

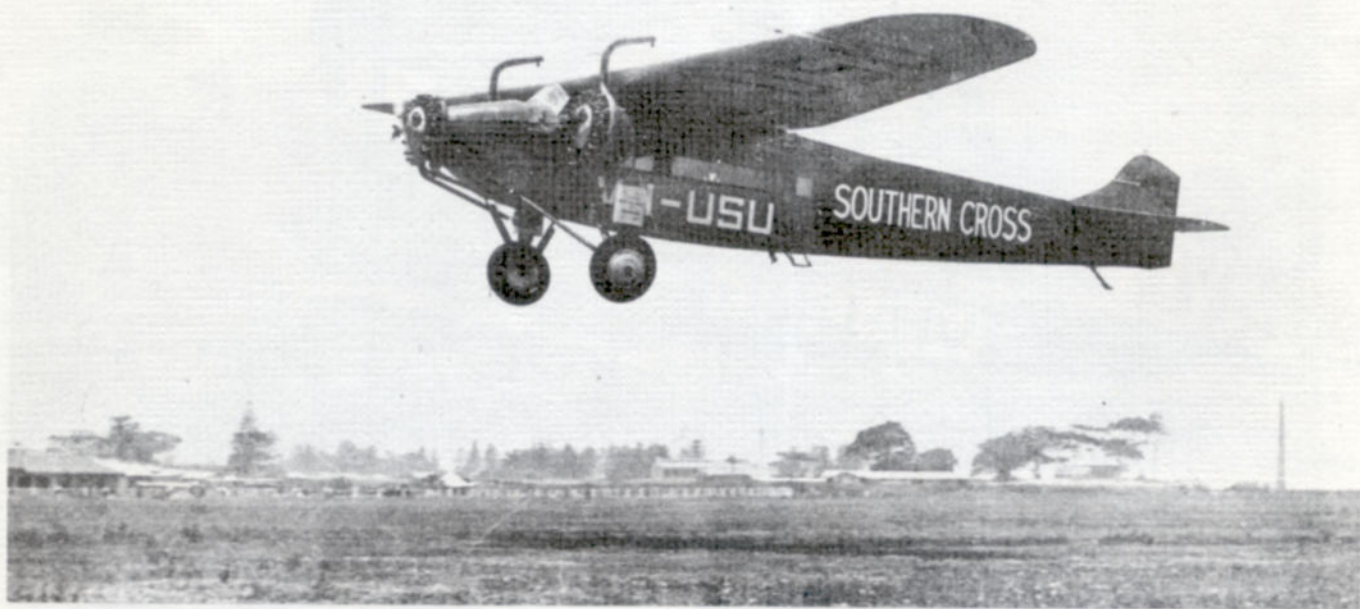


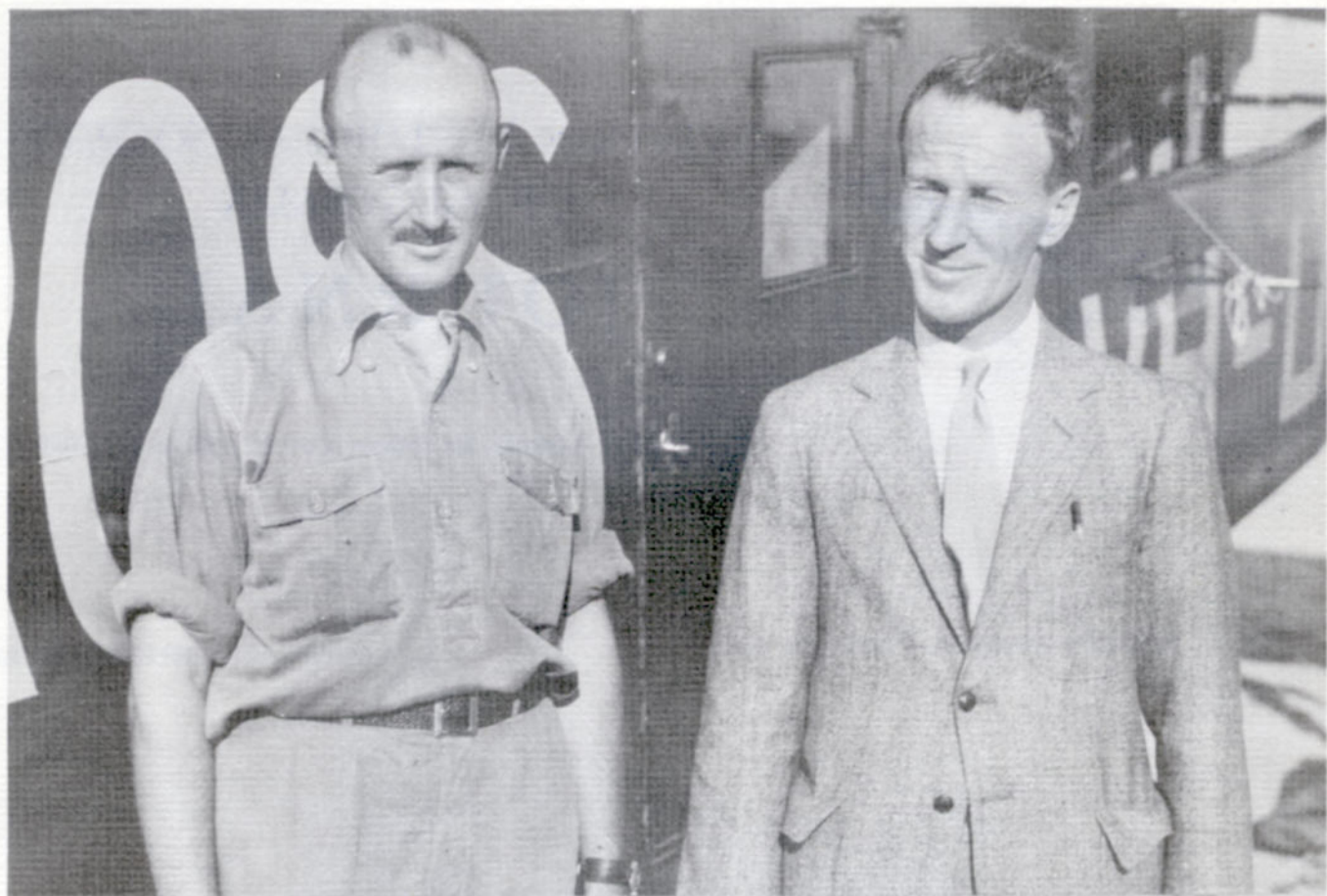
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## KINGSFORD SMITH AS I REMEMBER HIM.

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When I was invited to speak on Sir Charles Kingsford Smith, Harold Affleck, who was associated with Smithy at the same time as I was, asked me to suggest a title for the talk. I said that I would like to call it "Sir Charles Kingsford Smith, as I remember him". Much has been written about Smithy; many facts are known, but although my close association with him was only for a couple of years, in that period, we had some fairly realistic experiences together, and I feel that I learnt to know him very well indeed, (and I think he learnt to know me). So, my talk on Smithy will have the treatment I suggested. I feel happy, and very, very greatly honoured to speak of this great man.

I was associated with Smithy from 1933 to 1935, when he was lost. I will also refer to other aspects of his life, aspects of which I know fairly accurately, although not in detail. My first conscious recollection of Kingsford Smith was somewhere about 1927. That was when there was, in Australia, a great deal of talk and controversy about Kingsford Smith and Ulm, then in California, trying to undertake a flight across the Pacific. They had been there some time, and had been supported by the Government of New South Wales, but they did not seem to be getting anywhere. However, not many months later, the same people who had been criticising Smithy and Ulm were at Mascot Aerodrome to welcome the "Southern Cross" and to wave flags for the two Australians and their American comrades, Lyon and Warner. This early in my talk I mention this change of public opinion because this is the lot of pioneers, and Smithy was no exception. Thus he had great heights and great depths. He could take the depths with the heights; he was just that sort of man.

My next personal memory of Smithy was of listening to the radio signals from the "Southern Cross", when she was making the first Pacific crossing. I was greatly impressed by those signals, they made me realise an aircraft was actually crossing the Pacific for the first time. At that time I was experimenting in air navigation, an activity which really led up to my association with Smithy.

Perhaps a few details of the pioneer Pacific flight might be appropriate. At this time there had been one or two crossings from California to Honolulu, but nothing beyond that, and the longest stretch on a Pacific crossing was onwards from Honolulu to the Fiji Islands. Going right back to their original struggles in the U.S., Smithy and Charles Ulm went from one attempt to another to get an aeroplane for the flight. They went through all the things that I know very well from my own experience, finally, they met Capt. Allan Hancock. A very wealthy man Hancock was inspired by their project to fly the Pacific. He didn't reveal that interest at the outset of their acquaintance, but he did invite the two Australians to be his guests on his yacht for a couple of weeks, ostensibly just for a holiday. Actually the yacht trip was to enable him to get to know Smithy and Ulm, and to learn what sort of chaps they were. Obviously they passed muster, for at the end of the yacht trip, Hancock told them he would make available an aircraft. Their choice was the Fokker monoplane, which Smithy and Ulm named the "Southern Cross". Originally it was a single-engined aeroplane, but it was converted to a three-engined machine; the engines were 200 h.p. Wright Whirlwinds.

Before the Pacific flight was begun they made a number of test flights, including one extraordinary endurance flight in the region of 50 hours. There are people who know the actual figure - I'm sure Ern Crome would be eager to correct me to the very second - but I have no personal connection with this part of the story, and I speak only broadly on the point. However, that endurance flight proved exclusively that this aeroplane could fly the Pacific, because, the greatest stage distance - from Hawaii to Fiji - was approximately 3,150 statute miles. To be sure of making this distance, they increased the tankage of the "Southern Cross" until the weight was so great the aircraft had to be doing virtually maximum speed before it would become airborne. The maximum permissible all-up-weight of the "Southern Cross" was 10,225 lbs.

it weighed approximately 16,000 lbs. when they took off from Oakland for Hawaii, and from Barking Sands, Hawaii for Fiji. After take-off they flew at about 200 feet until they used up enough fuel to enable the aeroplane to climb; that was the kind of flight it started out to be.

There was no aid from radio; Harry Lyon worked entirely by astronomical and dead reckoning navigation; Smithy told me that Lyon was a genius of a navigator. On the job, he didn't do his figuring in books, but merely wrote on pieces of paper and then threw them out the window, but, declared Smithy, Lyon was an extremely accurate navigator. I believe that Lyon, and all associated with the flight, were inspired by the leadership of Smithy and Ulm. I thus bring Charles Ulm into this picture because I know the background, and although Ulm was not, at that time, a qualified pilot, he was a great organiser, and a great man. Equally with Smithy he was responsible for the fact that flight took place.

I think one of the greatest things Kingsford Smith ever did was to fly the "Southern Cross" by hand from the Hawaiian Islands to Fiji. Without an automatic pilot, or any other modern flight instruments, and with a great deal of instrument flying to be done, he had to do in the region of 34 hours hand flying. Charles Ulm did some of the flying but by the very nature of the flight, and as the flying leader, Smithy had to do the bulk of the flying, and after 34 hours in the air, with absolutely no rest, he then landed the "Southern Cross" in the cricket field at Albert Park, Suva.

I would guess that the field was about 300 yards at its greatest length and the "Southern Cross" did not have brakes. For an absolutely fresh pilot in a tiny aeroplane, it would be a pretty good effort to get into Albert Park. Smithy did that with the "Southern Cross". True, he ground-looped the aeroplane at the far end of the field, but that too, was an extraordinary thing. He touched down about half way across the park. Towards the end of the run the aeroplane showed no sign of stopping, and ahead, at the far end of the field, was a tree. With absolutely perfect judgement Smithy ground-looped the aeroplane around the tree and didn't touch a thing. Of course he was a pilot genius. Also he was a rugged determined personality.

He needed all those qualities on the final stage of the flight - from Suva to Brisbane. They had appalling weather, and probably the greatest hazards. The many stories written on the subject tell more than I can tell you now. The most important fact is that this was the first crossing of the Pacific. Now, 33 years later, a trans-Pacific flight is commonplace, and it is made in a few hours. However, that magnificent pioneer achievement, is, overall, my first conscious recollection of Kingsford Smith.

Soon after the Pacific project, Smithy, with Charles Ulm, Litchfield and McWilliam, made the first crossing of the Tasman Sea, from Richmond to Christchurch. Again there was some terrific weather to contend with; the "Southern Cross" got iced up, and they were in real trouble, but they got there. It seems that, on all pioneer flights, no matter how much organisation one has, and how careful the planning, an apparently inescapable fact is that the aeroplane always has to cope with some abnormal conditions. But again they got there through determination, skill and airmanship, and of course, the reliability of the aeroplane.

After that, I believe, from memory, the next "Southern Cross" flight of any consequence, was the crossing of Australia, merely a record crossing over to Perth and back. Then, also in the "Southern Cross" Smithy, Ulm, Litchfield and McWilliam set out on a flight to England, a flight which ended at a place which was to be called by them "Coffee Royal", in North Western Australia. I refer to this incident because it is one of the times that has remained in the background of Kingsford Smith's life with a certain amount of uncertainty, in public opinion.

From Sydney the flight was to have been to Wyndham. They had a satisfactory weather report. Everything went well until the later stages. Then the weather shut in and completely clamped right down to the ground. There was absolutely no way of finding where they were. They went on dead reckoning for Wyndham, but when they should have been at this town, there was nothing in sight. Navigators are human creatures, they

are tradesmen. They need tools and materials to do their work. Well, Litchfield had no material; he was wrapped up in a cloud. There was no way of finding where the "Southern Cross" was. So they descended, and when they came out of the bottom of this stuff, there was very little visibility. For a long time they flew around trying to establish their position. Finally, when the fuel was pretty low, and they still didn't know where they were, they had to find a landing ground. Then Kingsford Smith again displayed his genius as a handler of aeroplanes. He put down the "Southern Cross" in a little clay-pan that looked just impossible; and a few weeks later he took it off again. For various reasons I do not know the full reasons of "Coffee Royal" so I will not attempt to explain them - they were unable to communicate, by radio, what their position was. They were lost there for some days. Worse, two of the men searching for the missing aircraft forced landed in Central Australia and died of thirst. They were Keith Anderson, a friend of Smithy and Ulm's who had intended taking part in the first Pacific flight with them, and Hitchcock.

That tragedy started the train of comment which developed into an enormous controversy, with a great deal of criticism for Kingsford Smith and Ulm, and it was suggested that they deliberately landed in North Western Australia to create publicity. The truth was that they were victims of a press war. They had sold their story to one newspaper, and another newspaper of the time invented this story of a deliberate landing. Now I know very, very clearly that it was an absolutely genuine forced landing; you only had to know Smithy or Charles Ulm to know they just wouldn't do that sort of thing. But even if they had been the kind of people who would do that, there was absolutely nothing to be gained from it. If fact, by doing so, they had a great deal to lose, because none of us like to admit we are lost. It's a horrible thing to make a forced landing, and say "Well, I didn't know where I was", one's ego is shaken by such a thing. But, in the instance in question, there was no way of finding out where they were.

Unjustly, most unjustly, that incident marred Kingsford Smith's reputation. He was, I repeat, a victim of a "press" war I am sorry to say this but it is the truth. I refer to the incident, and its result, because once and for all, I would like to clear up the matter.

They came out of the clay-pan, got organised again, and, in the "Southern Cross" made a record flight to England.

It was at this time also, that Smithy's and Ulm's plans to operate intercapital airlines in Australia, came to a head in the formation of Australian National Airways, the original A.N.A. Ulm was the business man, the manager and the organiser. Smithy was the airman, he couldn't stay on the ground. I completely sympathise with him, I can't either. Smithy had to be off on to new adventures in the air perhaps new ventures. No, "adventures" is hardly the word. Smithy was no irresponsible stunt man, there was a good purpose for every flight he made.

I am again giving you a slant on Smithy's background by mentioning that there were people who used to say in effect, - "Oh yes, Smithy was a great pilot, but to do what he did, he always had this, that, or the other crew." However between England and Australia, Smithy made two of the great, record, solo flights in the history of pioneer aviation, one of them in a little Avro Avian. Those two flights, surely, refute the suggestion that he needed anyone else to be along with him. In the period when Smithy made those record flights, Australian National Airways was operating Sydney-Brisbane, Sydney-Melbourne, and Melbourne-Hobart services.

It was a very interesting era in Australian domestic air transport, one which was introduced by the wave of public interest aroused by the pioneer Pacific flight. From the far air, and wide spaces over the ocean, Smithy came back with a kind of super confidence; he felt that after flying the Pacific, everything else would be easy. He couldn't envisage any problem in flying between Sydney and Melbourne in any weather, and without instrument, without radio, without weather forecasts, without anything except just an aeroplane in his hands; he just couldn't feel that there was any problem at all. It is a good thing that Smithy felt that way, because he was responsible for

introducing modern flying into the airlines of this country. In A.N.A., on these runs we flew three engined Fokkers, exactly the same type of flying that is done today, regardless of weather, the aircraft left at a certain time, and proceeded from A to B in cloud or over cloud, at whatever level we decided to fly. That was an enormous forward step for air transport in this country. Because, until then, and long after with every other airline, there was what we call contact flying, that is, following railway lines, roads and so on, and more or less, hopping from twig to twig. It was Kingsford Smith who here introduced the type of flying now flown on the airlines of this country and in every other country - instrument flying in, and above cloud.

Of course it was completely wrong that we should have been doing it. But it is difficult to know where one decides if a thing is wrong. Somebody has to make a start and if we had waited until everything was 100% safe, I don't suppose anything would ever start. However, although I have been an active pilot for a good long time, and I've done quite a bit of airline flying, I don't think I have ever taken a completely serviceable aircraft off the ground. If the aeroplane was to have been checked over in absolutely the most minute detail, I don't think I've ever flown one in which you couldn't find something that had to be accepted as a minor point, one which did not necessarily affect safety. However, I repeat, you have to start somewhere, and it was Kingsford Smith who started modern flying in Australia. I discovered that myself. But I must not drift off on to my own experiences, even if they may seem to me to be relative.

When A.N.A. started operations, I was experimenting in air navigation. I was trying to learn the art for the flights I wanted to make, subsequently - exploratory flights across the oceans. I had reached the point where, theoretically, I had got to the end of my road and was ready for practical experience in the air. I could see that this new type of flying by A.N.A. was something I had to take on if I was going far. So, when a vacancy for captain came up, I called Charles Ulm, who was administering company affairs, and asked him for the job. Ulm looked at me, and obviously summing me very well, said, "Well, can you fly?" I said, "Oh yes, I can fly. I've been flying so and so years.", and Ulm absolutely shook me by saying "Well, possibly we might give you a trial as a second pilot."

I thought I could fly aeroplanes. Ulm's decision rocked me. However, what he said was also a challenge to me, something I liked. Also, I like Charles Ulm, he was a man who attracted me. I thought, well, this man's got something. So what with that and the challenge, I took on the job as a second pilot with A.N.A. On the first flight I made I learnt that Ulm couldn't have been more right. I knew absolutely nothing about that type of flying.

I was with Jimmy Mollison on that first A.N.A. flight of mine. Somewhere around Canberra, we flew into weather I wouldn't have considered going near at all; I would have gone right around by Cootamundra, by contact, following railway lines at that stage. But Mollison went straight on into this cloud, and we flew on instruments with ice coming off the props, and in violent turbulence for about four hours, by which time I had quite made up my mind that it would be sheer luck if we ever landed safely anywhere. At this time Jimmy Mollison turned to me and said, "Well, I think I will go down now.", and he just drew off the three throttles and started to descend. Oh well I thought, I've had it anyway. We're absolutely certain to collect a mountain, and he can't possibly know where we are. There was nothing I could do about it. I just sat there and hoped for the best. We went down - 8,000, 6,000, 4,000, 3,000 feet, still in cloud, still no sight of anything. Two thousand feet, still in cloud. Down to about 500 feet, we then came out through the bottom of the clouds .... and we were two miles from Essendon Aerodrome! All my life people have been telling me that a stage of my life had come when I should give up flying. They'd cite this, that, or any other thing. Well after this flight with Jimmy Mollison, I thought maybe they are right, I just don't know how to do this at all. However the same night at dinner at Menzies, with Jim, I asked him how he did it. I hadn't seen a gap, I said. Promptly he gave the show away. "Oh well," he said, "I did see a gap and I saw Yan Yee Reservoir, so, I knew where I was." That was the type of flying Kingsford Smith introduced. Although it may seem awfully irresponsible to carry passengers in such conditions, it was not nearly as irresponsible as it

may now sound to you. Those of us who flew on the A.N.A. runs learned how to do it with passengers in the back, and we knew what we were doing. We knew a lot about the weather and a lot about the routes.

The loss of the "Southern Cloud" was a phenomenal occurrence, and it was this that finally finished Smithy and Ulm's company, Australian National Airways. That, and the fact that they received no Government support whatsoever, to keep their airline going. The lack of such support is something I have never been able to understand, because the company was doing a very important, a very wonderful job. Smithy was not merely an adventurous airman, he had serious plans for operating airlines. To illustrate this, I've told this A.N.A. story.

Ulm had very definite plans for developing airlines, not only within Australia, but also overseas. If he had lived on, undoubtedly he would have been, today, right at the very top, the head of a big airline. There is no doubt of this. However, at the time of the first service from Singapore to Australia, he and Smithy tried to bring about an amalgamation of Australian airlines, QANTAS included, to keep the airline contact with Australia entirely Australian. But knowing Charles Ulm, I think, QANTAS rather wisely linked up with Imperial Airways, because, and forgive me for saying this, I think Ulm would have come out right on top as far as administrative work was concerned, in any combination of Australian airlines. And, quite certainly, Kingsford Smith was the top airman.

I seem to be getting a bit off the track, so now I come to my direct association with Smithy and the flights we made together. The first was in January 1933. To make another move towards the establishment of an air service between Australia and New Zealand, Smithy decided to make another flight across the Tasman. He did not have a navigator. He invited me to join him. I remember very clearly the night take-off from Gerringong Beach. That beach was chosen because the "Southern Cross" was very heavily loaded, indeed very much overloaded, and there was a long run along the sand. We went there in the afternoon. Round about midnight I looked along the beach and wondered how Smithy was going to take-off, it looked a pretty grim situation to me.

It was not quite low tide. There was a very strong north-east wind and a big sea. The sand from the surf was rolling up the beach, leaving only a very narrow strip of hard sand, between the water and the soft sandhills. The strip was only a little wider than the span of the undercarriage of the aeroplane. It was black dark when Smithy took the "Southern Cross" off, one wheel was just a few feet from the soft sand and the other wheel was almost in the surf. Smithy did not miss, it was an absolutely perfect takeoff. Those are the kind of things that make a genius in the air.

The flight was my first experience as a navigator with him, and his acceptance of me, as such, revealed I think, another facet of his character. I had studied navigation and had had a little practical experience of it with my own small aircraft, but at this stage I was not a proper navigator. When Smithy asked me if I would take this job on, I told him the facts. I told him that virtually I had no serious practical experience, but, I added, I would undertake to be able to navigate him by the time the "Southern Cross" was due to leave in January. Smithy looked at me with a pretty knowing look, and said, "Well, I'll think it over, and I'll let you know tomorrow." Next day he said, "That's all right, I'd like you to come." From that day right through our association, he never questioned me in any navigation. Once having made up his mind, that was it. He accepted me whatever was happening, and there were many times when I'm quite sure he must have wondered how things were going, but he never questioned me.

On that flight to New Zealand we had very unusual conditions, and I think we both learnt something valuable to us. We flew through the night for about six hours, and in the dawn came out to a violent gale from the north. I'll give a few figures which will probably bore some people, but may be quite interesting to others. Smithy gave us 30° of drift to starboard. We were allowing 11° easterly deviation and 2° easterly deviation. We therefore had 43° on the compass off the true course of our track for New Plymouth. In other words, we were deliberately steering a course on the compass that would put us hundreds of miles north of New Zealand; we wouldn't hit New Zealand at all.

Well, I worked out this and it bothered me to have to put this on the compass.

It was the first time I had been out over the ocean in such a situation. It's easy to sit in one's study and work out courses and tracks of courses, and all the problems of navigation, or to do practise flights over the aerodrome and get some sights and work out a position. But it's another thing altogether to be sitting in an aeroplane in a howling gale, 600 miles out from land at 500 feet, with a cloud base of about 600 feet, and to have to make a decision like that and believe it. Well, Smithy never questioned it. I explained the whole circumstances to him, and said that's the course I've got to put on the compass, and he never questioned it. He said, "All right, put it on then." So there we were, pointing hundreds of miles north of New Zealand.

When noon came, I took a sight to get a latitude, and to my horror, in spite of this enormous allowance to north, the sight showed us to be 70 miles south of our track. So I was confronted with the need to put another  $12^{\circ}$  on the same direction. Quite frankly I didn't have the courage to do that. I thought, well, primarily the thing to do is to hit New Zealand, and the secondary objective is to show what a good navigator I am and hit New Plymouth, but I was more interested in being sure of hitting New Zealand. So I made a compromise with myself, I allowed for the fact that we were 35 miles south of our track and not 70 miles.

Again, I gave an explanation to Smithy - that I was going to assume we were 35 miles south and would accordingly lay a new course from there. He agreed, he seemed quite happy about it. He just sat there and flew the aeroplane which was bouncing along in the violent turbulence. But Smithy was unworried. When we came on to New Zealand, we were right into Cook Strait, almost exactly south by the amount which on my own sights I had refused to believe. That was a great lesson to us both; we learnt, then, that you have to believe this thing. It's black magic but you just have to believe it. That's the main thing.

I repeat that Smithy made this flight to New Zealand to try to bring closer the Tasman service, and also to try to make a living by joy-riding in New Zealand, which latter he did most successfully. We made the return flight in March of the same year. Our next flight together was in January the next year (1934) with a return flight in March. I won't say these flights were routine, because no flight in an aeroplane is routine if you really know your job. No flight is routine; every flight is different. Any pilot who thinks something is routine has reached the limit of his ability to observe things. However on these four Tasman crossings together, our partnership, personal friendship, and our working together developed to the stage where, I think we both found in each other something we needed. Certainly I had enormous confidence in Smithy, he bred that sort of confidence in everybody who was associated with him. Although fundamentally, I was a pilot more than a navigator, and was always a little edgy flying with other pilots, I never felt like that at all with Smithy. I just felt that he was there, with the aeroplane, and that was something I didn't have to think about at all. He gave great confidence, and for good reason because undoubtedly, he was a great man in the air, as he was on the ground.

It was in 1934, in the Lockheed Altair, that we made the first west-east crossing of the Pacific. To tell you of Smithy and that flight, I must start with what was called the MacRobertson Air Race that year. As many of you know, Sir Macpherson Robertson offered prizes for that race, and he also offered to buy an aircraft for Kingsford Smith to take part in it, or rather to contribute, I think it was £5,000, towards the aircraft. Naturally Smithy wanted to fly a British aircraft in the race and he tried to get a D.H. Comet.

The Comet of those days was, of course, vastly different from that of today. It was a lovely little aircraft - a twin engined (Gipsy) high speed racing aeroplane. Three Comets had been ordered for other competitors; Smithy's order was for the fourth, but De Havillands informed him they were unable to supply two-positioned airscrews for his order. The other three Comets on order were fitted with these variable-pitch airscrews thus equipped, these aircraft would be able to fly non-stop between the main control points of the race. Smithy's Comet could not do this: it would have to make intermediate



landings between every obligatory control point. Thus, Smithy would be under a very serious handicap; in effect, he couldn't win. I don't know all the pros and cons of the matter, but I'm quite sure D.H.'s were really unable to supply Smithy with the variable pitch airscrews. Nor could he get any other British aircraft with a chance of winning the race.

When this became obvious to Smithy, it was typical of the man that immediately he took ship to California, and finding there a Lockheed Altair, he bought it for the race. This was a small aeroplane with a 550 h.p. Pratt and Whitney Wasp engine. It was a beautiful aeroplane, in appearance much like a modern fighter of World War Two. The purchase made, everything was in a great hurry. There was no time to dot the "i's" or cross the "t's", or to get all the authorities to do this and that before Smithy shipped his aircraft to Australia. He travelled on the same ship, the Mariposa.

Arrived in Sydney, Smithy had the aircraft put over the side on to a barge to bring it ashore, then he was refused authority to land the aeroplane in Australia. That was problem No.1. He managed to get over that one, and the Altair was taken on a barge to Neutral Bay and landed on Anderson Park, a little park at the end of the bay; it had, I think, about two or three hundred yards across. Then up came problem No. 2 - Smithy wasn't allowed to fly the Altair because it didn't have a certain kind of certificate. Then he was told he had to take the name "ANZAC" off the plane, because nobody could thus use the name "ANZAC". Well, that was right; it is a nationally sacred name. However Smithy was hoping to carry it worthily for Australia in the race.

On all the facts, Smithy's reception in Australia with the Altair wasn't a very good one, but he took it, just as he always took everythin, in his stride, no bitterness at all. Of course there were reasons for these things but on the whole, the business wasn't done very well; it could have been done better I think. Certainly Smithy had great problems getting that aeroplane into the air.

Finally, authority was forth-coming to fly it - to Mascot, and put it away in a hangar. That was a start. Smithy invited me to come with him on the flight from Anderson Park, which rather shook me because there were only 150 yards for the aeroplane to get off. We ran practically the whole length of the park. The grass was just finished and then there was a wall down into the water. He just about rolled the wheels off the end of this wall. It was not dangerous, really, and I'm making a rather dramatic story of it, but the take-off certainly looked dangerous. Anyway we landed the aircraft at Mascot.

Subsequently the aircraft was submitted to the various tests required by the Department of Civil Aviation and it easily passed all the tests. It was permitted to fly. At the time, it was in fact, the only modern aeroplane in Australia; it was ten years ahead of anything else here then. To familiarise ourselves with the Altair, we decided to make some flights within Australia. So we sat in it - I say "sat" deliberately - while it made every record between every capital city in Australia. It was so much faster than anything else here; there was nothing for us to do, merely sit while it did just that. By the time we had done these record flights the air race was fairly close.

Then another problem descended on Smithy - the race rules did not allow him to carry enough fuel to fly non-stop between the control points. So Smithy was virtually back again to where he'd started. The aeroplane was easily capable of carrying this fuel load, but due to a technicality in the race rules, Smithy could not carry this load. Then, again, Charles Kingsford Smith, the man, behaved true to form. He made no complaint at all, he accepted the position. In spite of the fact that only a miracle could make possible a win, we decided to compete.

Three days before the race was to begin we set out from Sydney for England. We intended to fly there pretty quickly, turn round, and come back in the race. But at Cloncurry, the first night, we found there were some serious cracks in the engine cowl. It was obvious that before we reached England the cowl would collapse. So we had to go back to Sydney for repairs, which meant we were out of the race; we couldn't get

back to Sydney for repairs to the cowl and then reach England in time.

There was a storm of unfounded criticism. Smithy had done this and not done that. Even white feathers were sent to him, intimating that he had deliberately flunked the race. Well, Smithy was accustomed to that kind of thing, but it made us feel that we wanted to do something worthwhile with the Altair to prove our faith in it. What with the anti-climax and feeling fairly depressed by all the criticism, we were sitting in Smithy's office at Mascot one day, when, I really don't know which one of us suggested it, but we decided to open the "Times" Atlas at the map of the Pacific Ocean; I seem to remember that it was page 102. He looked at me, and it was perfectly obvious what he meant. We decided to fly the Pacific. That may seem a little irresponsible, but it wasn't; we had been thinking about this for a long time, because we thought by again demonstrating that the Pacific could be flown would bring closer that air service.

However getting sufficient range for the long distances in our flight created some problems. Even with full tanks, which was a good deal more fuel than we were allowed to carry for the race, there was still not enough fuel for the Fiji-Honolulu stage. Smithy called in L.J. (later Sir Lawrence) Wackett and handed the whole problem over to him. Wackett designed the tanks: he put in tanks from wing-tip to wing-tip, and the whole fuselage back to the rear pilot's seat was full of tanks. Wackett tanked that aeroplane until it was a flying fuel tank. We didn't have any doubts at all that it would take off. Even with 518 gallons aboard there was just a little doubt as to whether we would be able to make the long stretch from Fiji to Honolulu. However after tests of fuel consumption and power setting checks, it was decided that the aeroplane could do it.

A few days ago, Harold Affleck reminded me that we left a day later than the chosen date. Harold then told me that I had asked him to put some bearing plates on the deck in front of my navigator's seat. Then some-one else (and it wasn't Smithy) who was concerned with the thing, said not to put the plates there, so we were delayed a day. That caused more criticism.

On the flight to Brisbane for the take-off, we made a final fuel consumption check and were horrified to discover that at the power settings we were using, the aeroplane just wouldn't fly the Pacific. So there we were in Brisbane with "Kingsford Smith going to fly the Pacific" spread all over the newspaper headlines, and with everybody waiting for the aeroplane to leave. Now what were we going to do? Smithy and I walked away from the aeroplane to work things out. Again, he was undismayed. We talked things over and decided we'd go out and make a series of fuel consumption tests at different power settings on different tanks; also we would announce publicly that we were just doing a little shakedown flight in the afternoon. Actually this was the most critical stage of our whole experience with that aircraft. If our different power settings and fuel consumption checks had not worked out, we would have to turn around and say, "We're sorry, but we are not flying the Pacific after all." And that would have been a really ghastly situation.

We went out. I had measured some distances from Cape Morton Light to points in the Bay. Systematically we went to work, and at different power settings took the fuel consumption of the Lockheed. Then we came back and dipped the tanks. We found there was a particular series of settings at which we could fly from Suva to Honolulu against a 25 mph headwind. This was the background of the first west to east Pacific crossing, and of Smithy's second pioneer crossing of this ocean.

I hope I'm not talking too much on background points, but they were very much a part of his life. Before these flights it's the surface part of all this business that takes so much out of one. Once in the air everything is clear and simple; it is peaceful and tranquil. True you may have problems (and certainly, Smithy had plenty of problems in the air) but they are clear cut, physical things which can be dealt with for better or for worse. A decision is made, action taken, and the result is there right or wrong.

It was on the ground however, that this great pioneer airman had so very much to contend with, and it was this phase of life that took the most out of him. I know it

did. Finally it killed him; he was quite unfit to have undertaken what was to prove his final flight. On several other occasions, particularly on one of his solo flights from England in the Percival Gull, he just wasn't fit enough to be doing it. Thus on the very last stage of that flight, from the Dutch East Indies (as it was then) to Darwin, he passed out in the aircraft at about 10,000 feet. He'd been so frustrated and so burned up over all these problems on the ground that he wasn't fit to make the flight, but with his incredible determination and courage, nothing would stop him, nothing at all. Nobody could do anything with him, he just made up his mind and that was that.

To return to the Lockheed Altair Pacific flight; Smithy flew that aeroplane nearly all the time. We had a little transmitter with which we could send out our position, but no receiver and no means of using radio as an aid to navigate. As navigator, I was pretty well occupied; I wasn't able to help Smithy much with his flying, and we were 25 hours aloft from Fiji to Honolulu.

Again he had put into the tiny field at Albert Park in Fiji. With the Altair it was much easier than with the "Southern Cross": the former had brakes. However it was practically in darkness that he put the Altair down. We had arrived at the Fijian Islands at the very last of the daylight, and the lights of the town were on when we came over Albert Park. Smithy took the Lockheed around in a beautiful circuit, eased down the power and just floated her in, with the wheels almost touching the tops of the coconut palms and sat her down beautifully. He took her out of there again, with very little fuel and flew over to Naselai Beach which was very good for a take-off. We left there for Honolulu.

I won't go into great detail on this flight, except to deal with one situation which further revealed his ability as an airman, and which gives an insight into his character. We left Naselai at 6 o'clock in the morning. We passed over the Phoenix Islands in the afternoon and flew right into the night. Early good weather, at about 10,000 feet, and we flew over broken cloud, perfect for navigation. About 9 p.m.

we ran into weather which, for a long time since then, has been known as an inter-tropic front; at about that time nobody knew anything about it. We got into this and climbed to about 15 or 16,000 feet. Violent turbulence, heavy rain and nil visibility I couldn't do anything about the navigation. I just sat there waiting for a break. Smithy, of course, was flying on instruments. We had been cruising at an indicated airspeed of 130-140 knots when I noticed the airspeed had come back to 90. The engine was running perfectly, there were no signs of throttling down, the control was wide open. I asked Smithy what had gone wrong. "I don't know" he said. "She won't give any more power, that's all." For no apparent reason we were nearly stalling at full power. In spite of Smithy's marvellous handling, the aeroplane stalled and spun. We knew it was spinning because we could see the altimeter winding itself down, and the flight instruments collapsing. Everything was just going haywire.

Smithy went through the normal procedure to bring an aircraft out of a spin. It had no effect, she just went right on spinning. "You have a go at her." Smithy said, I took the controls. I couldn't do anything about it, she just went on spinning. We had lost height, from 15,000 to 8,000 feet and were still losing. Smithy took over again and immediately lashed the controls about in every direction. Somehow or other he upset the rhythm of the spin and the aeroplane came out of it. But in the middle of the spin while all this was going on he had called me through the phone and said, "Look, Bill, I'm terribly sorry, but I can't get her out." You know, sort of apologising for the fact that we were going into the drink, which seemed inevitable. Smithy, being Smithy, was quite calm and collected. I didn't feel that at all.

When he got the aeroplane out of the spin we were still only doing 90 knots on the airspeed indicator. Then Smithy said, "Well, I'll have a look around the cockpit and check everything." He checked around and then said, "I've got it - the flap switch!" This is what had happened; we had been a little worried about the leading edge of the wing. It was a wooden one, and on the way to Suva the rain had been cutting into it a bit. So in the subsequent rain, Smithy had been switching on and off the landing lights to find out how heavy the rain was - as one would do in the hope it was easing.

even though it was probably raining harder. In this operation Smithy, unknowingly, had knocked down the flaps, with the result that the tail surfaces had been blanketed, the aeroplane had slowed down to 90 knots, and once the aeroplane was in a spin the normal methods of recovery just didn't function.

Two things, I think, were gained by this flight. The first was that it stimulated the idea of a trans-Pacific air service. That the Pacific had been flown again, and by a small single-engined land-plane, had quite an impact on world interest. The flight raised the point that with these great transports on the drawing boards, surely we must be getting close to having a regular service; and it was only a few years later that Pan American Airways inaugurated a trans-Pacific service through to New Zealand. That was one effect of this flight.

The other important result of this flight, one not much known, was the development of Canton Island. We were the first people ever to see the Phoenix Islands from the air, and when we saw those islands, (and Canton was one of them) it was obvious to us that it was here there had to be an intermediate base, between the Hawaiian and Fijian Islands to make feasible, in distance and payload, a trans-Pacific air service. So when we returned to Australia, we made representations to our Government that a move should be made, firstly to colonise Canton Island and definitely establish it as British territory; and secondly to establish our base there for the future air service.

I can remember, very clearly, the day we interviewed the Minister for Defence, in his office in Martin Place, Sydney. We tried to get over our thoughts on the need for this base and our vision of the future. The Minister was a busy man with many problems. We just couldn't get our message over. However, something on it was sent to London. We got the reply that there was no need to do anything, as the island was definitely British. Apparently somebody had looked at the "Times" Atlas and seen the red line drawn under Canton Island! Up to that time the island was claimed by both U.S.A. and Britain; it was one of those lonely places that no-one had done anything about. However, although we found it impossible to get any action from Australia, we then started on New Zealand and through that Government, an expedition was sent to Canton Island, the flag was planted and the island was colonised as a British possession.

The action by New Zealand drew attention to the possibilities of the island as an air base. When Pan American discovered that their Kingman Reef and Pago Pago bases were unsuitable, and as a result, the route of their Pacific service had to be re-designed, an American expedition went to Canton Island and built an air base there. That's how the situation developed. During the war it was this base which enabled American aircraft to reach Australia and take a very great part in turning back the Japanese invasion of this continent. Naturally I do not claim we were responsible for all that, but Kingsford Smith's Pacific flight in the Lockheed Altair was responsible for the initiation of the move to establish that base at Canton Island. That was, I think, the second major result of Smithy's pioneer Australia - U.S.A. flight in 1934. And, of course, there were many other results, tangible practical and physical, from his other flights.

Early in 1935, we decided to make another flight to New Zealand, to try to bring to a head the start of a trans-Tasman air service. Smithy wanted to operate this service: by this time Charles Ulm had been lost ( I will refer to this later). Our flight was to be made at the time of the Jubilee of King George V, and we were to fly mail commemorating the event. In the "Southern Cross" we set out from Richmond Aerodrome in the middle of the night. Just about dawn when I was flying the aircraft, I saw a kind of a little quiver of flame in the centre of the exhaust manifold of the centre engine. Suddenly it flared into a big flaming exhaust, there was a terrific vibration in the aircraft, and I realised the prop had gone on the starboard side. I pulled off the throttle on No. 3 engine. Smithy came flying up to the cockpit and took over. What had happened was that a piece of the exhaust manifold of the centre engine had come off and hurtling back in the slipstream, had hit, and cut off, part of a blade on the starboard propeller. The resulting vibration was so terrific that, had it not been stopped immediately, the engine would have been pulled to pieces. That was about 7 a.m.

We were then 600 miles out. With the weight we had we couldn't maintain flight on the remaining two engines. We decided to turn and head back for Australia. We dumped fuel leaving us enough to get us back. Although we were then almost exactly half way to New Zealand, the choice to return was the better one because weather and winds were more favourable towards Australia than to New Zealand.

It was my turn to fly the aeroplane again about 10.30. Soon afterwards I noticed a slight flicker on the oil pressure gauge of No.1 engine. The flicker continued, and each time the gauge went a little bit lower. I tried to pretend to myself that it wasn't falling but I knew it was. Obviously the engine was running out of oil. So, it seemed, we just had to go down into the sea. We did have oil in the tank behind No. 3 engine, the dead engine, but there was no oil in the tank of the good one. So to keep the aircraft flying, I went out and got the oil from one engine and put it in the other engine a number of times.

While this was going on, Smithy was flying the aeroplane which was virtually stalling, but he was holding it. It would only just fly; it had just enough power to maintain flight at about two or three knots above stalling speed. In that precarious position, Smithy held the "Southern Cross" for hours and hours. He held it in the air by sheer sympathy and ability and courage; he kept it flying while, at times, it was down to about 20 feet off the sea. Mostly we were between that and 500 feet, according to what was taking place in the aeroplane. Smithy brought in the "Southern Cross" to Mascot, not only brought it in, but brought it in to a perfect landing. That was our last flight together.

A few months later, Smithy went to England for a number of reasons, but, let's face it, the real reason was to beat the Comet's record from England to Australia. For, ever since the London - Melbourne air race, he had had inside him, a thing to make him show the true worth of the Lockheed on this route. The story of what happened on his flight from England, his last flight, is pretty well known. Not so well known was the fact that he was then a sick man, he shouldn't have left, but his spirit, his determination, made him make that flight. Tommy Pethybridge went with him. He took Tommy for a very sound reason. On flights of this kind, most of the fatigue is not in the air, but on the ground. It would seem that when you arrive at an airport, the rest is very simple - just put fuel in the tanks, oil topped off, start the engine and go, but it's not like that at all. For the moment you get on the ground, all sorts of people come running up with bits of paper on boards, with pencils and things, and somebody wants this, and somebody else says, "I'm terribly sorry but something that was going to happen isn't going to happen." So, it's only a matter of two or three minutes before you are absolutely submerged in a morass of completely irrelevant detail. It's so frustrating it nearly drives you mad; it just drains the last remaining strength out of your body. Smithy knew this only too well, that's why he took Tommy Pethybridge to protect him. Tommy was a first class engineer, and a good enough pilot to help Smithy with the flying. So the design of the operation was for Smithy to do the bulk of the flying, and the moment the plane came to rest on the ground, Smithy would go and rest, and Tommy would take over the frustration department to cope with the panic and upset, and all the things which are completely useless to the actual flight. You can't avoid these things, you just have to accept them.

They set out. When they left Allahabad, they just about had the record in hand; I don't think there is any doubt that they were in a position to set a new figure, but as you all probably know, Smithy and Pethybridge were never heard of again. The plane was thought to have been sighted by Melrose who, that night, was flying over the same route; Melrose saw the exhaust of an aircraft. Smithy didn't arrive at Singapore. It seemed incredible that he had gone down, he was one of the sort of people you couldn't imagine anything happening to. He seemed to belong with the air, he seemed to be able to arrive regardless of anything. This time he didn't. I'm not going into a great story about that - you know most of it - and a wheel of the Altair was later found on one of the Mergui Islands off the west coast of Malaya. It is also said that certain other parts of the aircraft were found. However the wheel positively identified Smithy's aircraft; this find was conclusive proof that Smithy must have gone into the

sea somewhere about that point. It is thought that, in the dark, when descending to make contact with the Malayan coast he may have hit the top of a small island. I also think it's quite possible that he may have passed out in the aircraft, because that had happened to him several times. One such occasion, was when we were coming back from New Zealand, he was so sick that he had to lie on the mail bags for a couple of hours. But what actually happened in the final stage of what was Smithy's last flight is unknown. The one known fact is that he went in, and that was the end.

For several relevant reasons, I want to come back for a moment to Charles Ulm. He and Smithy were complimentary (as Smithy and I were complimentary), and Ulm's end, one like Smithy's had a sequel which reveals a sidelight on Smithy. The incident happened a few days after the end of the Altair's Pacific flight. Smithy was staying in Los Angeles at the Clark Hotel. He was with John Stannage and Doug Morris, the hotel's manager, when the news came that Charles Ulm was missing - on his flight from San Francisco to Honolulu. Immediately Smithy said he was going out to look for Ulm; he told Stannage to get the Altair fully tanked at once. Smithy didn't consider the facts of the situation - no radio, no navigator, (I had gone on to England). Just himself and he was going out in the Altair to look for Charles Ulm. Ulm was missing and Smithy was going out to look for him, that's all there was to it. Try as they did, they couldn't dissuade Smithy, his decision was made. However before he left the hotel to begin the search, they invited him to have a drink; Doug Morris mixed a fearful potion and after Smithy drank it he was absolutely knocked out for about 24 hours. Then, and only then, they managed to make him see reason. Of course, if he had gone out as originally he intended, he would have been lost, but he hadn't thought about that. He just thought, Charles Ulm is missing and I'm going out to look for him. That was Smithy.

Before I end this talk, I want to read a little extract from Norm Ellison's book, "Flying Matilda". When Norman was writing this book, much of which is on Kingsford Smith, he asked me if I would write something on Smithy for the book. One morning when I happened to think about it, I sat down and wrote it. I think it gets about as close as I can tell as to what sort of man Smithy was in my thoughts. It says -

"I was associated with Sir Charles Kingsford Smith in a flying partnership from 1933 to 1935. Though basically a pilot, I flew as navigator with Smithy on a number of trans-oceanic flights to gain the experience I wanted as an air navigator. I therefore had a good opportunity to learn something of his greatness as a pilot, and as a man. As the fundamental urge to his flights he had the enlightened spirit of the born pioneer. Whatever the risks, the way into the unknown was always an irresistible invitation to him.

His rugged appearance hid a sensitive, finely balanced personality, upheld with a smile through his adventurous life by an inner structure of fine steel. It was this unusual combination of qualities which made him the great airman. He could see, feel and predict the air, vividly and accurately, with the sensitive surface of his personality. But whatever the conditions, his steel structure had the strength to deal with any situation. In the short period of our flights together, we found a complete mutual confidence, and I think this was one of his greatneses. Having entered upon our association in the air, he never questioned my navigation, though he certainly would have been entitled to do so; because at that time I was virtually learning to navigate as we flew across the oceans, sometimes with critical objectives.

Smithy was sometimes said to be no business man. What is a business man? Certainly the sheer accumulation of money was not his objective, but from his own efforts, he bore successfully his financial responsibilities, established and kept his home and family in good circumstances, though he had little time to think about business.

There are many business men; but only one Charles Kingsford Smith."

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