# FAIRCHILD TO OSHKOSH 1992. ZS-VWO. by C.F.Stobbart.

## INTRODUCTION.

On the 16th February 1984, I did a charter in a light twin to Sabie airfield, in the Eastern Transvaal. Whilst waiting for the businessmen to return from their meeting, I wandered over to a hangar where people were working on a Jodel and met Roelf van Tonder. In the back of the hangar I noticed an aircraft, without wings, which looked like a Fairchild 24 but had a radial engine. I learned from Roelf that it was indeed an F24W. The "W" denotes the Warner Super Scarab engine. I enquired as to whether it was for sale and was told that it was not.

January 1985, a friend, Max Chase bought ZS-UJZ a Fairchild 24R from another EAA 322 member, Anthony Pearl. Max then asked me to convert him to type. I then found out that the reason that Anthony Pearl had sold UJZ was that he had bought ZS-DCX, the F24W-41A from Roelf van Tonder and needed the cash for the restoration. Max and I then offered to buy DCX from Anthony, if he decided to sell. Two days later we bought DCX and struck a deal where I would rebuild DCX and ship it to Max when he returned to the USA. This deal fell through after Max had returned to the USA and I offered to buy the aircraft from him. The restoration of the aircraft was done at home and during 1987 the EAA chapter 322 news letter featured an article about me rebuilding the aircraft. This resulted in a letter from DCA (Directorate of Civil Aviation) informing me that I was contravening the ANR's and suggested that I register the aircraft as a Veteran under our LS1 document to allow me to complete the restoration legally.

So ZS-DCX became ZS-VWO. Fortunately Max and I had had the wings and flight control surfaces restored by an AMO and this would benefit me in time to come. The engine and airframe were restored by myself.

The restoration took 3 years 6 months and during that time, for 6 months I did not touch the aircraft due to homebuilder's burnout, caused by starting this project immediately after I had completed the restoration of a C185, ZS-FSV. ZS-VWO flew for the first time on 18th May 1989 having not flown since 6th June 1971, at which time the logbook showed only 280:50, since the previous rebuild when a new engine was fitted. Two weeks later with only about 9 hours of proving flights done, I was given permission to fly to Margate to attend the Annual Convention of the EAA in SA. The aircraft won various trophies at the convention.

August the same year whilst returning from an air show in Swaziland, again with various trophies, I was thinking about how well the aircraft had performed to date having logged a grand total of 44 trouble free hours and started wondering about what sort of challenging flight I could do in the aircraft. It was then that the thought of flying to the Annual Convention of the Experimental Aircraft Association at Wittman Field Oshkosh WI USA, came to mind.

This is that story.

## FEASIBILITY STUDY.

As a First Officer with SAA, I was able to acquire some old obsolete Jeppesen Charts and measured distances to see if it would be at all possible to fly through Africa and across the North Atlantic, where refuel stops are few and far between. I came to the conclusion that the flight could be done if

I fitted a 250 liter fuel tank in place of the rear bench seat. Happy that is was possible I mentally placed the idea on a back burner and never even mentioned it. (Perhaps for fear of ridicule.)

November 1989, at the annual dinner/dance of EAA Chapter 322 Peter Hengst approached me and explained that he had offered to purchase a Twin Comanche (PA 39) in Germany and asked me if I would accompany him on the ferry flight to South Africa, as he wanted to have an instrument rated pilot with him. I replied that I would be happy to if he, in turn, accompanied me on a flight in my F24W to Oshkosh! Peter's answer was an immediate yes! Now I could discuss the flight with my wife and start planning in earnest.

Peter and I were to have collected the Twin Comanche during January 1990, but the German LLB were still trying to perfect bureaucracy (with regard to trying to secure a validation of Peter's and my South African licences.) For example we both had to pass an approved course in First Aid. However Peter was informed that as he could speak German, he had to do the German R/T test, but as I could not talk German, they would accept my R/T licence! I managed to do a "crash" course in First Aid with the Red Cross and sent the required paperwork to Germany. However as the weather delayed completion of the annual inspection, we had to delay the flight till March.

Finally we collected the aircraft D-GFTL on 16th March 1990 and departed for South Africa. Our route took us through Italy, Crete, Egypt, Sudan, Kenya, Malawi to Johannesburg. One must bear in mind that South Africa was subjected to all sorts of sanctions and for this reason in Africa, if anyone asked, our destination we gave it as Zimbabwe. In Kenya we found that South Africa was referred to as "Southern Zimbabwe"! This trip was a good insight as to what we could expect on our flight to Oshkosh.

PLANNING.

After our annual convention at Margate during May 1990, the planning started in earnest. I wrote letters to various people trying to find out as much as possible about flying across the North Atlantic during the summer ‘silly season’ as I was not keen to become one of the many statistics. As I subscribed to Air Progress, I studied all the articles on ferry flying by Peter Lert. I wrote three letters to Mr. Lert but never received a reply.

Finally in desperation I spoke to a friend, Richard Mooney, who had done various ferries from Europe to Africa and he arranged, through AOPA USA, a copy of the North Atlantic manual for light aircraft. Various meetings were held with Engineers at our DCA until the DCA came up with a list of requirements that I had to meet before the aircraft could be issued with a Restricted Certificate of Airworthiness. This was necessary as the LS1 document under which the aircraft was licensed was only valid within the borders of the Republic of South Africa and thus to fly the aircraft beyond our borders would require a of a Certificate of Airworthiness. I immediately set about meeting the 8 requirements set out by our DCA, which included an MPI (Mandatory Periodic Inspection) with Mass and Balance calculated at the ferry weight of 20% over gross plus a test flight at this weight, Modification applications for all the mods I had incorporated during the restoration were submitted and passed. Then all the documentation required for such a flight, was submitted and passed.

Meanwhile, Peter and I were hard at work trying to sell the idea to a sponsor. We wanted to do the flight accompanied by a chase plane so that the trip could be recorded from the outside rather than just by photos taken from our aircraft. Our attempts were wasted in the harsh economic times, notwithstanding the fact that we had 2 professional Fund Raisers working on our proposal at the

same time that we were trying. However I was fortunate enough to arrange some sponsorship through Century Avionics of Lanseria. The Century Avionics Team were keen to assist and arranged the loan of a stack of BENDIX/KING Silver Crown radios, which included 1 Comm, 1 Nav/Comm, 1 Audio panel, 1 ADF, 1 Transponder with blind encoder and most important of all a GARMIN 100 GPS satellite navigation unit. At the time, this navigation unit was the latest most advanced unit available to general aviation although the use of GPS by civilians was still in it's infancy. The whole avionics pack was shoehorned into the instrument panel without any damage to the panel as all we had to do was remove the right hand panel/glove box and replace the entire panel with the new temporary unit and wired in the avionics.

Peter How of Performance Aviation, Grand Central, sponsored me with an ELT and Mark Quesnel of Handic, Johannesburg, loaned me a Kenwood (Amateur radio ham) HF. When it became apparent that we would not be able to secure a full sponsor, we started appealing to fellow EAAers for donations. For the Margate Convention 1991, we had special commemorative T shirts printed and these we gave away 'free' to all who donated at least R50! (At the time, about $50) At the same time Peter was able to secure several donations from clients of his, this all helped to reduce the financial burden on us. I use the term 'us' lightly as Peter was to pick up the lion's share of the tab.

During our 1991 convention at Margate, I was flying a solo slot to promote the flight to the USA, the wind had been strong all day due to a cold front approaching and when I came in to land (Rwy 22) the tower gave the wind as "240/40 gusting 52, put it down on the numbers" I informed the controller that this would be an exercise of survival and not precision! The air show was closed 10 minutes later due to the wind.

After Margate, preparation for the flight started in earnest. The rear benchseat was removed and a ferry tank installed. I calculated that we would need about 250 liters of fuel so designed a tank that held 275L. Peter convinced me that 300L would be better. The tank had been designed to use the length of an 8' x 4' aluminium sheet, so the only way to make it hold more fuel, was to make it wider. The 300L tank only just fitted in. We actually had to remove the rear window trim, fit the tank and then replace the trim due to the tight fit. The fuel tank was plumbed into the two wing tanks with two separate fuel pumps to transfer the fuel up to each wing tank. The fuel breather exited through a hole cut in the right rear window with a right angle fitting to point into the wind to assist the fuel pumps.

But what if you lose ALL electrical power? Simple remove the flexible hose to the breather and connect a hand pump and inflate the tank to force fuel up to the wing tanks! Next in went the new panel and all the radios plus their antennae. Then the weight and balance was done and finally a test flight at 10% over gross. We took off from Grand Central (5327' AMSL) did the test and recorded 260 FPM then landed at Lanseria, (4500' AMSL) loaded up to 20% over gross and took off on runway 24. (uphill) We did manage to get airborne with a wheel height of about 10 feet, the aircraft needed an IAS of 80 MPH to fly but as the maximum straight and level IAS on the Highveld was only 85 MPH, the aircraft was not climbing at all. I aborted the take-off in the last 300 meters of runway available. We discarded water ballast to bring the weight down to 15% over gross and managed to record 100 FPM at this weight.

We then plotted graphs and submitted these to our DCA to prove that the aircraft could in fact fly at 20% over gross at sea level with a projected 350 FPM rate of climb. Whilst all this was going on I was working on obtaining the necessary clearances to fly through Africa, with the help of Rod Meyer, who had a company at Lanseria, which specialised in arranging clearances and the handling of visiting aircraft. The Department of Foreign Affairs had promised to assist with arranging clearances after I had addressed a letter (17 April, 1991) to the Minister of Foreign Affairs, Mr Pik

Botha. As they had acknowledged my letter and indicated that they would contact me once the clearances had been arranged, I elected not to nag them.

In June I called the Dept of Foreign Affairs as we only had 10 days before we departed, to enquire as to how they were progressing with the required clearances. HUH! What letter? What clearances? I informed the individual that my letter had been acknowledged as received on 6 May and that I could expect a reply in 'due course.' I was informed that YAARBUTT I had left it too late! Fortunately a friend knew the Speaker of Parliament, Minister Louis Le Grange and in short time a rocket was lit under the butts of the gents at Foreign Affairs and clearances started to roll in!

Unfortunately our primary route through Kenya and Sudan could not be secured due to relationships between South Africa, Tanzania and the Sudan. So we had to concentrate on the alternate route through Africa. Namely:- Zimbabwe, Zambia, Zaire, Central African Republic, Chad, Niger and Algeria. All the required clearances were in by Friday 28 June 1991, all except Algeria and Niger. However the Algerian clearance had been promised as forthcoming by Foreign Affairs. Niger was still a problem, so we had decided that we would file a flight plan along the border of Niger and Libya, the border airspace being "no man's land," then once we arrived there we would just fly direct across the Sahara Desert! We had tried to route around Niger but Mali also refused permission. Boy life is tough when you are the political bad guy!

The final job that had to be done for the issue of the C of A was to have the engine inspected by a DCA nominated engineer, plus I had to have an oil analysis done. This resulted in me flying to Ermelo to have the engine inspected by Celair, armed with the spectrum analysis of the oil. The inspection was carried out and approved, log book signed.

What a relief to finally have met all DCA's requirements. Thursday 27 June 1991, all the paperwork was completed and the C of A was issued. I flew the aircraft to Lanseria to have the G/S (glide slope) card fitted to the nav radio and returned to Grand Central. Boy was I ever happy that all the hassles were over. On final to Rwy 17, tower advised that the wind was 240/15. Anticipating wind shear due to the trees west of Rwy 17, I carried an extra 10 MPH on the approach and.... no wind shear today! So I floated, then hit a gust and ended up 3' off the ground running out of energy but not ideas; a burst of power, more stick into wind and more opposite rudder. The landing was less than perfect and the fuel in the ferry tank slopped across to the left which resulted in a violent swing to the right into wind. The correction led to a violent swing to the left, then the right and left again as the fuel slopped through the (too large) holes in the baffles in the ferry tank. I then elected to stop the fourth swing and head where ever the aircraft ended up pointing, off the runway.

That is the closest that I have ever come to a ground-loop in the Fairchild! Just goes to show, you can never relax in a taildragger. But I thought I knew that. To add insult to injury, the lady in the tower remarked, 'it's a bit windy today, hey!'

## FINALLY WE ARE READY TO GO

The last three weeks of June were hectic. Peter was busy buying his business from the German parent company and they were to have sent their auditors over during the first week of June. As things turned out, they arrived three weeks late. As a result Peter had to spend all his time with them to allow them to complete their audit before we departed. Fortunately things worked out, the audit was competed in time, Peter and I were ready to depart on our 6 week adventure. Friday 28th was spent with last minute arrangements and an air to air photo sortie then weighing all the food, survival equipment and the supplies that we were to take with us, then we packed the

aircraft. At this time the only clearance outstanding was the one from Algeria and although Foreign Affairs assured us that it would be forthcoming, we were beginning to have our doubts as Algiers had been on the news every day with rioting in the streets. The Prime Minister had resigned during the week and a state of emergency had been declared. We insisted on the clearance in writing and asked Foreign Affairs to telex it to Lanseria Aerospace who would telex it to us in Tzaneen.

Saturday 29th 'D-Day' had arrived. Off to Grand Central to a prolonged emotional farewell from friends and family and then off to Tzaneen. The Letaba Flying Club were having an air show and had asked us to stop there on our way, they in return would donate a sum to the flight. The day at Tzaneen was spent partaking in the air show and talking to the press, public and friends. Peter spent most of his time communicating with Lanseria Aerospace and Foreign Affairs. Finally late in the afternoon the word came through that Algeria had refused permission due to the unstable political situation in their country. We offered to take the risk on our own heads but the refusal stayed. What a let down. Many hours had been spent by Rod Meyer and Lanseria Aerospace trying to secure the needed clearances, but to no avail. Political instability in Algeria was set to foul up our plans. We retired to the hotel and debated at length as to what we should do. I was pushing for us to continue and Peter was the one applying the brakes. Finally reason prevailed, we decided to return to Johannesburg and revert to 'Plan B' this would entail re-registering the aircraft in a neighbouring African country.

We returned to Johannesburg in a borrowed aircraft as the Fairchild was loaded up with fuel for the flight to Zaire. On Monday morning we set about the task of applying to register the aircraft in Swaziland. The paperwork was on the relevant Minister's desk on Wednesday morning, but he only graced the office with his presence on Friday! We were told that it would be signed and sealed that day. Hoo boy how naive can one be, things just don't work that fast in darkest Africa.

Wednesday 10th July, I called Peter and suggested that we call off the trip for 1991 and plan it for 1992, as we had by then used up all the "bad weather" days that we had built in for the trip. Even if we could be on our way by the Friday, it would be such a rush to get to Oshkosh that we were sure to open ourselves to more risk by rushing. The decision was made to try again in 1992. On Thursday 11th July we flew to Tzaneen in Peter's Twin Comanche, transferred the excess fuel to his aircraft and then I flew the Fairchild back to Grand Central. What a soul shattering disappointment, so many months of continuous work had to be shelved due to matters totally beyond our control. I must have been a pain to my family as I stomped around the house like a bear with a burr under his tail. Finally we decided to get away from it all, packed up and set off to Margate, on the South Coast, to relax.

What a chore to remove the ferry tank, radios and nav equipment to return the aircraft to its original configuration, knowing full well that I would have to do it again the next year.

Well as the saying goes 'hindsight is 20/20 vision.' This is so true to our case. We did not have fuel arranged in Northern Zaire, as it is difficult to obtain Avgas, we had planned to use mogas, which is equally as difficult to find and subsequently we have been informed that the fuel is often mixed with tea coloured water so that you can not tell that it is water! Flying through Niger and Algeria would take us through the centre of the Sahara Desert where ferocious sand storms can spring up with little or no warning and as it turned out we most probably would not have been able to make it across the North Atlantic due to the foul weather they were experiencing at the time.

It looks as though someone was trying to tell us not to go. Peter and I did decide that we could use the year to try to find a sponsor and set about the task with vigor. The extra time would also allow us to try to obtain clearances through Tanzania and Sudan, the preferred route through Africa.

We contracted two separate companies to try to find a sponsor and again contacted our Department of Foreign Affairs to advise them that the flight had been delayed one year. This time, I stayed in regular contact with Foreign Affairs to see how things were progressing. The most frustrating part was to hear from our sponsor seekers, that they were unable to find any interested parties due to the economic climate. We knew that we had a fantastic project on the go, one that would offer a sponsor a large amount of media coverage but were totally frustrated in attempts to interest anybody.

1992 WE START AGAIN.

The memories of the last minute rush still fresh in my mind I set about preparing the aircraft well in advance. The idea was to have it completed before the Margate Convention. So Tuesday 28 April I started preparing the aircraft. First cut the fuel tank shorter to ease installation and reduce the total fuel quantity by 25 Liters. Pressure test the tank and then fit it, then off to Lanseria to have Century Avionics fit the radios and nav units. Sadly, the Bendix/King Company who supplied the radios in 1991 on a deferred payment scheme, were not able to do the same during 1992 due to the recession in the USA at the time. This meant that Century Avionics had to loan us the radios at their own expense, a great help to Peter and I as we knew only too well that the recession in the USA was nowhere as bad as the one experienced by any company in the RSA. Once the radio installation was completed, back to Grand Central and had Air Supply complete the MPI.

Wednesday 27 May 1992, off to the Annual Convention of the EAA of SA. That year we did not push our T shirt sales as a way of fund raising due to the negative comments of some people. It would seem as though we were seen as chancers who had relieved some people of their hard earned cash. Instead we elected to only advertise the fact that we were going to fly to Oshkosh '92.

When I departed from Grand Central Airport, Peter was still struggling to find the cause of an intermittent missfire in his immaculate Bucker Jungman. The Bucker had been totally rebuilt and was expected to win a lot of prizes at the convention.

Unfortunately Peter did not make it to Margate due to the missfire and he was understandably not keen to fly the aircraft unless it was perfect.

At Margate I had a chance to relax and even had the honour of flying my Fairchild in a formation fly-past that included the SAA JU52, two Harvards, a DH Beaver, an AN2 and a SU26. A mixed bag of "round engined" aircraft not often seen.

Wednesday 10 June 1992, I called Foreign Affairs to enquire if they had managed to secure a clearance through the Sudan, when they said that they had not I informed them that their cut-off date had arrived and thanked them for their help. In desperation I called the Sudanese Embassy in Harare. I was informed that a clearance could be issued but as the Embassy was closed for Ramadan, that I should send a Telex on Monday or Tuesday. On Tuesday a Telex was dispatched and a week later we had the elusive clearance! Meanwhile we still did not have a clearance for Tanzania, but as political changes were happening fast in our country, South Africans were gaining more acceptance in Africa.

We had sent 4 Telexes to Tanzania and not yet received a reply. We were led to believe that this was due to Tanzania not having the foreign currency to pay for Telexes! However that we could proceed as the Tanzanians had been informed of our intended flight. One thing you learn quickly when

flying through Africa is to carry copies of ALL your clearances with you as most often than not, the ATC do not have a copy of your clearance and this can result in embarrassment and delays, or even to be arrested and locked up.

Finally, a week before scheduled departure, everything was completed including collection of immersion suits and one man dingies, kindly loaned to us by the SAAF. (South African Air Force) On Tuesday 30 June I had the pleasure of flying the Fairchild, to represent the EAA and general aviation aircraft, at the official opening of the new runway at Grand Central.

Friday 3 July was spent weighing all the food, water and survival gear and packing the aircraft. The SABC sent a TV crew around to film us packing and to do an interview. Finally at sunset we could sit down and go through a final check list to see that we have everything, then off home for a restless night, wondering if we had forgotten anything.

DAY ONE. Saturday 4 July 1992.

Up at 05:30 I ate breakfast with the family for the last time in about six weeks and prepared to leave. We arrived at Grand Central at about 07:30. It was a cold winter's morning, OAT +4C. We were pleasantly surprised to find a strong contingent of wellwishers there to see us off. I had tried to get hold of Mark Quesnell during the preceding weeks to fly with him so that he could demonstrate how to use the SWR meter to tune the trailing antenna for the HF set. We had not been able to do this so we took tape and paint, wound out the correct length of antenna and marked it for the frequencies we would need in Africa. Then started the engine to warm the oil, whilst the engine was running we said all the farewells to friends and family. Funny thing, the farewells were not as emotional as the previous year, perhaps everybody thought we would be back in a few days. Finally at about 09:30 we took off for the 2:20/178 Nm leg to Tzaneen.

We had decided to route through Tzaneen to visit the guys there as they had supported us the previous year. The leg to Tzaneen took us low level past Waterkloof AFB then direct to Tzaneen. This was undoubtedly the most nerve wracking leg for me. After all the preparation we were finally on our way.

But what if.....? What if we ground looped the aircraft at Tzaneen.....? What if Tanzania sent us back.....? What if the engine decided to quit now.....? The mind raced, the engine was messing more oil onto the windscreen than before, was the oil feed to the rockers leaking....? What if the oil hose did break.....? What if we were shot down by some rebel in Mozambique.....? What if we ended up stuck in a remote part of Africa, how would we get the aircraft back to South Africa.....? What if we ended up in the North Atlantic, would we be able to survive the ditching.....? What if we had to turn back, how would we face our friends who supported this venture ...?

We discussed the oil leaking onto the windscreen and decided that we would investigate it at Tzaneen. Then the GPS 50 stopped working, no power. Another job for Tzaneen.

We checked the oil consumption and checked for a loose rocker box, but with the engine cowl on this was difficult, so I decided that the problem was all in my mind and that the oil leak was not worth worrying about. The 28V power lead to the GPS 50 was dead so I connected it to the 12V supply to the HF set and fuel pumps. Great it worked again.

That year the flyin to Tzaneen was a low key get together and was enjoyed by all. We spent the night as guests of Max and Leonie Bothma, although we went to bed late, we were up early Sunday morning.

2h20 to cover 178 Nm. Average G/S 76 Knots.

DAY TWO. Sunday 5 July.

We were up at 03:30 and treated to an early breakfast at the Bothma home, then off to Tzaneen airfield. We had planned to take off at first light (06:00) so as to avoid flying in the heat of the day. We had arranged for a Customs/Immigration official to come down from Pietersburg to complete the necessary paperwork, however he slept late and only arrived at 07:30. I was sorely tempted to leave without clearance, but knew that I would need a re-import permit for the aircraft and avionics to prove that I had left the country in the aircraft. So we had no option but to wait, watching the sunrise, along with the air temperature. By 08:00 we were on our way to Lilongwe Malawi some 7:30/637 Nm away. Max Bothma accompanied us for the first half hour or so, in a Decathlon. As he waved a final farewell, waved the wings, performed a straight roll and departed, little did we know that it would be the last time that we would see Max, as he was to die two days later in a helicopter crash with another good friend, Steve Schoeman. They will both be sorely missed.

Our take off from Tzaneen was at 17% over gross and we were pleasantly surprised at the difference in performance in the Lowveld, compared to the Highveld. We set course direct to Masvingo in Zimbabwe and crossed the Limpopo River into Zimbabwe on schedule. The river was just a trickle of water, reflecting the severe drought that gripped the African Continent.

On this leg we took time to familiarize ourselves with the GARMIN 50 GPS which Century Avionics had loaned us as a spare, should the GARMIN 100 AVD pack up for any reason. The GARMIN 50 GPS is a unit for boating use and switches off at 90 Kts. Unfortunately the GARMIN 55 GPS was not on the market yet when we left otherwise we would have taken it along. As our cruise speed was between 85 and 90 Kts the GPS 50 worked whilst we had a headwind but with a tailwind it switched off. This did not bother us as we only had it along as a back up for the flight across the North Atlantic, where we expected a head wind.

On the flight through Zimbabwe we flew past the remnants of Lake Kyle. Now reduced to the river course only, again indicating the serious nature of the drought gripping the African Continent. We stayed on the airway and passed well east of Harare, on our way to Lilongwe. Every hour, on the hour I called the SAA communications centre at Jan Smuts Airport, "Springbok Johannesburg" (ZUR) on HF 8933, to report operations normal. The people there had been kind enough to offer to pass on reports to my wife, to keep her informed. What a pleasure to have HF comms when you are far away from home.

The flight across Zimbabwe was conducted at about 1500' AGL and as we approached the Zambesi Valley we encountered our first bit of weather. We had hoped to see the Cabora Bassa dam, but were not too keen to fly too close in case some trigger happy Mozambican decided to take a pot shot at us. We had to descend to about 1000' AGL to remain visual. The Zambesi Valley looks like a great place to live but nobody lives there due to the Tsetse Fly. A fly responsible for ‘sleeping sickness.’

Once through the valley we had to climb again to negotiate the high ground at the edge of the valley for the last part of our flight into Lilongwe's Kamuzu International Airport. With Lilongwe in sight I managed to contact ZUR on 8933 to report ops normal. The last bit into Lilongwe was uneventful. We refueled the aircraft and prepared it for the next leg to Nairobi, Kenya.

We had been asked to bring an old fashioned, hand operated cast iron meat mincer along for a friend of Rod Meyer's. The man turned out to be one of the ATC's and was kind enough to offer to take us to the hotel in town and bring us back in the morning in return for the mincer. Little did he know that I had agonized about carrying the extra few kilograms. A deal was struck and off to the Capitol Hotel, a pleasant establishment. Our original plan had been to fly to Mzuzu, 144 Nm north of Lilongwe, so as to make the next day's flight to Nairobi less of an ordeal. However as it was a Sunday, our application had been refused due to the field being closed, plus Monday was a public holiday and the field would also be closed then. For these reasons we chose Lilongwe. After refueling, when we went to see the ATC's, we were informed that the chaps at Mzuzu were waiting for us! Unfortunately we had already loaded the aircraft over gross, so would not have been able to land at Mzuzu plus it was getting late, so we decided to stay at Lilongwe. Due to the long hours in the air, we had to regulate our intake of liquids and food. We lived off biltong (beef jerky,) chocolates, nuts, glucose and nuts bars and fruit juices. So at the end of the day we were ready for our daily meal and liquid refreshment. At the hotel, Peter and I had a few beers in the lounge, to re-hydrate the bodies, then proceeded to the dining room for supper. We both had steak; steak that could have been used as a sole for our boots! Was it ever tough and a bad cut, to boot. (Pun intended.)

Call time set for 03:30 and pick-up at 04:30 we retired to a good night's sleep at about 21:00.

7h50 to cover 637 Nm. Average G/S 81 Knots.

DAY THREE.

Up early, we had coffee and toast for breakfast and off to the airport at 04:30. We arrived at the briefing section to find our requested met report waiting and so we filed a flight plan. Because we did not have a clearance number for Tanzania, we were hoping that Malawi ATC would not request one. They did however query as to why we had not indicated that we were HF equipped. I question why and they ***informed me*** that we had an HF!

No use denying it, so I told them that it was an old set which only had 3 frequencies! Then only did I realize, from the HF crackle and talk, in the back ground, that Air Malawi Ops and ZUR both used the frequency 8933! By 06:00 we had filed flight plans etc and were ready to go, but the immigration people were still asleep! We elected to walk to the aircraft, to warm the engine before departure. As it turned out we were not able to depart before 07:00 due to ground fog rolling through.

Shortly after 07:00 Customs/Immigration formalities completed, we were ready to depart and take off. We were not able to fly on track to Mzuzu due to low overcast so we headed in an easterly direction to the west coast of Lake Malawi. On the way we had to fly over a lot of fog and around low cloud. Up the west bank of Lake Malawi, navigation was easy but due to the venturi effect of the high ground, the winds (headwinds) were strong and moderate turbulence was experienced.

The turbulence was a worry as we were at 18% over gross and did not want to overstress the wings. Not that it was likely as the main spars, made from nature's own composite material, wood, measure 180mm x 38mm. (7" x 1.5") Half way up the lake, when we passed east of Mzuzu, we noticed that we were lucky that we did not proceed there the previous day, as the mountains were shrouded in cloud and we most certainly would not have been able to fly out of there due to the bad weather. We both commented on how glad we were that luck appeared to be on our side. To the north of Lake Malawi the weather improved and we were able to climb to clear the high ground of

the Poroto Mountains. Still over gross we staggered up to 9 000' to just make it over the lowest part of the high ground. To cross high ground at 500' AGL, in windy conditions, is not a comfortable feeling knowing that you do not have any power or performance to spare.

The northern tip of Lake Malawi, at Matema, we entered Tanzanian airspace. Because we did not have a clearance number and due to the fact the South African aircraft had, for years, been banned from Tanzanian airspace, we elected not to contact Mbeya or Dar Es Salaam on VHF, in case they told us to leave their airspace. The Poroto Mountains/Kipengere Range does not extend far and abruptly drops to the plateau of Tanzania. The wind was now a strong N/E and the ground below was obscured by dust and smoke. Shrub fires were the only sign of life that we would see for hours. We were descending and gazing at the semi-desert below, wondering how people could survive in this area when we were called by an airliner. It would seem that 'Dar' was looking for us, Dar requested a position report. (All airliners at the time used 126.9 to ensure own separation in areas of bad or no ATC control and we monitored this frequency all the way through Africa.)

OK here it comes, we were going to be told to vacate Tanzanian airspace. We dutifully gave a position report, which was relayed, Dar responded 'report ops normal time 09:00!' Surprise, surprise they knew about us and were not going to chase us away. We discussed this new development and proceeded on track. Finally when we were in radio range of Dar we contacted them and surprise turned to embarrassment! Not only were they aware of us but they were actually concerned about our well being....! The controllers called us regularly, to find out how we were doing. Goes to show that only politicians cannot get on together, normal people do not seem to have those problems. We found the Tanzanian ATC's to be helpful and friendly.

The hours through Tanzania dragged by, suddenly I shouted at Peter, "did you hear that?"
"Hear what?" responded Peter.
"The engine is running rough."
"No I can't hear it" replied Peter.
"Well turn your head sideways."
"Still can't hear it, are you sure?" asked Peter, looking concerned.
"Take your headset off then."
"Still can't hear it" says Peter, looking more uncertain.
"Feel the airframe tubing, it has a vibration."
Peter felt the tubing, that extends from the top corners of the windshield forward to the centre of the windshield.
"Are you sure?" he asked anxiously.
"No it's OK" I responded, "but just remember this when we are flying over the Mediterranean or the North Atlantic!"

This scenario was repeated during the next three days, whenever it seemed as though nothing was happening, just to keep us awake and hopefully to prevent an actual discussion whilst flying over the ocean. We waited, in anticipation, to see Mt Kilimanjaro. Mt Kilimanjaro, an extinct volcano, rises from the plains of Tanzania to an altitude of 19 340.' (5895m) It should have been visible, about 70 Nm East of our track, however due to the bad visibility and the haze we never saw it. On the way to Lake Manyara we passed Hanang Mountain, a small mountain thrust out of the earth's crust by volcanic action to a height of 11 212', it too was shrouded in cloud.

We had chosen the westerly track to stay closer to the Rift Valley, in the hope that we might see both Lake Eyasi and Lake Manyara. Lake Eyasi was obscured due to the haze but Lake Manyara which was on our track was covered in flocks of Flamingos, for this reason we stayed high over the lake to avoid any chance of a bird strike. Just north of Lakes Eyasi & Manyara lies the extinct

volcanic crater of the Ngorongoro Mountain. Unfortunately this too was shrouded in cloud. This area of Tanzania is studded with craters and fissures, showing that the area was volcanic in the past and is a beautiful part of Africa.

By the time we approached Nairobi it was late in the afternoon. We landed at Nairobi's Wilson Airport at about 17:45 after 09:35/778 Nm flying and gained one hour due to crossing into the East African Time Zone. We were warmly welcomed to Kenya by the locals, they were all keen to hear news about South Africa, and asked if we had newspapers for them to read. After taxying to the correct parking area, we cleared Customs/Immigration and retired to the East African Flying Club. (Established in 1927.) Here our welcome was even warmer, we were offered a beer each in the pub which we gladly accepted as we were quite dehydrated after a day in the aircraft.

However as we raised the glasses to take a sip, a hush descended on the bar. Totally oblivious Peter and I drank a long, well earned draught of beer, then looked around to the intent stare of the other men around the bar. We were then informed that we had broken a rule of the bar, punishable by having to buy a round for all. We had failed to remove our epaulets before indulging in an alcoholic beverage.

Here I must point out that travel through Africa in an aircraft is made much easier if you wear a pilot's uniform. For this reason Peter and I wore navy blue trousers, pilot shirt and epaulets. Our flying overalls were safely stored in the baggage compartment and would only be removed once we arrived in Europe. To wear a pilots overall in Africa is to risk being locked up as spy. The offending epaulets were removed in haste and we continued to spend a pleasant evening seeing to the body's hydration level before retiring to the dining room where we had a hearty meal and then retired to the single rooms that are available to club members and visiting pilots.

9h35 to cover 778 Nm. Average G/S 81 Knots.

DAY FOUR.

As the leg to Lodwar was relatively short, only 03:50/280 Nm, we decided to sleep late ie 06:30! We enjoyed a leisurely breakfast and then went to the office to pay the bill. At Tzaneen 1991, Dave Becker, the then National President of EAA Chapters of South Africa, had presented us with the original log book of the flight of my aircraft from the UK to South Africa in 1949. It was an honour to receive the actual log of the flight which started in Meir on the 8th Jan 1949 and took G-AKJB through France, Spain, Gibraltar, the west coast of Africa, central Africa, into Rhodesia and finally to Durban, South Africa. Arriving 28th March and 100hrs later.

We had decided to take the log book with us and have it endorsed, with rubber stamps, to record our progress on the flight to Oshkosh. Problem....! We were informed that in Kenya, people are sensitive about where their rubber stamps are placed! This was to become a problem enroute, not only confined to Africa. We had planned to depart by 09:00 or 10:00 so arrived at the aircraft at 08:00 to refuel, clear Customs/Immigration, then proceed to Lodwar. We had arranged to buy fuel from Bishop Mohan, in Lodwar.

The bishop had for years, carried fuel for the Flying Doctor service, and is one of the few places in Kenya where it is possible to buy aviation fuel. For this reason we had to tanker fuel out of Nairobi Wilson, so that we only had to take a full 200 liter (55 Gal) drum from the Bishop. For this reason we loaded the aircraft up to 16% over gross for the departure from Nairobi Wilson.

To clear Customs/Immigration, we were required to fill in the General Declaration in six fold, one at a time as carbon paper was not available. This we dutifully did, had each copy stamped and signed, Immigration took one, Customs took one, the other four copies were handed back to us! All this took longer than we had anticipated. In the end we lined up for take off at 12:30 local.

Fortunately it was overcast and the temperature was "only" up to 26 C. At an airfield elevation of 5557' AMSL this meant that we would be severely restricted in rate of climb. We lined up on the easterly runway, Peter advanced the throttle...

Ever flown a 35hp Cub? That is what our acceleration felt like. We used at least 3 000' of the available 4 800' before staggering into the air. We stayed low over the runway and chased the speed up to 85 Mph. At our weight the stalling speed of ZS-VWO was close to 80 MPH!
“Aim at the fence Peter, don’t try to climb, aim at the fence...” and that is what we did, just clearing the boundry fence and continuing on towards the approach path to Nairobi’s International Airport. This concerned the ATC, but we needed a bit of height before we would be able to turn towards the Rift Valley.

Fortunately the ground slopes down to sea level at Mombassa some 200 Nm away. We staggered off at perhaps 50 FPM ROC. With the speed pegged at 85 we sloooowly climbed away. It took us what seemed like hours to climb to 500 AGL, then we turned back to the N-West and set course to Nakuru, en route to Lodwar.

Our route to Nakuru took us through the Kenyan Highlands, past the Lakes Naivasha, Elementeita and Nakuru. With that much water, it is understandably prime farming land. The flight to Nakuru was rather turbulent due to the strong wind, Lake Nakuru was also tinted pink by the large flocks of Flamingos. 18 Nm North of Nakuru we crossed the Equator and thought of our departure from Grand Central, 26 degrees South of us. The size of the coffee plantations in this area are massive and have to be seen to be believed. 40 Nm North of the Equator, past Lakes Hannington and Baringo the land changes rapidly to semidesert shrub land.

Approaching Lodwar which lies West of Lake Turkana (nee Rudolf) we descended low level to takes some photos of the dwellings of the Turkana people. These people somehow manage to survive in the semidesert and being nomadic people, live in huts made from branches of thorn trees. The last 15 Nm into Lodwar we flew IFR. (I Follow Roads) Amazing to think that this thin strip of tar is part of the famous Cape to Cairo road, envisioned by Cecil John Rhodes! We flew over the runway at Lodwar to announce our arrival and to clear the runway. After landing we taxyed to the fuel store operated by Bishop Mohan and parked for the night.

The temperature was about 38 C. Soon the Bishop arrived accompanied by most of the local villagers, who came to see the aircraft and tried to sell us some of their hand made baskets, hats, coasters, etc. The amount of children in this part of Africa is amazing. Even more so is the fact that, somehow, they manage to survive in the desert. Bishop Mohan supplied us with our drum of Avgas, with this safely loaded, we negotiated the cost of a night watch, then retired to the Bishop's humble home.

After sunset the Bishop offered us a few beers and supper. We sat outside under the clear skies and discussed our flight, the Turkana people and how they were being affected by the drought. I enquired as to how cool it would be in the morning as we were again 18% over gross. The Bishop replied that the temperature seldom drops below 30 C! This was disturbing as although the runway was at 1715' altitude, it was only 3 280' long, but it did have at least 300' of clearway at either end.

We used the Bishop's telephone to contact Maureen, in Johannesburg to let her know of our progress, as this would most probably be the last time that we would be able to phone till we arrived in Egypt. Here I found that it was not possible to make a reverse charges (collect) call due to exchange regulations, so had to time the call and then pay the Bishop the rate as laid down in the telephone directory.

It is sobering to stay with missionaries, such as Bishop Mohan and his Brothers and Sisters. The total lack of earthly goods that we all take for granted impressed me.

At about 21:30 we retired to a good night's sleep in the heat of the desert night. However in the back of my mind was the nagging worry of how the aircraft would perform at over 30 C. The vision of the boundary fence at Nairobi Wilson Airport was still etched in my mind, the memory of that sluggish take off was still fresh and it was one we were not keen to repeat.

3h50 to cover 280 Nm. Average G/S 73 Knots.

DAY FIVE.

We were up at 04:30. The shower only had one tap, luke warm. After a refreshing shower and a light breakfast, the Bishop took us down to the aircraft. Our night watchman woke up when we were loading our bags into the aircraft. A glance at the temperature gauge told me that the temperature was 28 C. A light Easterly breeze was blowing and perhaps this air mass carried some cool air in from Lake Turkana some 30 Nm East of us. Our guardian angel was hard at work already. By 05:30, we were loaded and ready to go. We bade our host farewell and cranked up the trusty old Warner.

The glow of dawn announced the arrival of the sun as we taxied to the runway and backtracked the undershoot. The desert sand was soft in places and there were a lot of small stones and shale on the surface. I advanced the throttle slowly, only hitting full throttle as we neared the threshold of the runway. The aircraft accelerated briskly and we were airborne before we had used up half of the runway. The trusty old Warner dragged us into the air at 200 FPM. What a relief! We turned on track, along the airway and headed for Ethiopia and the Sudan.

This leg would take us through the ITCZ. (Inter Tropical Covergence Zone) Breeding grounds of some of the fiercest thunderstorms in the world. We did not have a met forecast as we could not get through to Nairobi on the phone. Perhaps the Lodwar exchange had not yet opened, but we reasoned that as it does not rain much in the desert, if we did come across a Cb we would simply fly around it. Some 100 Nm North of Lodwar, we crossed the border of the Sudan. We had slowly been climbing as Southern Sudan and Western Ethiopia were in a state of war due to internal strife and we wanted to be at least 5 000' AGL by the time we reached Ethiopia. Occasionally light aircraft have been shot down in this area and we were not too keen to become another statistic. The desert was surprisingly wet in Northern Kenya as we often saw sunlight glinting off water pools in the river courses in the desert. During the flight we kept ourselves busy with fuel management and communications. We still had the problem that we could not contact ZUR on HF. Fortunately a Lufthansa flight reported on 126.90 and he relayed a message to Nairobi and Johannesburg for us.

Some 220 Nm North of Lodwar, we crossed the border into Ethiopia. The easterly wind that was blowing had slowly veered and was now becoming a tailwind. However the weather was starting to become cloudy. We asked the Lufthansa flight for a weather report as they had passed through the weather on their way south. They reported that there were Cb's embedded in the cloud cover. As we

progressed through Western Ethiopia we were surprised to see that it was very wet swampland and not the desert highland that one sees on the TV shots of the starving people of Ethiopia. The further North we flew the greater the cloud cover became until we were faced with the choice of going IMC through the weather or descending to proceed VFR below. At home this choice is an easy one, but here we were faced with the dilemma that if we flew low, we might attract gunfire. Eventually it became obvious that we had to descend as the thought of flying through a Charlie Bravo in a 51 year old aircraft was not one worth entertaining. We managed to find a hole in the cloud cover and descended to 500' AGL to remain VFR. Even this was difficult to do as there was a lot of rain.

Imagine there you are over totally unfamiliar terrain, weaving to avoid heavy rain showers, hoping that all the trigger-happy bandits are hiding under their parkas and trying to navigate. We had deviated about 30 Nm west of track, as the weather looked bad ahead on our original track. We loaded the coordinates of a place on the Nile River in the GPS and hit the GOTO button and headed for the Nile. Boy navigation is sure difficult in Africa with this modern GPS.

As we approached the Nile, the weather cleared up and the tailwind component increased, things were looking better all the time. The last airstrip we flew over in the Sudan before heading west, to better weather, was a strip at Daga Post. From there we flew over swampland which changed to savanna over a distance of 100 Nm, then back to desert where we met the Nile River at 11 north. We followed the Nile as we headed north 120 Nm to Kenana. At Kenana we saw the first signs of civilization in 600 Nm. Kenana has a large dirt airstrip to serve the farming community and the cotton processing plant, which is surrounded by well irrigated farmlands, with cotton being the main crop. Although Kenana is not a recognized port ofentry, we had filed it as our alternate.

The Sudan is the largest country in Africa and Khartoum is the only port of entry, alternates are few and far between. From Kenana it is some 160 Nm to Khartoum, by now we had about 20 knots tailwind component, with a strong S/W wind blowing. As we proceeded on track the visibility started to decrease, so we climbed in the hope that we might climb above the dust, besides it was cooler higher up. We leveled of at FL65 (4 000' AGL) but were still in the dust.

The last hour of the flight was spent on instruments in the duststorm. Meanwhile we had been trying to establish contact with Khartoum, to no avail. Soon it became apparent that other aircraft were also calling Khartoum and not receiving a reply. We continued inbound, maintaining own separation till Khartoum came on the air when we were about 10 NM out. We joined on a left hand downwind for Rwy 18. Kept it tight to keep the field in sight. On finals the opposite threshold of the runway was lost in the dust storm. We taxyed in to the apron and shut down, happy to be safe on the ground again after a flight of 08:10 and 771 NM. Whilst we were parking a Piper Navajo was calling for taxy clearance for a local test flight. We thought that they were mad to go out in a duststorm for a test flight. They returned 40 minutes later and the pilot walked over to introduce himself to us.

Fred Schrafft, a New Zealander, on contract in Sudan enquired as to "what the bloody hell were the Yaapies doing here; you're a bit far from home aren't you?" Strange, we thought that he was far from home! We briefly explained our trip and asked him if he could help in any way with the Customs/Immigration formalities as we were not having much success and the 42 C temperature was not conducive to prolonged negotiation. Fred dispatched his engineer, (a Philipino, was he far from home!) Within an hour, we had completed all the formalities and Fred had secured permission for us to park the Fairchild in his hangar.

Here I must digress, when one flies through Africa, one must put the body's motor function into low gear, as things just do not happen fast in the searing heat. As we intended leaving Khartoum before

sunrise, we were keen to pay all accounts for parking/landing/navigation/etc., before we retired to the hotel. This we found was not possible. You have to pay the shift responsible for the departure of your flight! This was also true in Egypt.

Fred informed us that the reason for no radio comms was that the airport had experienced a power failure, but they could not start the standby generator as there was no diesel fuel in the tank! Fred was kind enough to offer a bed in his house, if we preferred not to stay in a hotel. As we wanted to meet people on the flight, we gratefully accepted his offer. He called his wife, Helen, on a handheld radio (the telephone system does not work very well) and she came to fetch us.

With the Fairchild safely parked in the hangar, we departed to Fred and Helen's apartment. The roads (or lack thereof) and traffic in Khartoum have to be seen to be believed. People seem to drive where ever they want to. If you are not in a hurry, simply stick to the middle of the road and all others will zoom past on both sides! During the drive it soon became apparent that it was better to drive with the windows closed, without airconditioning, than to drive with them open as the wind burns your skin.

We arrived safely at the apartment and were ushered into a foyer with 4 large fans on the ceiling stirring up the 40 C air. The heat was stifling. Fred invited us into his den. AAHH what a relief to enter an airconditioned room. On the one side or the room stood a 20 liter refrigerated cooler full of water. Peter and I had at least 2 liters each! Peter enquired if he could use the phone to advise the hotel that we would not be staying there. This gave Fred and Helen a reason to chuckle, this is Africa, man. The phones don't work, so a runner was dispatched with a message for the hotel!

All our chocolate bars were placed in the freezer to return them to a recognizable solid form. After a refreshing shower we were invited to another home, where we were treated to a few "Barley Pops," as Sudan being Muslim is a dry country, in more ways than one. We then departed to the Hilton Hotel and enjoyed a hearty meal where we learned that Fred had over 30 000 hours as pilot and Helen had about 13 000, a truly aviation orientated family. Fred also showed us some GPS letdowns that he had flown on days with good visibility, then loaded into his GPS, specifically to allow him to land at the strips he had to fly in to, during duststorms such as the one we had come through that day. They had enough confidence in the accuracy of the GPS to allow descents to 200' AGL.

Makes one wonder how things were done before the advent of GPS. Or for that matter, how the pioneers managed to accomplish their flights with little more than a road map. After dinner we retired to our airconditioned room at the Schrafft apartment for a well earned night's rest.

8h10 to cover 770 Nm. Average G/S 94 Knots. (Wow!)

DAY SIX.

Up again early after a good night's sleep and off to the airport, we arrived there by 05:15. We had refueled the aircraft the previous day but were unable to buy straight 100 oil, fortunately Fred found 4 Qts of 120 oil, which we gratefully accepted and topped up the Fairchild's oil tank. With Customs/Immigration formalities the only thing remaining we embarked on a tour of the airport. Fortunately we had Fred to drive us from building to building, trying to track down the required gentlemen.

We located the immigration official, in his office, asleep on the floor behind his desk. His

subordinates were loath to wake him and insisted that we wait for him to surface. The fact that the temperature was already 32 C, before sunrise, was reason enough for us to want to depart with minimum delay. Eventually the noise that we were making must have, unfortunately, disturbed the official's sleep and he staggered back to life. Our passports, which had been surrendered the previous day, could not be located. Another delay. When the passports were finally located we were ushered off to another building for the obligatory rubber stamp. With this in our passports we were able to file a flight plan for Luxor (Egypt) and collect the met forecast.

Then off to pay the landing/etc fees. By 07:30 we were able to take leave of our host and hostess and proceed further north. The duststorm had not subsided at all, but at least we still had a tail wind. We had filed FL65, to avoid the heat of the desert, but at this level we found that we were still in the dust, so we climbed higher. As we were 17% over gross at take-off, we were only able to climb to FL85. At this altitude we were still in the dust, so had no option but to proceed under instrument conditions. This lasted for just on 02:30, before we flew out of the dust. At the same time we ran into headwinds!

The 420 Nm to Abu Simbel on Lake Nasser, (Aswan Dam) across the desert was boredom, followed by boredom. The (man made) lake is massive, some 180 Nm from start to end. The contrast of this body of water against the back drop of the desert is a sight to behold. An example of man's folly, as the dam is silting up with the life giving silt that had for centuries assured the Egyptians of some of the most fertile soil on earth. A visit to the Temple of Luxor 100 Nm downstream will highlight another problem caused by the dam. Walls in the ruins of the Temple have to be propped up as they are collapsing due to the soil being softened by the rising underground water table!

From overhead Abu Simbel at FL85 (the MINIMUM VFR level) we were cleared direct to Luxor. We requested routing via Aswan, as per our flight plan, so that we could follow the course of the Nile. This was refused. One must take into account that the entire airspace of Egypt is a restricted area. No movements are permitted off airways and Aswan, being a Military Base is a danger area. (HED4) We were sorely tempted to ignore ATC and follow the Nile, but as we were not too keen on spending time as guests of the Egyptian Government, we elected to route direct as requested.

The desert on this leg was rugged, with large wadis and outcrops of rock. 25 Nm out from Luxor, we crossed the Nile again. It is a pity that we could not follow the river, as the contrast between the desert and the lush green of the farmlands bordering the Nile is interesting to see. The approach and landing at Luxor were uneventful.

We were directed to park in front of their new control tower. We had covered another 624 Nm in a time of 07:00. Two fuel trucks came out to meet us plus a representative of Nile Aviation, a "handling agent." (a modern day Ali Baba) We had planned to have a day off in Luxor, to view the Temple of Karnak, as we did not have the time to see it on our previous trip. For this reason we did not want to refuel the aircraft and have it stand for a day in the searing desert heat, full of fuel. The one fuel truck driver insisted on filling the aircraft as there would be "no fuel on Saturday." Meanwhile the "handling agent" was trying to rip an arm and a leg off Peter.

Try a fee of US $600 to see us though Customs/Immigration/ATC. All the things that we have always done under our own steam. Peter declined his offer. Soon it sounded like a bazaar around us with the one fuel truck driver revving his engine and offering us our "last chance" to refuel. By this time at least three security police and a few army types had approached, all with hands outstretched requesting "bukshees." (Something for nothing, a gift or freebie) The impatient fuel trucker departed but we still managed to arrange fuel, through the remaining fuel truck, for early Saturday morning.

The "handling agent" dropped his price to his rock-bottom bargain-basement price of $450! We declined to make use of his services, even after he informed us that it was compulsory to make use of the services of an agent.

We gathered up all our belongings, including our now back to milkshake chocolates, and set off to the terminal building in the 40 C heat. An off duty Security Policeman latched on to us and became our agent. We had to bribe the health officials to approve our entry into Egypt.

The trick is to carry a large amount of small denomination (read "one") dollar bills and put these into his outstretched palm one at a time. Initially he will look at you as if you have just deposited your breakfast in his lap, when there is enough cash in his hand he will break out into a smile!

It seems as though every single Egyptian you meet is on the take. They are a bunch of chancers, even one of the high ranking officers in the Security Police wanted 50 Egyptian Pounds for "increased security" around the aircraft. I refused to pay and advised him that if he had a security problem at his International Airport, I would be glad to bring it to the attention of his superior officers!

Two hours after landing, we were in a taxi, on our way to the hotel in Luxor, having paid about $30 in bribes, we were congratulating ourselves for having saved the $450 demanded by the clearing agent.

We spent a pleasant afternoon on the banks of the Nile sipping the local Stella beer, which seems to have improved since our previous trip through Egypt. We cautiously allowed ourselves a toast to celebrate covering one third of the flight. 3268 Nm covered in six days. That evening we had an early night, the first so far.

7h00 to cover 624 Nm. Average G/S 89 Knots.

DAY SEVEN.

A day off, a chance to relax. We took a taxi ride through town then went and toured the ruins of the Temple of Karnak. A most impressive sight. The rest of the day was spent relaxing. Late in the afternoon we took a taxi to the airport to check the aircraft after the flight through the duststorm. I managed to borrow a set of sockets from a technician at the airport and fitted a new airfilter, which I had brought along for just such an event. The dust lining the cowls was of the texture of talcum powder. You could not shake any out of the filter but fortunately the filter did not look as though it was clogged.

We spent a while inspecting the aircraft and generally tidying the interior. We had planned to spend the evening watching the Lights and Music show at the Temple of Karnak. The show started at 9 pm but as we were falling asleep at supper, we elected to have another early night.

DAY EIGHT.

Up early again we checked out at 04:30, but our taxi driver did not arrive. The hotel called another taxi and we were off to the airport. On arrival at the airport we were met by the Security Policeman, who helped us through on our arrival. He saw to our clearance through immigration and

took us up to the control tower. Up we went through dark passageways and staircases, all infested with mosquitoes, up to the tower. The three controllers were asleep on the floor. I began to wonder if they actually had homes to go to!

We filed the flight plan via Asyut to El Daba then on to Crete. Nope you can't go that way. It seems that this airway had a minimum altitude of FL150, although this was not reflected on Mr. Jeppesen's charts. ATC informed us that we had to route via New Valley, 117 Nm due West of Luxor. We explained that at 85 Knots this would add at least two hours to our flight and would result in us not being able to reach Crete. The ATC man called Cairo on the hot line and some discussion in Arabic took place. He then informed us that as we could not carry enough fuel for his intended route that Cairo insisted that we route via Cairo International.

The last thing that we needed in our lives was to stop at Cairo International as we had been warned to avoid this airport at all costs as they are rip-off artists. We asked if we could file a flight plan to Alexandria, refuel there and proceed to Crete. Another Arabic phone call. Nope you can't do that either, the minimum FL to overfly Cairo to Alexandria is FL180! By this time we were becoming annoyed at the apparent run-around that the ATC's were giving us.

We asked the man if he could suggest what we should do, to leave his country as it seemed that they had some diabolical rules for light aircraft. His answer was that we should proceed to Cairo, as they would know what to do with us.

Peter and I went down to the aircraft, packed and refueled. As we only planned to fly to Cairo I elected to only fill the wing tanks. By the time we were airborne it was 08:00 and already as hot as Hades. We had to climb to FL85 but as the engine and the oil were becoming very hot, we had to chase the speed up to cool the engine, this resulted in a decreased rate of climb. I was worried as the oil leaving the engine was over 250 F, fortunately the oil cooler was working well and the oil entering the engine was at 85 C. The worrying thing was that the oil might lose it's lubricating qualities due to the excessively high temperature leaving the engine. With the higher cruise-climb speed the oil temperature soon stabilized.

ATC were keen to know when we reached FL85 and finally I began to wise up and reported FL85 to get him off our back. Luxor handed us over to Cairo ATC. When we were in range of Cairo we contacted their ATC, but they had not been informed of our arrival! Cairo ATC queried as to why we were proceeding to his field. We explained the debacle at Luxor and he enquired if we would rather continue to Alexandria! If only I had put 25 liters of fuel in the ferry tank, if only.....

We were battling against a strong headwind with a ground speed of 65 Knots, at this rate we would not be able to reach Alexandria, if only I had taken more fuel..... We informed Cairo ATC that we would have to land at Cairo International to refuel then proceed to Crete. We requested that Cairo arrange fuel for us on landing and proceeded inbound. Due to the strong winds stirring up the dust, the visibility was poor as we approached Cairo, so much so that when Cairo radar vectored us on a right hand downwind, we could not see the airfield.

Cairo vectored us onto the ILS localiser and we flew the only ILS of the trip. At the outer marker the field became visible and we landed without incident. Ground control directed us to our parking area, where we were met by a Jet A1 bowser! We requested AVGAS only to be told that there was none available! It would seem that Cairo International does not stock Avgas!

Now we had the definite feeling that the Egyptians were giving us the run-around. The Nile Aviation Rep arrived and informed us that his services would cost US $100 plus landing/etc fee of $100. We

declined to use his services and explained that we were sent to Cairo by Luxor ATC, so they should bill Luxor! That one did not work. OK then we would be our own handling agents. Here another problem arose, we had to cross one of the runways to reach the airport building, to do this required a bus which was in contact with the tower. Nile Aviation had such a bus. OK they had us over a barrel, so off in their bus we went. In the airport building we were understandably in a hurry to do whatever paper work was required and sort out why we were made to fly to Cairo in the first place. First we had to pay landing fees, which we initially refused to pay. This took the best part of an hour to do. Then off to briefing to find out where we could find avgas. Here we ran in to another fee to pay.

Back down to the landing fee office to secure the needed receipt. Back up to briefing with a warning that if we stayed one minute longer than two hours, then we would have to pay a parking fee. At the briefing office we were informed that avgas was available at Embaba airfield about 10 Nm away. Fine then we would go there. Problem, we had officially departed from Egypt when we left Luxor, now we had to re-enter Egypt so that we could fly internally to Embaba. This of course would cost an extra "handling fee," would take more time which would lead to paying parking fees which would lead to a greater delay which would...etc, etc.

Peter and I ended up jumping up and down, screaming and shouting, having totally lost our sense of humor. We demanded to see the Chief of ATC, the Minister of Transport, the Airport Manager. All we saw were the same two faces on the other side of the counter who did not give a damn about our problems. Peter was becoming rather annoyed, he was saying rather uncomplimentary things about the gentlemen who seemed to be the cause of our problems. When things progressed to the stage where there would be blood shed, I suggested to Peter that he should step outside and allow me to negotiate with the officials. It did not take long before I, too, was ranting and raving. In desperation we enquired how we should go about flying to Embaba. File a flight plan! So we filed a flight plan and left. We were taken to the immigration area. There were three cubicles. One had the officer sitting with his elbows on the table, hands cupped under his chin, fast asleep! The other two were trying to cope with the workload. Our Rep plus one of the Immigration Officials disappeared with our passports, meanwhile we stood chomping at the bit. Our two hours on the ground had now expired.

Finally the Rep arrived with our passports explaining that it was OK for us to proceed to Embaba, but we had to return to Cairo so as to clear Customs/Immigration formalities.

"TILT" Peter and I both went off. We almost started foaming at the mouth. No way, not ever, never, not even if Hell froze over! NO WAY were we ***ever*** going to return to Cairo. We felt that we needed another hole in our heads before we returned to Cairo. So off we flew to Embaba.

Embaba is just across the Nile on the outskirts of Cairo and is a small airfield, with the approach to both sides of the runway, obstructed by high-rise buildings. This was disturbing as we had to take enough fuel for the flight to Heraklion, Crete. With the temperature close to 40 C, our rate of climb was sure to be minimal. This would mean a rather dangerous departure from Embaba. Enroute to Embaba we were treated to a view of the Pyramids off in the distance. We landed at Embaba and were invited to the Airport Commissar's office.

He had his office directly below the control tower. In the west wall an airconditioner buzzed away at high speed. The ozone unfriendly gas had leaked out long ago, all the airconditioner managed to do was to stir up the hot/humid air. We explained that we required avgas for our flight to Crete, however as the field was short and ringed with high buildings, we had decided that it would be safer to uplift fuel for Alexandria only. Stop at Alexandria, clear Customs/Immigration and then proceed.

He agreed that we would have to stop at Alexandria as he did not have Customs/Immigration at Embaba.

Fine. Call the fuel man and arrange fuel please. Wouldn't you have guessed? It was Saturday afternoon and the gent had gone home! How far away does he live? About 25 Km. We requested that they call him as we were prepared to wait for him to arrive. We were then advised that it would take him at least four hours to get back to Embaba!

We began to feel that these guys were also in on the run-around that we were being subjected to by Egyptian Bureaucracy. By this time we were totally fed up and dehydrated so we requested two bottles of mineral water, to improve our sense of humor.

Tap water causes 'Egyptian Tummy' as the tour guide brochure at the hotel put it. The Commissar dispatched one of his men to town. Another 30 minute wait. Finally when we received the water we went out to the aircraft, in the hope of meeting some sympathetic pilots from the training school on the airfield. Sure enough we met a few, one offered to find a few containers and drive into town to fetch the fuel. Whilst Peter went to fetch the fuel, I went to file the flight plan to Alexandria.

Problem #101 minimum VFR FL to Alex is FL105. So I filed FL105, who knows we might even make it in the 102 Nm available at ISA +20 conditions!

Problem #102 the clearance number I had given them was invalid! That was finger trouble on my part, I had inadvertently given them the clearance number for the Sudan! That caused another delay, but I was back at the aircraft in time to load the fuel Peter had procured. By now I was highly suspicious of anything Egyptian. The fuel smelled like power paraffin. I enquired as to what fuel it was, Peter assured me that it had come out of a fuel pump and that it was the highest grade available, which was 83 octane! Fortunately the aircraft only required a minimum 73 octane. With the 75 liters loaded we were ready to depart to Alexandria, armed with a written assurance from the Commissar of Embaba airfield, that avgas was available in Alexandria. We departed as per our flight plan, along the airway to Alexandria, and even managed to reach FL105.

This leg took us over some of the lushest farmlands you are sure to find anywhere in the world. The Nile Delta is about 10 Nm wide at Cairo, from there it fans out to a width of about 150 Nm just 100 Nm away. The patch work of the farmlands is criss-crossed by canals and the river courses as it flows to the sea. A magnificent sight, made even more so by the contrast of the rapid change of the land to desert. By the time Cairo handed us over to Alexandria we were only 30 Nm out and had to descend to sea level whilst still keeping the engine warm. It is obvious that the Egyptian authorities are not particularly friendly towards general aviation aircraft and pilots.

On arrival at Alexandria we were pleased to note that it was not necessary for us to have a handling agent. It had taken us the whole day to fly the 380 NM from Luxor to Alexandria. As it was close to 5pm, considering that we had to file a flight plan clear Customs/Immigration, pay landing/etc/etc fees, refuel and then fly 04:30 to Crete, we decided to call it a day. By this time both Peter and I were totally without sense of humor and had had a few harsh words, with the one blaming the other for the total waste of the day. Besides, we reasoned that we would have to fly for a few hours at night, across the Mediterranean.

Flying across an ocean in a single engined (Vintage) aircraft, is a task not to be attempted light heartedly. More so at night. If one were to ditch in the dark, and survive, your best prospects would be to enjoy a cold/wet night in the sea, as search and rescue would only start at daybreak. We elected to refuel before we departed to a hotel. We loaded the aircraft up to 18% over gross again,

removed the molten chocolates, GPS and flight bag so that we could flight plan the next day's flight.

I had previously programed the flight all the way to Kerkira, however now with the changed route we had to do our homework. We stopped in the terminal building to try to pay the fees in advance so that we would not be delayed in departing the following morning. HA HA wishful thinking. We arranged to have a met forecast waiting for us at 04:00 but were unable to file a flight plan before we left. On the way out Peter, now suspicious of any dealings with an Egyptian, asked the man at briefing what one should pay the taxi driver for a ride to the Hilton Hotel. He replied 25 Egyptian Pounds.

On the way out to the taxi rank another Egyptian offered to help us out to the taxi. We declined his offer and walked to the first cab in the row of cabs waiting. We threw our bags in and told him the price was 25 Pounds. He couldn't speak English, so our "friend" spoke to him in Arabic and announced that the price was 50 Pounds, cab driver nodded enthusiastically. This small incident was a red rag to a bull.

We both went ape, threw all our toys out the cot, told both Egyptians exactly what we thought of them, their parents and their Nation in general. We then proceeded to remove our bags from the car, when the driver indicated that this would not be necessary as he would take us for 25 Pounds. Mutter, mutter we climbed back in. As it turned out, the taxi ride was at least three times as far as the taxi ride to the hotel in Luxor and for the same price. Had we not found out what one could expect to pay, we would have been happy to pay the 50 Pound fee. Conclusion, Luxor is a tourist rip-off venue. The streets of Alexandria were busy, it seemed that it was rush hour on a Friday and not a Saturday. The city is also spread out along the Mediterranean coast. At the hotel we were fortunate to secure a room for the night. We checked in and immediately retired to the patio for a well deserved beer. Whilst we sat there we completed the flight planning plus loading the routes in the GPS. We then retired to the room for a shower, then downstairs for supper. Whilst we were enjoying our meal, we noticed a large wedding party arriving at the hotel, all "dressed up to the nines" later we would find out where the reception was being held.

After supper we retired for a well deserved nights rest, considering the hassles we had had that day. Sleep? You should be so lucky! No prizes for guessing where the wedding reception was being held, right under our window some four floors below. Have you ever had an amplified band of snake charmers and kettle drummers creating a racket under your window all night long? Needless to say we did not sleep well that night. However we had decided that due to the day wasted in Egypt, that we would have to fly at least 14 hours the next day to make up for lost time. This decision had been made before we returned to the room! I am sure, that had we known that we were in for a sleepless night, we would have planned a short day for the following day.

All day! to cover 384 Nm. Average G/S very little!

DAY NINE.

We were up at 02:15, had coffee and toast for breakfast and collected our taxi at 03:00. We arrived at the airport 30 minutes later, happy in the knowledge that we would be departing Egypt soon. We collected the Met forecast first, then went to file the flight plan. The door of Briefing was locked, so we knocked. We could hear stirrings inside and finally the door was opened by a bleary-eyed gent. The same man who had been there the previous evening. By then I was convinced that these people did not have homes of their own. We filed the flight plan for 04:30, then went to clear Customs/Immigration. Here it was noticed that we had departed Egypt from Luxor, the previous

day but had not officially re-entered Egypt. This created a great amount of arm waving and talking amongst the officials.

We tried to explain that we were the poor guys who had been given the run around by Egyptian bureaucracy the previous day and all we wanted to do was to depart Egypt, never ever to return. All our appeals fell on deaf ears, we had to wait for a senior official to arrive so that a decision could be made. We tried begging, bribing, cajoling, demanding, screaming, threatening. No deal, the Egyptians would not budge.

The airport building was hot and humid and infested with mosquitoes. We spent most of our time swatting mozzies and arguing with the Immigration officials. Then a tourist group arrived for a Lufthansa flight. Peter approached the Lufthansa rep, addressed him in German and asked him if he could help in any way. The rep did try but the Egyptians would not budge. They insisted that we wait for the senior officer to arrive at 05:30. We begged, pleaded, threatened to leave without clearance but they were not interested, we had to wait. Knowing that Egyptian bureaucracy had already cost us a day, we were keen to leave and totally without any sense of humor. Again we ended up losing our cool and blew off a lot of steam at the immigration men but to no avail. Nobody seemed to have the authority to release us. As we were going to be late for departure we asked the officials if we could go out to our aircraft to preflight and pack. This took some discussion before they allowed us to enter the apron with our own armed guard. We packed and prepared the aircraft for departure, then went back and delayed the flight plan.

Finally, at about 05:30 the senior official arrived, questioned his men as to what the problem was, inspected our passports and waved us on our way. It seemed that he felt that as we had already officially left Egypt, that we should depart ASAP. That was exactly what we had wanted to do at 04:30! The English speaking official who had insisted that we did not depart, walked with us to the aircraft. By this time I just wanted to see the last of Egypt. Peter was explaining to the official in no uncertain terms, what he thought of Egyptians in general and that he would never in his life return to Egypt. The official, on the other hand, was trying to convince Peter to return at a later date. In the end I took a photo of Peter and the official at the aircraft, then we said our farewells and climbed into the Fairchild for our first extended leg over water. Initially we had planned our route via El Daba, as this was the shortest route across the Mediterranean from Egypt. The distance from El Daba to Sitia, on Crete, was 269 Nm which was just in the limits of the "90 Minute" rule at a cruise speed of 90 Knots. For a flight which puts an aircraft more than 90 minutes away from land, a life raft has to be carried. We had borrowed two one man dinghies from the SAAF but decided not to carry them with us as we did not legally require them and also were worried about the weight penalty through Africa.

However, due to matters beyond our control, we had been forced to fly from Alexandria to Sitia, this added 12 Nm to the distance across the ocean, which meant that we had to fly at 94 knots to remain legal. We filed 95 knots as the cruise speed and departed. We discussed donning our inflatable airliner type life jackets before entering the aircraft, but Peter was of the opinion that that sort of precaution would not be necessary. I elected to don mine as I figured we would have enough to do with an engine failure over water, without having to still don the life vest, then fasten the shoulder straps of the seatbelts whilst still flying the aircraft and transmitting a "MAY DAY" call. We had flown through Africa in our pilot uniforms and now that we were departing Africa, we put on our flight overalls which would allow us more pocket space for survival gear. I then donned my life vest and boarded the aircraft. I do believe Peter's decision was influenced by his state of mind, brought on by Egyptian Bureaucracy because once we were over the ocean, he changed his mind and donned his life vest.

In various pockets of our flight suits, we had stored the handheld VHF radio, the flares, smoke flares, strobe light, food and a rope to keep us from drifting apart if we were to land in the sea. The theory was that if we did land up in the sea, I would take the GARMIN 50 GPS which we would use to direct search and rescue to our location using the VHF radio. A theory that we were not keen to put to the test.

By the time that we took off from Alexandria and headed out over the Mediterranean, we were so glad to see the last of Egypt, that the thought of flying over the ocean scarcely crossed our minds. I say scarcely as it is difficult to put thoughts of an engine failure out of your mind. However self assurance that the engine had not missed a beat till then, did help. Also our "Did you hear that?" routine whilst flying through Africa, did work as not once did either of us suffer the syndrome of "auto rough" over the sea.

The visibility was poor in the haze, which resulted in us having to fly IFR for the first hour or so. We had filed our flight plan for FL85 as that was the minimum level acceptable to the Egyptians, with a descent to FL65 in Greek airspace. Unfortunately, due to our having to cruise-climb to maintain the best ground speed, we were only able to reach FL65 in Egyptian airspace. At position Tansa we contacted the Greek controllers and recleared FL65. They gave us our routing Sitia, Milos, Tripolis, Araxos to Kerkira. We had hoped to route VFR at 1500' AGL along the southern coast of Crete then island hop to the Greek mainland, then along the coast to Kerkira. This was how we had filed our flight plan. Partly for safety and partly to make the flight more interesting.

I called "Athinai" control and requested routing as per flight plan. Negative! Route as cleared! They were not open to negotiation. We reached the Sitia VOR after having flown 03:40 over the sea but nobody questioned our late arrival. This gave us a ground (water) speed of only 82 Knots. Our faithful headwinds were still with us. We had been looking forward to flying past the many Greek islands, but were now faced with another 130 Nm leg across water to the island of Milos, then another 90 Nm to the Greek mainland. The colour of the sea around the Greek Islands is a beautiful blue, with the contrast of the white beaches and the ever present boats and yachts, if only we could join the people relaxing on the beaches.

There we were 6 500' above the sea, with the good old Warner droning along as it churned out the horse power we required to keep our feet dry. Never did the engine miss a beat. As we approached the Greek mainland, we had our first sighting of Cumulonimbus clouds (Cb) building over the high ground. A slight detour kept us clear of cloud and clear of the high ground as we proceeded to Araxos, on the coast.

As we passed seawards abeam of Preveza, we were required by ATC to descend to 1 000' above the sea with 60 Nm still to go to Kerkira! This I found difficult to understand. There we were in a 51 year old aircraft, 6 Nm out to sea at low level with land in sight, but no chance of reaching it in case of engine failure. Finally I called the ATC and requested permission to fly VFR along the coast. "Negative, remain on the airway" was the reply. I questioned as to WHY? "Search and rescue, if we lose radar contact, we know where you are" was the reply! No use questioning his reasoning, after all his butt was safe in a seat which had no chance of being deposited in the Mediterranean Sea at short notice.

What a welcome sight to see the island of Corfu dead ahead of us. We landed at Kerkira after 09h05/720 Nm, of which just over 600 Nm was over water. As we were keen to make up lost time we only spent an hour on the ground to refuel, file a flight plan, get the latest weather forecast and see to bodily functions after such a long flight. We had been informed that fuel was cheaper in Greece than in Italy, so we loaded the aircraft up to 17% over gross, so as to avoid having to refuel

in Italy.

If fuel was cheaper in Greece than in Italy, somebody forgot to tell the man in Kerkira! We departed Kerkira at about 16:00 (local) for our planned destination of Rimini, Italy. This final leg across the Mediterranean was 100 Nm over the sea. Only 100 Nm? Flying over the open sea was by now old hat to us. On the flight to Italy the satellite coverage was poor resulting in the GARMIN 100 switching off, surprisingly the GARMIN 50 still worked. All the satellites available were low on the horizon and I guess the wing mounted antenna was shielded by the wing. This lasted for about 10 minutes before the GARMIN 100 announced "ready for navigation" again.

At the Brindisi FIR we contacted Brindisi, who asked us to confirm that Rimini was our destination. We confirmed this as we wanted to fly as far north in the daylight available, as possible. We were then informed that as Rimini was Civil/Military and we did not have permission from the Military, that permission to land there had been refused. We requested our first alternate, Pescara but this too was Military/Civil and thus not available. In the end we settled for Bari, which was about 65 Nm north of Brindisi. We landed at Bari after 02h30 giving us a total of 11h35 for the day.

A cold front was moving through the Alps and down the east coast of Italy. We had been flying into headwinds all day, were tired from a long and sometimes trying day after a sleepless night, so were happy to spend the night in Bari. This would avoid us having to fly towards the cold front as night fell, to arrive at Pescara at night in bad weather. Considering our long day after a sleepless night, Bari was a welcome sight. We arranged a met forecast for the morning plus Customs/Immigration, then departed for town. Here we go again, the taxi driver could not speak a word of English, so we tried to explain to him that we did not require a top class "prima" hotel, but a middle of the road hotel close to the airport. This I demonstrated with a left-to-right wavy motion of the hand to signal "average". You guessed it, he took us to a small hotel at the sea side! The taxi driver then demonstrated that we might be out of Africa but we had not yet escaped from the rip-off artists. The fee you see on the meter is not the fee you pay! There is an extra fee for each piece of baggage, for each passenger and for the trip back to the airport for him!

We checked into our room and sat down to call our wives, to let them know that we were OK. The phones did not work. We approached the manager, who also could not speak English, he explained in sign language that the phones had been struck by lightening but had not yet been repaired. We had to have access to a telephone, so we checked out again, the hotel manager went up the road to call another hotel and to arrange for another taxi. Another short taxi ride 2 or 3 Km, another $12 and we were in the next hotel. This time the phones worked and we were able to contact our wives to let them know that we had arrived safely in Europe. Our wives thought that we were drunk! We were slurring our words, we were so tired. Only then did we realize that it was just as well that we were refused permission to proceed to Rimini or Pescara as we had not at the time realized just how tired we were. Our Guardian Angel was looking after us.

We retired to the dining room for supper, struggling to keep our eyes open, then ordered anything that they had to eat as the dining room was about to close, washed the food down with a beer.

The GPS had previously only loaded with the route as far as Italy, as we did not know which route we would take around (via France or Austria) or through the Alps to Germany, this would only be decided by the weather on the day that we arrived in Italy. So we sat down, in our tired state at the supper table and planned our preferred route through the Alps. We reasoned that the weather should be favorable once the front had passed Italy, towards the Adriatic Sea. By the time we returned to the room, we were so tired that we were both fast asleep within minutes totally oblivious to the noise of the relatively busy street below our window.

11h35 to cover 886 Nm. Average G/S 76 Knots.

DAY TEN.

Up refreshed at our now customary 03:30 we were off to the airport by 04:30. It took a while to locate the Customs/Immigration people and then the airport management's offices to pay all the required fees. Our Met forecast was waiting as promised, however the weather in Northern Italy was less than favorable. The forecast gave 8 octas Cb in the vicinity of Pescara. I questioned this and was assured that it was correct. I could not imagine the sky TOTALLY obscured by Charlie Bravos! However we elected to wait for the 06:00 actual and forecasts.

When these arrived, it was obvious that the cold front had passed through Pescara during the early hours of the morning and was now sitting off the coast, in the vicinity of Vieste. We elected to go VFR along the coast. Our headwind was still with us and became stronger as we proceeded north. In the vicinity of Vieste we had to dodge a few cells and as we approached Pescara the wind was really fierce, our ground speed was down to 45 Knots and great big trucks on the Autostrada were overtaking us with ease. We discussed turning back but decided that as long as we were proceeding in the correct direction, that we should continue, whatever the ground speed. Fortunately as we were flying up the east coast of Italy, we did not require the GPS for navigation because when we did try to extract ETA's for positions on the route, we found that we had programmed all sorts of garbage in the route and most of the positions had incorrect coordinates inserted!

That brought home to us how tired we had been the previous day and how fortunate we were that the Italians had not allowed us to proceed further north, into deteriorating weather. North of Rimini, the weather cleared and we had a most enjoyable flight through the flatlands of the Po Valley as we proceeded north. Soon the Alps came into view towering above us in their majestic glory.

It became obvious to us that luck was certainly on our side. The previous day the Alps were totally impassable due to the cold front and here we were with almost unlimited visibility and about 3 octas cloud cover over the mountain peaks. We followed the Autostrada and the railway tracks as they wound their way through the valleys on their way up to the Brenner Pass. We slowly climbed up to 7 500' and enjoyed the majesty of the view afforded to us, it was truly magnificent and better than we had ever hoped to see. I believe that it would be possible to cross the Brenner Pass at an altitude of about 6 000' if you had an aircraft powerful enough to drag you out of trouble if you were to hit wind-shear or a down draught.

Descending to Innsbruck we discussed landing at Innsbruck to refuel as we were over an hour down on ETA and beginning to doubt whether we would make it to our destination, Aalen, in Germany. Innsbruck were glad to hear from us as somehow the Italians had not passed on our ETA's and the Germans had been looking for us. Passing Innsbruck we decided to run the one fuel tank dry, so as to give us a more accurate idea of how much fuel we had remaining. I had never before run a tank dry in the Fairchild due to the stories I had heard about airlocks in the pipes and resultant engine failure after take-off if you used that tank. When the engine spluttered and died, I estimated one hour fuel remaining, with about 50 minutes to the destination.....depending on our routing and ground speed.

Not enough reserves, so we announced to the German controllers that we would be diverting to Kempten to pick up some fuel. We were only about 5 minutes from Kempten when we made this

decision. We passed over the VOR and started looking for the airfield, but could not find it!! Considering that the visibility in Germany, that day, was given as 75 Nm!!! Now we started to worry again, here we were low on fuel, in contact with Kempten but could not find the airfield. Eventually I spotted what looked like a grass strip. I asked Kempten to confirm that they had a grass runway. The German's command of the English language did not extend that far.

We had had trouble early in the flight with the amplifier of the intercom, which resulted in unreadable radio transmissions. As a result whenever I transmitted on the radio, I had to flick the "on" switch of the intercom to the "fail" position to transmit. This only connected my mike to the radio. Now we had to swop our headsets to allow Peter to talk to the German in his own language. Yes, they confirmed that it was indeed a grass strip and we proceeded to land without further ado.

We had covered 580 Nm that day in 7h25, which gave us an average ground speed of only 78 Knots but had flown a total of 9h55 since refueling at Kerkira. We called ATC to cancel the flight plan, refueled and cleared Customs/ Immigration!

Interestingly, we were at a small grass strip, with the main activity being gliding along the slopes of the Alps. The field was not a recognized Port of Entry, but the tower personnel were qualified to complete the required paperwork to facilitate our entry into Germany. What a pleasure to be in a civilized country! With enough fuel to assure us of a safe arrival at Aalen, we proceeded for the short 65 Nm hop. On arrival we were met by Peter's wife, Christel and members of their family, complete with Champagne. That evening we enjoyed some good German cuisine with Peter and Christel's family, at a local restaurant.

We all drank a toast to the successful completion of the flight as we had by then completed half of the distance, a total of 5 183 Nm (9 330 Km) over 9 days.

8h25 to cover 645 Nm. Average G/S 76 Knots.

DAY ELEVEN.

Peter and I spent the morning stocking up with food for survival in the Arctic region, then took along all the thermal clothing that we might also need in the event of a forced landing or ditching. With our bags packed, we exchanged the maps we had used, for the maps that we would need for the second half of the trip and loaded down with all the extra survival gear, we set out to Aalen airfield. The Met forecast did not look too good as there was a warm front in the north of France. We took the advice of the locals and flight planned via Luxembourg then through France. This allowed us to avoid any high ground as we wanted to continue VFR as far as possible. We departed at about midday and headed west. The flight through Germany was uneventful but as we approached Belguim, the weather started to deteriorate and we were soon forced to descend below 1 000' AGL.

In Germany VFR light aircraft have to fly at 2 000' AGL or higher, as all the high speed Military aircraft remain lower to assure separation but as we approached Luxombourg we were forced to descend below 1 000' AGL as the weather was deteriorating. We contacted Luxembourg and they cleared us through their airspace at 800' AGL VFR. We flew direct towards their airfield and were then radar vectored past the approach area, to assure safe passage for all the airliners in the area. This ease of passage was new to us as we both commented on what would have happened had we been in Johannesburg and had requested VFR clearance past Jan Smuts Airport. The standard reply would have been "remain clear of controlled airspace, route via the Special Rules Area, broadcast on 125 decimal 8."

By the time we entered France we were down to 500' AGL we had trouble contacting the French ATC's but pressed on trying to remain VFR. We continued till we were down to about 300' AGL, then Peter and I both agreed that we were trying to commit suicide so we turned around and headed back to Luxembourg. We called Luxombourg and requested a diversion to their field, they welcomed us back and gave us vectors to a right hand down-wind to the active runway, then had us orbit whilst they cleared an Aerovlot freighter to land. We landed behind the Aerovlot freighter without further incident. When we had parked we found out that fuel was much cheaper in LUX than Germany or England, so we again loaded the aircraft to 18% over gross.

We then went to the Met office and they informed us that the front was static; they termed it a "waving front". It had been in the same loction for the past 3 days. Later we were to learn that it was this same warm front that had washed out the World Aerobatics Competition. With no chance of continuing VFR to the UK, we decided to spend the night at the closest hotel and try again in the morning. We walked to the hotel as it was just over the road and checked in for the night.

3h25 to cover 168 Nm. Average G/S 59 Knots. (due to the diversion)

DAY TWELVE.

As the weather was still bad when we surfaced, we had the rare treat of a leisurely breakfast before setting off to the airport. The front was still in the same location, with no sign of it dissipating that day. So as there was no chance of going VFR to the UK, we decided to file an IFR flight plan. Now I had always avoided IFR in the Fairchild as I am a firm believer that due to the age of the instrumentation, no pitot heat and only one venturi to drive all three gyro instruments, one should remain VFR at all times. However here we were in a situation that required that I re-evaluate those standards. Fortunately one of the requirements laid down by DCA had been that I have all the instruments in the aircraft recertified and we had already done several hours of instrument flying en route so we agreed to file IFR to avoid having to go scud running to the UK.

FL 60 was lower than the forecast freezing level, so we filed this level. Whilst taxying out it dawned on me that we did not have any of the Standard Instrument Departure charts, (SID's) only the approach charts. We carried the approach charts in case we were to divert, but had not considered the possibility of departing on an IFR flight plan. So I called the controller, informed him that as we were on a ferry flight and operating over gross, we would not be able to comply with the climb gradients of the SID's! We then requested a radar departure, which was given to us.

Our climb performance after take off was minimal, however the controllers were patient and understanding and vectored us past any high ground, till we reached FL 60. During this flight, Peter raised the question of what would happen if we were to ice up the venturi, or lose the A/H? I had entertained those thoughts, but dismissed them as not likely as all the instruments had been overhauled and we would remain clear of icing conditions. Peter suggested that whilst we were IMC, he would try to fly the aircraft by reference to the GPS only! On the NAV page, you can have the desired track displayed above the ACTUAL track, by keeping these two the same, cross referencing to the GPS ground speed and the GPS altitude, you can maintain a very reasonable attitude and track, but it is difficult.

We sat for almost 4 hours, solid IFR, until we were over the east coast of the UK where it was becoming turbulent and we were then also flying through fairly heave precipitation. With a wooden propeller this is of great concern as water erodes the leading edge of the prop. I asked the controller

to allow us to descend to proceed VFR below. With this approved, we descended and broke clear of cloud at 3 000' altitude as predicted by the ATC. On a VFR flight the controllers provide "flight watch" and provide VFR pilots with traffic information. Mostly high speed Military jets.

At one stage on the east coast, we were given course changes every 10 seconds or so! It would go something like this... "Zulu Sierra Victor Whiskey Oscar, slow traffic one mile 12 o'clock, turn left heading three three zero." We would crank it around to 330.
"Zulu Whiskey Oscar slow traffic now in your ten o'clock, turn right zero three zero." We would crank it around to the right again.
"Zulu Whiskey Oscar, slow traffic now in your two o'clock, turn left two seven zero." We would crank it around to the left again.

Considering that we were identified on transponder, the headings we were given seemed strange. Eventually I informed the controller that we ***were slow traffic***! I do believe that we were dodging ourselves as the wild heading changes stopped after that. We landed at Humberside airport to clear Customs/Immigration. Here we caused a bit of a stir as the controllers were keen to find out more about the flight and where we were off to. With the legal requirement seen to we departed for the short 25 Nm hop to Breighton, to do an inspection and change the oil.

A few months earlier, at Grand Central, I had met a gent from the UK, Keith Wigglesworth, who was out in SA on holiday. I informed him of the planned flight to the USA. He offered to arrange the loan of tools and a place to do an inspection, before we set out across the North Atlantic.

He contacted Taff Smith who owned the airfield at Breighton, where he kept his Bucker Yungmanns and other "toys." The field was ideal as it has a grass strip and the only aircraft allowed to be hangared at the field are ones with the little wheel at the back! We landed at Breighton and were met by a few members of the "Real Airplane Club." Arrangements were made for the inspection the following day, plus purchase of a new oil filter and 4 gallons of oil. With that done we retired to the local Inn where we were to stay and enjoyed some warm English beer!

05h40 to cover 391 Nm. Average G/S 69 Knots.

DAY THIRTEEN.

At the start of the inspection, I removed all the bags we had left in the aircraft, to allow us free movement around the aircraft whilst doing the work. In a previous letter to Keith I had requested 4 gallons of multi-grade aviation oil and an oil filter to be bought for us, this had not been done when we arrived. Taffy's mechanic arranged an oil filter for us and a drum of "straight" 100 oil. We would have preferred a multi-grade oil, but had to make do with what we had. The "50 hour" inspection went off as scheduled, the only snag that we had made note of was the mixture control which was stiff to operate, this was soon rectified by removing the inner cable, removing the kink and refitting it well lubricated. Tappets set, points gap set, timing checked and ground run carried out to check for oil leaks.

We had also lost the funnel that draws out the trailing HF antennae, so this was replaced with the spare funnel which we had brought along for just such an eventuality. The day was warm, one of the rare sunny days in the UK, spoilt by millions of tiny "corn mites" that seemed to swarm around us and fly into our eyes, ears, nose and mouth. Rather annoying little bugs. With the inspection complete, we retired to the Inn for a good meal, then collected our laundry, packed so that we could settle down for a good night's rest.

Unfortunately both Peter and I had some articles of clothing missing. Some of the laundry was placed on the bed but our shirts were missing. As we only had a few it was a bit of a problem. The problem was solved after an hour of searching the laundry and other guests rooms. The maid had carefully folded the shirts and placed them in the cupboard! We had been living out of our suitcases for so long now that the thought never entered our minds to look in the cupboard.

Day off.

DAY FOURTEEN.

As the flight to Stornoway was relatively short and daylight was long, we were not in a hurry to depart. On our way to the airfield we stopped to buy a funnel, so as to have a spare. This caused a slight stir as the Brits did not understand us! When they worked out that what we actually wanted was a "foonel" we were sold one and sent on our way. Back at the airfield we washed the oil and grime, which had accumulated over the past 70 hours or so, off the aircraft. Taffy Smith took his Bucker Jungmann and his Extra 230 out for a bit of aerobatics whilst we were washing and packing the aircraft. The flight in the Extra was to cause us a "spot of bother," as we found out later.

Our sleeping bags, winter woolies and suitcases were placed in the baggage compartment with the mosquito net, as required by the Canadian MOT. Then our newly acquired 4 man liferaft was strapped to the top of the ferry tank, with the lanyard attached to the aircraft structure. This simple act of attaching a bit of rope to the structure of the aircraft was not without some discussion. Peter felt that if the lanyard was attached to the structure and we were to ditch, if the aircraft sank, it would take the liferaft with it! I was of the opinion that the lanyard had to have a frangible link which would break if the aircraft did sink. I also argued that if we were to ditch in windy conditions, that once the liferaft had been inflated, it could well be blown away from the aircraft. In the end we attached the lanyard to the structure. Fortunately we did not have to test the theory.

Our bag of food and cool drinks was stored behind our seats, then we donned our immersion suits for the first time. These suits which had been loaned to us by the SAAF, were the new lightweight type. An immersion suit is designed to keep you dry if you were to land in the sea, however they are not designed to keep you warm. In the North Atlantic if you were to land in the ocean and end up wet, hypothermia would set in within 15 minutes. Your chance of survival without protective gear is close to zero. Most ferry pilots chose to use the survival suit, as use by oil riggers in the North Atlantic. These suits will keep you warm, afloat and alive for 72 hours. However they are very hot and bulky, so much so that most pilots pull them up to their waist and leave the top off, with the idea that it can be pulled on and zipped up in the event of a ditching. The survival suit also has the advantage of built in gloves to keep you hands warm.

During winter this is a definite consideration, but during summer we elected to take the chance of getting wet, but assumed that we would be able to get into the liferaft before our hands became too cold to function. For this reason we did carry a towel, to dry the hands and head, plus gloves and a balaclava, inside the survival suit.

Peter and I elected to wear the suits for the flight to Stornoway, so first on with 2 pairs socks 2 pairs long johns, thermal vests, warm clothing and a jersey, then climb into the immersion suit and zip up the waterproof zip, then try to sit in the aircraft. We found that the suit would inflate as you tried to sit down, making movement uncomfortable. The solution was to loosen the zip slightly allow the air to escape, fasten seatbelts and then close the zip. It was about 3pm by the time we departed

for Stornoway. We did a flypast to wave good-bye to our new friends, then set course to the north. The weather was overcast with the occasional drizzle and a cloud base of 1000' to 1500' as we proceeded north across the English countryside, we reflected on our progress thus far commenting on how well things had proceeded. About an hour out of Breighton, the English controller called us to give us a message from the guys at Breighton, we had left one bag behind! A quick check revealed that it was the bag that contained all our extra flares, survival blankets, survival rations from the SAAF, chocolates and other high energy foods as required by the Canadian MOT.

The survival blankets were the greatest worry as they would come in handy if we were to end up stranded in Greenland or Canada. The flares were not a problem as I had kept some in a pocket in my flight suit and the liferaft did have a supply of them included in the pack. The rest of the stuff could be replaced in Iceland.

When Taff had taken his Extra 230 out, our bags were on the floor in front of the aircraft, somebody had moved the one bag to the corner of the hangar and the others over to the centre, causing me to leave one behind. Bad luck, but was this a sign of things to come? When we were handed over to the Scottish controllers we were informed that out ETA for Stornoway was 15 minutes after their published hours of duty! We requested that they stay open till we arrived but were told that this was not possible. After Egyptian bureaurocracy, we were now confronted with Scottish bureaurocracy! We requested a diversion to Inverness and this was granted.

Our route took us past Edinburgh and Perth, then over the Grampian Highlands to Inverness. On the way we made a slight detour to catch sight of the famous Loch Ness, unfortunately "Nessie" the famous monster did not rise to greet us. On approach to Inverness the tower enquired as to how long we intended staying. To our reply of overnight, we were informed that Customs/Immigration required a minimum of 24 hours notice! No way could this rule be changed. We replied that we would discuss the matter after our arrival. We parked on the apron with a variety of other light aircraft from Europe and the USA, then went to see the ATC to see if there was any way that we could convince the Customs/Immigration men to bend the rules. No way!

The controller did however, phone other airfields and found out that a German aircraft had made the necessary arrangements at Kirkwall (Orkney Isles) for the following morning at 09:15. He suggested that we arrive there before nine in the morning and ask the Customs/Immigration people to check us out of the UK. With the arrangements made and met forecast arranged for the following day, we boarded a taxi for a ride to the nearest hotel. Was it ever a fancy establishment, but (un)fortunately full. Perhaps they did not take a fancy to our flying overalls or perhaps they were actually full. We were directed to another hotel a short walk away. Once we had checked in we called the wives to advise of our progress then sat down to more flight planning, then enjoyed a good meal and off to an early night's rest.

3h10 to cover 261 Nm. Average G/S 82 Knots.

DAY FIFTEEN.

We arose to a fine day and set out to the airport. The Met report from Bracknel, was ready and waiting. The synoptic chart showed a low pressure system way off to the N/W of the UK. This would assure us a tail wind all the way to Iceland, however there was a warm front just off the east coast of Iceland. We called Bracknel and were assured that the front was dissipating and would have dissipated by the time we arrived there. Great our luck was holding and we were going to cross the North Atlantic with a tail wind! This was something that we had not expected.

With the flight plan filed, we said good-bye to the chaps at Inverness and prepared for our departure to Kirkwall. Again, we donned our winter woolies and the immersion suits. Zipped safe and dry in the suits were a small towel, balaclava and ski gloves to allow us to dry our face and hands, then cover them, to conserve body heat if we were to land up in the liferaft. A thought that we did not want to entertain, but had to plan for. Peter had the handheld radio in a plastic bag, in the leg pouch of his suit plus a spare battery pack. I had the flares plus the battery pack and spare batteries for the Garmin 55, so that we could communicate with a search party and advise them of our position if we were to ditch. With all preparations made, we started up and departed for Kirkwall.

At John O'Groats we left the UK behind us and set out across the Pentland Firth to the Orkney Isles. Our arrival had the local press scurrying out to do a quick interview, before our departure. The Customs/Immigration men were happy to do our departure, so we checked out of the UK, refueled to 20% over gross again and prepared to leave.

The airfield at Kirkwall has three runways, the prevailing wind required us to take off towards a slight hill at the end of the runway, again this was a slight worry as an early right turn would take us low level over the town and a left turn would take us towards high ground as well. We lined up and advanced the throttle for the leg to Iceland. The aircraft lifted off easily and posted a rate of climb of about 350 FPM, which was as predicted in our graph we had drawn up for DCA a few months earlier. We flew over the town and headed for the open sea. Not much was said for the first hour or so. We were both deep in thought listening intently to the reassuring rumble of the trusty Warner. It's a strange feeling to fly over the North Atlantic in a light single. We had the assurance of many hours of trouble-free flying behind us, but still there was that ever present "what if."

We had discussed the possibility of a ditching in the ocean and had planned our actions. Peter would remove the control column on his side as it had been left loose, then he would have to remove the liferaft from behind him and place it in front of him between his legs. I would have to fly the aircraft and broadcast our position on both the VHF ATC frequency and the air-to-air frequency. Then remove the GARMIN 55, drop it into a plastic bag and slip it into a pocket in my survival suit. Assuming that we did have enough time to do all of this, we would then jettison both doors, whilst hoping that they did not take the horizontal stabilizer with them as they departed. Then we would have to prepare for the ditching.

I had installed shoulder straps to the seat belts, as a ditching was sure to result in ‘panel rash.’ The shoulder harnesses would have to be pulled tight as the Fairchild, with its long landing gear, would most certainly end up inverted in the sea. What would happen then is anybody's guess. The theory was that we would release our straps, after supporting our weight with a hand, then exit the aircraft whilst it was still afloat. The liferaft would be deposited in the sea by Peter and the lanyard tugged to inflate it. We would then both board the liferaft and use the VHF handheld radio and GPS to relay our position to any rescue aircraft. All I can say is we are happy that we did not have to test our theories, as at times we were forced to fly low level to remain VMC and would have been hard pressed to execute the required actions before hitting the water.

VFR flights across the North Atlantic are only allowed below FL 55, above this one has to file IFR. We filed FL 45 and leveled of at this altitude and looked at the ocean that stretched to the horizon ahead of us. About an hour out we found ourselves flying over a solid cloud layer, VFR on top. This had a strange psychological easing of the tension as with the sea out of sight, it was not prominent in our thoughts, but not out of mind. After a while the cloud tops started to rise, till we found that we could not remain VFR at FL 45, so we slowly climbed till we leveled off at FL 50.

Scottish called us and informed us that we were at the incorrect flight level (mode c transponder) and if we were not able to remain VFR, that we should file IFR FL 60. This we did and climbed to the new level. At least this kept us clear of cloud. Our route took us past the Faroe Isles, which were covered in cloud, however as we passed we did catch sight of the Islands through holes in the clouds. For the rest of the time we stayed VFR on top. The Scottish controllers handed us over to Iceland Radio on HF. In an airliner, HF is a pain in the ear (read butt) but in a light aircraft, over the North Atlantic, HF can be a savior and is your "life line" to the outside world. We remained in HF contact with Iceland Radio till we were in VHF range, then they handed us over to Keflavic Approach. All the time we were sitting above the warm front that should have dissipated, ahead of us the clouds towered above us. Keflavik informed us that FL 80 was the minimum IFR level for the east coast of Iceland. There we were at FL 60, OAT +2 C. A climb to FL 80 would put us at 2 C. Without pitot heat, de-icing and only a venturi driving our gyro instruments, climbing to FL 80 would be OK till we entered IMC, then it would become suicidal.

At the time, we thought we had no option but to descend till we broke VFR below, with hindsight the better idea would have been to climb to FL80 and remain clear of cloud. This would have been possible as the orographic lift from the island of Iceland was raising the clouds in the warm front. Considering Bracknel had said that the front would dissipate, we had been expecting the weather to be breaking up! We informed Keflavic Approach, that we could not accept FL 80. They enquired as to whether we were VMC. We replied to the affirmative. They then suggested that we descend to remain VFR. However we were VMC on top!

We had to descend, as to enter IMC at FL 80, was suicidal. We checked our position, approximately 63N 14W. We decided to turn to the left, to parallel the front, and descend till we broke VFR below. We knew that we were out to sea, so were assured of not flying into a mountain, however, we were only at +2 C. What if we picked up ice during the descent? We had to descend and things should warm up during the descent, not so...? You guessed, not so! We initiated the descent from FL 60, foremost in our minds were the words from the AOPA North Atlantic Manual. "If you are not equipped for icing conditions, NEVER GO INTO CLOUD!" There we were descending IMC through conditions only just above icing, hoping and praying that we did not pick up any ice. I was watching the drops of water flowing rearwards on the wing and lift-struts, waiting to see if they slowed down and stopped to form ice, as we descended. Peter was flying, using the instruments on the left and the GPS on the right, as had been practiced previously, he leveled off at 1500' still IMC.

I rechecked the GPS present position and confirmed that we were over 70 Nm out to sea, so we descended to 1000' and leveled off, we were then becoming worried about descending into a ship and not a mountain! All the time the OAT had hovered at +1 C, now it was up to +3 C, with no signs of ice forming. Still no sign of the ocean.

By this time we had decided that we were committed to descending till we were VMC below. We set our altimeter to 3 Mb below the area QNH, as supplied by Bracknel, I then suggested that Peter set up a 200 FPM descent till we broke visual. He would remain on instruments and I would check his progress, whilst looking out for visual signs of the ocean. At 600' I caught a glimpse of a wave, and told Peter to continue to 500' altitude. We leveled off at 500' where we could just make out the tops of the waves, through the clouds and mist. We descended to 300' above the sea, at this altitude we did have contact with the sea but poor visibility forwards, so we descended to 200' above the sea. This gave us some sort of forward visibility, through driving rain and patches of mist. We then set our altimeters to agree with our Mk 1 eyeball altitude. There we were at 200' above the sea, 68 NM from the coast of Iceland, almost 80 Nm west of track in driving rain hoping that we did not meet up with a large fishing trawler. We did in fact see two trawlers as we progressed to the coast of

Iceland.

At this time we had difficulty in contacting Iceland Radio on VHF or HF, so had to rely on a relay from another aircraft on VHF. Imagine, there you are, at 200' Altitude, trying to get a relay to Keflavic to tell them that we were now safe at 200' above the sea, VFR below 68 NM off the coast. The guy relaying could not copy our call sign, but this was a problem which would plague us for the duration of the flight, never mind believe that we were not at FL 200! We had to confirm a few times that we were in fact at 200' AMSL. With our GPS position and time relayed, we continued to Iceland. Finally through the gloom we saw what appeared to be waves breaking over a coral reef. A coral reef in the North Atlantic! I hear you ask?

Through the mist and rain all we could make out was the white foam of the waves breaking on the beach/reef with smooth shiny black water behind the breakers. We were over the beach before we could make out that the black shiny water was in fact the beach which was wet, black volcanic sand! The sand was shiny due to the heavy rain, we had mistaken this for smooth water as in a lagoon. We turned left to follow the coast, low level, to Reykjavic. Due to the poor visibility, we remained seawards of the coast as we progressed west. We contacted Keflavic to request the latest actual at Reykjavic. They told us that the Reykjavic weather was 6 Octas Stratus at 400'. Oh dear, (or words to that effect) Bracknel's forecast was wrong again!

Keflavic's weather was only 2 Octas at 1 000.' As Reykjavic only has non-precision approaches, this was a problem. After our ordeal, I was not keen to fly an approach down to minimums, on old gyros and a magnetic compass that was corrected for the Southern Hemisphere. We informed Keflavic that we might have to divert to their field. This caused some consternation, it seemed that they were less than keen to have us divert to their field. So we proceeded west, leaving the decision of diverting till later.

Fortunately the weather began to improve, till we finally flew clear of the cloud cover and climbed to 1 000' Alt. From this height we could see that there was more cloud cover in the direction of Reykjavic with the S/W tip of Iceland, where Keflavic is situated, clear. At least we had an alternate close by. We debated flying the long way around the coast or flying over the high ground between us and Reykjavic, then attempting an approach. We decided to route direct and contacted Reykjavic tower, they informed us that their weather was 4 Octas at 400'. That was a bit of a relief, so we continued over 8 Octas, with radar vectors, for the LOC/DME approach on to RWY 16. Being a slow aircraft and flying GPS tracks for the headings given by ATC, we only intercepted the localizer inside the outer marker. As we were late in intercepting the localizer and were still above 8 Octas, we could not descend. This put us high on the approach and on short finals we could see the threshold of the runway through a hole in the cloud cover. Any IFR pilot will tell you that a hole in the cloud cover is better than a bunch of let downs, Peter closed the throttle and stuffed the nose down, intent on landing. Knowing the aircraft a bit better than him I suggested that we break off the approach once we were VFR below. I then requested a low level right hand circuit as we were too high to land, this was approved and we landed a minute later, happy to have made it across the first stretch of the North Atlantic.

During the approach we were not the only aircraft coming in to land, the other aircraft that we heard on the radio, was an American registered aircraft, flown by a German pilot. Boy was his radio work bad, most transmissions to him had to be repeated and his communications were vague, with words slurred. We were to meet this pilot the following day and to be informed as to why he was not performing well at the time. The people at Reykjavic Airport are used to handling ferry flights across the North Atlantic, on a daily basis. However our flight did cause a bit of a stir due to the age of the aircraft. The first person we met was one Petur Johnson, who lives on the airport and makes

a living out of aviation photography and printing aviation related calendars. Petur introduced us to Jon Larusson, who owned a few aircraft and a hanger on the airfield. Jon offered a hangar in which to park the aircraft, which we decided to keep as an open option, should the weather turn bad. We then departed to the airport hotel, the Loftleidir, which is literally across the road from the airport arrival/departure hall and Met office.

The hotel was full, as it was a Saturday, however we were offered a room for that night only. We gratefully accepted and retired to the room to shower and change. After cleaning up, we stopped at the bank in the foyer to buy some local currency, then retired to the lounge to enjoy a local beer. This we did, as the beer was tasty and cold, so we ordered another each. The second beer completed, we decided to check the Smorgasbord for which the hotel is famous, so requested the bill for the beers. Peter accepted the bill, then turned deathly pale and without a word passed it on to me. If only we had known, we would have sipped those beers like Champagne. The beers cost, US $10 each.

After paying for the beers our appetite seemed to wane. We did check the available Smorgasbord, then returned to the lounge for a light meal. After the meal, we returned to the airport, to secure the aircraft and to arrange a Met forecast for the following day. The staff at the airfield were extremely helpful and arranged a room at one of the local boarding houses for us for the Sunday night. They also promised to have our requested Met waiting for us in the morning. We then retired to Petur Johnson's flat in the old control tower for a panoramic view of the airfield and the village of Reykjavic. After visiting for a while, we returned to the hotel, for a good night's rest.

8h15 to cover 743 Nm. Average G/S 90 Knots.

DAY SIXTEEN.

We enjoyed a hearty breakfast at the hotel, then collected our belongings and checked out, fortunately with 20% discount to pilots, this made the bill affordable. We carried all our bags back to the airport and spent a pleasant morning speaking to various pilots who were on their way across the North Atlantic, via Reykjavic. The young German pilot explained that he was on his first ferry flight from the USA to Europe in a Cessna 182. He was a relatively new and inexperienced Commercial Pilot. About three hours out from Reykjavic, the vacuum pump decided to seize, as they are want to do at the most inopportune times. The phenolic drive sheared, as it is designed to do, however the two halves continued to rub against each other and the smell entered the cockpit. This vapor proceeded to give the poor pilot a splitting headache and resulted in him struggling to keep his wits about him. He had great difficulty concentrating and could not think straight due to the nauseating pain from the headache. At one time he had considered leaving the controls alone and allowing the aircraft to crash into the sea. Anything to end the pain, however he decided to continue, if only to be able to say that he had successfully crossed the North Atlantic. He made it safely to Reykjavic and was trying to arrange for a spare part to be flown in so that he could proceed to Europe as the thought of proceeding without gyro instruments, was not to be entertained lightly by a young and inexperienced pilot.

Another pilot that we met there was totally the opposite of the young pilot on his first ferry flight across the North Atlantic. This gent was older and highly experienced, having flown his Bonanza across the North Atlantic over 30 times. Sometimes on business, other times just to see the sights. There was one other difference between this wizened pilot and most, if not all pilots, that fly light aircraft across the North Atlantic. He carried absolutely no survival gear! He flew in his normal clothes, denim jeans and shirt. He figured that if his Bonanza was to let him down and deposit him

in the icy waters, then so be it! This kind of fatalistic approach is not recommended.

Also on the airfield were three aircraft returning to the USA having completed an air race around the world. The Bonanza, which had won the race, was there. It was registered in the Experimental category as it had 150 US Gallon tip tanks. This gave it the range and endurance to beat opposition such as the Falcon 50, a Twin Comanche (which secured second place) and a Cessna 310 also parked on the airfield. The 310 was piloted by two women who managed to win the prize of First All-female Crew. After talking to us the one confided to Peter that she felt much more at ease at the thought of departing on their last leg over the North Atlantic, knowing that we had the confidence to attempt the flight in an Antique!

We then mentioned to the locals that we were looking for lodgings for the night and possibly longer. We had set aside 7 days to cross the North Atlantic, as we had to wait for VFR weather. If it took longer then so be it, we would just arrive late at Oshkosh. A local ... Pension was recommended so Peter and I picked up all our belongings and started to walk into town. We needed the exercise and if a beer cost $10, who knows what a taxi ride might cost. The Bed 'n Breakfast establishment was clean and tidy, so we moved in to our rooms. Peter walked over the road to replenish our stocks of food for our survival pack. Once settled in we walked back to the airport to see the latest weather forecast for Narsarsuak for the following day. The forecast looked promising so we elected to do the short bus tour around Reyjkavik that afternoon, and should the weather turn bad in Greenland we could use the time in Iceland for more tours.

The island of Iceland is an island of contrasts, from Glaciers to Moon-like areas. The tour we took gave us an insight to the island and would have been followed up with a more comprehensive tour if we had the time. We visited the residence of the Prime Minister, with the Chapel dictating some of the history of the Vikings. The "New World" or USA/Canada and Greenland as we know it today, was discovered by the Vikings some two centuries before Columbus. We then visited an inland lake, the soil totally devoid of any vegetation, reminded one of pictures of the surface of the moon. Close by we visited a site of geysers, which had been drilled to tap the Geo-Thermal power, but as the steam was ‘only’ at 260 C it was not considered viable and left as a tourist attraction. The tour continued past an area of the moon-like terrain which was used to wind dry fish carcasses, for the fish meel industry.

The bus stopped and all had to disembark and walk amongst the fish graveyard to savour the aroma. Initially, you choke on the smell but when the decision of taking another breath arrives, one has to debate whether you are going to purposefully suffocate yourself or take another breath! The fact that there were not hundreds of tourist's bodies lying around, would seem to indicate that all place survival above the smell. The area around the drying racks was littered with spent shotgun shells, indicating the problem the people have to keep the Sea Gulls away.

The bus then took us to the coast where we were treated to a close-up view of the black beaches of Iceland. Then on to the Geo-Thermal power station and hot-springs. At the power station the steam exits the ground at 400 C, this steam is high in sulphur content and is passed through heat exchangers, which heat up the water used to power the steam turbines which supply the electrical power to the Island. The residual heat in the steam is then used to heat the water in the ‘hot springs’ pool. The floor of the pool is covered in Silica, which is purported to have healing powers. The weather was cold, but the pool was full. The hot water/steam is then piped around the island to all the households for central heating and hot water, which is free to all, perhaps subsidized by the tax on beer!

The bus then deposited us back at the airport at about 8pm. Peter and I then walked into town to have supper. We noticed that the price of beer at the restaurant was much the same as the hotel and being the eternal optimists we ordered a beer each, thinking that this one would perhaps be a beer mug. Wrong again, the beer was served in a 250 ml wine glass and this cost us $10. Did we ever sip those beers! After supper we returned to the pension where we retired for a good night's sleep, only problem was that daylight lasted for 22 hours and twilight lasted two hours! It took me a while to fall asleep as it was quite light in the room and the thought of the next two legs across the North Atlantic were heavy on my mind. I was so restless that my money bag which up until then had always been hanging around my neck, was begining to annoy me so I put it under the pillow and finally managed to fall asleep.

Day off.

DAY SEVENTEEN.

After a hearty breakfast at the pension, we walked to the airport to check on the weather forecast for the route to Narsarsuak, Greenland. As we had 22 hours daylight, we were not in a great hurry. What we did require was good weather at Narsarsuak, or Sondrestrom Fjord. We had planned two routes, the shortest being Reykjavic to Narsarsuak then direct to Goose Bay. The leg to Goose Bay would be the longest over the North Atlantic route, 650 NM of which 500 Nm is over the Ocean. The alternate route would be the more Northern route, via Sondrestrom Fjord, across the Davis Straight, to Baffin Island and on to Frobisher (Iqualit.) This would add at least a day to the trip, but would result in less ocean to cross. However our Wizened-Ocean-Crosser informed us that in the North Atlantic/Labrador area, LAND was a Four-Letter-Word! WATER was not!

Basically he advised us that we would be better off flying direct to Goose, than routing via Frobisher. As it turned out, we were informed that there was no fuel available at Frobisher and this ruled out that route. During the walk to the airport, Peter was saying that as we had made good time thus far, we should spend another day in Iceland and do another bus tour. I was of the opinion that if the weather forecast for Narsarsuak was good, then we ***had to*** proceed as Narsarsuak very seldom had perfect VFR weather and if the wind changed to Westerly or South Westerly, the airfield would become fog bound, as it was at the end of a Fjord. Also the idea of doing an NDB approach to a strange airfield at the end of a fjord, in an aircraft with marginal climb performance, was not a thought to be entertained lightly. At the Reykjavic met office, we were shown the synoptic charts for the route, with forecast charts at 4 hour intervals. These showed a high pressure system over Greenland, the low pressure system still N/W of the UK, both these would give us a tailwind to Greenland. The high pressure system would assure good weather at Narsarsuak, with little chance of fog. The forecast for Narsarsuak was fog patches in the morning becoming CAVOK later in the day. The forecaster informed us that he could not remember when last he had seen such a favorable forecast for Narsarsuak! This coupled with the tailwind convinced me that we should depart as soon as possible.

Peter still wanted to stay and tour the island as it was doubtful whether either of us would ever return to Iceland. He asked the forecaster in he could assure us that the weather would be the same the following day. This he could not, explaining that the weather changes rapidly in the North Atlantic and that it was not unusual for a VFR flight to have to wait two weeks or longer for a favorable VFR day such as we had. I pressed for us to depart and finally Peter agreed that we should go, he promised to return at a later date to tour the island. We both rushed off to collect our belongings and checked out of the pension. Within an hour we were ready to depart, having refueled to 20% over gross, filed the required flight plan and cleared out with the immigration official. We

donned our warm winter clothing and then put on the immersion suits. It took a while to say goodbye to our new friends and then we were ready to go.

Ever had that feeling that you have left something behind? As I sat down in the aircraft, this feeling came over me. I did a mental check of all the things I had unpacked in the room and was sure that I had repacked them all. The maps were all there and the flight log was ready. Then it dawned on me, I had left my money bag under the pillow of the bed, in the pension. This was something I needed dearly, I was happy that I had recalled this before we had departed. I asked one of the guys who were there to see us off if he could give me a lift into town. The wallet was still where I had left it, with a thanks to the owners of the pension, I ran back to the car and returned to the airport.

When I arrived, Peter already had the engine running, to warm it up, then with a final wave we taxyed out to the active runway. After the power check, we were cleared to line up. We backtracked to make use of every bit of runway, then lined up. Ahead of us lay the city of Reykjavic and then the ocean. I advanced the power and the aircraft accelerated in its normal, lethargic, fashion. Before we had used up half the runway, we were airborne. The aircraft climbed out at about 400 FPM we flew over the outskirts of Reykjavic then over the ocean, as we turned slightly left on to our required track. We had filed our flight to FLOSI which is a waypoint on an arc 120 Nm from Keflavic VORTAC, then direct to 62N 42W, then direct to Narsarsuak. As we established ourselves on the required GPS track, we offered our thanks to GARMIN and to the American tax payers, for the satellites our GPS was using to plot our course. By this time we were almost used to flying over large expanses of water, so we busied ourselves with working out ETA's and checking the engine parameters. Peter took the last few photos of the N/W tip of Iceland as we headed west, till all we could see from horizon to horizon, was water and the receding pack ice north of our track. As we approached the waypoint FLOSI, Reykjavic called us, "Zulu Sierra Victor Whiskey Oscar, you are on track, contact Iceland Radio on HF 8891, good luck."

Well it was great to know that we were on track, now we had to start using the HF again. The antenna was wound out to the approximate length then tuned to the given frequency and contact established. The frequency was quite busy, but we managed to give our position report and the required ETA's. We were instructed to call crossing 30 West and 40 West. We then gave a position report on the general frequency, 127.9 on VHF, with the radio work completed and 120 Nm behind us it was time to have something to eat and drink. Whilst we were in Reykjavic, Peter had replenished our stock of survival food and drink. We noticed an odd thing with the 250 ml square fruit juice containers, there were two that cost 3 times as much as the others and curious to find out why we each selected these to drink. They did not have straws attached, but this did not stop us. I cut off the corner of one and passed it to Peter, then cut off the corner of the other one for myself. We then found out why they were so expensive, they were concentrate. We could not drink them, so had no option but to drop them into the sea and select another two juices to drink, we sure had a good laugh at our own stupidity.

Then I decided to tune the ADF in to the NDB at Prins Christian Sund on the southern tip of Greenland. We did not need the NDB, as we did have the GPS for navigation, but tuned it in for interest sake. The needle swung around and unwaveringly pointed slightly left of the nose. Not bad considering that the NDB was over 400 Nm away! The sea was soon hidden from our view by a low layer of stratus cloud, this again had a strange way of relieving tension, as out of sight was out of mind, well ... almost.

We reflected on the statistics as supplied to us by AOPA, with regard to flights across the North Atlantic, at least 20% turn back before they have covered 100 Nm. The thought of turning back did

not enter our minds as we had our sights set firmly on Oshkosh. We then settled down to the normal boredom of flying the aircraft. We had stuck to a system of flying two hours each, then handing over control, at times we even timed the two hour stint down to the last second! The hours dragged by, there were not many airliners flying overhead. I guess it was still too early in the day, there was nothing to do, so I selected the chatter frequency, keyed the mike and called, "anybody out there going to Oshkosh?" An American Airlines pilot replied that he was, so I gave him a brief rundown of our flight and gave him our position. He promised to look for us at Oshkosh. No other flights paid any interest in the Antique, light aircraft, flying VFR, low and slow across the North Atlantic.

Makes you feel all the more lonely and alone out there..... what if the engine were to quit now? Nope don't even think ... of it ... put the thought out of your mind. Sneak a glance at Peter to see if he looks worried and wonder what he is thinking; he looks contented, gazing out of the window. A check of the engine instruments shows that all is well in the engine room. I lean out the mixture again and think back to the first few days of the flight where Peter had remarked that I keep fidgeting with the controls and never seemed to relax. Was it a case of nervousness or was it a case of trying to keep the combustion temperatures as high as possible to burn all the lead in the 100/130 octane fuel we had to use? I claim it was the latter, as I wanted to prevent plug fouling and ensure best fuel economy. Peter had a great time the first few days teasing me, but here over the North Atlantic, keeping the engine warm and happy would ensure that our feet stayed warm and dry and no comments were forthcoming from the "Peanut Gallery" even though we were burning 100LL.

Having covered about 400 Nm, the cloud cover stopped and reminded us that there was a large, cold expanse of water below us. We would stare into the distance till our eyes hurt, trying to sight land. Finally Peter called "Land Ho!" In the distance we could make out something, was it Greenland or was it just clouds? As we flew closer Greenland came into view, what a stark/harsh/beautiful sight it was. It made me think back almost three weeks since we had departed from Grand Central, many said it could not be done but here we were, well almost! Approaching the coast of Greenland, the pack ice became thicker, with the occasional small iceberg. Again we were reminded that LAND was a four letter word ... actually so was WATER as there were so many ice floes and small icebergs in the sea that chances of surviving .... NO forget it!

Peter wanted to descend to take some photos and I wanted to climb, to put as much distance between us and the uninviting terrain below, as possible. So we started a slow climb. We had covered 530 Nm of ocean in 5:30, giving an average G/S of 96 Knots. The coast of Greenland is indeed beautiful but harsh, as we climbed Peter had his window open to take the photos we needed. All we had to endure above the long distance, cramped conditions, trussed up in survival gear, was a 90 Knot gale at minus 6 C! We followed the coast for about 30 Nm, as the horizon over the ice cap was not clearly discernible and the idea of flying into a "white out" was not on our agenda. After 20 minutes of flying down the coast the cloud over the ice cap started to dissipate and the horizon was again discernible, so we turned right and continued our climb, heading inland. The minimum IFR level across the ice cap is FL130, when we filed our flight plan we informed the Reykjavic agent that we would not be able to make FL140 and requested the incorrect level 130, this was granted. We crossed the coast line at about 8 000' as we climbed to FL130. Just right of our track to Narsarsuak, there were two peaks protruding through the white expanse. These peaks were some 10 600' AMSL, with the ice cap only 500' or 600' lower. We leveled of above the ice cap and enjoyed and photographed a spectacle few others have witnessed. Of course, the window on Peter's side had to be rolled open for the photos and all we had to do was sit in a 90 Knot gale at minus 12 C.

mongst all the excitement and the chill of the freezing wind blowing through the open window plus

the drag caused by the open window, we only managed to reach FL110 before we had to start our descent into Narsarsuak. (Well, that's my excuse.) When the time came to descend, we were not able to contact Narsarsuak due to the high ground and ice separating us. Finally 35 Nm out at FL110 we established contact and were asked if we were still maintaining FL130, I replied that we had started a VMC descent and were at FL110! The Narsarsuak controller then cleared us to descend VFR to the airfield, with pleasure sir! We followed the glacier as it wound its way down to sea level. At one stage we had to execute a few orbits to lose height, whilst keeping the engine warm, as the glacier descended faster than us! The sight of that glacier was awe inspiring. The sheer size of it and the unevenness of the tortured ice, as it is torn and broken up and funneled by the land down to the sea reminded us of how insignificant we were in comparison to the might of the ice cap.

Approaching Narsarsuak, the glacier splits into two, the main course to the left ends in the sea, the one to the right peters out about 3 miles short of Narsarsuak airport. We followed the right hand fork of the glacier past the old hospital blocks which were used to rehabilitate American Servicemen wounded during WW2 and the Korean conflict.

Narsarsuak airport lies at the edge of the fjord, with the threshold of runway (02) almost at the water's edge. After landing, we taxied to park next to the modern terminal building and climbed out happy to be back on terra-firma. This joy was short lived as we were immediately attacked by seemingly a million mosquitoes! Did those bugs ever annoy us whilst we were removing our immersion suits and survival gear. Having completed the arrival formalities, we went up to the control tower to meet the ATC men and to check on the weather forecast for our next destination, Goose Bay. The modern setup in the tower had been installed by the Danish Government and was most impressive. The synoptic chart showed a warm front followed by a cold front approaching Goose Bay. To the north of Goose Bay, the fronts were occluded, and this made us feel good that we had not chosen the northern route as we would not have been able to reach Frobisher in that kind of weather. We decided that we would wait till the fronts had both passed Goose Bay, before we departed so that we could fly VFR below the fronts hopefully out to sea, where we would not run into high ground.

The hotel in Narsarsuak is a prefabricated concrete structure, brought in from Denmark. We checked in then went for a walk to the old hospital structures which were being used as workshops, then we carried on in the direction of the glacier. It was relatively warm, but any wind off the ice cap or the fjord was quite cold, for this reason we kept our warm jackets on. On the high ground above the base we found some trenches and gun emplacements, relics of the war years. The ever present mosquitoes made the walk less than fun, but it was good to stretch the legs a bit. We were informed by the locals that we were lucky to miss the black flies which normally appeared at the end of summer. These flies, we were told, bit chunks out of you! As we were the only guests in the hotel, the management offered to open the restaurant for us, but offered us the choice of eating in the local/staff canteen. We had our evening meal in the canteen with the hotel staff. During the meal the phone in the kitchen rang and the chef announced that there was a call for a Mr Hengst! Peter went to see who it was and it turned out to be a pilot friend of his who was on his way to the USA in a Cessna Citation. He had seen the Fairchild on the ramp and called the hotel to look for Peter. We went to the airport to see the crew and were introduced to the owners of the aircraft. What a coincidence, there in Narsarsuak, Greenland. Parked on the airfield were only two aircraft, and BOTH were from South Africa!

7h10 to cover 682 Nm. Average G/S 95 Knots.

DAY EIGHTEEN.

That man Murphy was alive and well, our first morning in Narsarsuak dawned bright and clear and stayed that way for the remainder of the day! Which meant that we could have spent another day in Iceland. Well hindsight is 20/20 vision they say. We checked the progress of the fronts approaching Goose Bay, to find that the warm front was only 30nm west of Goose and expected to pass Goose during the night with the cold front 50nm or so behind. So the decision was made to spend another night at Narsarsuak then to proceed the following morning. We spent the day walking around the area but the mosquitoes were a real problem, not that the locals seemed to mind. They walked around in T shirts, whilst we had warm jackets on. I guess it was a warm summer day to them.

Day off.

DAY NINETEEN.

Our second morning in Narsarsuak was overcast as we made our way to the airport. Here we were informed that both the fronts had passed through Goose Bay and were approaching the coast. Great, this would mean that we would be able to pass under the fronts, out to sea. However the low overcast was a worry as the cloud base was only 400' and at the coast, at the end of the fjord, it was reported to be 200'. This meant that we would not be able to fly down the fjord, VFR below the cloud. We were informed that the cloud cover would break up during the day, so off to the hotel to check out and collect all our belongings. With 20 hours of daylight there was not that much of a rush and by the time we had completed all the necessary formalities and refueled the aircraft, with the most expensive fuel, at $2.00 per LITER there was a hole in the cloud cover directly above the airfield! How lucky can you get.

We donned all our warm clothing, immersion suits and other survival gear and cranked up the trusty old Warner. After about 20 minutes the oil was warm enough for us to depart. We lined up on the runway which pointed towards the fjord, as it was downhill and advanced the throttle. The Fairchild at 20% over gross accelerated rather smartly in the cool sea level air and soon we were airborne climbing at 400 FPM. We orbited to climb through the hole above the airfield, then set course at 2 000' VFR on top. The fjord that Narsarsuak lies in has a kink in it so we chose the fjord to the west of it as this one was almost directly on our track. We flew over the saddle separating the two fjords and then positioned ourselves in the centre of the fjord, with the sides towering above us on both sides. The first thirty minutes or so are always nerve wracking, as you listen to the engine, check the gauges and feel the familiar vibrations.

Occasionally through a hole in the clouds we were given glimpses of the iceberg strewn fjord and the obvious thought is that you do not need an engine failure then, VFR on top with a 200' cloud base and an iceberg covered fjord as your only forced landing site. But the trusty old Warner just continued to crank out the necessary horse power and slowly we drew closer to the Atlantic Ocean again. The first hour of the flight we had a tailwind, just as forecast. Then as we proceeded out to sea the wind began veering and increasing in velocity. Soon the wind was at right angles to our track and as a result we had about a 15 Knot headwind. Once clear of the coast, the cloud cover began to break up as we slowly climbed to 4 000' Once level we established contact on HF, gave our ETA's enroute and for Goose, then we were on our own, except for the reassuring blip on the transponder. Not once on the crossing of the North Atlantic, had we not had at least one station interrogating our transponder. It is reassuring to know that you are always radar identified at all times. However, should you disappear off the screens, the position would be noted and a search only

started once the full time of your fuel endurance had passed!

As we approached the warm front, we debated trying to fly over it as the clouds did not seem to be that high, but remembering our approach to Iceland, we elected to descend and fly below the front. We started the descent and were soon forced to descend to 200' AMSL to remain VFR fortunately the air temperature was close to 4 C thus we did not have to worry about ice. After about 30 minutes we were past the warm front and although we could have climbed higher than our 500', we elected to stay low as we were actually beginning to enjoy the flight across the ocean, low level! During our time spent between the two fronts we were treated to the sight of a few icebergs towering, perhaps 200' above the sea. The distance between the warm front and the cold front was about 90Nm and our ground speed was down to 65 Knots, we had to physically stop ourselves looking at the ground speed readout on both our GPS receivers, as it was demoralizing. As we approached the cold front our ground speed dropped below 50 Knots for the first time since Italy. Slowly but surely, we were forced to descend below 200'.. then below 100'.. then down to 50' Finally we were forced to descend even lower, worried that the trailing antenna might drag in the sea and break, we wound in the trailing antenna and descended to about 20'! There we were almost 200 Nm from land at 20' above the sea, dodging fog banks, weaving left and right, eyes straining to see any icebergs; with the OAT steady at +1 C. However at such a low altitude ice was not a consideration as we were in the salt spray of the sea.

I mentioned to Peter that at that altitude, we would have very little time to prepare for a forced landing. The biggest problem was that the liferaft was secured to the top of the fuel tank in the rear seat and that there would not be enough time for Peter to remove his control stick, release the liferaft, jettison his door and then secure his shoulder harness and hold the liferaft between his knees in the time it would take for the aircraft to end up in the water. We debated removing the control stick on his side and preparing for a ditching, but I think that he was having too much fun weaving in and out through the fog banks to worry about a possible engine failure! Besides we had by now become so accustomed to flying over the ocean and the engine was purring along like an old tractor so negative thoughts were banished from our minds, whilst we enjoyed the flight and the sights. What a blessing the GPS was, because at no time did we have to worry about where we were, or what heading to steer. Simply hit the GOTO button and the required waypoint number, and you are back on track. All we had to do was adjust the "track made good" till it was the same as the required track. Who worried about the 56 degrees deviation or the angle that the compass was tilted at due to the proximity to the magnetic north or the way the compass gyrated wildly in its alcohol mix or the fact that the compass had last been swung in the southern hemisphere?

We said another prayer of thanks to the GPS Guru's and their satellites whizzing around way out there in earth orbit. It must have taken 20 minutes to fly through the cold front, twenty minutes that felt like hours. But finally we were able to climb up to 200' then later higher as the cloud cover behind the front dissipated. Soon we were to find that the icebergs we had seen thus far were small compared to the icebergs in the last 100 Nm to the Labrador coast. Some of the icebergs we flew past towered to 300' above the sea. Considering that only 10% of an iceberg protrudes above the sea, they must have been rather large blocks of ice.

Eventually the Labrador coast appeared on the horizon as we neared the end of our crossing of the North Atlantic and would you believe it, the artificial horizon toppled. A time to reflect, had the A/H toppled whilst we were inbound to Iceland, or negotiating our way through the warm front earlier..... rather not even think about it. The flight across the North Atlantic had been hours of boredom, no; not boredom but hours of inactivity punctuated by some minutes of uncertainty as we descended through the warm front on our way to Iceland and the awe at the beauty of the Icecap of Greenland. The trip had been an education but not one to be attempted without proper planning.

The fact that we crossed the North Atlantic in an antique aircraft in so few days, was due to thorough planning and a good measure of luck, in that we were lucky to have good, if not almost perfect VFR weather for the crossing.

In front of us the coast of Canada crept closer till we crossed the coast at Cape Harrison. Once again we were reminded that LAND was a four letter word, due to the harsh territory we had to over-fly.

We had expected to see some signs of life near the coast but we were to find that there was little, if any signs of life in Labrador. The size of the Canadian "remote areas" was a sight to behold. We did not see any signs of life during the 120 Nm flight from Cape Harrison to Goose Bay, except for a ship on Lake Melville. The last 20 Nm into Goose Bay was across Lake Melville, funny, we had already flown more than 1 000 Nm across the Atlantic Ocean and here we had a mere 20 Nm more water to cross to Goose. Yet the thought entered my mind to avoid flying over the lake. However, we proceeded direct to Goose where we were cleared straight in on runway (27) We were cleared to land whilst fighters of the German Airforce, Netherlands Air Force and other European Air Forces were departing on sorties of low level exercises. The sheer size of the remote areas and the lack of a large population explained the reason for the Europeans using Canada for their summer exercises.

After parking and completing the necessary Customs/Immigration formalities, we were on a high, so Peter suggested that we continue to Baie Comeau whilst the weather was good. I cautioned against this, reminding Peter of the day we tried to make it to Pescara (Italy) and how we almost fell asleep at the supper table in Bari. Reason prevailed and as we walked back to the Fairchild a Cessna 185, on amphibious floats, taxied in. We introduced ourselves to the pilot and his wife then shared a taxi with them to a hotel in town. At the hotel we celebrated the successful crossing of the North Atlantic and convinced ourselves that there was no need to rush as we had all but completed our task. From Goose Bay to Oshkosh, would be down hill (surely)!

8h20 to cover 670 Nm. Average G/S 81 Knots.

DAY TWENTY.

The weather looked fine for our proposed flight, the next morning as we sat down to a leisurely breakfast with our new friends. The weather was partly cloudy, 3 to 4 Octas, (scattered in US terms) as we drove out to Goose Airport. As the major part of the flight had been completed and we were not in any sort of a rush to reach Oshkosh, we had been advised to stop at Baie Comeau for lunch as the restaurant was reported to be good. We had planned to route via Baie Comeau and Sept Iles, along the northern bank of the St Lawrence to Niagara and then into the USA, Baie Comeau was enroute, so we agreed to stop there for lunch. On arrival at Goose Bay Airfield we were ushered to the Met Office and the Briefing section where we were informed of the weather and filed the necessary flight plan to Baie Comeau, via Sept Iles. The Canadians went out of their way to provide us with all the information that we required, with the flight plan filed, we took leave of our new found friends and prepared the Fairchild for departure.

All too soon, we were airborne and on track to Baie Comeau. The cloud cover kept us at about 1500' AGL where we were happy to be as it afforded us a good view of the surrounding area. Only now did we begin to appreciate why Canada is known as the land of a thousand lakes, (only lakes that are more than one mile long are counted) and why most aircraft are equipped with amphibious floats. The countryside is dotted with lakes, all surrounded by forest. The only place for a forced landing is in the water. After almost two hours of flying we came across the first signs of civilization that we had seen since leaving Goose Bay. Burnt Lake, this consisted of a few wooden (what else)

bungalows, an airfield, a lake and an NDB. Nobody paid any attention to the lone, antique, aircraft droning on towards the USA. Slowly the terrain started to rise and soon we were forced to deviate from our desired track, to remain VFR. As all the valleys were orientated S/E towards the St Lawrence, we elected to turn left and follow one of them towards the estuary.

This was a decision we were not to regret as the area we chose reminded us of the flight through the Swiss Alps and the fjords of Greenland. The sight of this totally unspoiled area, as we wound our way low level over the Magpie Lake, with the sheer sides of the valleys towering above us, surprised us by its beauty and lack of habitation, as we had expected to see more signs of civilization than we had. In fact we only saw one narrow road winding its way up the mountains from the St Lawrence, during the 300Nm trip to the St Lawrence. With the northern coast of the St Lawrence in sight we were able to descend and then follow the coast towards Sept Iles and Baie Comeau. On passing Sept Iles, the ATC advised us to land there as there was a rather large Cb between us and our destination, Baie Comeau. In fact, an American pilot inbound to Sept Iles in a Cessna 210, descending through the area described it as "a wahl ahv wahder!" This could not scare us ‘jaapies’ as we had seen many a thunderstorm before. We just deviated to the right of track, towards the high ground, remained VFR and pressed on westwards into the prevailing wind which was assisted by the dissipating Cb. The ride around the Cb was rather turbulent and at times we were tempted to turn back as the ground speed decreased below 60 Knots, but we pressed on as long as we were pointed roughly westwards, we were heading in the right direction. Soon Baie Comeau was in sight, clear of the weather and we landed there without any problem.

The local FBO assisted us with obtaining the necessary weather forecasts and filing the flight plans, then presented us with a directory of all the airports in Canada, complete with all the radio frequencies required etc. This was to be of great help to us as we made our way through Canada. As the weather around the area seemed to be deteriorating, we elected not to have lunch there but rather to press on towards our destination Quebec City. The rest of the flight to Quebec was easy. Keep the water on the left and the land on the right and you can't go wrong. It was great to see signs of civilization again and as we approached Quebec, so we were treated to more and more signs of civilization.

The approach to Quebec's Airport was standard, the only odd thing was that the main runway was being repaired and only half was available for landing. On finals we were asked if 1200m was enough for our landing roll! Hell yes it was! Taxying in it was interesting to see how the FBO's were out to compete for our business. Each FBO had a man out trying to marshal us in, we chose the one we wanted, parked and shut down. The FBO refueled us and supplied us with chocks and tie-downs, then led us through to the office and showed us their facilities. We arranged a cab to take us to a hotel in town. The Monte Pillier hotel was a real fine establishment and not at all expensive, compared to what we had had to pay in Iceland and Greenland. Once established in our rooms, we started calling home and the EAA Canada members whose names we had brought along. We managed to establish contact with members of EAA 245 at Carp Airfield just outside Ottawa and with EAA 911 at Oshawa, which is east of Toronto. With all the calls made we departed for an evening meal in a local street fresh out of good olde Paris. The food was good, the wine, expensive!

8H10 to cover 590 Nm. Average G/S 72 Knots.

DAY TWENTY ONE.

Well rested we departed at a leisurely hour to Carp Airfield "only" 220 Nm away! The weather was perfect, except for the prevailing westerly wind which reduced our ground speed to 66 Knots for

the day. ATC routed us clear of traffic around Montreal then on to Ottawa along the Ottawa river. As we approached Carp Airfield we announced our arrival, looked for the wind sock and being relaxed joined LH downwind for the westerly runway. After all we had been flying in to headwinds since leaving Greenland, so the wind must SURELY be westerly at Carp. Wrong!! I managed to execute one of my better downwind landings at Carp! The small enthusiastic band of Canadians who had assembled to meet us surprised us as they were the most dedicated bunch of EAAers we were to meet in Canada. That evening the members entertained us, the first time that we had been entertained by friends since leaving Peter's family in Germany!

3H20 to cover 220 Nm. Average G/S 66 Knots.

DAY TWENTY TWO.

Again with no rush to depart to Oshawa, we finally bade farewell to our new friends at about midday. The weather around the shores of Lake Ontario had been forecast to be overcast, with fog. This gave us ample reason to delay our departure. By the time we set sail it was afternoon and we departed on our 2:20 flight to Oshawa.

As we passed the second city named Perth (the first being in Scotland) the weather started to deteriorate, so much so that we could not fly over Belville, which was on our planned track. We kept closer to Kingston till we were over the northern coast of Lake Ontario. By this time we were in marginal VFR, with only vertically down visibility and considering that our A/H had toppled a few day before, this was a less than desirable position to be in. Fortunately we did have contact with the ground and we also knew that the weather ahead was better. Once clear of the fog, we proceeded to Oshawa, where we were met by Dave Drain, the President of EAA 911.
Dave entertained us and put us up for the night.

2H20 to cover 175 Nm. Average G/S 76 Knots.

DAY TWENTY THREE.

Sunday morning dawned wet, overcast with drizzle. We had planned to fly to Quelph, on the western outskirts of Toronto, as this airfield was reputed to be the Canadian headquarters of the De Havilland Tiger Moths. But as all the birds were walking, we decided that the weather was not good enough for us to fly in, so we elected to take the day off. The rush was over, now was the time to enjoy the last bit of the flight to Oshkosh. Dave mentioned the problem that his son was having with his car so I offered my services to repair it. Peter convinced Dave that I was capable of repairing the defect. We took a trip out to the golf course, where his son worked and the car was stranded, one hour later the car was running. We had earned our stay at the Drain family home.

Day off.

DAY TWENTY FOUR.

Up early, the weather looked good so after a hearty breakfast, we were off to the airport for the short hop to the picturesque Toronto Island Airport. During the preflight I noticed that the engine had consumed 2 liters of oil on the last leg which had been 2H20 long. This was a reason for concern as the average oil consumption to date had been 1 liter per 5 to 6 hours of flying. I

inspected the engine for any obvious signs of oil leak, then securely chocked the aircraft; started the engine and checked the exhaust. Yes there were definite signs of oil being burnt by the engine. Now the doubt started to set in. We had less than 8 hours of flight left to Oshkosh and here we had signs that the engine was starting to signal it had had enough. Was this going to turn out to be one of those "I almost made it" stories?

The engine sounded good, the oil tank held 20 liters so even at 1 liter/hour we still had a safe 10 hours endurance plus reserves! We decided to continue to Toronto as it was only about 20 minutes away. At Toronto, we stopped at one of the new FBO's on the airfield, topped up the oil then refueled the aircraft. As we were at one of the most picturesque airports of the trip we had the aircraft towed to the waters edge and photographed it with the skyline of Toronto as the backdrop. With all the photography completed, we took leave of our friends and proceeded as planned via Niagara Falls. Due to the uncertain condition of the engine, we elected to follow the coast of Lake Ontario, rather than fly direct to the Falls. The flight was uneventful, although both Peter and I were sitting on the edge of our seats. The uncertainty of the condition of the engine was a constant worry, although we tried to reassure ourselves that as it had not missed a beat in over 100 hours, that it would complete the flight.

At Niagara Falls, we entered the pattern around the falls and Peter started shooting off some rolls of film. At this time we discussed how sorry we were that we had not been able to raise a sponsor, as here we were over one of the most well known landmarks in the world, and we did not have another aircraft to photograph us. At this time two single Comanches joined the pattern. They were from England and Germany, respectively, on their way to Oshkosh. We were surprised to meet them over Niagara and found out that they had been warned in Reykjavic to be on the lookout for us. Of all the coincidences in the world, this impressed us, that we should have arrived at the Niagara Falls at the same time as them. One of the Comanche pilots took a shot of us over the Falls, promised to look us up at Oshkosh, then sped off again. Having taken enough photos, we set sail to our destination, Port Huron, which is a small airfield near the waterway joining Lake Huron and Lake Erie. On this leg we flew past London, Canada!

At Port Huron, we had expected to be grilled by the American Customs Officers as we were from a strange country, had a large ferry tank and had some strange reason for entry as ‘Flying to Oshkosh.’ We had been expecting to be treated as drug smugglers, but were treated cordially, paid our $25 processing fee and were on our way. The only delay we had was that we had to wait for change for the $30 that Peter tendered! During the previous two hours the engine had consumed another 2 liters of oil. This was a lot, but at least the consumption figure was stable at about 1 liter/Hr. Peter called the US agents of the German blow-molding equipment that he sells, arranged an arrival time at an airfield near Lansing, and we were on our way again. On arrival we were taken to the Bekum factory for Peter to conduct some business. Whilst we were there we organized through the Bekum guys, that an FBO at the Lansing County airfield would loan us some of his equipment to inspect the engine. I needed a boroscope to allow inspection of the cylinder, plus equipment for a blow-by check. That evening we were treated to an excellent rib-eye steak by the Bekum guys before returning to our hotel.

3h50 to cover 295 Nm. Average G/S 76 Knots.

DAY TWENTY FIVE.

On arrival at the airfield, we removed the engine cowls and with the help of the local FBO inspected the engine, we found that #5 cylinder was the one burning the oil. Inspection of the cylinder wall

revealed that there was no damage or score marks, the top of the piston was also sound. A blow-by check of all the cylinders revealed that the engine was in good shape with a suspected stuck oil ring in #5 cylinder. The FBO commented on the size of the spark plug gaps and proceeded to clean and gap the plugs. This small service and the loan of his time and equipment, did not cost us a cent. A gentleman to the aid of a travelling aviator. An inspection of the magnetic plug in the oil tank revealed no metal particles, so happy in the knowledge that the engine was sound, we replaced the cowls and prepared to fly to Fon Du Lac on the third last leg of our epic adventure.

Our planned route was via the Chicago Heights VOR south of Lake Michigan then to Chicago's Meigs airfield before departing for Fon Du Lac. Now reassured that the engine was not about to pack up, we said farewell to our friends from Bekum and set sail for Chicago's Meigs airfield. Our route to Chicago Heights took us past places like Battle Creek and just south of Kalamazoo. As we approached Kalamazoo, we had the normal problem of getting the ATC to copy our call sign. He enquired where we were from and what our destination was, so we gave him a quick run down. A few minutes later he gave us a heading to the north of Kalamazoo airport. A heading which put us on track to a small line squall, some 20 miles away. Initially I was of the opinion that we were being routed away from the approach to the active runway, but once clear of the active area and approaching the few Cb cells, I enquired from the ATC, where he was sending us. He replied, "on a direct track to Oshkosh"

I informed him that we were on GPS Nav on a track to the CHT VOR. He apologized and cleared us, own navigation, to Chicago Heights. To which, an unknown station remarked, "Ya woodin-uh thawt they'd be scayred of a liddle bid-a wahder!" To which Peter replied that we were scared of fresh water. We had a good chuckle about that one it helped to relieve the stress of worrying about the condition of the engine. The flight along the waters edge to Meigs took us past some lovely Marinas and yacht basins, also past some of the dirtiest metal foundries which seemed to be built on reclaimed ground in the lakes. The reclaimed ground seemed to be principally made up of waste materials from the foundries. We wondered what the "greens" had to say about that. The approach to Meigs is interesting, in that the runway is orientated N/S on the eastern side of Chicago, on reclaimed land in lake Michigan. The prevailing winds being westerly, result in severe wind shear and turbulence on finals to the active runway. This makes the approach and landing interesting, to say the least.

After taking a bunch of photographs, with the skyline of Chicago as a backdrop, we departed on our second last leg, to Fon Du Lac. Our arrival at Fon Du Lac, just before sunset, did not even raise an eyebrow. We were just one of the many interesting aircraft parked there for the night, or week. We did however, meet up with an EAA member from South Africa and a Fairchild Club member, both just happened to be there. We departed to a local motel, called the EAA to arrange an arrival time the following day, after we had cleaned the aircraft. No such luck, Chuck Yeager and the airmen of the first African American squadron were to arrive later in the day. We had to arrive early, 09:00. I then called the Fairchild Club to coordinate our arrival, then retired for a good night's rest before our final leg to Oshkosh, remembering our departure from Johannesburg some three weeks previously, on a flight that some said was impossible, some said was madness and a few, a very few, thought possible.

4h20 to cover 310 Nm. Average G/S 72 Knots.

DAY TWENTY SIX.

Up early, as usual, we departed for the airport where we were met by two members of the Fairchild

Club. Charlie Bell had his F24W which was a past Grand Champion. Ed Wegner had his customized F24R. Peter and I had dutifully carried the NOTAM of arrival procedures at OSH, all the way from Africa. We were keen to follow the arrival procedure as accurately and professionally as we had approached the flight.

I enquired as to which procedure we were going to follow, we were advised to switch our radios on if we wanted to, to say nothing and to follow the other two Fairchilds in on the "no radio" arrival procedure. That is how we arrived, at the busiest airport in the world (for one week), own separation, visual approach to Rwy 36R, waved off the runway by marshals with flags, then flagged across Rwy 36L.

Not a word was said.

We taxyed in behind the other two Fairchild's to the parking area, but were waved on to the main ramp area. There a welcoming party was assembled, waiting to welcome us to Oshkosh, complete with welcome signs and the South African flag.

We were overwhelmed by the reception we received. There were two local TV stations present plus Paul and Tom Poberezny waiting to welcome us. Tom introduced us to his father, Paul, the founder of the EAA. We were congratulated on having made it to the EAA Annual Convention and then interviewed by the EAA TV crew and the TV station crews and were featured on the news that evening.

The next 9 days were hectic. We had air-to-air sorties for video and stills photography, TV interviews, one of which was 6 minutes live on the 12 o'clock news. Flights in the Showcase and the rest of the day spent repeating our story over and over to the thousands of visitors who walked past the aircraft where it had been parked, in front of the Antique Classic Barn, headquarters of the Antique Classic Division of the EAA.

We were welcomed by the Antique Classic Division as the best thing that had ever happened to them. The best thing that had happened to further their cause of restoring and flying our Aviation Heritage and an example to all owners of Antique Classic aircraft in the USA, that Oshkosh was not too far for them to fly to!

We met a lot of people, shook a lot of hands, posed for hundreds of photographs, and made a lot of new friends. Heroes we were, for a week. Asked if we would do it again, we both answered "Yes." Later I added a rider: “In something a little faster.”

EPILOGUE

The Fairchild was left at KOSH whilst Peter and I returned to South Africa and tried to find a sponsor for an around-the-world flight. The idea was to have the engine repaired and continue westward back to South Africa. This never happened and in 1995 the Fairchild was containerised and shipped back.

In 1994 I was fortunate to fly to Oshkosh again, in something a bit faster. The South African Airways Museum DC-4. I was asked to join the flight as First Officer; an offer I gladly accepted. The DC4 ZS-BMH was the last DC4 ever produced and was assembled on the DC6 production line.

In 2003 I led a group of three aircraft from South Africa to Oshkosh and back. I flew my RV-6 ZU-

EAA. The other two aircraft were a Cessna 182 and a Piper PA28-235. We stayed in Oshkosh for the week of AirVenture, then visited First Flight before returning to South Africa. Peter joined me on the flight back to South Africa.

In 2007, Peter passed away, due to cancer of the colon.

RIP, my friend.