome, Mackensen, to Berlin, No 3952, 10th October 1942
37 PRO GFM 195/139955, memorandum from Woermann, No 639, 12th October 1942
38 PRO GFM 195/139956, ibid, No 640, 12th October 1942
40 PRO GFM 195/139957, memorandum from Woermann, No 646, 13th October 1942
41 PRO GFM 195/139960 memorandum from Weizsäcker, No 614, 14th October 1942
42 ADAP E vol IV 50, notes of a meeting between Bose and Ribbentrop, 14th October 1942
43 IDDI vol IX 229, diplomatic telegram, Berlin, Alfieri, to Rome, Ciano, 16th October 1942
44 PRO GFM 195/139962, memorandum from Woermann, No 649, 15th October 1942
45 PRO GFM 195/139972, diplomatic telegram, Berlin to Rome, No 1338, 18th October 1942
46 PRO GFM 195/139975, memorandum from Woermann, No 675, 20th October 1942
47 PRO GFM 195/139979, diplomatic telegram, Rome, Mackensen, to Berlin, No 4125, 20th October 1942
48 PRO GFM 195/140006, memorandum from Keppler to Woermann and Weizsäcker, 23rd October 1942
49 Bletchley Park card index JMA 108 ref to ZIP 1047
50 PRO GFM 195/140019, diplomatic telegram, Rome, Mackensen to Berlin, No 4417, 6th November 1942
51 PRO GFM 195/140020, memorandum from Weizsäcker, No 133/42, 7th November 1942
52 PRO GFM 195/140025, diplomatic telegram, Rome, Mackensen, to Berlin, No 4501, 12th November 1942
53 Bletchley Park card index JMA 108 ref to ZIP 790
54 PRO GFM 195/140026, memorandum from Woermann, No 753, 15th November 1942
55 PRO GFM E48968, diplomatic telegram, Rome, Mackensen, to Berlin, No 4553, 16th
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56 Bletchley Park card index JMA 108 ref to ZIP 1393
57 PRO GFM 901/297769, Tokyo, Ott to Berlin, No 3654, 26th November 1942
58 NARA RG 457 SRDJ 29010-11, Tokyo, Tani to Berlin, Oshima, No 903, 28th November 1942
59 Bose (S C) *The Indian Struggle 1920-1942* compiled by the Netaji Research Bureau Calcutta 1964 p 461
60 Bletchley Park card index JMA 108 ref to ZIP 072
61 ADAP E vol IV 275, notes of meeting between Ribbentrop and Oshima, 11th December 1942
62 Mourin 1949 op cit p 141
63 ibid
64 NARA RG 457 SRDJ 33942, diplomatic telegram, Rome to Tokyo, No 018, 13th January 1943. See also Bletchley Park card index JMA 108 ref to ZIP 931
65 ADAP E vol V 41, memorandum from Woermann, No 32, 14th January 1943
66 NARA RG 457 SRDJ 34350 diplomatic telegram, Tokyo to Rome, No 53, 28th January 1943. See also Bletchley Park card index JMA 108 ref to ZIP 1833
67 Bletchley Park card index JMA 108 ref to ZIP 383
68 ibid ref to ZIP 440
69 PRO GFM 195/140161, memorandum from Weizsäcker, No 76/220, 2nd February 1943
70 The full story of the voyage is told in Bose (Sisir K) and Werth (Alexander) eds *Beacon across Asia* Delhi 1973. There are photographs of the two passengers on the U boat and crossing to the Japanese submarine during a ten hour rendezvous off Madagascar in April 1943.
71 ADAP E vol V 107, diplomatic telegram, Berlin, Weizsäcker to Rome, 8th February 1943
72 Bergamini (David) *Japan's Imperial Conspiracy* New York 1971 p 61
73 PRO GFM E489852, memorandum from Woermann, No 166, 8th March 1943
74 PRO GFM 27/17214/5, memorandum from Gottfriedsen, 13th May 1943
75 PRO GFM F13/119, notes of a meeting between Ribbentrop, Oshima and Okamoto,
19th May 1943
76 Boyd 1993 op cit p 84-95
77 NARA RG 457 SRDJ 41747/8, diplomatic telegram, Berlin, Oshima to Tokyo, 30th July 1943, quoted in Boyd 1993 op cit p94.
Chapter 6
Trying Again 2: Germany from January 1943 to December 1943

Oshima and Lufthansa had continued to remain in contact during the autumn of 1942 following Hitler's decision to halt the German contribution to the air service project. Their aim was still to develop flights using the Blohm und Voss BV 222 preferably using aircraft which had been sold or given to Japan. A first consignment of replacement engines and spare parts for the BV 222 to allow engine changes and maintenance in Japan had already been sent out on a blockade runner which was lost in the winter of 1942(1). But the Germans were still not united in their determination to develop the air route to the Far East. Although the Foreign Office and Lufthansa were still keen to explore the air service possibilities and confident that a route could be developed there were still strong factions in the Luftwaffe which did not consider this venture an appropriate use for the few long range aircraft available.

There is some evidence that in the spring of 1943 there were contacts on the issue of a separate peace between Germany and the Soviet Union. It may be that this was an added stimulus for Japanese involvement in plans for the Far East flight at this time(2).

The Junkers Ju 290 which would have been particularly suitable for long range transport flights to the Far East became available at the end of 1942 but there was bound to be competition to use this aircraft which could also fulfil a number of other roles for the Luftwaffe. This problem had been foreshadowed in Milch's meeting on October 20th 1942 before the first Ju 290 was even in service. Milch had reported to his staff that Hitler had made the decision not to allow flights to Japan for the time being and they believed this would release the newly available Ju 290s to become a maritime reconnaissance aircraft in the Atlantic. The first pre-production Ju 290 had been due to make its maiden flight and at that time the aircraft had been developed as a transport. The first versions delivered were, in fact, thrown, as transports, into the support for the encircled Paulus and his Sixth Army at Stalingrad and destroyed. There was also discussion at this meeting concerning the development and use of the Junkers Ju 390(3).
On January 2nd 1943 Luft Transport Staffel 290 was formed at Tempelhof, working under the High Command, and it received the first production Ju290s. Hptmn Heinz Braun was the commander. We can begin to track the emergence of a small group of Luftwaffe pilots with great experience of long range and multi engine work. Walter Blume and Rudolf Mayr, for example, both from Lufthansa were involved in endurance flight testing of the BV 222 in September 1942. A pilot called Mayer was mentioned in the discussions on the BV 222 flight in August 1942. Rudolf Mayr went on to be part of the test pilot team for the Junkers 390 (4). Heinz Braun was involved in LTS 290, and then FAG 5 and KG 200.

Views were changing about what were feasible routes and although Lufthansa had been willing in June 1942 to discuss and consider plans to fly over the southern route this did not now look such a reasonable option. On 25th January 1943 Oshima sent a message to Tokyo and the contents were reported in the SRS of February 16th(5). The same message was also included in the key documents forwarded to Winston Churchill. The report followed a meeting with a Lufthansa official who Oshima quoted as having said:

"a) the southern route from Rhodes to Rangoon is now out of the question since

1 it would be too dangerous to fly over Egypt now that Rommel has been driven out

2 the distance Rhodes to Rangoon is too great

3 Anti-aircraft defences in India and the Near East are stronger than ever

b) the only possible route is Rostov to Pao Tow - 5,500 Km (3440 miles) - which would take 17 or 18 hours

c) the aircraft would be the Fw 200B landplane. This plane has been remarkably improved with a range of 7,000 KM non stop(4375 miles) carrying 1000 kilos payload."
The Luftwaffe has a large number already. There would need to be four to support one flight per week but we could start with two. The aircraft would be unarmoured [unarmed?] to give a maximum payload

Oshima recorded that his response was non-committal because Japan would have liked to have control of the project and would have liked to be able to send her own planes to Europe. Japan wished to purchase aircraft from Germany to allow her to do this and Lufthansa welcomed this idea but first they would need to get the aircraft released by the Luftwaffe and this would, again, bring them up against the Luftwaffe views about the proper use of military aircraft and the priority for the use of long range aircraft elsewhere. This would almost inevitably lead to a refusal. The discussion continued because on 27th January an Attaché message went to Tokyo from Berlin and was logged at Bletchley Park on "discussions to improve communications between Japan and Europe"(6). The Japanese were looking with keen interest at available long range German aircraft. On February 4th and again later in the year on 28th June reports went from the military attaches in Berlin to Tokyo on the development of the Me 264(7). On the 18th February the Attaches in Berlin received information from Tokyo on a "contract for the purchase of a new Kondor plane"(8)

Further stimulus for re-opening the air service discussion was recorded in the Milch archives on 25th February 1943(9). At this time Milch received from Weizsäcker, in the Foreign Office, the half yearly report covering June to December 1942 for the commission concerned with technical aid to Japan. In addition to recording the Japanese inspection of the FW 200 at Kottbus in July 1942, an inspection of the BV 222 in Hamburg in October 1942 and an inspection of the Me 264 at Augsburg in November 1942, the report also made it very plain that out of the many items ordered by the Japanese hardly any had been delivered. Part of the problem was the reluctance of German manufacturers to trade their high technology to the Japanese without payment. German arms manufacturers remembered with considerable bitterness the loss of the markets in China when Japan forced Germany to withdraw support for the Chinese in 1938. Chapman (10) describes the similar problems which arose from the desire of the
Japanese Military Mission to acquire weapons technology and the synthetic fuel processes. After many months of negotiation the IG Farben fuel process was finally handed over to Japan in January 1945(11).

This report on activity or rather the lack of activity in the second half of 1942 which underlined the inadequacy of the actual transfer of technology to Japan could well have been a trigger for the correspondence between Milch and Weizsäcker beginning March 1st 1943 which tried again to push forward the idea of German participation in the development of an air service. It had been said in September 1942 that it might be reasonable to suggest a review of Hitler's decision in March 1943 and discussion with Oshima, as we have seen, had been continuing. Also on 25th February an Attaché message to Tokyo from Berlin intercepted and decoded at Bletchley Park discussed the "prospects of Germany/Japan air link" (12).

In the meantime, we can see the gradual development of the resources available to support a flight. By March 1943 LTS 290 was at Grossetto flying supplies in the Mediterranean theatre and Heinz Braun was in charge under command of the Luftstransport Führer Mittelmeer. The group had a very mixed bag of heavy and four engine aircraft. Deliveries of Ju 290s had been slow and by 31st March 1943 the roster was:

2 Ju 290s
1 Ju 252
1 FW 200

(13)

Lufthansa was continuing to take an interest in developing an air service. The issue of replacement engines and spares had been tackled once although the shipment had been lost. It was this aspect which had been used as a reason for the rejection of the project in September 1942. The point which had been made then was that Goering was unable to guarantee the aircraft, the BV 222 at that time, and had doubts about the repair in Japan of any damage suffered on the outward flight. As we have seen in the Lufthansa study in

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January 1942 there would certainly be a need to change engines for the BV 222 in Japan because the engine life between overhauls was 30 to 40 hours.

In response to this and possibly the report on the lack of action on the transfer of technology to Japan, Weizsäcker noted on 1st March 1943 that he had spoken to Milch about the urgency of establishing the air service to Japan and found that Milch was not personally against the idea. Milch had explained, on the contrary, that spare engines to support the air service could be transported to Japan at any time and that engine changes could be carried out in Japan. But Milch had made it clear that to move forward would require Ribbentrop to gain positive support from Hitler which would over-ride the current agreements between Goering and Hitler not to support the idea of flights(14). Weizsäcker appeared to have successfully gained Hitler's support in this because on 5th March 1943 he wrote to Milch, "After I reported to the Foreign Minister about our recent talk about establishing an air service to the Far East the Minister discussed this with the Führer. The Führer declared that the service should be set up. The Minister had mentioned that it was likely the Condor machine would be considered. Another possibility would be the use of the flying boat. It was likely that whichever type was used would need spare engines sent to the Far East following your advice. The Minister gave me the job of speeding up the introduction of the service. I should be grateful for an announcement on when the first flight is likely to take place. I would like to have a personal discussion when you return to Berlin"(15).

Oshima was coming under pressure again to attempt to stimulate some German activity. In a Japanese message on March 6th 1943 (16) Foreign Minister Tani, referring to two of Oshima's messages, told him that the Japanese were working on their own flights and asked him again to press Germany on their flights. Tani wrote "We too realise that Japan and Germany ought to have aerial liaison and we are trying to find a way to use planes of our own"... "However we don't want any trouble with the Soviet and in any case we would not think of flying over the territory of that Union. If we permit Pao Tow to be used it would lead, of course, to Germany's passing over Russia. I know you already realise this but anyway get it well in mind and see if you can't get the Germans to

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consider getting some long-flight airplanes ready and taking the usual course. I know it is very hard for them to do this but talk to the people concerned, especially German Air officials and see if you can't convince them."

Planning for a flight continued with enthusiasm on the part of the Foreign Office because on the 12th March Weizsäcker notes that he had followed up the letter with Milch. He had phoned Milch on the 8th March to check he had received the letter. Milch, just returned from Führer HQ, had already had knowledge of it and had pointed out to the Reichsmarshall that the Führer order meant there had to be action. Milch said that the spare engines were already on their way to the Far East for the flying boat or the Condor (17). According to Chapman the blockade runner Osorno left Bordeaux on 29th March 1943 carrying aero engines and spares(18).

Following the maneuvering by Weizsäcker and Milch Ribbentrop wrote formally, on the 18th March, to Goering on the subject of starting up flights. He went through the discussions which had taken place and the reasons why a flight would be valuable. He pointed out that he was writing personally because they had received no confirmation from the Reichsminister that anything was happening and he asked when the first flight would take place(19).

This initiative also seems to have disappeared without trace and nothing happened of any significance. Once again the Foreign Office, Lufthansa and Oshima could not persuade Goering to release the resources needed for a flight. Goering still, in the end, was powerful enough to hold his position despite agreements that Ribbentrop might believe he had made with Hitler. Meanwhile the scarce long range aircraft were being used for what was considered a more important strategic purpose. From April 1943 LTS 290 was re-designated as LTS 5 when the remaining Ju 290s were transferred away from the transport unit to carry out maritime reconnaissance over the Atlantic as Fernaufklärungsgruppe 5. By 30th April 1942 the roster for LTS 290/LTS 5 was:

1 Ju 290
FAG 5 moved to Mont de Marsan in France in July 1943 and became operational on October 15th 1943. Ju 290s were, therefore, no longer easily available for transport purposes. There were 2 Ju 290s with FAG 5 initially and this built up to 17 on the roster in May, June and July 1944. At the same time LTS 5 became the home for other major four engine and heavy transports. After the loss of the Ju 290s it continued with eight Ju 90s but was down to 5 aircraft in October 1943 when the force was added to by the allocation of Piaggio Pi 108s made available through Italy's surrender.

Discussions continued despite the failure to move Goering and a Japanese Military Attaché message from Berlin to Tokyo on 18th May 1943 records a German proposal to hand over flying boats to Japan. Further discussion on the same issue was recorded in the message of 2nd June 1943 and in the 28th June Military Attaché message from Berlin to Tokyo on the cancellation of the contract with Focke Wulf.

Messages for Lufthansa from Tokyo were, it appears, sent via the Foreign Office and there was often a delay in passing them on. Kaumann, the Lufthansa representative in Tokyo, sent a message dated 26th June 1943 from Tokyo which was passed to the Air Ministry on the 7th of September and actually arrived with Lufthansa on the 17th September after a delay of nearly three months. Kaumann had discussed flights with the Japanese civil aviation office in Tokyo. There was still no possibility of compromise over flying over Russia but the Japanese wanted again to consider purchasing German aircraft to make flights since no suitable Japanese aircraft was available. Obviously they had the Tachikawa Ki 77 which was just ready to depart on the flight to Berlin but there were only two examples of this aircraft available. Perhaps the Japanese realised that they were unlikely to be able to produce the numbers of aircraft with the load carrying capacity needed for an air service. As we have seen already it was believed that the idea of purchasing aircraft and flying them under the Japanese flag could help overcome the neutrality issue and permit flights over Soviet territory but there is no evidence that this
idea was explored with the Soviet authorities. As we have seen from the Military Attaché messages the Japanese side were already discussing the possibility of taking over German flying boats on 18th May 1943 and there had also been similar talks in July and August 1942.

In the message of 26th June the Japanese listed with Kaumann three possible routes: The central route, now being called "Gablenzweg" out of respect for the dead pioneer and explorer, a southern route now using the Andaman Islands as a staging point and the northern route now identified as from Sakhalin to North Norway. The message put the emphasis on the northern route(25).

On October 1st 1943 Lufthansa completed yet another report on the feasibility of the flights which referred back to a previous study they had carried out on 2nd December 1942. The routes would be from Kirkenes or Kemi in Scandinavia to Sakhalin or from Rostov or Kirovgrad to Pao Tow without the detour over the Pamirs and possibly using the harbour at Simferopol in the Crimea. It was now necessary to include the capability of the Ju 290 alongside the FW 200 and BV 222. The BV 222 was suitable for both the northern and southern routes(26). After some exchange of internal memos on October 13th 1943 Lufthansa replied to the Air Ministry on the matter and requested a meeting to agree a reply to Kaumann and the Japanese(27).

Meanwhile the Japanese were still gathering information on long range German aircraft. Attaché messages on 14th October included reports on four engine and six engine German aircraft. The six engine aircraft was likely to be the Ju 390(28).

More background work was done by Lufthansa and recorded in reports on 21st October and 25th October. These expanded on the work already done in December 1942 and the report produced on October 1st 1943. Tables and a map showing the routes and the capacities of the different aircraft were sent to the Air Ministry. The Germans were very unhappy about the southern route because of the heavy military activity in the area. For the northern route they preferred the BV 222 and for the overland, central route the Ju
290 or FW 200. Two BV 222s were currently available at Bordeaux fitted with Bramo Fafnir motors while two later versions were fitted with diesels giving a speed of about 50 Km per hour less(29). The BV 222s at Bordeaux were part of Aufklärung Staffel See 222 which had been established in May 1943 at Biscarrosse, a salt lake south east of Bordeaux some forty miles from Mont de Marsan, the air base which housed the Junkers Ju 290 units operating over the Atlantic. The first versions of the BV 222 with diesel engines had been introduced from April 1 1943 with the aim of gaining in endurance and by this stage in the war there were four BV 222s available(30).

On the 6th November 1943 the proposal for the flight to the Far East was discussed with Admiral Groos, Chairman of the Military Commission of the Tripartite Pact. He made again the points which had been used to reject these proposals in the past. He favoured the idea of a regular air service but not one-off propaganda flights. This was the same point made in August 1942 by the Luftwaffe. He also mentioned problems over the availability of suitable aircraft and the conflicting demands of the military especially the Navy. The flights would be valuable but not at this time(31). The point about the conflicting demands on the available aircraft was supported by the fact that FAG 5 equipped with Ju 290s and working over the Atlantic became operational in October 1943 and the BV 222s had also become part of a maritime reconnaissance unit in May 1943. But Lufthansa continued to work on the possibility of carrying out flights and on November 22nd 1943 wrote to the Air Ministry with further feasibility reports and requesting meetings to draw up a reply for Kaumann and the Japanese authorities. The feasibility report said strongly that the northern and middle routes could be developed with existing aircraft and navigational techniques without particular difficulty(32). But finally on the 29th November a telephone discussion took place which was recorded in a note on 30th November and which stopped the developments. Lufthansa were told that it would not be possible to deliver aircraft to Japan for the Far East flight and a message to this effect went to Kaumann on 13th December 1943(33).

Notes to Chapter 6
1 Chapman (John W) The origin and development of German and Japanese military
2 Weinberg 1995 op cit pp 610/11
3 Imperial War Museum, London. Milch papers vol 16 GL Besprechung reel 20 pp 2832/41
4 Kössler and Ott 1993 op cit p 100
5 National Archives Washington Record group 457 MAGIC Summaries – daily summaries of significant Japanese messages intercepted and decoded. SRS February 16th 1943
Also in Public Record Office, Kew, London, Government Code and Cypher School:
Signals Intelligence passed to the Prime Minister. PRO HW 1/1287
6 Bletchley Park Archive. This is a card index logging messages intercepted and decoded between the Japanese Military Attachés in Berlin and the Foreign Office in Tokyo.
Bletchley Park card index JMA 108 ref to ZIP 1765
7 ibid ZIP 2082 and 2746
8 ibid ZIP 497
9 Milch papers - vol 56 reel 4 pp 2631-47
10 Chapman 1982 op cit vol 1 pxxi, various entries for December 1940 to April 1941
Vols II and II, Vol III notes and documents pp 534/42
11 Meskill 1966 op cit pp 161/72
12 Bletchley Park card index JMA 108 ref to ZIP 593
13 Kössler and Ott 1993 op cit p 238
14 Public Record Office, Kew, London. Captured Germany Foreign Office documents. PRO GFM E489831, memorandum from Weizsäcker to Ribbentrop, No 130, March 1st 1943
15 Akten zur deutschen aüswardigen Politik 1918-45 Series E – published German Foreign Office documents. ADAP E vol IV 180 and PRO GFM E489862, letter to Milch from Weizsäcker, March 5th 1943
16 National Archives, Washington, Record Group 457, Japanese diplomatic messages intercepted and decoded. NARA RG 457 SRDJ 32785, diplomatic telegram, Tokyo, Tani to Berlin, No 152, 6th March 1943
17 PRO GFM E489861, memorandum to Ribbentrop from Weizsäcker, 144/233, 12th
March 1943
18 Chapman 1967 op cit table 1
19 PRO GFM 983/304084, memorandum to Goering from Ribbentrop, 18th March 1943
20 Kössler and Ott 1993 op cit pp 238/9
21 ibid
22 Bletchley Park card index JMA 108 ref to Zip 231
23 ibid Zip 2491
24 ibid Zip 2098
25 Lufthansa Archives, Cologne. Letter headed "Auswärtiges Amt" dated 7th September 1943 copying the message from Kaumann. From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.
27 Lufthansa Archives - letter dated 13th October to Herrn Reichsminister der Luftfahrt, headed Fernostflug. From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.
28 Bletchley Park card index JMA 108 ref to Zip 3353, 3850, 4082
29 Lufthansa Archive - file note dated 21st October 1943. Also a brief report dated 25th October 1943. Title "Luftverkehr Japan - Deutschland". There is a table showing the northern and middle routes. An explanation points out that the southern route is too dangerous because of military activity. There is also a map showing alternative starting points for the northern route at Kirkenes and Kemi, alternatives for the middle route - Kirowograd to Paotow or Odessa to Hankau, and a southern route from Odessa to the Andaman Islands in the Indian Ocean. From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.
30 Green 1970 op cit p 94
Lufthansa Archive - covering letter to Herrn Reichsminister der Luftfahrt headed "Fernostflug" and report dated 18th November 1943. Title - "Weitere Untersuchungen zu den Möglichkeiten einer Luftverkehrsverbindung nach Fernost". From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.

Lufthansa Archive - file note of telephone conversation dated 30th November 1943. From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.
Chapter 7

Trying Again 3: Japan takes a hand January 1943 to July 1943

Following the failure of the Italians to repeat their successful flight in the autumn of 1942 and as a result of the continuing difficulty in getting the Germans to provide an air service the Japanese stepped up their own efforts to produce an aircraft capable of making the flight. They already had a suitable aircraft in the Tachikawa A26/Ki 77, which, as we have seen in Chapter 1, was originally intended as a record breaking aircraft, which would have flown from Tokyo to New York non stop in 1940 as a celebration of the 2600 years of the Japanese Imperial Dynasty. Dr Kimura, the designer, drew on his experience of other ultra-long range projects in attempting to meet three key specifications - a range to exceed 9320 miles without refueling, a speed of over 186 mph and an ability to fly in the sub stratosphere to allow research for a future stratospheric transport. As a result of difficulties with the construction of a fully pressurised cabin it became necessary to plan for the aircraft to be able to fly at 27,000 feet with the crew on oxygen throughout the flight. Detailed design work had begun in the autumn of 1940 but the build up to the Pacific war meant that the manufacturing company, Tachikawa, had to concentrate on military aircraft.

The June 1942 Liaison Conference in Japan was concerned with the need to send delegations to Berlin to negotiate a separate peace between Germany and the Soviet Union. This pressure also affected the development of this aircraft. "Suddenly in the early summer of 1942 the Army ordered Tachikawa to resume construction of the A26 immediately and the aircraft was allocated the highest manufacturing priority. Whereas the original plan had called for the highest possible standard of workmanship, the accent was now on speed."(1). This would also have been a response to the successful Italian flight, Japan's success in the Indian Ocean and German success at Tobruk. These were the same stimuli which encouraged the Japanese approach to Germany about their supporting a "Tenno" flight in July 1942.

By September 1942 the Ki-77 I, the first prototype, was completed and tests began. In October there were ground trials which showed up design faults. The engine cowlings
overheated which caused fires and this problem delayed the first flight. The lack of progress possibly created the pressure to send a Delegation on the return leg of the Italian flight planned for October 1942. Japan was working to use all the available options to get a Delegation to Europe. On 16th November 1942, the same day that the Italian second flight was indefinitely postponed and following the failure of the Germans to carry out the "Tenno" flight, a message was sent from Kaumann, the representative of Luftansa in Tokyo and Ambassador Ott, to Luftansa in Berlin. They indicated that Japan was still keenly interested in flights and they suggested that the capability to make the flights was already there in Japan. The evidence they put forward was that for some time there had been flights to Singapore twice a month, a journey, non stop, of 5,000 Km, which was the same sort of distance as that from Pao Tow to Eastern Europe. According to the Germans these flights apparently used captured Boeing B17s and Douglas DC 4Es built under license by Nakajima (2). This was a misunderstanding of the situation by the German representatives. This air route to Singapore is mentioned in an SRS of 9th April 1943(3). According to the US intelligence officers, Tokyo radio had announced on 23rd March 1943 that flights would start from April 1st 1943 between Manchukuo, China and Japan and also regular flights to the Philippines, French Indo China, Thailand and Malaya. Japanese Imperial Airlines were establishing a route from Japan to Singapore and Bangkok. (4). Further messages made it clear that the Japan/Singapore route had stops at Taihoku on Formosa, Canton, Hainan Island and Saigon. There had been considerable reluctance on the part of the Japanese to restart commercial flights. On 28th September 1942 Tani, as Foreign Minister, had explained to the Thais that no air routes could be re-established because of shortages of fuel and planes and again on November 4th 1942 the Thais had been told there was no fuel or planes for an air service.

A route from Japan to Singapore with stops as described would not have needed long range aircraft. It may be that the German officials misunderstood what was being discussed and assumed the flights were non-stop. At the same time there appears to be no evidence of the use of captured B17s or of the DC4E as transport planes by Japan. As we have seen in Chapter 1 the prototype Douglas DC4E, a four engine airliner, was bought from the USA in August 1939 and dismantled as part of the development process for the
Despite this misunderstanding the German officials were correct in recognising Japan's desire to make a flight. The real opportunity for the project depended on the development of the Japanese aircraft and on November 18 1942, according to its designer Dr Kimura, the Ki 77-1 made its first flight. The pilots were Kamada and Nagatomo. In January 1943, again according to Dr Kimura, there was a test flight of the Ki 77-1 between Tachikawa and Fukuoka.

Oshima was still under pressure from the Foreign Ministry to pursue the idea of mediating peace between Germany and the Soviet Union. On January 12th 1943 he was advised to discuss the idea of separate peace again with the German government(5). From December 1942 and through the spring of 1943 there was strong agreement amongst the Japanese diplomats that Germany was following the wrong course on the Eastern Front. A Circular from Tokyo to all embassies in January 1943 was entitled "Germany cannot defeat Russia"(6).

Discussions with Germany and Italy continued while the Japanese worked on their own flight. German interest in carrying out flights during the spring of 1943 mainly came from Lufthansa and was continuing but with no real action(See Chapter 6 Trying Again 2). At the same time in January 1943 the Japanese were continuing to follow all the options by pressing the Italians for information on their plans to fly again to Japan. The radio beacon at Rangoon which had been requested by the Italians in November 1942 would be in place by February 1943 but nothing had been heard from the Italian side. Was this the result of a loss of nerve as the Japanese official had reported, or a realistic outcome of the loss of the staging point in North Africa and the increased air activity in the Mediterranean resulting from TORCH and the succeeding operations? Japanese enquiries to Italy about progress continued(See Chapter 5 Trying Again 1).

The Japanese were clearly losing hope of any Italian flight and saw no positive outcome from Lufthansa efforts. To be fair the German side, particularly Lufthansa, had said that...
it would not be possible to consider asking Hitler to reverse his decisions against the air service project before March 1943. Meanwhile the Japanese aircraft was itself proving to be a success and in February 1943 the Ki 77-1 made a ten hour test flight. In a Japanese message on March 6th 1943 (7) Foreign Minister Tani referring to two of Oshima's messages told him that they were working on their own flights and asked Oshima again to press Germany on their flights. As we have seen in Chapter 6 Tani had reiterated that there was a desperate need for aerial liaison but that any route had to avoid Soviet territory. At the same time he explained that Japan was trying to use her own aircraft but that Oshima should still try to get active German co-operation on providing aircraft for flights.

The German officials in Tokyo had some idea of the development of the Japanese project. On 16th March 1943 Kaumann, Lufthansa's representative in Tokyo and Ambassador Stahmer sent a message to Lufthansa in Berlin. They understood that the Japanese wanted flights as soon as possible (8) and that they were preparing to use their own plane subject to testing. The Japanese were determined it should be a civilian flight and could be developed using the airline agreement between Japanese National Airline and Lufthansa from 1936/9 as the base. Stahmer added that the Japanese Army were working on the flight under much pressure from Japanese dignitaries (9).

von Gronau, the Air Attaché in Tokyo at the time, explained in his autobiography that he was quite clear that the Japanese flight was intended to help bring about an armistice between Germany and the USSR (10).

The information the Germans had was not complete at this stage. On 26th March 1943 Stahmer and Kaumann wrote to Lufthansa in Berlin and explained that the Japanese Army with the support of the Foreign Office was working on a flight. It was the view of the German officials that the route from Pao Tow over Turkestan to South East Europe seemed most suitable (11). This route would, in fact, have been totally unacceptable unless it avoided Soviet territory and the Germans still did not seem to understand this. Every piece of evidence suggests that the southern route was the only option being
Development of the Japanese aircraft continued. On April 20th 1943 the Ki 77-1 flew from Fussa, now Yokota, to Singapore, a journey of 3,500 miles in 19 hours 13 minutes. Also in April the second prototype, Ki 77-II, was completed and by May the Japanese were making clear arrangements with Germany for the flight. On May 16th 1943 a message went to Berlin (13) to the Military Attaches. "We should establish an airline between the three countries. Based on the following specifications it has been decided to begin the operation of an Asia-Europe airline. We would like to have you make representations to the German Air Force in accord with our following wire and wire us the result.

1 Looking towards the establishment of an Asia-Europe military airline, let us immediately make a trial flight.

2 Plan to make this flight in June, the exact time to be determined later.

3 The route both ways to be Tokyo, Singapore, Crete or Crimea, Berlin.

On the outward bound flight the plane will leave Tokyo on the first day, arrive in Singapore on the second day, leave Singapore on the third day and arrive at the Island of Crete or Crimean Peninsula on the fourth day. It will reach Berlin on the fifth day. The return will correspond to the outward flight. However on either the outward or return the stop at Crete or Crimea may be omitted according to the situation at the time.

6 This plane will be referred to as the SE plane (in German this will be GOA)"

Following this there was the first of a series of detailed messages giving technical information(14). The first message carried instructions on weather forecasts, fuel types and wireless information. The take off time was to be known as Y and from Y+15 hours the Japanese would want weather information at landing fields and for Berlin broadcast
every hour on the hour.

These messages went to the Military Attachés in Berlin and were confirmed by the German officials in Tokyo on the 19th May 1943. According to the German Embassy a Japanese Army flight was being prepared for the month of June and the Japanese were asking for agreement and support. The flight was planned to go from Singapore towards Crete or the Crimea. The Japanese were asking for information on a possible route to avoid threats of enemy action, information on airports with 1500m long runways, details on weather forecasting information and its transmission. The same information was sent to Komatsu, the Military Attaché, and the message was signed by von Gronau and Ambassador Stahmer (15).

On the same day a message from Shigemitsu to Oshima, which was referred to in the SRS June 1st and June 13th (16), told Oshima that the Japanese Army was working on flights over the southern route from Rangoon to Rhodes. The Army had already begun to talk to the German Military Attaché in Tokyo. "We have just carried out some long distance flights and the results have been good" - see above April 20th when a non stop flight of 3,500 miles to Singapore had already been carried out - "The next thing we want to do is to get Japanese Imperial Airlines in touch with the German military officials. The Army has already begun definite parleys with the German Attaché in Tokyo"

Again, on the 19th May, Oshima met Ribbentrop and held a discussion which drew together several themes of interest within this thesis. Oshima explained that the attempt to carry out the Tenno flight in August 1942 had failed because of the difficulties of the route but that planning to send a delegation had continued. At last this small delegation led by Okamoto had arrived including men knowledgeable about the different aspects of the Japanese war effort. In order to fulfil their purpose they would have to return soon to Japan, probably by U boat. Oshima formally thanked the Germans for their assistance in delivering Bose to the Far East and he also mentioned Japan's continuing desire to mediate a peace on the Eastern Front. He then went on to alert the Foreign Minister to
Japan's intention send an aircraft over the route from Singapore to either Crete or the Crimea and then said that "Unfortunately because of the danger a prominent person from the Japanese side will not be sent on the flight" this would wait until a later flight (17).

On 24th May a Japanese Military Attaché message from Berlin to Tokyo referred to a "staff officer to be sent when the GOA plane flies" (18). On 28th May another Attaché message from Berlin to Tokyo dealt with "arrangements for the flight of the SE plane from Singapore to Berlin" (19) and on 29th May an Attaché message from Berlin to Tokyo dealt with "arrangements for communications with the SE plane" (20).

On May 30th a test heavyweight take-off of the Ki 77-I took place (21) at the request of the Japanese Army. Kimura records that SEIKO (success) was the codename for the Japanese Army flight to Berlin and on May 31st 1943 a Japanese message went from Berlin to Tokyo (22) concerning weather reports for the flight of the SE plane. The plan was that on June 1st at 9.00 am GMT the German air general staff HQ would send to von Gronau via the German Foreign Office a report on weather over the flying route. If they knew the time this plane was due to reach Singapore they should let Berlin know. This message was reported in the SRS June 13th (23). The Intelligence analysts comment that the Japanese had tried to persuade the Germans without success to use the southern route and that they were now using Japanese planes.

On June 1st in a message to Berlin, also reported in the SRS June 13th, the Japanese sent a description of the plane which would be coming. "Low wing twin engine monoplane, single rudder, fuselage unpainted, wings painted grey with a yellow mark along the inner half of the front edges of the wings. Rising Suns on both sides of the fuselage and the underside of both wings" Wing span 30m and height 3m "If there are other items which are used in Germany for the identification of friendly planes and which our planes should adopt please inform us at once" (24).

A set of messages from Tokyo to Berlin on June 1st, 2nd and 3rd dealt with weather reports (25), the type of fuel required (26), and asked the Berlin Attaché for their opinion.
on the preparations for the flight (27). On June 3rd 1943 a message went from Tokyo to Berlin (28) with more detail on how to handle radio links and repeating some of the May 16th message points. Again on June 4th a message went from Tokyo to Berlin (29) with more on radio communications and weather information.

On 19th June 1943 a message to Berlin about the SE flight reported that stops were planned at Singapore and at Sarabuz in the Crimea (30) and preparations for the flight of the SE plane had got to an advanced stage by June 24th 1943 when the Commander in Chief of the Luftwaffe sent a message to Luftflotte 4 on the Eastern Front on the subject of GOA - the German code name for the Japanese SE flight -

"1) Take off in Tokio not before 28th June. Take off in Singapore for the flight to Sarabuz one day after departure in Tokio. 23.59 GMT. Approx time of flight Singapore to Sarabuz 34 hours consequently time of arrival will be about 10.00 am. Take off from Tokio and Singapore will be notified in good time to Luftflotte 4.

2) The A/C[aircraft] has been absolutely forbidden to fly over ships and convoys in the Black Sea area. Two single red stars fired successively have been arranged as recognition signals. The A/C has a retractable undercarriage.

3) For reception in Sarabuz the Japanese Generalmajor Otani will arrive from Berlin with a Japanese major as aide. It is requested that billets be assigned in Sarabuz for both these gentlemen, as well as for the crew of GOA which consists of an Oberst, 2 Oberst Leutenants, 2 flugcapitan of Hauptmann rank, 2 ingenieurs of Hauptmann rank and one W/T operator."(31)

A message on 27th June 1943 to Rome for information confirmed that the SE flight had been postponed until 30th June, confirmed it would be a round trip and confirmed that the objective was an experimental flight for the purposes of military liaison. Departure had been delayed until the 30th June and the route would now run Tokyo, Singapore, Crimea, Berlin with a crew of Lt Col Shozo Nakamura plus 6. "It is planned to make a trial flight
to Italy at a later time and we are beginning casual(sic) talks for working out the connections. This is strictly secret." This message was reported in the SRS for July 1st 1943(32). The fact that this reference is in the SRS which was circulated on July 1st means that information was available to the British and American forces at a time which would have allowed a deliberate shooting down of the Japanese aircraft. There is no direct evidence that this was planned by the Allies.

The intelligence analysts at Bletchley Park also concluded that Lt Col Nakamura Shozo would be the principal passenger on the SE plane. His card in the personnel file kept by those watching the Military Attaché traffic shows that he returned to Japan from Germany in December 1942 and notes that he was "passenger in SE plane". This set of file cards was unpacked by the author on October 18th 1998 for the first time since they were sent to GCHQ, marked "Top Secret Ultra" after the end of the war(33).

According to US Intelligence analysts Nakamura was at the Imperial HQ Tokyo in November 1941, then in Italy and Germany as a representative of the War Ministry. In December 1942 he traveled back to Japan overland across the Soviet Union in General Banzai's party and arrived in Tokyo in January 1943.

On June 30 1943 The Japanese Ki 77-II took off on the first leg of the flight to Berlin. The first stage was to Singapore from Fussa. Coincident with the take off for the second stage of the flight leaving from Singapore on July 7th a curious message went to the Military Attaché in Berlin from Tokyo(34).

"My Secret wire. Committee wire #42

Please make an immediate investigation of the possibilities of exporting to Japan pitchblend (the source of radium) from the Czecko-Joachimsthal region. If we had to we could get along with the residue from the extraction of radium. Please send this information and as large an amount of supplies as you can on the plane."

This is one of a series of messages about uranium and similar materials being needed
urgently in Japan. There is a continuing debate about the status of the Japanese atom bomb project but this message is clearly an attempt to use the embryonic air service as a way to get urgently needed samples rapidly back to Japan.

Another example of the way the flight was to be used came when Oshima tried to see Hitler on 6th July because a member of the Japanese liaison mission was shortly going to return to Japan. No submarine left in the next month so it is likely the Japanese were expecting to use the return leg of the flight to take at least one passenger back to Japan with up to the minute views from the German leader(35).

These two examples show very clearly the value that an air link would have had in transferring technology and in fostering discussion and collaboration.

On the 8th July there is a note in the Attaché files (36) which gives an indication of when the Japanese aircraft was scheduled to leave Germany on its return flight. In the attempt to make an appointment for Okamoto to meet Hitler the note refers to 15th July as "the take-off of the Japanese aircraft for Tokio".

But on July 7th 1943 after leaving Singapore on its way to Berlin the Japanese plane was lost over the Indian Ocean. Dr Kimura's account says that the Ki 77-II left Singapore and was never heard from again. Other accounts say a last radio message was received on July 7th from over the Indian Ocean. According to Kimura the crew of the aircraft was Nagatomo, Kawasaki, Tsukagoshi, Nagata, Kawashima together with three Army officers(37). Von Gronau suggests these were high ranking officers but no evidence has been found other than that referring to Lt Col Shozo Nakamura. Oshima in his discussion with Ribbentrop suggested that no important people would be on the first flight because of the danger(38). Were they effectively another "Tenno" delegation following through Japan's aim of exerting influence in Berlin or was this seen as a test flight? (39).

According to Robert McKesh a British fighter claimed a kill in the area at the time (40). There was certainly a good coverage by Hurricane IIC fighters of the Arrakan and
Calcutta areas. No evidence has been found so far in squadron records to confirm this kill but according to the same records the weather over the Bay of Bengal was not good on that day and the monsoon period was on its way \( 41 \). Chapman suggests the plane was shot down using information from ULTRA intercepts. As we have seen the information was certainly available to the Allies in time to plan this \( 42 \).

The Japanese reacted to the loss and on July 9th 1943 a Japanese message, probably a circular to all embassies, \( 43 \) "The Japanese Army plane bound for Europe has been missing since it left Singapore. Listen to all British broadcasts and if you hear anything about this plane let us know immediately" This message was in the SRS by 15th July. Oshima was distraught as a result of this failure and wrote to Tokyo on July 9th \( 44 \) "The military situation in Europe is now undergoing vast changes; and if you say that we don't have to worry immediately about establishing air liaison with Germany you are wrong. If we cannot do so precious time will be lost and my people cannot keep up their work. I'm at my wit's end already. This is no time to give up the idea. We've got to start it again. You should understand that, and I hope you will not lose a moment in getting down to real business this time. In my messages so far I have told you that I cannot put down in messages all these delicate yet very important points. Now we've got to consider real joint warfare and unless we can get in touch by word of mouth misunderstandings and mistakes are going to be made. It was with the earnest desire in explaining all this to you that I set forward the date of Colonel Kotani's return to Japan, and from our recent understanding with him everything is ready. We might try any of the following plans:

1) To start using "SE" planes again immediately.
2) To give up the southern route, and with the appearance of avoiding Russian territory, changing to the land course.
3) If our planes are not ready we might try again to get Germany to consider the aforementioned land course.

We've got to use one of these plans. The reason why we have not so far succeeded I hardly know; but the contact men do not like the long dangerous southern route so strictly
guarded by the enemy. I think that we had better immediately return to the idea of the land route. I'm sure that this is our best prospect. The German leaders are already fully aware of our position with respect to the Soviet. I'll do my best to get the Germans to consider the plan again."

The use of the word "appearance" in point 2 suggests that Oshima may have been involved in the German plans to fly the northern route while telling Japan that they were using the southern.

The Japanese were still trying to find out what had gone wrong with the flight. Instructions went on 10th July to the Military Attaché in Istanbul to "investigate the loss of the SE plane" (45). On 13th July a message to the Attaché in Rome asked him to make "enquiries about the loss of the SE plane"(46). On the same day a message went to Berlin on the loss of the aircraft. (47) On 15th July a message went from Berlin to Tokyo expressing "thanks to the Vice Chief of Staff re the SE plane" (48). 19th July message back from Istanbul to Tokyo on the "search for the missing liaison aircraft" (49).

On the 9th December a message from Istanbul to Tokyo and Berlin gave an interim report on enquiries about the SE plane (50). The Japanese were not sure what had happened to the aircraft. On 27th Feb 1944 the SRS reported a message from the Japanese embassy in Ankara "Late last June a Japanese Army plane embarked on an experimental flight from Tokyo to Berlin. Its movements a closely guarded secret, the plane proceeded from Tokyo to Singapore without incident. On or shortly after July 1st the ship(sic) took off on the long hop to the Crimea. No further word was heard of it and by July 9th the Japanese were resigned to the fact that it had been forced down - see SRS 15th July 1943 - it now appears that the fate of the plane is still a mystery. On February 8th the Attaché in Ankara reported a particular rumour that a Japanese plane had been forced down in Iran and its crew interned. The Attaché has now investigated this and found no truth in it"(51). Enquiries were still going on in March and April 1944 (52) and there were enquiries between Tokyo and Istanbul between May 18th and 29th May 1944(53).
The loss of the Ki 77-1 in July 1943 marked the end of Japan's effort to use their own aircraft to create an air service apart from suggestions that a version of the Ki 74 "Patsy" derived from the A26 design by Tachikawa as a long range high altitude bomber was being readied for a flight to Berlin when the Germans capitulated. Although the Ki 77-I, the first prototype, was still available it was not used for another attempt at the flight to Berlin. Possibly because of the obviously increasing danger in the area of the southern routes. Spitfires moved into the Arrakan area in the Autumn of 1943, and the weather on that route was always difficult and virtually impossible in the monsoon season.

Germany was never really happy with the southern route as Oshima pointed out in July "the contact men do not like the long dangerous southern route so strictly guarded by the enemy". A Lufthansa official had made the same point in January 1943 maintaining that the retreat of Rommel from Egypt and the increasing strength of anti-aircraft defences in the near East and India made the Rhodes to Rangoon route very dangerous. The Ki 77 had certainly been capable of making the flight to Europe. On July 2nd 1944, in a return to its original purpose, the first prototype took off from Sinking and flew around a triangular course in Manchuria for 57 hours 12 minutes covering 10,212 miles non stop proving the effectiveness of the design. As we have seen (June 24th) the flight from Singapore to Sarabus was expected to take only 34 hours. At the end of the war the sole remaining aircraft was taken back to the United States and scrapped without any further testing (54).

By the summer of 1943 Italy was out of the reckoning and in reality they had stopped work on flights probably around Christmas 1942 when the North Africa stop-over became impossible. With the loss of the Japanese aircraft all that was really left for the air service was the possibility, however remote, of German flights.

Notes to Chapter 7

1 Kimura - all these references are to the account by the designer, Dr Kimura, of the development and use of Tachikawa Ki 77 in Flying Review International Vol 19 No 6
February 1964 p 43


PRO GFM E489697, Tokyo, Kaumann and Ott to Berlin, No 3509, 16th November 1942

3 National Archives Washington Record group 457 MAGIC Summaries – daily summaries of significant Japanese messages intercepted and decoded. SRS April 9th 1943

4 SRS June 13th 1943

5 National Archives, Washington, Record Group 457, Japanese diplomatic messages intercepted and decoded. NARA RG 457 SRDJ 30140, diplomatic telegram, Tokyo to Berlin, 12th January 1943

6 ibid SRDJ 31059, diplomatic circular, Tokyo, Tani to Berlin, 5th February 1943

7 ibid SRDJ 32785, diplomatic telegram, Tokyo, Tani to Berlin, No 152, 6th March 1943

8 PRO GFM E489872, Tokyo to Berlin, Lufthansa, No 360, 16th March 1943. See also DLH no 25 of Jan 29th 1942.

9 ibid

10 Martin 1969 op cit p 210

11 PRO GFM E489895, diplomatic telegram, Tokyo, Kaumann and Stahmer to Berlin, Lufthansa, No 1002, 26th March 1943

12 Kimura 1964 op cit

13 National Archives, Washington, Record Group 457, Japanese diplomatic messages intercepted and decoded. SRA 00235, military attaché telegram, Tokyo to Berlin, 16th May 1943. See also Bletchley Park Archive. This is a card index logging messages intercepted and decoded between the Japanese Military Attachés in Berlin and Tokyo. Bletchley Park card index JMA 108 ref to Zip 2793 and 2670

14 NARA RG 457 SRDJ 38950/1, diplomatic telegram, Tokyo to Berlin, No 272, 16th May 1943

15 PRO GFM E489947, telegram, Tokyo to Berlin Attachégruppe, No 1565, 19th May 1943

16 SRS June 1st and 13th 1943 – op cit

17 PRO GFM F13/119 et seq and F04 0092/3, notes of meeting between Ribbentrop, Oshima and Okamoto, 19th May 1943

18 Bletchley Park card index JMA 108 ref to Zip 1677
19 ibid zip 2135, 2071
20 ibid ZIP 2375
21 Kimura 1964 op cit
22 NARA RG 457 SRDJ 37957, diplomatic telegram, Berlin to Tokyo, No 171, 31st May 1943. see also Bletchley Park card index JMA 108 ref to ZIP 1694
23 SRS June 13th 1943
24 Also in Bletchley Park card index JMA 108 ref to ZIP 1707
25 ibid ZIP 2353
26 ibid ZIP 2183
27 ibid ZIP 2658
28 NARA RG 457 SRDJ 38946/7, diplomatic telegram, Tokyo to Berlin, No 323, 3rd June 1943
29 NARA RG 457 SRDJ 38948/9 ibid, No 322, 4th June 1943. See also ZIP 2182
30 SRS July 1st 1943
31 Public Record Office, Kew, London, Government Code and Cypher School: Signals Intelligence passed to the Prime Minister. PRO HW 1/1770, German Air Force message from C in C GAF to Luftflotte 4, 24th June 1943
32 SRS July 1st 1943
33 Bletchley Park card index JMA 108 - Personnel file
34 NARA RG 457 SRA 01576, diplomatic telegram, Tokyo to Berlin, No 439, 7th July 1943
35 PRO HW 1/1816, diplomatic telegram Berlin, Oshima to Tokyo, 6th July 1943, to Churchill 10th July 1943
36 National Archives, Washington, Berlin Attaché Office, NARA Microcopy T78 Roll 357 Frame 6317704, notes 8th July 1943
37 Kimura 1964 op cit
38 Von Gronau (Wolfgang) Wolflyeinger Erinnerungen 1926-47 Stuttgart 1955 p 239
39 Mikesh 1993 op cit
40 Franks (Norman LR) Spitfires over the Arrakan London 1988
41 Public Record Office, Kew, London. Squadron Records AIR 27
42 Chapman (J W M) The Have Nots go to War - The Economic and Technological Basis

43 NARA RG 457 SRA 01169, diplomatic telegrams Military Attachés, Berlin to Madrid, No 351, 9th July 1943. See also Bletchley Park card index JMA 108 ref to ZIP 2188 and 2158

44 NARA RG 457 SRDJ 40323/4, diplomatic telegram, Berlin, Oshima to Tokyo, No 750, 9th July 1943

45 Bletchley Park card index JMA 108 ref to ZIP 3532

46 ibid 3567

47 ibid 3584

48 ibid 3356

49 ibid 2987

50 ibid 4926

51 SRS 27th February 1944

52 Bletchley Park card index JMA 108 ref to ZIP 11026 and 6249

53 ibid 11026

54 Mikesh 1993 op cit
The latest initiative by Lufthansa and the Japanese was brought to an end in December 1943 by the Luftwaffe's refusal to consider releasing long range aircraft for flights to the Far East. But almost at the same moment elements within the Luftwaffe itself began to take the initiative in trying to develop an air service which could bring back raw materials, particularly wolfram, the source of tungsten, from the Far East and transport experts and specialists to Japan.

By the end of 1943 German supplies of wolfram from Spain and Portugal were not reliable and were becoming increasingly expensive. In September 1942 a Japanese report from Lisbon described the competition between Germany and Britain for supplies. Germany was buying up mines to try to guarantee deliveries but out of the 5,000 tons Portugal exported in 1941 and the 2,600 tons exported up to May 1942 the share was 60:40 in favour of Britain(1). In June 1943 Portuguese production was estimated at 6,000 tons. 1,000 tons were produced from German owned mines and exported to Germany, 3,000 tons were produced from British owned mines and exported to Britain and there was competition for the remaining 2,000 tons produced by locally owned mines. Up to February 1943 the deal in existence gave the Allies 25% of that general production(2). In June 1942 the German Minister in Lisbon claimed that Germany would be able to get all the wolfram she needed from the Far East if any problem arose with supplies from Portugal due to pressure from the Allies (3). But when the need arose it was not as easy as it had seemed to get supplies from Japan. One of the major sources for wolfram in the Far East was China where Japanese control was uncertain and, of course, Japan also required this material for her own arms production. Japan actually tried to bar the export of wolfram to Germany (4) in September 1941 and again in December 1941. In January 1943 Hitler ordered priority for wolfram, molybdenum and rubber on the three ships loading ready to leave Japan. From a meeting with Speer 6th-8th February 1943 the emphasis was again put on the need for wolfram and rubber(5). Germany had wanted to import 5,000 tons of wolfram from the Far East by July 1943 but Japan would only offer
1,000 tons(6). In January 1944 Germany made a direct request to Japan as a result of an "urgent need" for 2,000 tons of wolfram and 500 of molybdenum later raised to 3,000 tons of wolfram. Shigemitsu had to reply on the 6th April 1944 that "We will have to make great efforts in every quarter to care for our own needs". One hundred tons were offered which may have been sent on a submarine which left Japan on 1st May 1944(7).

The need to guarantee supplies of wolfram was a pressing reason to develop the air service project. In the Luftwaffe feasibility study on long range flights in April 1942 the high price of Iberian wolfram had already made it worth considering flying stocks from the Far East partly because the limited quantities required made air transport a practical option(see Chapter 2). There was a precedent for using aircraft to transport wolfram. In the period between the opening of the war in Europe and the defeat of France in 1940 cargoes of five tons of wolfram in sacks were regularly flown from Barcelona to Viterbo in Italy and then on to Vienna using Lufthansa Junkers Ju 90 aircraft sometimes painted in Italian air line livery(8).

Priority was being given to wolfram in the loading of vessels heading from the Far East to Europe from the winter of 1943/4 but the ability of vessels to run the blockade successfully had diminished rapidly by then. The Allies had become progressively more effective at closing down the blockade running traffic in the Atlantic and Biscay as Signals Intelligence and codebreaking gave them more and more accurate information about the arrival dates and the location of ships arriving from the Far East(9). The Allies increasing success in cutting the blockade running route can be seen from the following analysis:

Five ships left the Far East before June 1941 and three arrived in Europe. In the winter of 1941/2 nineteen ships were involved. Fourteen attempted the journey from the Far East to Europe of which two were sunk and twelve were successful. 32,000 tons of rubber plus 25,000 tons of other goods were delivered to Europe which was believed to be two years supply of needs(10). In the same winter five ships successfully made the voyage from Europe to the Far East(11).
In the winter of 1942/3 eleven ships attempted the journey from the Far East to Europe of which seven were sunk and four got through successfully(12). The ships carried 7800 tons of rubber which was believed to be sufficient to satisfy one year's needs(13). At the same time seventeen ships attempted the journey from Europe to the Far East of which four were sunk, three returned to port and ten were successful(14).

After the problems of the 1942/3 season Germany temporarily suspended sailings from the Far East to Europe for a period from February 1943 and halted sailings from Europe in March. On the 11th March 1943 four ships on their way from the Far East were ordered to turn back(15).

In the winter of 1943/4 five ships attempted the journey from the Far East to Europe of which four were sunk and one, damaged by a mine, struggled into safety in the Gironde. By this time each arrival in the Bay of Biscay required a major naval commitment from Germany to protect the vessels from Allied interventions(16).

Finally on January 19th 1944 the whole surface ship blockade running operation was shut down by Hitler's order as a result of the losses in the winter season 1943/4 and ships waiting to leave for the Far East were unloaded.

The overall contribution of the surface blockade runners had been significant. From the 1940/41 season to the 1943/4 season over 200,000 tons of cargo had been sent to Europe from Japan and over half had got through. The major items in terms of quantity were rubber and edible oils and fats(17). One of the issues of this study is the inadequacy of these methods of transport as a means of exchanging key personnel. The only examples of passengers being carried on the blockade running surface ships appear to be prisoners of war and returning crews. In addition von Petersdorf, the military attaché in Japan, returned home on the Pietro Orseolo which was driven ashore in the Gironde estuary in April 1943(18) and an engineer Colonel Niemöller was sent out to Japan on a blockade runner in the summer of 1942 with information on shaped and hollow charges for the
Japanese Army. He was unable to return home and became an assistant military attaché(19).

As the surface blockade running had become more difficult the emphasis had switched to submarines. The Japanese had already demonstrated the feasibility of submarine trips to the West in April 1942 when I30 went on around the Cape after the Japanese Navy raid into the Indian Ocean and arrived in Lorient where its arrival was welcomed by Admiral Raeder with much publicity. The submarine had then left Lorient in late August 1942 carrying examples of radar sets, rocket and glider bombs and anti tank guns. The voyage home was uneventful but she struck a mine at the entrance to Singapore harbour.

With submarines like I30 Japan had the ideal vehicle for a blockade running enterprise. These were very long range fleet submarines which had been designed to harry a US fleet advancing across the Pacific towards a major fleet to fleet confrontation off the Japanese homeland. These boats had the size and range to carry out the transport function and some also had aircraft hangers which could be used for cargo. I8 for example displaced over 2,000 tons, had a cruising range of 14,000 miles at 16 knots. I52 built later also displaced over 2,000 tons and had a range of 21,000 miles at 16 knots(20). In addition ten Italian submarines were converted by the Germans for the transport role and there were some specialised transport U boats in use. Most of the voyages took the 11,000 miles route round the tip of Africa to Singapore or Penang.

German combat U boats operating from shared bases at Penang and Djakarta, taking part in the only real area of military collaboration between Germany and Japan, also contributed to the supply of raw materials(21). But the submarine blockade runners suffered in the same way as the surface blockade runners from the increasingly precise Allied knowledge of movements through ULTRA and MAGIC and Signal Intelligence generally. An example is the sinking of the Japanese submarine I29 in 1944. The submarine had made a successful journey to Europe leaving Penang in November 1943. It left Lorient on the return journey on 16th April 1944 but was detected through an intercept as being in the Indian Ocean on July 3rd. It was tracked into the Sunda Straits

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and Singapore on 14th July again by intercepted message. Knowledge of the cargo of weapons technology described above, knowledge again obtained from intercepts, increased the level of activity from the Allies and a message from I29 giving its expected time of departure and route to Japan was intercepted on the 20th July. As a result she was caught on the surface by an Allied submarine USS Sawfish off the Philippines and sunk on July 25th(22).

The U boat combat units were very successful in their primary role in the Indian Ocean and as a result 7% of all allied tonnage sunk in all theatres was sunk in the Indian Ocean by these 57 U boats. 32 of them were lost in action and four of the boats did two tours while U181 went out to the Indian Ocean three times(23). The German and converted Italian transport submarines made ten successful trips out to the Far East including carrying stores to the Penang bases but none returned with cargo. The Japanese submarines completed three successful round trips Singapore to Biscay - I30, I8, I29 - although I30, as we have seen, struck a mine at Singapore and I29 was sunk on the way to Japan. According to the MAGIC History summary written in December 1944 there had been one successful submarine round trip in 1942. In 1943 there were 16 voyages from Europe to the Far East of which 3 were lost and 3 voyages from the Far East to Europe with one being lost. In the period up to November 1944 18 submarines had been sent from Europe to the Far East of which 10 had been lost and one was still en route. 5 submarines had attempted the voyage from the Far East to Europe of which 2 had been lost and 2 were still en route(24).

The contribution from the submarine transport to the German war effort was small. In terms of raw materials delivered to Germany the outcome was a few hundred tons at most and certainly less than the amount carried by one surface ship. At the same time it is important to remember that the nature of the raw materials required was such that even small quantities were of value since the rubber imported was used to form a base for the synthetic process and the rare metals were used as additives.

The submarines were also used to transport important passengers between Europe and the
Far East -

As we have seen Subhas Bose eventually left Europe on a U boat, U180, on the 9th February 1943. There was a rendezvous with the Japanese submarine I29 off Madagascar on the 23rd April and he arrived in Sabang in May 1943. At the rendezvous in mid ocean Bose and an aide transferred in a rubber boat to I29 during a ten hour meeting while two passengers and gold for the Japanese embassy in Berlin were transferred to U180. The Japanese passengers included Lt Cmdr Hideo Tomonaga, expert in submarine construction, who committed suicide at the end of the war on the U boat U234 when the boat surrendered while attempting to return him and others to Japan.

The US Intelligence MAGIC history (25) lists other people known to have traveled by submarine up to December 1944:

U511 left Europe on 10th May 1943 as a gift to Japan. As a type IXC it was not the most modern available and with an 11,000 mile range of very limited use to Japan. It carried Admiral Nomura, Head of the Naval Mission, Ernst Woermann to be ambassador in Nanking, allowing Heinrich Stahmer to become ambassador in Tokyo, replacing Eugen Ott who had lost his position over the Sorge spy ring affair; 13 other passengers were carried mainly technicians.

In June 1943 I8 left Penang and brought a crew of 48 Japanese submariners to take a second German gift submarine, U1224, back to Japan. I8 arrived at Lorient on the 29th August. U1224 was eventually sunk on its way to Japan.

I8 took back Admiral Yokoi Naval Attaché in Berlin leaving Europe on 6th October 1943 and arriving in Japan 5th Dec 1943. According to Boyd(26) the submarine also carried hydrophone and radar technicians.

On December 15th 1943 I29 brought 13 Japanese specialists to Europe together with Admiral Kojima Naval Attaché replacing Admiral Yokoi.
Sea-borne blockade running could not be effective as a way of moving significant people because of the time taken by each voyage. The journey took up to three months each way and the submarine journeys added another dimension of risk and terror to that suffered by passengers on the surface ships. No-one involved in the management of the war could afford to be out of contact for three months or even the six months required to do a round trip. A number of important passengers did make the long and difficult journey by sea as well as a number of technicians and specialists and the fact that they did this underlines the overriding need for the exchange of these key personnel but this means of transport could not meet the need adequately and therefore there was still a desperate need for an air service to fulfil that purpose. The difficulties which lay in the way of Axis collaboration and face to face planning meetings can be contrasted with the relative ease with which the Allied leaders met on repeated occasions together with their high level commanders.

These two particular reasons - the transport of people and the need for wolfram - re-awakened the German interest in developing an air service during 1944 and 1945. The focus was on two routes, a polar route across the Arctic Ocean and the Bering Straits and a central one from Pao-Tow to central Europe. The focus was on transporting wolfram from the Far east and on transporting a new German Air Attaché to the Far East. The Luftwaffe, for the first time, took a positive interest in carrying the new Attaché and wolfram across the northern route while Lufthansa continued discussion with the Japanese about ways to exploit the central route.

From October 1943 it seems that Hptmn Mayr, who had been one of the BV 222 pilots on the endurance tests in September 1942, was increasingly taking charge of long distance work with Junkers Ju 290s (27) and activity had been slowly coming together on the Luftwaffe side to support flights over the northern route. SRS June 3rd 1944 refers to enquiries made by the German Air Attaché in Tokyo in December 1943 about emergency airfields in Manchuria at Harbin, Hailar, Tsitsihar(28). Because the German Air Attaché "has not let us see their objectives" the Japanese asked their Military Attaché in Berlin to
inquire about what the Luftwaffe had in mind. There is also information from the interrogation of a pilot who ditched and was captured 28th December 1943. He therefore reported what was common knowledge at that date. The report runs as follows -

"47 The pilot of the present aircraft stated that attempts were being made to establish an air communication route with Japan by way of the polar regions and that the aircraft envisaged for this purpose was the JU 290. Hauptmann Mayr an experienced ex Lufthansa pilot and until recently Staffelkapitan of 9/KG40 had been called in for consultation on this matter.

48 P/W's own opinion was that when the fall of Germany was imminent Hitler would attempt to escape to Japan by this route and that Hauptmann Mayr would be the pilot for this undertaking." (29)

In January 1944 Hptmn Heinz Braun, one of the key figures in the use of heavy, long range aircraft, moved from FAG 5 to the test centre at Rechlin and began entries under the heading "Kommando Japan" in his logbook. Lufthansa was also involved in this project alongside General der Transportflieger and a research group(30). From January 7th to 17th a series of Junkers Ju 52 flights was recorded in Braun's log while he was looking for a suitable base for flights to Japan. It was finally established that Nautsi in Finland would be the choice although Lufthansa had wanted to use Kemi (31). Three new Ju 290 A-9s, the only examples of this version built, were to be used for the flights to the Far East. The flight captains were to be Heinz Braun, Rudolf Mayr and Walter Blume. Braun had drawn together the team which had flown endurance tests in the BV 222 in 1942 and had considerable experience in multi engine, heavy aircraft(32). The aim of the flights, according to Kössler and Ott, was to fly to Manchuria in order to bring back wolfram. A load of two tons could be carried on each trip and the aircraft were built to order in January, February and March 1944 at Dessau. The three Ju 290 A-9s were ready on the 18th, 25th February and 14th March - Werk Nos 0182, 0183, 0185 (33).

Between February 4-6th 1944 Mayr practised taking off with overweight aircraft from
Dessau using a Ju 290 A-5 Werks No 0170 the eighth prototype retained by Junkers for testing purposes. The take off weight was up to 45 tons while the normal load for a Ju 290 A-5 would have been 41 tons. This was practice for the long distance flight to the Far East and the need to take off with an overload of fuel.

Alongside the plan to carry wolfram one of the points for discussion from early in 1944 was a plan to send Luftwaffe General Ulrich Kessler and 16 others to Tokyo to advise on air defence and for Kessler to replace von Gronau as Air Attaché. Von Gronau would then have traveled back to Germany on the return flight. An early mention of the plan was in a Military Attaché message 3rd March 1944 "On sending German Air Attaché to Japan"(34) and in May 1944 (35) proposals to fly the new German Air Attaché to Tokyo were noted by the Allied codebreakers and the route described was via the Arctic Ocean/Bering Straits. This was noted by the US Intelligence officers as being the first suggestion of a northern route by Germany which did not infringe Soviet air space. This discussion of polar routes corroborates the PoW interrogation report about Rudolf Mayr's expertise and polar flights quoted earlier.

Japan was still concerned whether this would be a genuine polar flight which would not cross Soviet territory. A message of May 5th 1944 from Tokyo to Berlin, summarised in SRS 3rd June 1944(36), suggests that Japan did not trust the Germans to avoid Soviet territory, even though they were suggesting a route across the polar regions, and that the Japanese expected them to take a short cut south over Siberia. "It is expected that a direct route to Japan across East Siberia will be taken, inasmuch as the route proposed by Germany is fairly circuitous. We are therefore proceeding with a careful study of the matter, in view of the present extremely delicate relations between Japan and Russia."

The US Intelligence analyst suggested that the enquiries in December 1943 about landing sites in Manchuria had also led the Japanese to suspect a diversion across Soviet territory.

It seems that the Luftwaffe plans for flights were halted by Japan's concerns (37) and the three Ju 290 A-9s were then transferred to KG 200. In one way it seems strange that the project should have got to this stage without any thought for Japan's concerns over her
Neutrality Pact with the Soviet Union but it is typical of the lack of understanding of each other's position displayed repeatedly throughout the war by the Axis powers. As we have seen Japan's position had been made clear on a number of occasions since the summer of 1942 and Japan had certainly become less rather than more likely to want to precipitate a conflict with the USSR.

The three Ju 290 A-9s were passed to KG 200 which had been formed in February 1944 to carry out a range of semi clandestine activities including long range penetration flights dropping agents. All three of the A-9s were destroyed before June 1944 although at one time or another KG 200 operated a total of 7 Junkers Ju 290s(38). KG 200 has had a somewhat clouded history and all sorts of things have been suggested and were suggested at the time. An example is a Prisoner of War interrogation report 22nd March 1945. Among very detailed material on fighter squadron issues KG200 was mentioned and described by the Intelligence Officer as the "Ghost Geschwader". The prisoner had first heard of this unit when he joined his current outfit. It was said that "some of the aircraft .... made special courier trips to Japan". More authoritatively, in an Intelligence distribution to the Staffel in late January, it had been concretely stated that KG 200 was a "special" organisation carrying out extraordinary missions(39).

It seems likely that the work of Kössler and Ott on the uses of the Ju 290s has been so exhaustive that there are no gaps in the record and it seems clear from their research that the project to use the Ju 290 A-9s on trips to Manchuria was aborted. One would have expected Mayr, Blume and above all Heinz Braun to have been involved and Kössler and Ott have researched Braun's log book and interviewed him and there is no support for the idea that there was any covert continuation of the project. Certainly there would have been no Japanese support for any activity and in some ways the most conclusive evidence is that the new Air Attaché was not transported to Japan by air at this time. There is, however, a PoW interrogation report which seems to suggest the project was activated. This is discussed in Appendix 1.

Meanwhile activity concerning the Central route was continuing. Lufthansa and Japan
had returned to the question despite the Luftwaffe decision of December 1943. On 22nd December 1943 Kaumann, the Lufthansa representative in Japan, replied to the Lufthansa message of 13th December which had told him that aircraft could not be released. He explained that he understood that the northern route was still not acceptable to Japan but that he had continued discussions with Yendo who was in charge of the civil air transport office in Japan. Yendo was moving to become Vice President of the airline Chungua the Luftverkehr-Gesellschaft Peking. Because of his changing role Yendo was able to propose that flights should take place under the Chinese flag across a central route - the "Gablenzweg" - from Pao Tow to Bulgaria. This approach would remove the possibility of friction between Japan and the Soviet Union since the official partner would be the Chinese Transport Ministry in Nanking. The movement of the Eastern Front had left Bulgaria as the nearest point available to the Germans. Odessa had fallen on April 10th but the Soviet drive led to the formation of a huge salient with Odessa on one shoulder stretching, by August, as far as Warsaw. This left southern Rumania and Bulgaria in German hands. There would, according to the message, need to be more discussion with the German and Japanese authorities and it would still be necessary for the Japanese to buy aircraft from the Germans through the purchasing commission in Berlin. Interestingly Yendo proposed that the German aircraft could be seen as an investment in kind in the airline leading to a partnership between Lufthansa and Chunghua. This suggestion is an attempt to recreate the arrangement which supported the Eurasia airline in the 1930s and would have been an economic toehold in the Far East for Germany.

Delayed again in the Foreign Office the message from Kaumann was passed to the Air Ministry and on to Lufthansa on 19th May 1944. An accompanying message from Holtz the Lufthansa representative in China suggested Kaumann would be returning to Tokyo from Nanking in mid May.

The problem again was the reluctance of the Luftwaffe to release aircraft to the Japanese or a front organisation to facilitate the air service. Lufthansa discussed the proposal immediately they received it, on the 19th May, and replied to the Air Ministry on the 22nd May 1944 explaining that the flights were possible but that they would need assurances that the Ju 290s would be available and they also suggested that the Ju 390
could also be considered. The reply from the Air Ministry on 3rd June reminded Lufthansa that they had already been told that aircraft were not available for this purpose in the phone conversation on 29th November 1943. The situation had not changed and the Ju 290 should be left out of consideration(41).

On 10th July a message from Dessau, the home of the Junkers company, to the Air Ministry discussed the availability of the Ju 290s in terms of other military requirements, fuel shortages and the production of the type. It also pointed out that there were only a few Ju 390s likely to be available. "There is little possibility of German aircraft being put at the disposal of the plan for the Far East project"(42).

Still on the 27th July Lufthansa explained that Bulgaria to Pao Tow was the only available route and that they believed this could be covered with the Ju 290 and would like to use the Ju 390 when it became available. By July 1944 production of the Ju 290 had almost ceased although there were between 15 and 20 machines still available at that time(43). On 3rd August a message to DLH from Dessau, replying to their message of 27th July made it clear that neither Junkers 290s nor the prototype Ju 390 could be made available(44).

Meanwhile Kaumann had sent another message on 10th July which was again delayed. He explained that the President of Chunchua airline was negotiating with the Army Air office in Tokyo about developing flights with the objective of bringing out spares for the aircraft they were using - obviously German. He was looking for similar possibilities with arms cargoes but he also stressed the need to aim for high value loads of which "Bayerpreparat" - pharmaceuticals - would be a prime example where 1000 Kg could be sold for RM 5 million. After more discussion on 14th December 1944 Lufthansa asked for a telegram to go to Kaumann telling him that "Aircraft with a great enough range will not be available within the foreseeable future"(45).

Although they were not willing to release them the surviving Junkers Ju 290s were becoming more available after August 1944 when FAG 5 was disbanded because the
bases in France were lost but production was becoming more difficult. The remaining Ju 290s were transferred to KG200 and Luftpriiportstaffel (LTS) 5 as a linked group.

Discussion had continued on the plan to fly the new Air Attaché to Tokyo. Japanese Military Attaches in Berlin reported progress "in connection with the despatch of the new German Air Attaché to Japan" on 14th May 1944 (46) and on the 12th June they reported on "air transport to the Far East" (47). The Luftwaffe kept pushing to find a way to make the flight to deliver Kessler. The following messages show the various attempts to get around Japan's concerns over Neutrality. On August 2nd Oshima wrote to Tokyo (48). "I have been requested by the German Air Force to use my good offices in connection with the trip of Lieutenant General Kessler (Kessuraa in the text) to Japan. Please consult the navy wire for details. The crucial stage which the war situation is approaching necessitates greater co-ordination between Germany and Japan. Although it will take a number of days to do anything effective along this line, and although it is to be regretted that it is impossible to follow closely the changing situation, which is developing at such a rapid pace, please do everything you can to facilitate this matter in spite of all other difficulties facing the Japanese government. Furthermore we are dealing with a person who thoroughly appreciates the Japanese policy of remaining in a peaceful relationship with Russia. Technically the only route open to us is the Northern one, as I have pointed out a number of times. By this route we find it most convenient to leave from Finland. In order to do this, we would like you to follow the political situation there very closely, also note that the choice of date for flying by plane is greatly limited by weather conditions. Please send us instructions with regard to the above.

You are aware of the fact that there are a number of circumstances affecting the (?decisions?) of the German Air Force. While the German Air Force is very enthusiastic about this matter at the moment, if they should suddenly break off discussions because of our attitude, I'm afraid there would be insurmountable difficulties in re-arranging this matter a second time." Oshima recognised very clearly how important it was to react to the new found enthusiasm from the Luftwaffe. The other Japanese officials in Germany added their support to the idea and on 4th August 1944 Vice Admiral Abe (49) wrote
supporting the Kessler flight and pointing out that the Germans understood the problems and would be circumspect. He also suggested that German efforts and plans were going on without Hitler's knowledge. "Naturally the Germans have fully appreciated Japan's attitude to the project, the Führer especially having understood it very well all along, and the reason why the Germans are making covert preparations without submitting the matter to the Führer for approval is because they fear that the latter would never be able to take the matter up failing an understanding with Japan. Hence if the project does come about they are likely to be extremely circumspect in matters affecting relations with the Soviet, and we for our part are anxious to do everything that lies in our power(to insure this)"

On 7th Sept 1944 (50) the Japanese Naval Attaché in Berlin made the point strongly that submarine traffic was useless and that there was a need for air communications across Siberia. Again on 14th September the Naval Attaché wrote "The war situation is indeed grave; although the state of liaison by sea between Germany and Japan is deplorable, increasing difficulties may be expected because longer periods of time are required." (51) The message went on to suggest considering a one way flight over the northern route and asked what would happen if Germany suspended the building of long range aircraft. The message suggested that Japan should remove all obstacles to air military liaison and should buy a German plane either an He 177 or Ju 290 to fly to Japan and use a German crew. If there were any problem the Attaché suggested that the Russians could inspect the aircraft or Japan could negotiate exchanges of prisoners and meet Allied planes in Central Asia so that Japan could use this as a cover for the exchange of personnel and documents.

But Tokyo was unmoved by these ideas and replied (52) that they believed that in practice, despite the German proposals, the use of the northern route would violate Russian airspace over Siberia. "Taking into account the critical state of relations with Russia,...we desire most emphatically to be free of any affairs which on some pretext or other give rise to trouble." The USSR was taking very careful note of all violations by sea and air "It almost looks as though the underlying motive is to use such cases as a means of stirring up trouble against Japan."
Tokyo suggested that a flight should therefore use the southern route by refueling flying boats from submarines. If the Kessler trip was urgent then a submarine should be used. The idea of Russian inspection or an exchange of prisoners was not possible in the current climate but a good idea to be investigated.

But Oshima did not give up despite this response from Tokyo and he wrote again and I quote the document in full. Phrases in brackets are from the original and show uncertain areas from the decode. The phrase ---1G--- indicates a number of groups of characters in the original which were missed:

"Part 1. Urgent. At the time of the interview mentioned in my 18 (unavailable) Foreign Minister Ribbentrop stated, in regard to sending General Kessler, that the German Air Force and the General himself hoped to have him go to his post by air and that there was no alternative from a technical standpoint but to take the northern route. While the Germans fully understood that Japan might raise serious objections to this on political grounds, still the German officials in charge were very eager for this and had given consideration to a method whereby Japan would be put to as little trouble as possible. He suggested that he should like me to hear about this directly from Air General Kessler.

Therefore on the 7th I had the General call, the Army and Navy Attaches also being in attendance. He expressed the following view.

1 The German Navy can do no better for the trip to their posts of General Kessler's party than to send 8 men by submarine up to March, sending two passengers on each ship. Thus the arrival at --G-- of the 16 members of the party would be greatly delayed. For his part the General would like to make the trip by air taking six persons, his chief staff officer, a torpedo specialist and crew members concerned with weather observation and wireless, and would like to achieve co-operation with the Japanese Army, Navy and Air Force as quickly as possible.
Part 2

The method by which flight through the air over Russia is to be concealed is as follows.

(a) Leaving at night, the flight will be made from Finland over the Arctic Ocean and from the Enisei River to Tokyo across Siberia and Manchukuo.

During this time there will be barely 4 hours of daylight (in the Enisei delta area), and since that is an area of sparse population it is expected that this activity can be entirely concealed (during the day time flight will be at an altitude of 5,000 metres)

(b) As provision for the worst eventualities the plane's log will put down the route as across the Bering Straits to Japan. (Japan will maintain to the bitter end that that is the route to which she had agreed)

(c) The plane used will be a Junkers 290. Since it is a 4-motored plane it is not thought it will have to make a forced landing in Russian territory. While its cruising speed is 325 kilometres (? an hour?) there is a west wind averaging 30 kilometres (?an hour ?). In case it cannot make it all the way to Tokyo and it is forced down in Manchukuo suitable camouflage will be used (?by saying?) it is on a flight from Singapore (Shonan).

(d) The flight will be made entirely with civilian personnel; the crew members will all be Lufthansa staff members and the status of the officers will be concealed. Furthermore the plane will carry Lufthansa markings and will not be armed.

3 The Japanese will be (?informed in advance?) of the plane used.

For my part I(Oshima) replied that while we had from the beginning hoped for as speedy an arrival at their posts as possible of the General's party, who were known to be veteran soldiers and technical specialists, the delicate relations between Japan and Russia demanded consideration not only from Japan's standpoint but from that of German-Japanese --3G-- and since --3G--, many difficulties are to be expected in carrying this
Therefore I said that while on principle I preferred that they go to their posts by submarine, I would hear what (headquarters thought of this?) and reply. Accordingly please let me know your views on this matter.

I have already conferred with the Army and Navy Attaché about this.

Please pass this on to the Army and Navy"(53)

The turn south over the Enisei delta is exactly the kind of short cut across Soviet territory that the Japanese government had feared and had referred to earlier. This must have reinforced all their anxieties about the Germans lack of sensitivity to the Neutrality Pact issue.

On 16th December 1944 according to Kössler and Ott a Junkers Ju 290 A-3, works No 0163 registration PI + PQ, was withdrawn from FAG 5 and earmarked for modification to take Kessler on the polar route. Hptmn Rudolf Mayr was to be the pilot and he delivered the plane to the factory on December 16th for modification. But, according to Kössler and Ott delays in the work at the Travemunde works on the conversion was the reason for the plan not being carried out(54). The actual reason, of course, was that Japan would still not accept any compromise of the Neutrality Pact with the Soviets and they did not believe that the Germans would honour their agreement and fly far enough to the North to avoid Soviet territory altogether. Pressure was mounting from the Soviet side and the Japanese realised that if they provoked any active move by the Soviet Union against Japan this would guarantee instant and total defeat.

But the pressure from Berlin continued. Oshima was backed up strongly by Admiral Abe and the other Attaches and on 13th Jan 1945 (55) Abe and Kojima, the Naval Attaché sent a message to Tokyo again promoting the North Siberia route for the Kessler flight but with some additional selling points. The aircraft, which would be a converted Ju 290, would be a gift to Japan. The pilot had flown over the South Pole and had wide experience of Arctic flying and was skilled with aerial torpedoes,
Kessler had been a friend of Naval Attaché Kojima for seven years. Kessler was ex-Navy himself and was once attached to the Japanese fleet, and would therefore honour Japanese requirements for secrecy. Also "There have been left behind here for an extremely long period of time important weapons and techniques eg radar, anti tank guns and rocket guns and essential personnel which can be relied upon to make immediate contributions to the present day Greater East Asia war situation. (Utmost efforts were made to attempt to transport them by submarine but because of the successive losses of last year, few arrived in Japan. Since then blueprints have been used and equipment is being set up after various plans are sent in the form of small scale photographs)"

There is an interesting consistency here. Ribbentrop had told Goering in September 1942 when they were corresponding about the proposed flight by the BV 222 that the flight would take an expert with aerial torpedoes to Japan. This expert was likely to be one of the BV 222 endurance pilots - Mayr or Blume. There are mentions of Mayr elsewhere in connection with polar flights although I have not been able to find any evidence of a link between Mayr and the South Pole.

Despite all the pressure from the Japanese Embassy in Berlin, Tokyo was still unmoved and replied on January 21st 1945 (56): "The air trip of General KE cannot be realised. We have had a message dated 17th Nov from the German Air Attaché here stating that the orders for General KE's appointment as Air Attaché had been cancelled". Also on January 21st 1945 Shigemitsu responded to Oshima (57) "The Japanese government fully appreciates the --1G-- view that a trip by General Kessler and his party to Japan would strengthen German-Japanese cooperation. Moreover, since this represents the desire of the highest German authorities, we have been continuing our careful discussions with the parties concerned.

However, the fact remains that we must attach great importance to the (?bona fide?) maintenance of our relations with the Soviet Union; and it is believed that, even if we made use of the route and private plane suggested by the Germans, it would be practically
impossible to conceal the flight --2G--. Consequently, the Japanese Government has again arrived at the conclusion that it cannot approve of a flight via the northern route. On the other hand, it would naturally welcome a trip to Japan by General Kessler and his party by submarine or some other method via the Southern Area.

Please inform the German authorities, at your discretion, to the effect that we cannot revise our previous stand on the matter.

We have already conferred with the Army and Navy on the above."

The fact that Army, Navy and Foreign Office all agreed made the point unarguable and so according to Oshima on January 30th 1945 Oshima informed Tokyo that Kessler had called to say goodbye. He agreed with the Japanese government message and the party had been broken into groups for submarine trips. Eight staff were to go with him. Von Gronau would return by submarine after Kessler arrived in Tokyo(58).

The submarine eventually chosen to carry Kessler was U234 commanded by Lt Cmmdr Johann Fehler, ex-mines and explosives officer on the raider Atlantis. This was the last U boat to leave Germany heading for Japan. There were originally going to be 27 passengers but Fehler negotiated this down to 12 - Dr Heinz Schlicke - Director of Telecommunications testing at the Kiel Arsenal and a high frequency specialist, Capt Hideo Tomonaga, a submarine architect, Air Force Colonel Genzo Shosi, aero engineer, Bringewald and Ruf civilian engineers advising on jet and rocket aircraft, Luftwaffe Col Fritz von Sandrath, Capt Gerhard Falk of Naval Architecture division of the OKM, Judge Kay Nieschling travelling to hear accusations against Ambassador Ott in the Sorge spy case, Luftwaffe Lt Erich Menzel, V1 and aerial torpedo expert, Navy Lt Heinrich Hellendorn, Engineering Midshipman Klug, Luftwaffe Gen Ulrich Kessler. The cargo included mercury in the keel in 50lb iron bottles, optical glass, engineering blueprints, cameras, documents in sealed containers, parts of an Me 262, Panzerfausts, anti tank weapons and small rockets (59). The U 234 surrendered in mid Atlantic in May 1945 and the two Japanese specialists committed suicide. Events had come full circle since
Tomonaga had traveled to Europe on U 180 on its return from delivering Subhas Bose to a rendezvous with a Japanese submarine off Madagascar in early 1943. U234 also carried a consignment of Uranium Oxide. There are suggestions that the finding of this cargo by the US Navy when the U boat arrived in Norfolk Virginia accelerated and strengthened the decision to use the atomic bomb against Japan(60).

Despite the failure of the attempt to transport Kessler to the Far East by air the efforts to fly continued to the bitter end. Even as the Third Reich was collapsing the Germans were still trying to get information and personnel out to Japan to continue the struggle. As late as April 7th 1945 the Japanese Military Attaches sent a "proposal for sending German scientific specialists and equipment to Japan" (61), and just two days before the evacuation of the Japanese Military Attaches from Berlin ahead of the victorious Red Army (62) the Naval and Military Attaches in Germany contacted the Chiefs of Staff in Tokyo in order to request clearance for a flight for Major General Wild who was Kessler's senior aide. Kessler was already travelling to Japan by submarine and the journey would take three months and "there is a danger of losing the opportunity of exchanging experience gained in warfare with new weapons". The message proposed using a modified Ju 290 [presumably the A-3 version already being modified at Travemunde for the Kessler flight]. The aircraft would follow the great circle route from Bardufoss, Norway, across the pole down the Bering Straits to Paramushiro Island off Kamchatka. This was a journey of 7,700 Km and would use a Ju 290 improved to have 9000 Km range carrying 4.5 tons of fuel. 6,000m altitude. 310/320 knots cruising. It would need an 800m long runway for landing. Crew would be pilot, flight officer, engineer, radio operator. The plane would be transferred to Japan. There would be no reason to cross Soviet territory. If there were any problem the plane would divert to Alaska not Russia.

"The men to be sent are all doing their best to get together the latest information to take along (important data will be on microfilm) in response to the various questions that have been asked by Japan."
Ironically the navigation information given pointed out that because the route took them over the pole the use of the magnetic compass would be impossible. The flight would, therefore, have to take place when sun and moon were near to 90 degrees of separation. There were only 3 days when this would be possible each side of 28th April, 20th May, 15th June 1945.

It all proved too late. The Germans surrendered on May 7th 1945!

Notes to Chapter 8
1 National Archives Washington Record group 457 MAGIC Summaries – daily summaries of significant Japanese messages intercepted and decoded. NARA RG 457 SRS October 1st 1942
2 SRS June 4th 1943
3 Medlicott 1952 op cit vol 2 p 6
4 Chapman 1982 op cit vol IV pp 640/1
5 Medlicott 1952 op cit vol 2 pp 446/7
6 SRS December 31st 1942
7 SRS 12th May 1944
8 Kössler and Ott 1993 op cit p 113
9 Hinsley (FH) et al British Intelligence in the Second World War London 1979-90, Beesley (Patrick) Very Special Intelligence New York 1978 - both books show how the developing use of intercepts and SIGINT gave the Allies the ability to stop blockade runners arriving at Atlantic ports.
10 Medlicott 1952 op cit vol 2 pp 170/2 and 446/7
11 National Archives, Washington, Record Group 457, Histories and reports analysing information gathered from decodes. NARA RG 457 SRH 019 Blockade running between Europe and the Far East by submarine 1942-4, produced 1st December 1944
12 ibid
13 Medlicott 1952 op cit vol 2 p 448
14 NARA RG 457 SRH 019 op cit
15 SRS 6th April 1943
16 NARA RG 457 SRH 019 op cit
17 Meskell 1966 op cit pp 129-31
18 International Military Tribunal (Far East) - IMTFE evidence of von Petersdorf 38427,
19 Niemöller story in IMTFE evidence of Kretschmer 24635
20 Hashimoto (Mochitsura) *Sunk: The story of the Japanese Submarine Fleet* New York
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21 Saville (Allison W) *German Submarines in the Far East* US Naval Institute
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22 Winton (John) *ULTRA in the Pacific* London 1993 pp 202/3
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25 ibid
26 Boyd (Carl) and Yoshida (Akihiko) *The Japanese Submarine Force and World War II*
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27 ibid p 204
28 SRS 3rd June 1944
29 Air Force Historical Research Agency Library, Maxwell Airforce Base, Alabama.
   (512.619B-17) Interrogation report of pilot Focke Wulf Condor KG40 ditched in Atlantic
   28th December 1943. "Operations under Fliegerführer Atlantik in Biscay area" January
   28th 1944. ADI (K) report no 45/1944 quoted in Werrell 1988
30 Kössler and Ott 1993 op cit p 204/5
31 ibid
32 ibid
33 ibid
34 Bletchley Park Archive. This is a card index logging messages intercepted and
   decoded between the Japanese Military Attachés in Berlin and Tokyo. Bletchley Park
   card index JMA 108 ref to ZIP 5744
35 SRS 3rd June 1944
36 ibid
37 Kössler and Ott 1993 op cit pp 204/5
38 ibid 230/1

212
(549.361) Interrogation report on Me 109 pilot who deserted to Allies 19th March 1945. 
APWIU (1st TACAF) 25/1945 23rd March 1945 quoted in Werrell 1988

40 Lufthansa Archive Cologne. Letter from Auswärtiges Amt dated 9th May 1944 and headed "Flugverbindung Deutschland - Japan" enclosing report from Kaumann. From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.

41 Lufthansa Archive - note dated 3rd June 1944, Berlin. Headed "Flugzeuge für Fernostdienst". From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.

42 Lufthansa Archive - note dated 27th July 1944, Berlin. Headed "Flugzeuge für Fernostdienst". From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.

43 Kössler and Ott 1993 op cit pp 230/1

44 Lufthansa Archive - note dated 3rd August 1944, Dessau-Kochstedt. Headed "Flugzeuge für Fernostdienst". From the file on issues concerning transport between Europe and the Far East and correspondence with Kaumann in Tokyo.

45 Lufthansa Archive - not dated 14th December 1944, Berlin. From the file on issues concerning transport between Europe and the Far east and correspondence with Kaumann in Tokyo.

46 Bletchley Park card index JMA 108 ref to ZIP 0321 - 

47 ibid ZIP 10924

48 National Archives, Washington, Record Group 457, Japanese diplomatic messages intercepted and decoded. NARA RG 457 SRDJ 66833, diplomatic telegram, Berlin, Oshima to Tokyo, No 782, 2nd August 1944

49 NARA RG 457 SRNA 2086/7, Naval Attaché message, Berlin, Admiral Abe to Tokyo, 4th August 1944

50 SRS 7th October 1944

51 NARA RG 457 SRNA 2458/9, Naval Attaché message, Berlin to Tokyo, 14th September 1944

52 NARA RG 457 SRNA 2182/3, Tokyo to Naval Attaché in Berlin, 10th October 1944
53 NARA RG 457 SRDJ 85409-11, diplomatic telegram, Berlin, Oshima to Tokyo, No 20, 7th January 1945  
54 Kössler and Ott 1993 op cit pp 204/5  
55 NARA RG 457 SRNA 3792-6, Naval Attaché message, Berlin, Abe and Kojima, to Tokyo, No 232, 13th January 1945  
56 NARA RG 457 SRA 15267, Military Attaché message, Tokyo to Berlin, No 053, 21st January 1945  
57 NARA RG457 SRDJ 87373, diplomatic telegram, Tokyo, Shigemitsu to Berlin, No 49, 21st January 1945  
58 SRS 30th Jan 1945  
61 Bletchley Park card index JMA 108 ref to ZIP 11623  
62 NARA RG 457 SRNA 4467-71, Naval Attaché message, Germany to Tokyo, 12th April 1945
Conclusions

In the Introduction a number of reasons were identified which encouraged Japan and Germany to work at recovering transport links after the loss of the overland railway route across the Soviet Union. In addition to the obvious need to promote military collaboration the other reasons why continuing transport links seemed desirable to the Axis partners were:

the transport of goods -

- economic contact and particularly the transport of essential raw materials.

- the transfer of technology and expertise particularly the exchange of weapons systems, plans, parts.

the transport of people

- bringing German technicians to Japan to support technology transfer

- sending Subhas Chandrar Bose to the Far East.

- improving Japan's representation in Berlin.

- sending a delegation to negotiate a separate peace between Germany and the Soviet Union on the Eastern Front.

There were some successes for the Axis powers in this enterprise. The surface blockade runners carried cargoes to Europe in the winters of 1941/2 and 1942/3 which made a significant difference to Germany's ability to wage war. But when surface voyages became impossible the transport submarines which took over the role probably carried less than the cargo of one surface ship in total throughout the war. To give a sense of proportion US Intelligence analysts calculated that the total blockade running exercise to
Japan throughout the war carried the equivalent of less than half of one day's lend lease shipments from the USA to the Allies. It is also the case that disagreement over export licenses and contracts delayed any significant movement of technology from Germany to Japan until late in the war.

As far as movement of people was concerned a number of people did make the long and dangerous voyage. According to the History produced from MAGIC material in December 1944 twenty nine named people plus the crew of fifty two for U 1224 had traveled to Europe on submarines and thirty two named people plus eleven unnamed German technicians had traveled to the Far East. U 1224 was intended to be the second U-boat given to Japan. Those passengers going to the Far East had included Admiral Nomura, Rear-Admiral Yokoi and of course Subhas Bose all in 1943. The journeys lasted around three months in each direction. Some Japanese diplomats, or those who could claim some form of diplomatic identity, traveled overland across the Soviet Union but there was no means of transport which offered an acceptable rapid way for key figures in the management of the war to meet in each others' capitals. At the same time the need to move and exchange people was vastly greater than the actual level of activity carried out.

In December 1941 the Japanese attack on Pearl Harbour and the German declaration of war on the USA turned the war into a global conflict. Both the Allied and the Axis partnerships struggled to react to the new situation and form effective war-winning partnerships. In both camps there were cultural differences and a lack of mutual respect and understanding. The issues which led to the failure of relationships on the Axis side were described in the Introduction but similar rifts and confusions existed on the Allied side. It could be argued that it was only the opportunity for frequent high level meetings between the partners on the Allied side and particularly between Britain and the USA which allowed these problems to be overcome and which brought about a high level of co-ordinated planning and operations. It was this co-ordination which, in the long run, allowed the overwhelming resources of the Allied partners to be applied to winning the war.
The Axis partners, on the other hand, never reached a similar level of collaboration. Although the rhetoric was always strong actual military co-operation was limited and very little joint activity actually emerged even at the period in 1942 when the Allies were vulnerable in the Indian Ocean. Before December 1941 there were some examples of collaboration between the German and Japanese Navies to support German surface raiders and to exchange intelligence. After December 1941 the Germans initially wanted support from Japan through an attack on Manchuria but perhaps more practically they looked for assistance in the Indian Ocean to cut the allied supply route to the Middle East around the Cape and to the Soviet Union via the Persian Gulf. The Japanese Navy carried out the large scale raid into the Indian Ocean in April 1942 followed by some major submarine activity but there was no exploitation of the raid and although there was spasmodic activity later in 1942 and in 1943 the Japanese submarine strategic doctrine and tactics prevented a systematic focus on cutting off supplies. The establishment of German submarine bases in Penang and Djakarta eventually provided the force Japan was unwilling and unable to commit and these U boats were relatively successful in sinking allied ships but there were considerable strains in the relationship in the only place where German and Japanese personnel actually had to work together.

Again, it could be argued that it was the lack of the ability for the Axis partners to meet face to face and resolve or at least compromise on their differences which prevented any degree of collaborative planning.

This thesis has demonstrated that an alternative form of transport which would have met these needs was available. The technological capability existed to create an air service between Europe and the Far East which could have provided a regular, rapid and effective way for senior decision makers to meet and plan and to move small quantities of high value goods eg weapons specimens, blueprints, mineral additives. The airline, Lufthansa, especially had developed the expertise and the aircraft which could have operated such a service. The capacity in terms of expertise and hardware existed within pre-war experience and practice and was being developed further in 1942 and 1943.
The evidence put forward in Chapter I showed that the hardware, the crews, the
techniques of long distance flying and the knowledge of the routes were all in place. The
Blohm und Voss BV 222 Wiking was available from 1941 in sufficient numbers to have
operated an air service from northern Norway to Dairen or direct to Tokyo. These aircraft
were designed and built as commercial airliners to fly Hamburg to New York non-stop.
Across a more central route the Focke-Wulf FW 200 Condor, again developed from a
commercial airliner, could have operated a service. After the end of 1942 the Junkers Ju
290 was available which could have flown either route. During 1943 the Japanese
developed their own aircraft, of which only two were built, the Tachikawa Ki 77, to fly
the southern route. The Italians proved their aircraft the Savoia Marchetti SM 75 over a
central route to Tokyo but its ability to carry any useful load is doubtful. It was shown in
Chapter I that there were pilots, navigators and flight engineers with experience of flying
over long distances and with navigation over water and unknown territory coming
forward from Lufthansa and from the Italian airline LATI and with experience also
gathered from the various air races and exploration flights. Again it was shown that the
practical knowledge of the three alternative routes to the Far East was extensive and that
the information was being exchanged between the Axis partners. All that was practically
necessary was available and waiting to be used.

The barriers which prevented the development of an air service from this strong base of
technical capability demonstrate the lack of a shared purpose and a common agenda
between the Axis partners. German military resources were being sucked into the
catastrophic ideological crusade on the Eastern Front while her ally, Japan had no
intention of attacking the Soviet Union and assisting in this conflict. On the contrary she
was so desperate to retain her neutrality agreement with the USSR that Japan was not
only willing to allow millions of tons of lend lease aid trade to the Soviet Union to flow
past the home islands but, importantly for this thesis, blocked any attempt by the
Germans to take the direct air route across Siberia and Manchuria fearing that any
infringement of Soviet air space might lead to a breach of neutrality. Japan feared that
any change in the relationship with the Soviet Union could lead to the alliance between
USSR and USA becoming a physical reality in the Pacific and this would have meant US
air power projected from bases in the maritime provinces around Vladivostok bringing the Japanese home islands within easy range of the US strategic bombers.

Paradoxically again, although Japan was unwilling to attack the Soviet Union or to allow Germany to use her preferred air route across Soviet territory, she was desperately keen to develop an air service because she wanted high ranking delegations to go to Germany to mediate an end to the war on the Eastern Front so that Germany's resources could be applied against Japan's enemies the USA and Britain. They had had no success up to the end of 1943 in transporting a high-ranking delegation to Berlin or in getting the Germans to consider an armistice on the Eastern Front. From October 1941 through to the autumn of 1943 they had tried to use the Italians, Germans and their own aircraft to take a delegation to Europe which could argue for a settlement between Germany and the Soviet Union. The focus was on working with Germany because the Japanese realised that, since the Germans were, at that time, in the ascendant on the Eastern Front, it was they who would have to be persuaded to halt the fighting. During 1943 it became clear that it was now the Soviet Union which was moving into the dominant position and it would be necessary to persuade the Soviet Union to halt the fighting. Japanese diplomatic efforts therefore began to be focussed in Moscow. Japan had believed that the Germans would be able to operate an air service which would serve her purposes but her diplomatic alignment with the Soviet Union barred the Germans from using what they considered to be the safest and most feasible route.

Similarly within Germany the airline, Lufthansa, had the expertise to operate an air service to the Far East and aircraft with a sufficiently long range like the BV 222 flying boat but the failure of the Lufwaffe to develop strategic bombers from which long range transports could have been converted meant that any multi-engine heavy aircraft were at a premium. The priority for their use was seen to be in combat over the Atlantic supporting the U-boat war and not in flying to Japan. Within the fragmented decision making apparatus of the Nazi state it was not possible to create the alliance needed to commit aircraft to the strategic purpose of establishing German/Japanese liaison. At the same time, the fact that it was Lufthansa that was taking the lead was a concern and a
disincentive for Japan because the involvement of the commercial airline was seen as an attempt by Germany to re-establish an economic base in China and the Far East. Japan had worked hard in the late 1930s to drive out German economic involvement in China and the Lufthansa subsidiary Eurasia had been a key part of that involvement. Japan could not accept German commercial ventures within the area of the Co Prosperity Sphere.

The breaches within the Axis partnership could have been healed by the kinds of meetings and exchanges which an air service would have made possible but the technological capability to create and run an air service was not exploited as a direct result of factors which demonstrate the rifts within the Axis partnership. The failure to develop an air service was, therefore, both a symptom and a cause of the continuing inability of the Axis partners to work together.

The end result of the failure to develop the air service was continued dependence by the Axis partners on representatives of dubious quality and, more importantly, a dependence on radio communication which provided the Allies, through their code breaking achievements, with a crucial insight into the central workings of the Axis alliance which contributed significantly to the speed of the allied victory.
APPENDIX A
The possibility that German flights to Manchuria took place in Spring 1944
The narrative in the text takes the view that no German flights to the Far East took place. There is one piece of evidence that seems to contradict this version of events, which suggests that the project to fly to Manchuria was not cancelled and that four flights were made to Manchuria by three Junkers Ju 290s in February/March 1944. This story has often been repeated in the technical literature. The flights are described as carrying aero engines for Japan and returning with rubber and other raw materials. In fact, if they did take place it would be more likely that they would be carrying spare engines on the flight out for repair purposes (see Milch/Weizsäcker correspondence March 1943. The Junkers Ju 290 had been designed from experience with the Ju 90 with an easily removable engine unit - see photo in Walters 1996).

Werrell 1980 has looked at this story critically. I have gone back to the original documents and reviewed them against the background of the knowledge gained from the current research -

The evidence is a prisoner of war interrogation carried out on 29th March 1945. I have quoted this in full.

The report starts with a caveat on the reliability of informant -

"The following information was obtained from interrogation of an intelligent, observing and talkative P/W. Although violently anti-Nazi and anxious to offer services for the Allies, some of his statements should be accepted with reservation as they reflect confident exuberance."

The report then continues -

"Career
1 Uffz. Wolf Baumgart, 24, gold war-flight badge, came to the Luftwaffe in the fall of 1940 as a civilian pilot and took technical training courses until the Spring of 1941. In April of that year he joined 1/F (Nacht), then transferred to 4/F-11, and flew with these units in south Russia until March 1943. From April to August he was test pilot for Junkers at Dessau and Rechlin".
2 From August 1943 to April 1944 P/W served with FAG 5 at Mont de Marsan during which time he flew two special missions to Manchuria as described below. He then transferred to Eckusta 2 OKL and made Atlantic weather flights from Mont de Marsan and Bordeaux Merignac. He followed the Staffel to Brandis, then to Burg, where it was dissolved 25th September 1944

3 In the ensuing shuffle of assignments P/W ended up at the end of January 1945 with Scharfschuetze Kemp. 1 and was wounded on the Russian front. He surrendered voluntarily while proceeding to his home in the Pfalz after having requested a release from hospital.

Another LW Sonderkommando
4 In February of 1944 three A/C of FAG 5 one of which was piloted by the P/W were recalled to Tempelhof to be banded together into a special purpose unit. The Ju 290s were to be used to fly transport missions to Manchuria and the P/W made two such trips to an unknown landing ground in Japanese territory.

5 The first of these trips made by P/W was begun at Odessa with the return base being Mielec in Southern Poland. The second flight one week later was started and ended at Mielec. Astro navigation was used by the observer and one of the check points which P/W remembered was Lake Baikal. Flying time between destination and Mielec was about 33 hours. About two hours before landing in Manchuria the Tokyo radio station was D.Fd by the radio operator.

BMW 801 - MLs for Manchuria
6 The outbound cargo on each flight consisted of a complete BMW 801 ML power egg. These were loaded at Finsterwalde and Werneuchen respectively. In addition to the power egg on the second trip a heavy box marked "Secret - handle carefully" was taken on board at Atiershof.

7 A total of only 4 flights were made by the Sonderkommando. P/W had occasion to see the pilots of each of the other two A/C at a later date and learned that each had made only one flight. In each case a BMW 801 power egg was the outbound cargo. The other two planes used Posen
as a starting place.

8 P/W believes that the BMW power eggs were transported to Manchuria to be used as replacements in case one of the Ju 290s should have motor failure.

Raw materials for the Reich

9 The return cargo on the first flight consisted of about 32 oblong cases about the size of an ammunition chest. P/W estimated the total weight to have been 4000Kgs and believes the contents to have been special alloys or metals.

10 The return cargo on the second trip consisted of about 3000 Kgs [3 tons] of crude rubber. This was in the form of both yellow balls and red sheets.

Conversion of Ju 290 to transport

11 Prior to starting on the first cross-Asia flight the Ju 290 flown by P/W was converted into a transport plane at Finsterwalde. All the items of weight were removed. This included all but one 2cm MG, ammunition containers, dual control mechanism, co-pilot's seat, loading ramp etc. Protective armour on fuel tanks was also removed and two additional fuel tanks of 2500 litres capacity were installed making a total fuel capacity of 23,800 litres. The conventional door was also enlarged to permit loading of the power egg. Alterations were rushed and completed within 48 hours.

12 During the lapse of one week between the two missions P/W landed at Werneuchen in addition to the stop-over at Atiersdorf. At the former field an additional fuel tank was installed.

13 Refueling took place at destination in Manchuria. The ordinary Japanese gasoline was mixed on the strip prior to filling of tanks with a fluid which P/W described as being a type of alcohol. The compounded fuel smelled very similar to the B-4 normally used in the BMW 801 and the P/W stated that he noticed no difference in motor performance with this new gas.
A mysterious observer

14 The crew in addition to P/W consisted of radio operator and observer, who was in command of the mission. P/W does not know the identity of the latter and only knew him by his first name. Although in plain blue uniform he wore no insignia nor unit identity designation. P/W believes however, that he was an important personage because of the respect accorded him by the Commander of Mielec airfield on their return. The mysterious observer had one glass eye and P/W gathered from a later conversation with a companion that he was a former Lufthansa pilot.

15 the mission was shrouded in secrecy. P/W was not aware of the destination until he was well on his way over Asia and no comments or explanation were given by the observer.

News from the Fatherland

16 At the airstrip in Manchuria the incoming Ju 290 was met by about 15 German nationals dressed in civilian clothes. All were news hungry and their first questions were regarding the situation in the homeland. From his conversations with one of them, P/W learned that they have been away from Germany since before the outbreak of the war.

P/W claims to have noticed no Japanese military officials on the field. He remained with the A/C during the entire stop over and could offer no other details on the field or its administration. He did, however, note one Ju 52 on the landing strip." (1)

This report is the only piece of evidence discovered which suggests that these flights took place. If the description of the pilot's career is accurate then he was with FAG 5 until the end of March 1944 which would have allowed him to be part of the team planning for the flights. This would have given him some of the background needed to fabricate the story if he wished to.

There are a number of strong circumstantial points:

1 Timing - on Jan 19th 1944 Hitler stopped surface blockade running after the increased sinkings. In February 1944 these flights are supposed to have happened. Wolfraum had been identified in the Luftwaffe feasibility study as a material which had supply difficulties and which
it was feasible to transport by air.

2 The preparations for flights in the spring of 1944, recorded by Kössler and Ott 1993, are based in authentic records. The differences in the two accounts of the preparations are small - Kössler and Ott show that the Ju 290 A9s were being built from new at Dessau and were not all completed by February.

3 The Lufthansa connection - the route knowledge and plans for flights all involve Lufthansa. The report claims that Baumgart was an experienced civilian pilot - with Lufthansa?

4 Taking powerplants in case of engine failure suggests they expect no help at the other end. The objective is certainly goods for Germany not goods for Japan. The need to take spare engines was always part of the planning for flights to the far east. It was part of the Lufthansa feasibility study in January 1942 and an essential part of the plan to use the BV 222 in 1942/3.

5 The fact that rubber and special minerals were carried back to Germany fits with German needs.

6 Loading and unloading by German nationals fits with the idea of a deniable flight, a flight made without any Japanese involvement. One would, however, expect some mention of these flights in von Gronau's autobiography.

7 The elapsed time of the flight is too long.

8 The interrogator expressed uncertainty about the trustworthiness of the PoW. This section was part of an extensive report on jets and Mistel composite aircraft - any of these could be reasons for the uncertainty expressed by the interrogator at the beginning.

9 Baumgart says he saw a Junkers Ju 52 on the runway in Manchuria. Is this possible? Although not in service with Japanese forces Ju 52s were used by Eurasia Airline. Von Gablenz delivered a Ju 52 to China via India in August 1934. The route to Bangkok was pioneered by Ju 52s while
awaiting the arrival of the Condor. The last Ju 52 on the Lufthansa route was confiscated at Bangkok but the crew escaped and took the aircraft to Shanghai where it was used by Eurasia. Would a pilot know this?

10 Werrell says there is no mention of these flights in the MAGIC Japanese material. He refers to a search carried out at his request by Carl Boyd who knows the National Archive material.

11 Doubt is also cast by the Werrell article on these Manchuria flights on the grounds that the navigational and technical expertise was not available. It is clear, however, that the technical capability to carry out such long distance flights did exist - see Chapter 1.

12 The most important evidence which argues against the flights having taken place is Japan's attitude on the Neutrality Pact with the USSR and her refusal to encourage or support the idea of German aircraft over flying Soviet territory. It is most unlikely that Japan would willingly or knowingly accept flights across Russia for the benefit of the German war economy when they had consistently refused all German proposals to fly the northern route or central routes across the USSR. At the same time they opposed the delivery of the He 177 variant - see Chapter 1 - and the flights requested by the Germans later to deliver Ulrich Kessler to Japan. Of course if the flights had taken place then surely Kessler would have been delivered to the Far East as part of the project.

But the Baumgart report has such a wealth of supportive detail which fits with the known situation and which would have been difficult for a young pilot to make up that it is necessary to search for corroborative evidence. Is it possible that the Germans carried out a few deniable flights with no Japanese involvement in discussion on flight or in Manchuria before the Japanese either found out or lost their nerve? Was the need for raw materials so overwhelming? The discussions around the Kessler flight show the devious ideas which were being considered and the possibility that the Germans were working on flights without going through formal channels. See particularly the message to Tokyo from Admiral Abe on August 4th 1944:

"Naturally the Germans have fully appreciated Japan's attitude to the project, the Führer."
especially having understood it very well all along, and the reason why the Germans are making covert preparations without submitting the matter to the Führer for approval is because they fear that the latter would never be able to take the matter up failing an understanding with Japan. Hence if the project does come about they are likely to be extremely circumspect in matters affecting relations with the Soviet, and we for our part are anxious to do everything that lies in our power(to insure this)"

Notes
APPENDIX B
Discussion of Primary Sources

Particular use has been made of material derived from the Allied code breaking projects. The increasing availability of this material is making a considerable impact on the understanding of all of the issues in question. It is now possible, for example, to draw a clear line between books and articles published before the Japanese MAGIC material began to be declassified in 1978 and that published using the new material. This is not to say that analysis produced before this material was available is necessarily defective but it is, however, necessary to check and confirm judgements because the evidence base now available is broader and more wide ranging. The US success with Japanese diplomatic codes came in late 1940 when the codes produced using the PURPLE machine was broken. MAGIC was the cover name used for all intelligence produced from decoding. The MAGIC material, particularly that emanating from the Berlin Embassy, gave a clear view of the relationship between the two major Axis powers and as a great bonus the Allies gained an insight into the thinking and decisions of Hitler and his close associates because Ambassador Oshima was himself one of those associates. George C Marshall, Chief of Staff of the Army, identified the decoded messages between the Japanese ambassador in Berlin and Tokyo as the "main basis of information regarding Hitler's intentions in Europe".

The full impact of the MAGIC material on the understanding of the Axis relationship and the conduct of the war has not been generally realised. Work written and published just after the war tended to depend on testimony and documents from the International Military Tribunal(Far East) - IMTFE. Work produced later had a wider access to German records but the MAGIC material contains Japanese messages which are not available anywhere else. The originals in Berlin or Tokyo were destroyed at the end of the war and the decode/translations now available in the National Archives in Washington are all that survives. These have the great advantage for western scholars of being in English but of course there is now no way to check and confirm the accuracy of the decode and translation.

The material in the National Archives in Washington is held in Record Group 457 at the College Park site. There is a very great volume of material in this archive - over 115,000
pages of diplomatic messages alone. Alongside this there are messages to and from Naval and Military Attaches and Germany/Japan liaison traffic. In order to make sense of the material as it was decoded the intelligence team produced frequent summaries - SRS - to be circulated to key people including President Roosevelt. There are over 1800 of these available for the period from 1940 to 1945 and this material has been indexed and microfilmed. The reports are to a standard format after the summer of 1942 with sections on Military, Political, Economic, Psychological and Subversion. A considerable number of pages were marked as "not releasable" when the microfilm record was made in 1980. Unfortunately there is no index to the main material and it is difficult to move from the Summaries to the main material because the referencing to individual documents is not consistent.

Another difficulty in the use of this material arises from the fact that the original numbering of the intercepts by the co-operating agencies which handled the process has been superseded by a system using the prefixes SRDJ, SRA, SRNA etc plus a number for each page of each of the documents. But the cross referencing of the documents by the people who originally worked on them used the original numbering. The Japanese Ambassador in Berlin might, for example, refer to "my earlier message 784". The decoder/translator makes a note on the transcript that this is, let us say, SSB 53015. SSB standing for the Signal Security Branch, one of the changing names for one of the agencies working on this material during the war. There appears to be no way to find that earlier message and to cross refer from one numbering system to another except by searching through likely messages and checking the reference attached to the message by the originator.

Another valuable category of documents in this archive are the Secret Research Histories - SRH - which are studies undertaken during the war building on the material which was being intercepted. There appear to be at least 400 of these. A major source for this piece of work has been SRH 019 "Blockade running by submarine between Europe and Far East up to Dec 1944".

In the UK the ULTRA material produced from the breaking of German codes produced using the ENIGMA and other coding machines has been held at the Government Code & Cypher
School since 1945 and is now being slowly weeded and distributed, where it is considered possible for continuing security reasons, to the Public Record Office at Kew or to the archives at Bletchley Park. Of particular interest in the PRO is the HW 1 series which comprises the files of decoded documents selected for Churchill’s personal scrutiny. These documents are introduced with a brief letter from "C" and often carry Churchill's own annotations which help to assess the level of importance of the information at the time. Interestingly one of the documents referring to the plans for an air service on June 3rd 1942 is included in the selection filed at HW1/635 and it has the comment "This is significant 10/7/42" written by Churchill himself.

In addition to the more well known work with the German codes Bletchley Park also worked on Japanese codes. From the summer of 1942 the Japanese Military Attaché code was being regularly broken. The huge amounts of data being gathered from the massive decoding operation at Bletchley Park were captured in a card index system. In the Bletchley Park Archives there are two card index boxes - JMA 108 - relating to messages from and to the Japanese Military Attaches in Berlin. The subject index has a series of cards recording messages concerning "Special Flights" with some 60 entries each of which is a one line summary of the message with the origin and the date and a reference to a message as a ZIP or some other number. There are also cards referring to purchases of equipment and raw materials and to the transfer of Japanese Diplomats back to Japan across the Soviet Union. It has not yet been possible to link these references to any sets of documents released to the PRO but the dates and the subjects of the messages can be used to fill out the chronology of the air service project. Some of these messages appear to be duplicates of messages also intercepted and processed by the US agencies and filed in the MAGIC documents at the National Archives in Washington.

There are considerable gaps in both the MAGIC and the ULTRA collections. There are sections in the MAGIC Summaries where blank pages are marked "Could not be declassified" and many ULTRA documents are "held by the department". The sensitivity of this material may relate to issues concerning the Soviet Union and the continuing use of the same cryptographic methods during the Cold War.
The bulk of the records of the German Foreign Ministry were captured in 1945 and a microfilmed set is held in the PRO. The files held by the State Secretary's office responsible for Japan have been searched thoroughly. Files for the later years of the war seem quite sparse.

The airline Lufthansa has an archive in Cologne and the staff have made available extracts from published material about the airline's work from the 1920s and also copies of documents from the files of correspondence between their wartime representative in Tokyo, Herr Kaumann, and headquarters in Berlin. This has been of considerable help in demonstrating the feasibility of an air service because Lufthansa undertook a number of technical studies to prove the concept because they were enthusiastic to extend their commercial routes to the Far East.

Material on the Luftwaffe has not survived in great quantities and the best source on discussions about the air service and priorities for the use of long range aircraft has been the papers of Field Marshall Milch which are held in the Imperial War Museum. A useful list of the topics discussed at the meetings between the Field Marshal and his senior team has been compiled by David Irving.

A point which needs to be considered is the use of "technical" material as a source of evidence. Since the war a huge number of publications have been produced which concentrate on hardware and the technical facts about, for example, aircraft of the Luftwaffe. These publications grow out of, and reinforce, each other in the sense that stories and possibilities are repeated endlessly without any referencing back to any original source. Professor Kenneth Werrell writing in Aerospace Historian in 1988 has made the only other attempt I have found to link this kind of unsupported chain of repetition to historically acceptable evidence(1). He has taken two often repeated stories about long range German flights and traced them back to a series of Prisoner of War Interrogation reports in the US Air Force Historical Research Agency at Maxwell Air Force base in Alabama. He then tries to assess the validity of the evidence as a support for the stories.

Technical material of this kind, put forward without any verifiable reference, has had to be
used in a number of places in the present study. Wherever this has been done other forms of evidence have been drawn forward in support. In the chapter on the technical feasibility of an air service between Europe and the Far East evidence has been drawn from a wide range of unreferenced sources but since the point of this chapter is to look at what was possible in the 1930s the attempt has been made to correlate this with articles and information in contemporary publications. Elsewhere assertions in the technical literature have been linked with evidence from contemporary documents or communications which verify that an event took place. The Italian round trip flight of July 1942, as an example, is mentioned occasionally in technical literature about the Savoia Marchetti SM 75 as an illustration of this aircraft's capability. This gives us some useful information about the technical specification of the aircraft but within this study the information is linked to diplomatic messages setting up the flight, a prisoner of war interrogation of a crew member, a contemporary newspaper article and further diplomatic messages following the flight. In this way the combination of types of evidence creates a rounded and probably more accurate picture of the event and its significance.

Discussion of Secondary Sources

This discussion is organised under topic headings. Sources are identified by the author's name in capitals and the date of publication. Full details are in the Bibliography.

*Reasons for making alternative transport links after the cutting of the Trans Siberia route - a) Access to scarce raw materials and technology transfer*

The fullest picture of the economic warfare and blockade running issues is in MEDLICOTT 1952. This is a work in the Official History series written in the 1950s with good access to the support materials. It is particularly strong on the Allies' approach to economic warfare and about Germany, her needs and her attempts to satisfy them. Blockade running and counter activity by the Allies is seen as part of the evolving Allied strategy for economic warfare. MILWARD 1965 provides a different view of the German economic position and stresses the amount of under use of resources.

CHAPMAN 1982 is the edited War Diary of the German Naval Attaché in Japan and this provides a view from Tokyo of the work to put together cargoes and ships to run the blockade
to Europe. Blockade runners also operated as supply ships for raiders and both activities fell under the responsibility of the Attaché. The diary, which was sent to Europe in sections using blockade runners, is one of the few documents surviving from the German Embassy in Tokyo. It shows clearly the varying levels of support from Japan for the trade with Germany and the editor has created a very strong and detailed support in the form of notes and documents which has turned the diary into a strong analytical account of relations between Germany and Japan which reaches back into the 1930s.

The work on technology transfer is scattered through a number of works including CHAPMAN 1982, 1984 and MESKILL 1966 which look at the political/diplomatic dimensions. There was concern in Germany over reciprocity in the exchanges and some reluctance until quite late in the war to release technology to the Japanese. These works look at the Japanese Naval and Military Missions to Germany in the early years of the war. Elsewhere there are references in the Technical literature which identify aspects of technology transfer. FRANCILLON 1970 which is mainly concerned with descriptions of the development and use of Japanese aircraft identifies examples of aircraft cannon from Germany being incorporated into Japanese aircraft, German engines being imported and built under licence and German aircraft acting as a model for development by Japanese companies. Articles in various Technical Journals eg RAF FLYING REVIEW concerning particular aircraft deal with links to Japan and efforts to purchase sample aircraft and technology. SCHMITT and GREEN 1970 discuss the involvement of German aircraft manufacturers in Japan in the 1920s and 30s and CHAPMAN 1979 discusses naval construction links in the 1920s. This is also mentioned by GRAY 1992. The Germany Army involvement in using overseas companies to conceal arms developments in the period between the wars is covered in detail by CRAIG 1964. AKIRA 1998 looks at the links between German and Japanese companies in the 1920s and 30s. A number of other authors look at aspects of technology transfer BROOKS 1992, HENSHALL 1995, WILCOX 1984, SHAPLEY 1978 are all particularly interested in the possibility of transfer of information on nuclear weapons developments. RHODES 1986 provides a more conventional approach to this issue.

b) Transporting Subhas Bose to the Far East

Subhas Bose has become a cult figure since his death in an air crash in Taiwan escaping to a
possible haven in the Soviet Union in the last days of the war. He is known as "Netaji" and it seems that almost everyone who knew him has written memoirs which sometimes give quite different views on the same incidents. Some have been written quite a long while after the event. The interest for this study is in trying to piece together the plans for getting Bose to the Far East in 1942 which included the possibility of him travelling on an Italian aircraft. The most authoritative work on Bose and Axis policy towards India generally is HAUNER 1981 which draws mainly from German sources. GORDON 1990 is written as a double biography of Subhas Bose and his brother who was also an active nationalist leader who continued to work from within India when Subhas Bose left to find support elsewhere.

c) Japan's concerns over the quality of her representation in Berlin

BOYD 1980 and BOYD 1995 between them cover Oshima's career in Europe and it was his relationship with Hitler and Ribbentrop, so well demonstrated in "Hitler's Japanese Confidant", which caused concern over the effectiveness of the Ambassador in representing Japan's views. Boyd's earlier book on Oshima's role in the 1930s shows how he developed the close relationship with the Nazi hierarchy. Oshima's closest contact in the hierarchy was Ribbentrop and BLOCH 1994 is a well researched biography which shows the fragmentation within the Nazi policy making apparatus. The splits within the Foreign Office are well explained by Bloch and supported by the information about Erich Kordt and his brother in HOFFMAN 1977. Erich Kordt was a career Foreign Office civil servant who was seconded to Ribbentrop and the Ribbentropbüro in 1934 to observe on behalf of the Foreign Office and to prevent Ribbentrop from making a fool of himself. The Kordt brothers were associated with the anti Nazi underground and Erich was eventually posted to the Far East to keep him out of trouble. MILWARD 1965 and SPEER 1970 describe more examples of the fragmentation of the Nazi government in economic and armaments planning.

d) the attempts by Japan to mediate a separate peace between Germany and the Soviet Union

There is no separate study of this at present. The issue emerges within general studies of the war particularly WEINBERG 1994. KORDT 1950 is the memoirs of Erich Kordt who was a member of the German Embassy staff in Tokyo and he records a number of efforts from the Japanese to begin negotiations on mediation. Masonobu Tsuji describes his assessment of the
war on the Eastern Front as a strategic planner within the Kwantung Army in TSUJI 1951 and JONES 1954 and MESKILL 1966 mention the issue in their discussion of relations between Germany and Japan. MOURIN 1949 is concerned entirely with peace moves within the wartime activity. KRAMMER 1976 provides a good summary of the Japanese moves. SHIGEMITSU 1958 is an account of the diplomacy of Japan in this period by a man who was Foreign Minister and always close to the government. The book was written while he was serving a sentence in Sugamo Prison imposed by the Tokyo War Crimes Court. His criticism of pre-war and wartime policy is made with the benefit of hindsight and with a degree of self-justification.

In addition there is a limited amount of work which deals with the relationship between Germany and Japan in general. PRESEISSEN 1969 is very much concerned with the diplomatic developments leading to the Tripartite Pact. It and MARTIN 1969 were both produced mainly using German sources. MESKILL 1966 similarly draws from German sources although she had some access to US material which was later declassified. CHAPMAN 1982 shows the relationship from the view of the German Embassy in Tokyo while MASLAND 1949 was himself involved in the occupation government of Japan. BOYD 1995 looks at the relationship between Oshima Hiroshi the Japanese Ambassador in Berlin and the Nazi hierarchy as demonstrated through the MAGIC intercepts of his messages to Japan. This book covers all aspects of the Japan/Germany alliance and through extensive quotation gives an acute feel of the people involved. KORDT 1948 and 1950 worked in the Embassy in Tokyo until he moved to Nanking. His memoirs provide a useful insight but it is difficult to identify exact dates and sequences of events. PRANGE 1984 similarly shows the situation within the German Embassy in Tokyo and the working relationships with the Japanese as part of his assessment of the Sorge spy ring and its activity. STAHRMER 1952 is an account by the man who was drawn into Ribbentrop's "shadow" foreign office in the 1930s and then acted as a representative during the Tri-Partite Pact negotiations in September 1940. He moved from being ambassador at Nanking to ambassador in Tokyo following the discovery of the Sorge spy ring and the discrediting of Eugen Ott.

e) military co-operation

Military co-operation between Germany and Japan could have taken place against the Soviet
Union. In considering this possibility it is difficult to separate the three main strands of the Japan/Soviet relationship which were the maintenance of the Neutrality Pact, the desire to mediate a peace between the Soviet Union and Germany and the possibility of any military co-operation against the Soviet Union. These were all facets of the same relationship. This material is considered in the analysis of literature on the Neutrality Pact.

More practically co-operation was discussed against the USA and Britain. Naval collaboration is discussed by MASLAND 1949 and CHAPMAN 1967 and CHAPMAN 1979. MESKILL 1966 and JONES 1954 describe the attempts to collaborate and CHAPMAN 1982 shows a great deal of detail on the negotiations.

The factors which inhibited the development of alternative transport methods
a) Japan's neutrality pact with the Soviet Union
There is a general coverage of the issues in MESKILL 1966 and JONES 1954 but LENSEN 1972 has the most thorough and detailed account. The details of Lend Lease in HERRING 1973 and JONES 1969 demonstrate the value of the cross Pacific sea route and the ALSIB (Alaska/Siberia) air route and by inference the strength of Japan's determination to maintain the Neutrality Pact. DEANE 1947 gives an eyewitness account of the Lend Lease arrangements from within the Soviet Union. This whole topic really awaits a study using material from the Soviet archives.

b) Germany economic activity and interests in China and Japan's attitude to that
JONES 1954 and MESKILL 1966 cover this area. DAVIES 1983 is particularly concerned with the development of airlines in China in partnership with Lufthansa.

What were the alternative means of transport available to the Axis partners between Europe and the Far East once the Trans Siberian rail route was cut?

a) surface blockade runners
In some ways the key narrative is in BRICE 1981 but he is mainly interested in telling the story and recounting the exciting anecdotes without a strong link to the progress of the war and the impact of blockade running on the war economies. There are similarly two excellent narrative books on surface raiders WOODWARD 1955 and LANGMAID 1963. These are of
interest because blockade runners often acted as supply vessels for raiders. MEDLICOTT 1952 sets the facts about the blockade runners into the Economic Warfare context. CHAPMAN 1982 demonstrates the detail of the work which went on to assemble the group of ships to run the blockade from Japan and to obtain the cargoes and fuel required.

b) submarine blockade runners

BRICE 1981 also describes the submarine voyages but there are items particularly about the submarine involvement both as pure transport and as part of the Monsun operations. These include HASHIMOTO 1954 which is from the Japanese perspective written quite close to the events by an ex submarine captain with an active war record, GUNTON 1970 which is about the use of Penang by the German U boats and the transport submarines. He uses local knowledge and anecdotes although without adding much to the overall picture. This work was produced locally in Penang and was found in the Public Library in Georgetown. SAVILLE 1961 is a very detailed account of U boat involvement in the area around the Cape and the Indian Ocean as well as the combat missions based in the Far East and the transport submarines. BUSCH 1955 is an account from the German viewpoint with a chapter on the Penang base and the discontent of those Germans who were based there. He describes the cultural problems which arose in what was the only location where Germans and Japanese actually worked together side by side. Various others touch on the transport submarines and Monsun as part of a survey of U boat activity through the war. As an example HOYT 1987 has a chapter on U boats in the Far East. But these books are often poorly researched and repeat assertions from other books without investigating or sourcing them. Hoyt describes the sending of U511 to Japan as a gift but then claims that it was sunk by accident by a Japanese submarine which he identifies as Ro 501. In fact when she was accepted into the Japanese Navy at Kure on 16th September 1943 U511 was allocated the number Ro 501!!

There are any number of technical books on German and Japanese submarines and their specifications. One of the best of these is COMPTON HALL 1985 which has particularly interesting photographs of the Japanese submarine 18 arriving in Lorient, of the same submarine secure in a U boat pen and of the crew joining in a conga with a French accordionist in the grounds of a French Chateau! WATTS 1966 describes the development of the various Japanese submarine types and lists the members of the particular classes.
TAYLOR 1966 does the same job for U boats and includes a listing of the fate of each one. ROHWER AND HUMMELCHEN 1974 have produced a chronology which makes it possible to track the journeys of submarines around the world through the different war zones.

The availability of material from decoded German and Japanese material ULTRA and MAGIC has changed some perspectives on the defeat of the blockade runners.

BOYD AND YOSHIDA 1996 uses Japanese sources as well as the MAGIC intercepts and gives a complete picture of Japanese submarine operations of all types in the second World War. BOYD 1995 quotes the MAGIC intercepts concerning blockade running of which Oshima was aware. HINSLEY 1979-90 and BEESLEY 1978 look at the impact of the whole range of intelligence methods including SIGINT and ULTRA in closing down routes into the Bay of Biscay while LEWIN 1982 and WINTON 1993 look at the impact of MAGIC on the Pacific War and have some examples of the use of decoded information to intercept blockade running submarines.

c) overland using diplomatic immunity through the Soviet Union

There is very little available on this matter except for occasional references within the MAGIC documents and in the Military attaché file cards at Bletchley Park. BOYD 1995 describes the Okamoto mission in March 1943 which travelled overland from Manchuria to Turkey and then on to Germany. It is clear there were other similar trips which are referred to in decoded diplomatic signals traffic.

d) an air service - the two aspects to this are -

*Was an air service between Europe and Asia feasible in terms of technology?*

There has been no previous attempt to look at the feasibility of an air service between Europe and Japan during World War II or to describe and evaluate the attempts to develop one. An analysis of the feasibility has to focus on what was possible in the 1930s and how that could have been and was built on during the 1940s. It is a mistake to, as WERRELL 1988 does, look at his own experience in the 1950s, describe what he considered at that time to be "exceptional" flights and then use that as the yardstick for what was possible in the 1940s. It
is quite clear from the evidence of contemporary descriptions of activity from the 1930s that flights of much longer duration and over longer distances than Werrell's "exceptional" flights were carried out.

BOOG 1990 discusses the reassessment of the strategic role of the Luftwaffe which took place in 1942 and particularly looks at the feasibility studies on long distance flight which were carried out. MURRAY 1985 provides the best analysis of relationships within the Luftwaffe which affected long range aircraft developments.

The other sources are technical literature on aircraft specifications, histories of the development of airlines which show the route exploration which was being undertaken, contemporary records and descriptions of long distance flights, contemporary navigation manuals, contemporary articles on weather forecasting, memoirs of aircraft designers and pilots.

The Lufthansa archive has been particularly useful in identifying 1920s and 1930s route development work and the continuing involvement of the company's experts after the outbreak of the war.

Tracing the routes and potential landing grounds can be difficult and confusing because names of places and their spelling have changed. BACON 1912 as a very comprehensive world atlas from early in the century has proved very useful in identifying places particularly in Central Europe and the Far East and KEEGAN 1989 also provides very useful maps.

Analytical narrative of the various efforts to make flights between Europe and the Far East 1942 to 1945 linking the events to the political, military, diplomatic and economic context. When it comes to looking into the potential contribution of an air service there has been no complete study. There is some mention of particular flights or plans for flights in books on Bose which mention attempts to fly him to the Far East in 1942. MARTIN 1969 discusses the proposed Tenno flight July-Sept 1942 and is aware of the Italian flight, although he is in error on some of the details, and of the unsuccessful Japanese attempt in 1943. WEINBERG 1994 made the first serious mention of the whole issue of an air service and it was correspondence
with Professor Weinberg and the identification of the lack of a general study which has led to the present thesis.

Notes to Appendix B

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SRDJ - Japanese Diplomatic messages

SRA - Military Attaches messages

SRNA - Naval Attache

SRGL - Liaison messages

SRS - Summaries

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