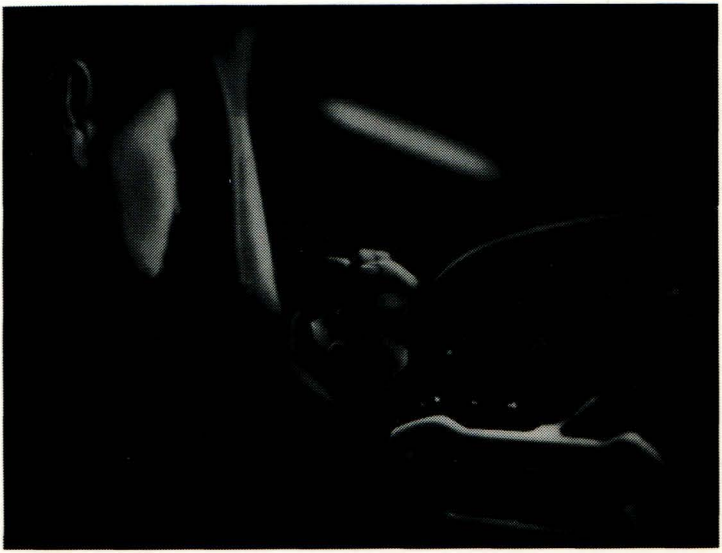
MELBOURNE EPISODE

CASE STUDY OF A MISSING PILOT



Richard F. Haines

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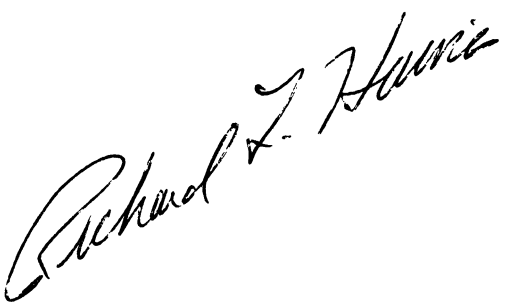

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FOREWORD

Fred said that it wasn't an aircraft,
and that has made all the difference.

It is a sad fact that many airplanes crash and pilots (crew and passengers) are killed every year. In most instances it is rather straightforward to attribute the crashes to mechanical failures, bad weather or to pilot errors. There are also a considerable number of cases when an aircraft has disappeared over water for no apparent reason, but usually some trace has been found such as buoyant parts of the plane or life preservers. There are, however, a small number of incidents in which an aircraft has disappeared under more mysterious circumstances... circumstances involving *unidentified flying objects.*

One of these is the so-called Kinross Air Force Base incident of November 23, 1953. An Air Force jet was ordered to chase an unidentified radar target. The jet was observed, on radar, to merge with the target and then both disappeared. This occurred over Lake Superior. According to the public Air Force record nothing was found after an extensive search (see *The Encyclopedia of UFOs,* by Ronald Story (editor), Doubleday and Co.., Garden City, NY, 1980, pg. 197. Another disappearance took place off the northeastern coast of Japan in the spring of 1959. An Air Force jet was ordered to approach and then fire upon a stationary object that had been first picked up by radar and then visually confirmed by the jet pilot. The jet's rockets had no deleterious effect on the object, but then the object chased the jet. This chase was observed on radar and confirmed by the pilot while he conversed with the ground. Then radar showed the unknown target merge with the jet target and the resulting single target remained stationary for a short time before disappearing. A several day search failed to turn up any wreckage (based on information from a first-hand witness).

On October 21, 1978 a civilian pilot decided to fly a small plane from Melbourne to King Island in order to buy crayfish for himself and some friends in the Royal Australian Air Force. However, he did not reach King Island. Instead, he flew into history

when he disappeared over Bass Strait, south of the Australian mainland. No trace of Frederick, or of his airplane, has ever been found. Although radar was not involved, the pilot's description of an object (an apparently metallic object with lights) flying past and around his airplane is sufficiently unusual to place this case into the category of UFO-related disappearances, such as the Air Force jet cases cited above. The pilot's name was Frederick Valentich, and his disappearance is the subject of this book.

This book is unlike any other UFO book, and may be unlike any other book you have read. It is partially historical, partially analytical and partially fiction. It is a mystery story, based upon actual events, which has no conclusive ending. The author has provided all of the "raw data", including analyses of the tape recorded voice transmission between the pilot and the ground, and has written several fictitious "solutions" to the mystery. Each solution is presented in a convincing manner. However, only one can be correct, or nearly correct. It is left up to you, the reader, to decide which one.

In reading this book I was drawn back to memories of events in 1978 and 1979, events which affected me directly...events which were indirect results of Frederick's disappearance. Although the media interest in the Valentich case is only briefly described in this book, it was immense (and affected the investigations for a short period of time). One of the many news services which featured the Valentich case was TV Channel 0 (now Channel 10) in Melbourne. The news reporters and management of Channel 0 noted the public interest in Valentich's disappearance. Therefore, when UFO sightings occurred several months later, on the 21st of December off the eastern coast of New Zealand, Channel 0 decided to do a news feature on the sightings. The station contacted an employee, reporter Quentin Fogarty, who was on vacation in New Zealand, and asked him to interview pilots and air traffic (radar) controllers who were involved in the December sightings. Fogarty did this, and on the 30th of December he went one step further...he arranged to fly with a camera crew on one of the same planes that had been involved in the sightings.

During this flight, early in the morning of the 31st of December, the experienced air crew observed unusual lights

(bright objects) which they could not identify. The lights were appearing, disappearing and moving in their vicinity. During the same flight the land-based air traffic control radar picked up radar targets that seemed to track the plane. Furthermore, the airplane radar picked up a target that was associated with a very bright light that appeared to track the airplane. The unusual lights and some of the radar targets were unknowns... UFOs.

When Fogarty returned to Melbourne on January 1, 1979, he had with him a 16mm color film movie of some of these unusual lights. Channel 0 publicized this film worldwide as the first genuine film of UFOs and was severly criticized by scientists throughout the world for doing so. As a result of a series of quirks of fate, I was asked by Channel 0 to investigate the case to determine whether or not the lights were actually UFOs or whether they could be identified. As part of this investigation I travelled to New Zealand and Australia to interview witnesses.

As I pointed out above, the involvement of a news crew in the New Zealand sightings of December 30-31, 1978, was an indirect result of Frederick's disappearance. Hence my trip to Australia was, also, an indirect result of his disappearance. Therefore it is somewhat ironic that when I met Guido Valentich in Australia I knew next to nothing about his son's disappearance (other than that Frederick hadn't returned).

I discussed the disappearance with Guido. He was searching for some reason to believe that his son might be alive. Apparently, he hoped that I could tell him something about the UFO phenomenon which would indicate that his son might be alive *somewhere*. Unfortunately, I was not aware of any comforting information. (I felt at the time that Frederick probably had died in an airplane crash whether or not a UFO was involved.)

Returning to the disappearance itself, we are ultimately left with two basic questions: why did Frederick (and his plane) disappear, and why were his last words devoted to a description of something that was "not an aircraft?" Did the darkness make him disoriented so that he couldn't tell which way he was flying so he misidentified ordinary lights on the land? Did he become so confused that he ultimately crashed, leaving no trace? Was he the

unwitting victim of some military operation gone awry? Or did he, in fact, see a True UFO... an object, probably intelligently controlled, which lies outside our realm of comprehension?

Most of these explanations were advanced soon after his disappearance. In Part II, author Haines explores each of these explanations in more detail. He has cleverly woven each explanation into a partially fictitious story that leads ultimately to Frederick's last flight. These stories are so convincingly written that I repeatedly had to remind myself that they were merely speculative and that none was an actual history of the events leading up to the disappearance. (The story about possible military involvement is particularly intriguing and could form the core of an exciting novel or movie.)

After each story the author discusses his reasons for accepting or rejecting the hypothesis upon which it is based. Although Haines has made no definite statement as to which reconstruction is, in his opinion, closest to the truth, he has indicated which of the four he thinks are the least likely.

After you read the evidence put forth here and the discussions of the possible explanations it will be up to you to decide what happened to Frederick. As you make your decision keep the following facts in mind: Frederick disappeared in October, 1978, and has not been found; no evidence that his plane crashed into the water has been discovered; neither an abandoned plane nor the wreckage of a plane at some remote site in the vicinity of Melbourne, King Island or Tasmania has been discovered; and finally, what makes this event different from the "average disappearance" are Frederick's last words to the air traffic controller, when he described an unusual object which he said was *not an aircraft*... and that makes all the difference.

Bruce Maccabee
December 1985

PREFACE

Trying to piece together the facts of an event that took place many thousands of miles away and several years ago is like a man searching for old buried coins using an unreliable metal detector. First of all, one is not sure where to begin looking, and thus often just begins somewhere. Second, one is not always sure that the detector is working correctly. At times it might be properly tuned to signal the location of some magnificent coin lying deep underground while at other times it may not work at all causing the would-be prospector to bypass even the most obvious of treasures. As the prospector, the field investigator must be as systematic as possible, carefully swinging his detector over even arcs as he goes along so as to not miss something of value. All of this takes time. This is why the author waited so long to complete the present book. There is little reason to believe that any new or significant data will be forthcoming which would delay this publication further.

The prospector must also know something about the limitations of his metal detector. Its effective detection area and optimal separation from the surface of the ground play a part in locating metal. These are some of the thoughts which came to mind as I contemplated writing about the mysterious disappearance of a young private pilot near Melbourne, Australia. I wondered whether anyone would still be interested in this story after some seven years, anyone that is, except the young man's family and friends who still await his return.

Now, in October of 1985, although time has covered many tracks, I have decided to share the buried coins that I have unearthed. Here, in a simple narrative form, are the facts for you to ponder. Here are the documented details as best as I could retrieve them from the memories of people who were involved as well as from newspapers and numerous reports of the disappearance by UFO study groups. Here also are copies of the original correspondence I had with Mr. Guido Valentich, the pilot's father, Kenneth Williams, the official spokesman for the Australian Department of Transport who conducted the search phase, and

many others both here and abroad.

As a research scientist by profession, I have never considered this (or any other) UFO case closed simply because we do not know what we are searching for. The UFO enigma remains just that, a baffling mystery for mankind. And the Valentich disappearance seems to involve a UFO, at least at first glance at the headlines and perhaps the wishful thinking of numerous devotees of the subject around the globe. I like to think that one must have all the evidence before selecting the final and best-fit explanation to some phenomenon. But this is not possible here since the pilot and his plane disappeared *completely*. No trace has been found. And so the case must remain open, at least from an official governmental point of view. But to those who cared the most for this aspiring young pilot, his parents, his brother Richard and twin sisters, Olivia and Laura, and many friends, the case closes itself off with each succeeding day.

The media madness has subsided now and the world has largely lost interest in this fascinating case. Things appear to have returned to normalcy at the Valentich' home; the curiosity seekers have gone away from their cream colored brick house in Avondale Heights, a suburb of Melbourne. The UFO investigators have, by and large, gone on to other cases. Yet our individual memory remains in addition to our collective memory which lies in the "morgue" files of newspapers around the world and in scrapbooks of clippings and letters. Because of these personal memories and some very haunting aspects of this bizarre case, I could not follow the same course of action as others had and simply move on to another UFO case. I felt a strong urge to dig a little deeper, and then dig deeper yet, into what allegedly took place. Call this urge curiosity or perhaps some simple ideosyncrasy. It really doesn't matter now.

Almost in mirror reversal to the steady decline in public and private interest in this case was a steady increase in my own involvement. Almost every week someone would send me a piece of news that somehow fit into a larger patchwork quilt. A quilt that could not be layed out nicely over the region extending from Tasmania to the south to Alice Springs at the north. The quilt had to fit over the whole of Australia and the United States too.

Indeed, this quilt was extremely thin in many places. Nevertheless, the facts should speak for themselves.

Finally, I have employed a narrative style here as if I were actually in the presence of Frederick Valentich and others during the event. To those readers who may be accustomed to a more scientific, dry documentary style this approach may seem less accurate than otherwise. Nevertheless, I felt that this particular case involved more subtle aspects which a concise, purely factual style would either de-emphasize or tend to omit altogether. I also attempted to place the reader in the probable emotional state of the young pilot prior to and during the alleged aerial encounter. Unless he is (hopefully) found alive and can give us his own version of what took place, we are at a terrible disadvantage in attempting to achieve total accuracy. This is another reason for using a less formal presentation style.

Richard F. Haines
Los Altos, Calif. 94022
October 21, 1985

DEDICATION

This book is dedicated to the entire Valentich family. To them go the genuine and heartfelt concerns of thousands and thousands of families around the world who have also lost a loved one during air travel. The natural grief that Mr. and Mrs. Valentich have suffered and their faith that their son might someday return has not dwindled. Indeed, it has served to encourage others in their own times of loss. And so I dedicate this book to this brave family that became the center of world-wide attention for a time. I would only hope that something I have written here will comfort them.

ACKNOWLEDGEMENTS

In a case such as this it was necessary to collect most of the facts through UFO investigators, official personnel of various agencies, and family and friends of Frederick Valentich. I am particularly endebted to Paul Norman, vice president of the Victorian UFO Research Society, Guido Valentich - father of the missing pilot, Kenneth Williams, Assistant Director of Public Relations of the Department of Transport in Melbourne, James J. Kibel of Victoria, Dr. Michael Duggin of the Minerals Research Laboratories, North Ryde, N.S.W., R.K. Stibbs, Bureau of Meteorology, Melbourne, Keith Basterfield, Joel Bartlett, KPIX (Channel 5) TV, San Francisco, Allan Hendry, Center for UFO Studies, Evanston, Illinois, Flemming Ahrenkiel, Scandinavian UFO Information, Denmark, W. C. (Bill) Chalker in Australia, and the many others who played some other role in supporting the research.

For their painstaking and dedicated help in reading the text and making helpful comments, I wish to thank Liz O'Lourie, Ray McWard, James McCampbell, Chuck Kubokawa, Steven Kiefel, and my wife Carol. Their efforts have helped make this text far more readable and accurate than it otherwise would have been. In a more technical vein, I am grateful to Mike Przekop for his excellent artistic rendering for Figure 9, to Kal Korff of Kensington Press for his helpful suggestions on the cover layout, and to Markham Dawson of Markham Marketing Group for valuable marketing and advertising insights. And last but by no means least I am very grateful to Carolyn Cole for the heroic job she did in transfering often unreadable page text to type.

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PART ONE

This part of *Melbourne Episode - Case Study of a Missing Pilot* presents all of the relevant background data upon which the narrative and conclusions of part two were drawn. It is as factual as possible under the difficult circumstances of being separated so far from Australia and of not having access to critical official documentation and other details. Since neither the young pilot nor his airplane have ever been found, the reader must draw his own conclusions. Hopefully, part one of this book will help in this task.

Chapter 1

A Distant Mystery

It was Monday, October 23, 1978. I was finally home from work and tired from a long day of technical meetings at my office, meetings which lasted far longer than they should have. Being a project coordinator for an inter-governmental technical evaluation project for the previous year and a half was a demanding task that I had become accustomed to by now. It seemed as if there were two or three meetings every day of every week. The one highlight of the day was a demonstration of a new color cathode ray tube display by personnel of a local Silicon Valley electronics manufacturing firm. All in all it was a typical Monday.

I picked up the Palo Alto Times newspaper lying in the driveway, took it inside the house, and set it on the entry table while I hung up my coat. I loosened my tie and looked forward to a quiet evening. The subject of UFOs was the farthest thing from my mind that day, particularly since it had been some time since there had been any prominent cases, both in the San Francisco Bay region, as well as the entire United States. There was no reason to suspect that this day would be any different. Little did I know at that particular moment that a small, five by five inch article on page 1, folded just out of sight by our conscientious paperboy, and entitled "It Isn't an Aircraft. It's ... Pilot spots UFO, then vanishes"... would lead me on a long and complex path of investigation. This path would lead almost halfway around the world by letters, telegrams, and phone.

The customary and welcome greeting from my wife Carol, awaited me. "Dinner's almost ready," and I answered, "Hey, that's great hon', because I'm starved. I didn't get any lunch today." She always seemed to know what I liked to hear when I got home. After this somewhat traditional greeting at a distance I gave her a hug and a kiss and looked over her shoulder at the pans on the stove. It's really hard to be double minded when you're

hungry. It was after five o'clock and we usually ate shortly after that. This allowed us long evenings together as a family to watch the local and national news on TV, read the paper, and then go on to other hobbies. Our two girls, ages eight and eleven, would trudge off to do homework or perhaps practice the piano for as short a time as possible. Carol would get into some project like sewing or reading, and I retreated to my study where I could regroup my thoughts and let down for awhile. I could take a book down from the shelves that lined one wall and browse over something of interest. It seemed that I always had something at one stage or another of completion - usually on the subject of unidentified flying objects (so called UFOs). I had committed a good part of the past two years writing two technical books on this little understood subject.

As I washed for dinner I thought back to the previous Saturday and my meeting with Peter Sturrock at Stanford. It was at my home, just a few miles from the campus. We met to discuss how the American Institute of Astronautics and Aeronautics' study group on anomalous phenomena, of which he was the chairman, might further contribute to broadening membership awareness about UFO phenomena. I remember our discussion of possibly holding a national meeting with various speakers presenting both the "pro" and "con" sides. We also talked about preparing a joint article for their journal *Astronautics and Aeronautics*. Would it be possible to find a sufficiently documented UFO case to challenge formerly uncommitted scientists and engineers to study the phenomena on their own? This question had been the focal point of numerous other meetings held at Stanford University during the preceding year.

My thoughts were interrupted by the laughter of Cindy and Laura in the hallway as they pushed and shoved each other playfully in the direction of the warm and aromatic kitchen. Then Carol's voice was heard, "Honey, come to dinner, girls come now."

It didn't take long for us all to pull our chairs up to the table, give our usual table blessing, and dig into another fine meal.

After dinner we moved to the family room to watch the six o'clock local news from a San Francisco station. At times in the past, when it wasn't particularly interesting, I would pick up the newspaper and browse over the headlines; that was the case on this Monday night. As I unrolled the paper the three bold letters UFO jumped out at me. Immediately my mind shut off the blare of the TV as I read the incredible tale. It was a front page story about a UFO sighting in our highly conservative local newspaper! "It really must have been considered something newsworthy for them to print it at all, much less on page one," I thought to myself. *(Note. A copy of this article is found in appendix 1 at the back of this book as are other letters, charts, and special material).*

Just as I finished reading the news story and was reading it a second time the voice of the newscaster broke through my attention-shield with the same letters...UFO.

"What did he just say?" I asked Carol, sitting beside me on the couch. What's he talking about?" Then, before she had a chance to answer the announcer went on. He gave almost the same facts, in the same exact order, as I had just read in the United Press International account, dateline Melbourne. While I hoped that he might give some new information about the case I knew inside that he would not. There couldn't have been enough time to change the basic story...unless in the intervening half day or so between setting and printing the type and delivering the newspaper, the young pilot had been found. Inwardly I hoped that the announcer would give an "up date" on the story as he liked to call them, even though I had learned that an "up date" was usually only a story rewrite without any new information. Nevertheless, I was still disappointed when there was nothing new.

The TV cameras shifted to a second announcer. As she told about a local news event my mind was still back in Melbourne where a young private pilot was probably dead or almost dead in the cold waters of Bass Strait, southwest of Melbourne. My thoughts were stuck on Frederick Valentich possibly clinging to some wreckage in waters I knew almost nothing about. What if it was a shallow area and he was just sitting in his airplane waiting for rescuers to come and pluck him out of the mud? Where in the world was King Island? Where was Cape Otway? Was it a part

of King Island or on the mainland of Australia? I became aware of how dreadfully ignorant I was of the geography of that area.

As had happened before, when reading about other strange aerial encounters pilots had had with UFOs, I thought how I might go about investigating the event. First there would need to be initial letters that would "break the ice" and let the recipient know that I was genuinely interested in their concerns and not just wanting to make a buck. Then there was the waiting. This was perhaps the hardest part of the investigation. And there would be other chains of correspondence with field investigators who I knew in Australia. Flight-path reconstructions, a procedure familiar to accident investigators world-over, would have to be attempted. Having completed several field investigations in the past involving aviation accidents, I was familiar with the level of detail the National Transportation Safety Board goes into during its investigation of accidents in the United States. Perhaps the Australian authorities did the same thing and would send me their findings. These were some of the thoughts I had then.

As I remember back to that Monday night in October, I recall feeling an excitement about this case. There was a sense that it might represent a good solid UFO sighting which I could "get into", so to speak. Some UFO sightings are of such a nature that I just cannot get very excited about them. Others seem to carry certain subtle marks of authenticity about them. Somehow I sensed that this shocking pilot disappearance, a story that splashed itself across the headlines of almost every major newspaper in the free world, held a treasure of interesting and even exciting information.

Perhaps one's sense of awareness of what constitutes a good UFO sighting is inborn, but I doubt it. I think it is more likely the result of a lot of serious reading and thinking about past cases, and just as much talking about them with others. It also involves having carried out your own investigations and talking with real live eyewitnesses who have confronted the "phenomenon" themselves. Wherever that awareness comes from, I felt that this was truly a sound case the moment I read the UPI release. It was right then that I knew I would become personally involved in studying what had happened.

By October of 1978, I had already spent a lot of time, money, and personal energy collecting and analyzing UFO sightings by pilots; indeed, I had almost 2,800 such cases. Here was yet another one! Like many of these previous cases the pilot was not available for comment or interview. "But," I thought to myself, "...there is a voice tape available of the last few minutes of the event. Surely it will be helpful in shedding more light on what really happened. Certainly a careful analysis of this Flight Service Center tape will disclose something new and possibly significant about what took place." Many different thoughts filled my mind that evening back in October, not the least of which was how would I find the time to launch into yet another investigation?

"Time? Well, there's no time like the present," I thought to myself, half concerned that Carol might also sense my rising excitement about this event. She was probably more aware than I was that I would be spending more evening hours in my study working through the myriad details of this case. But, being a bit of an "old professor", I didn't give much thought to that aspect of it. I got up from the couch after the news and went into my study. I closed the door quietly to begin my peerings into a distant mystery.

Chapter 2

The Correspondence and Homework Begin

The first letter I wrote concerning this event was that same evening, October 23, 1978, and was addressed to the Director, Flight Service Control, Melbourne Airport (copy included in appendix 2). Luckily I found a sheet of stationery from the Center for UFO Studies, for which I served (and still serve) as a scientific consultant and advisor. I used this letterhead thinking that foreign officials do not like to do business with private citizens of other nations, much less with people without any credentials. So I carefully asked only for the most general information on the disappearance, hoping that my request would be honored and that I might establish some degree of credibility with them for possible future use. *(Note: A formal reply to my letter was never received from the Australian officials. Whomever received my letter apparently forwarded it to Mr. Guido Valentich, father of the missing pilot, because he wrote me a letter dated November 20, 1978 (Appendix 3) in which he referred to my letter in detail. This is how I learned of the address for the Valentich Family in Melbourne.*

That same evening I also wrote a letter to a UFO investigator in Lane Cove, New South Wales, the province lying just north of Victoria province in which Melbourne is located. I had no way of knowing if he could or would respond to my request for all available information nor when he might send it, but I really didn't know where the best place was to begin my search for information. It is only through past experience, involving trial and error, that one knows who to contact for such information. There is no substitute for experience.

The next four days went as rapidly as that Monday had for I seemed to have entered a time warp. The days literally flew by. It seemed that as soon as I arrived at my office and unloaded my briefcase of papers from working at home the previous night, it was time to leave for home once again. In addition, my boss was

leaving for Washington, D.C. and I had briefing materials to get ready for him.

Thursday, October 26th arrived and I was feeling under the weather, so I stayed home trying to shake a lung congestion which caused me to cough and sneeze every few minutes. Even though I was feeling somewhat better the next day I thought it would be best to make it two days and spare my co-workers the chance of catching what I had. I was feeling well enough in the afternoon to do some reading so I went back over a clipping from the San Jose Mercury newspaper of October 24th about the missing pilot. Its dramatic headline read "Australian pilot disappears following 'UFO' encounter." It was pretty much the same coverage that I had read on Monday but comments made by the father of the pilot were missing. Both articles seemed factual, as far as I could tell. The article recounted only briefly how twenty year-old private pilot Frederick Valentich had been flying a rented Cessna model 182 from Melbourne to a small island about half way to Tasmania and back at dusk. He had radioed ground authorities that he could see an unidentified aircraft with a green light that was apparently metallic on the outside. It seemed to approach him. Ground control told him that there was no known air traffic in the area below his approximate altitude of 4,500 feet. But he disagreed. Apparently, he went on to describe other things that happened over a six minute period of time.

I had the impression that newspaper reporters were simply not trained, or had insufficient time, to seek out the really relevant information in a case such as this; afterall, they have to cover all kinds of stories and cannot be concerned with the countless details related to aircraft engine operation, aviation practices, atmospheric conditions, UFO lore, and the like. Over the next several months I came to see that I was wrong. As the newspaper clippings continued to arrive from friends and strangers around the world, I gained a new respect for the profession of journalism. When the newsman was an investigative journalist it was usually obvious.

From that first night that I learned about this case until November 26th when a letter arrived from Mr. Guido Valentich, the father of the pilot, I was unable to do very much. It was a frustrating time for me since I knew from previous cases that the

trail can grow cold quickly. Each day that passed left me with the feeling that I was missing out on a drama of unknown but probably truly significant proportions. Something had taken place not only off the southern coast of the mainland that night but also continued to occur at King Island and over much of the southern coastal region.

During the last week in October and the first two in November I got out all of the charts and books I could find on, what was to me, a lost continent. I knew that Australia was a big country but I didn't realize just how big! Stretching from the tenth to the thirty-eighth latitude, some 2,100 miles north to south and from the 113th to the 153rd longitude, about 2,500 miles east to west, Australia comprises 2,974,581 square miles compared to America's 2,977,128 (not including Alaska or Hawaii). Australia's land mass is about the same size as our own but with only about fourteen million inhabitants. If each Australian were given a plot of land of the same size he would have about 136 acres. I also found out that most of Australia's population live in concentrations along her coasts rather than in the "out back". Much of the inland region is a gigantic plane of desert lying generally north and south through the central portion of the land mass. There are relatively few towns or settlements scattered across the interior. Strange sounding names like Kalgoorlie in Western Australia and Oodnadatta in South Australia, like Betoota in Queensland and Alice Springs in the Northern Territory jumped out of the maps before me. At this point in my study they were only tiny dots on the paper, quaint names with unknown meanings which seemed to have little significance to what I was beginning to study. Not until a year later was the bustling town of Alice Springs to enter my mind again, but for quite another reason.

I discovered a range of mountains, called the Great Dividing Range, that runs parallel to the Eastern coast of Australia only a few hundred miles inland. Its peaks were over 24,000 feet high and the skiing is said to be great in the "Australian Alps."

The more I read the more fascinated I became. Australia is a land of immigrants from almost every nation in the world as well as a land of almost prehistoric peoples, continuing to live as they did thousands of years ago. In distinction to America, however,

Australia has no predominant dialects across its vast expanse. Everyone would sound pretty much alike to an English speaking visitor. The third largest Greek population in the world lives in Australia. Many other nationalities also came to Australia for many reasons to lend their cultural delights to this relatively young and vigorous nation. I learned that there were many people of Italian descent living in Australia, having come during the first and second world wars and that the family name "Valentich" was Italian. Could there be some connection here? At this point I could not be sure.

My studies also took me to Tasmania, actually a large island lying almost due south of Melbourne, and to King Island, a tiny jut of land with an airstrip and fishing villages. I knew that Frederick Valentich had planned to land at King Island on the night he disappeared. But the more I studied these maps and atlases the more I found myself focusing on the Melbourne area itself. This was where the young pilot started his journey. Fortunately, a friend had mailed me a highway map of Victoria province; it was very helpful.

Paul Norman, vice-president and very active member of the Victorian UFO Research Society had been kind enough to send me information concerning an analysis of this event which his organization was preparing. I learned that many people had witnessed strange lights in the sky that same night. The map Paul sent also helped make other details clearer. Melbourne, a seaport located at the northern-most part of the sheltered Port Phillip Bay, was first discovered by Lt. Murray in 1802 and officially proclaimed a town some 33 years later. It served as the country's capitol from 1901 to 1927 when Canberra was selected as its permanent site. All this information came from my motoring map!

Another close friend who was a Pan American Airlines B747 pilot supplied me with high and low level radio navigation charts for the air route he travelled. I looked through my library and found Jepco Avigation maps 11 and 12 High/Low Altitude Enroute Charts dated August 6, 1976. They covered the area in which Valentich had disappeared. Now I knew the exact location of all navigation beacons, minimum altitudes, commercial air routes to and from Melbourne, restricted air spaces, and scores of

other useful facts. Whereas the road map had indicated man's surface travel routes, these charts showed me how he followed equally defined routes through the sky. The shorelines on these aerial charts were only faintly visible in light green, suggesting that commercial pilots fly more by radio assisted navigation than by eyesight. As a would-be pilot myself, I could appreciate the need for such charts where the darkness of night and bad weather often totally obscured the ground. Modern aviation had gone through a revolution in the past several decades. Pilots could still fly by so-called "visual flight rules" (VFR), if local weather conditions and their training permitted. VFR flight requires that pilots have visual contact with the ground at all times and, while they can refer to their own flight instruments, they are not required to.

The radio navigation charts were specially designed to aid pilots who flew long distances over unfamiliar or featureless terrain in all kinds of weather and visibility. I began to wonder how much prior flight experience and specialized training Frederick Valentich had had before his seemingly last flight? All the news articles said was that he had been flying for 18 months before the disappearance.

November 26th brought a letter from Guido Valentich dated November 20, 1978 (see Appendix 3) in which he said that my earlier letter to Flight Service of October 23rd had either been forwarded to him or its main contents had been told to him. He kindly offered to cooperate with me to "...solve the mysterious circumstances surrounding my son's disappearance... my family is still waiting and hoping for his safe return." He also sent a copy of a Sunday Press (Melbourne) article of October 29th entitled: "VH:DSJ What the Pilot Reported." (see appendix 4). Mr. Valentich's letter did not include a photograph of his son (as indicated in the letter) but rather a photo copy which was pasted over the photo in the clipping. Later I discovered that the family had been visited by many investigators and reporters soon after the event and that the family had given all available photos of Frederick to them.

As is the case in almost all UFO investigations, each new piece of information seems to raise more questions than it lays to rest. This certainly was true for the reported conversation between

Frederick and Mr. Steve Robey, the flight controller on duty that night at Melbourne's Tullamarine airport. This story immediately grew even more bizzare and unbelievable than it had seemed at first.

Chapter 3

Beginnings of a Tangled Web

Time has many ways of teaching us wisdom. No one could have written anything definitive about the disappearance of Frederick Valentich soon after he radioed the final fateful call sign that identified his own aircraft, "*Delta Sierra Juliet - Melbourne...*" at 7:12:28 pm local Melbourne time. The authorities at Melbourne's international airport had acknowledged hearing the young pilot. Indeed, an extensive search and rescue operation was carried out. If some wreckage, or the pilot's body, or some electronically generated 'bleep' from the on-board emergency locator transmitter (ELT), had been picked up by someone then something definitive could have been written. But nothing of the sort has happened. However, in the Winter of 1979 I learned of some interesting events from a close friend who was personally involved in UFO studies, events that kept pointing away from the Melbourne area, toward the very center of Australia.

The town of Alice Springs is situated almost on top of the Tropic of Capricorn and virtually mid-way between the East and West coasts of the continent. Mountain ridges of the Macdonnell Range span the area and rise at most several hundred feet above the plain. Mt. Ziel, barely 1,500 feet high, lies about ten miles west northwest of Alice Springs and Mt. Olga, only 1,042 feet high, is some 25 miles southwest of the town. The barren Simpson Desert lies East and South a hundred miles or so, while to the West lies the Gibson Desert. To the North is the Tanami Desert and to the South southwest is the Great Victoria Desert. In short, Alice Springs is surrounded by vast arid regions populated by few animals and fewer humans.

In the old days Alice Springs was a natural oasis for the weary traveler. A resources map of the country shows that the region around "the Alice", as it is called, is used for raising cattle and smaller animals and contains such minerals as mica, tungsten,

copper, gold, and perhaps uranium. Barely fifteen miles southwest of Alice Springs lies a number of long, low, white buildings and a cluster of domed structures. It is here that my interest was drawn for a number of reasons and it was here that a very strange story allegedly arose.

According to a newspaper article, a newspaper at Perth received two visitors one day who had allegedly worked at a super-secret installation near Alice Springs. Known as "Pine Gap", this huge complex of high technology computers, antennae, and top security was almost entirely populated by Americans. Their families lived in the burgeoning town of Alice Springs. These two men walked into the newspaper offices telling the most incredible story imaginable. They spoke of electromagnetic devices which manifested themselves as unidentified flying objects and even alien beings at Pine Gap. Were these two men purposely sent out as "plants" to somehow divert or diffuse the public's growing attention about the U.S. run operation there? Were they telling the truth and, if so, was there any coincidence in the release of such incredible information when they did? While I struggled with these and other questions I found my attention swinging toward central Australia and away from the disappearance of a single engine plane and its sole occupant, away from a sensationalistic banner headline that had caught the imagination of much of the world - as subsequent clippings would prove - to a highly secret research center with truly international implications.

I began to read everything I could find on Pine Gap. Personal research by a colleague who had looked into the subject was made available to me. Eventually I obtained an advanced copy of a book that described not only Pine Gap but virtually all of America's military installations in Australia.[1] There were also numerous journal articles by investigative reporters and others who attempted to peek beneath the wraps of joint Australian - American security. Some of these articles are referenced later for those who may be interested. The more I learned about this facility the more I began to see that truth is stranger than fiction. If what I was learning about Pine Gap was true then it was not difficult to accept a lone, private pilot's eyewitness description of a strange aerial phenomenon buzzing him.

In his carefully documented book, Desmond Ball suggests that there continues to be a strong American presence in Australia, with perhaps as many as twenty installations there! While my initial interests in super secret bases was based entirely upon curiosity, these interests began to shift gradually into other seemingly unrelated areas as well. Little by little the pieces began to fit into a larger puzzle. A diffuse outline had begun to take shape, an outline that seemed to implicate the Central Intelligence agency (CIA), a U.S. Congressional Subcommittee,[2] and even America's Space Agency. Why would all of these diverse organizations, representing so many different interests, be connected? And how could any of them ever be shown to be implicated (if they indeed were) in the disappearance of a private pilot many miles away?

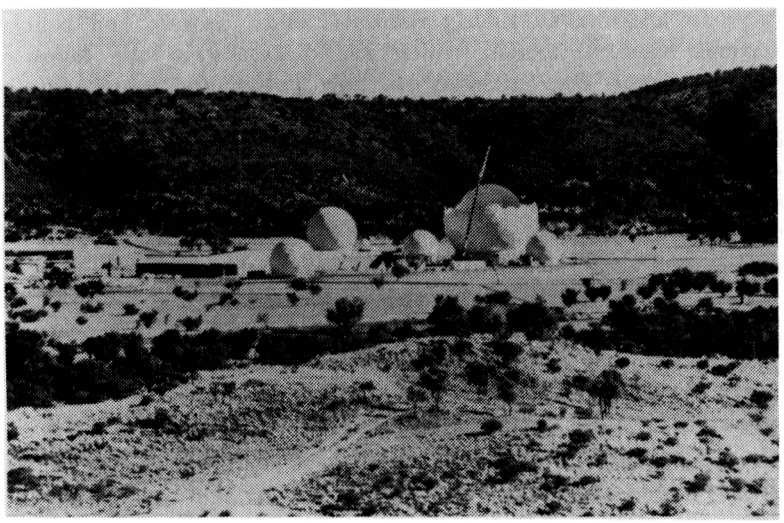
Some Americans are probably familiar with the name Woomera, since it served as one of the U.S. space program tracking stations. This large antenna tracking station is located about 315 miles NW of Adelaide and is officially operated by the U.S. Air Force. Few people know that Woomera is only one of two installations jointly known as the Joint Defense Space Communications Station or JDSCS for short. Pine Gap is the other. Each of these two American facilities has yet another name to a select group of Australians and Americans. This name is the Joint Defense Space Research Facility. Woomera's code name is 'Casino,' Pine Gap's 'Merino.' Woomera is also known by its Australian name Nurrungar and is located at 136.46 E longitude and 31.19 S latitude. Let us first review the Pine Gap installation, however.

Figure 1 is a photograph of Pine Gap taken in mid 1978 with the sixth and latest radome still under construction. According to a Defense Press Release number 194/67 of November 8, 1967 there is a seven square mile buffer zone around Pine Gap ostensibly to reduce electrical interference. Commonwealth Police and security guards maintain a 24 hour a day patrol along the two security fences. Recent concern has been expressed over Pine Gap's vulnerability to sabotage or wartime attack. This concern prompted then President Carter to order a multi-million dollar expenditure to update the facility. The expendature was included in his 1982 plans to modify the "sensors during an exhaustive overhaul

program which would involve 'substantial enlargement of the site', a Pentagon source said."[3]

Figure 1

Pine Gap Installation



Yet perhaps more important to the security of the base than the land surrounding it is the airspace above it. Under the Minister's declaration, aircraft may not fly over the prohibited area. The Civil Aviation Department has also issued regulations such that the air traffic controller at the Alice Springs airport is not permitted to allow aircraft to fly within a radius of four km of Pine Gap.[4] According to an article in the *Sun* by Toni McRae, "private aviators are smartly discouraged from flying directly over the base by lookouts with quick access to intercepting aircraft."

While photo reconnaissance experts can learn a great deal from photographs taken from high flying aircraft the ultra-high resolution now achievable from orbiting satellites make it possible

for other nations to learn valuable secrets about Pine Gap without having to fly aircraft over it.[5] So what other reason might there be for maintaining a secure airspace over the facility? Could there be testing of advanced weapons going on? Ball has stated that, "Both Pine Gap and Nurrungar have the capability to undertake a wide range of military and intelligence operations in space..." (pg. 58). Whether ground based testing was going on remains to be seen.

In addition to its six radomes which protect and conceal various sized antennae (which are discussed in the following chapter) Pine Gap includes its own power and water supply, laboratory and computer facilities, support facilities, and luxury accommodations for 115 Americans and Australians who live on the base in six motel-like units. Supposedly there is a week's long supply of food as well. Analysis of the average weekly water use rate at Pine Gap shows it to be about 2800 kl. One investigator has argued that the facility has its own nuclear power generating station.[6] Desmond Ball takes the opposite view. Yet despite these highly advanced facilities the question remains, what is going on inside Pine Gap? A review of who is manning the facility and some of the known equipment there may help unravel this knotty question.

Ball's review of Pine Gap points out that three U.S. Intelligence organizations are involved: the National Reconnaissance Office (NRO), the Central Intelligence Agency (CIA), and the National Security Agency (NSA). In addition, U.S. Air Force supply aircraft (including the C-5A Galaxy transport) fly a regular weekly schedule into Alice Springs from California. Also, when the first agreement was signed in Canberra by Australia's Minister for External Affairs, Paul Hasluck and the Councillor at the U.S. Embassy, Mr. E.M Cronk on December 9, 1966 Pine Gap was to be operated by the Pentagon's Advanced Research Projects Agency (ARPA), a known CIA cover organization. "All of the chiefs of the facility have been senior CIA officers, " according to Ball (pg. 63). An article by senior aviation editor for *Aviation Week and Space Technology* magazine, Philip J. Klass indicated that U.S. Air Force personnel were also stationed there "to perform certain critical satellite control/relay functions." This type of

staffing points to an intelligence gathering function along with a possible ability to actually control certain satellite functions from the installation. A direct satellite communications link with CIA headquarters in Langley, Virginia (supported by TRW Systems) further supports this first function. Both Pine Gap and Nurrungar have a direct communications link with the Department of Defense in Canberra.[7]

But what about the equipment in the Pine Gap area? Relatively little is known for certain. Again, Dr. Ball reviewed in detail the U.S. 'Oak Tree' operation at Alice Springs which was put into operation shortly after 1955 and publically disclosed only in 1973. This U.S. Air Force operation employs an array of 19 seismometers in a large circle of about ten square km. These sensors are appropriately adjusted to pick up both long and short period vibrations, clearly in line with monitoring atomic tests as well as earthquakes. An average of 2,100 seismic events are recorded every week!

At Pine Gap itself there are six radomes ranging in size from 110 ft to less than 20 ft in diameter. A large solid tower more than 90 ft tall is located about 1000 ft west of the main facility. Its use can only be guessed at, namely radio frequency control, calibration of the antennae beam patterns, and telemetry orientation. A high frequency antenna at the northerly boundary of the property is the only non-satellite communications system. According to Dr. Ball it operates on 14 different frequencies and was registered with the International Telecommunications Union on February 25, 1969.

One of the low buildings housing the computer center has been estimated to be about 45,000 square feet. The computers were supplied by IBM and E-Systems in Texas. It is also known that IBM 360/75J digital computers were in use there... which indicates that it has a large central processing unit to perform highly complex calculations quickly.

It is likely that there are optical systems for tracking satellites at Pine Gap as there are at Nurrungar. One is a satellite laser pulse ranging system and the other an older Baker-Nunn Camera SC-23. One source indicated that a command and control

room was located many stories underground.

From the standpoint of tracking aerial objects such as missiles and other moving phenomena two ground tracking stations are better than one. The second such station of the JDSCS is at Woomera about 550 miles to the south of Pine Gap. This "base" leg is long enough to provide good triangulation ability when coupled with excellent communications and data transfer capability.

Nurrungar, as it is called, was formally established by an agreement reached on April 23, 1969. The site has two large radomes and two large buildings and is situated in a valley with hills several hundred feet high on each side.[8] Nurrungar was identified as the second facility of the U.S. Air Force's Space and Missile Systems Organization (SAMSO). The other (main) facility is at Buckley Field, Colorado.[9] The possible significance of this may lie in the fact that NSA representation is extensive at Buckley Field.[10] Thus, both Pine Gap and Nurrungar are but important links in a far larger chain of U.S. military intelligence installations. While it is becoming clear from numerous sources that the chief role played by the Nurrungar facility is that of supporting the U.S. Air Force's integrated Missile Early Warning Satellite System,[11] it may also serve in other capacities as well. Perhaps it is participating in field tests on how to provide more protection to our ground stations against counter-attack. Author Reinecke (Ibid.) pointed out that back in 1976 a group of U.S. companies (possibly TRW Space and Defense Systems, Honeywell, and IBM) were studying the possibility of developing small processing stations containing a satellite communications module and a data processing unit. The availability of transportable communications centers could, in the words of a December 1974 article in *Aviation Week and Space Technology* , "...relieve dependence of command authorities on one or both of the existing ground stations (Nurrungar and Buckley), particularly the politically controversial site in Australia."

In my opinion this work has progressed well beyond just a mobile communications and data processing capability. As is suggested in chapter 13, there is the possibility that actual field tests have been carried out with mobile stations which include some type of high energy offensive weapons.

In this brief chapter I have concentrated upon several specific ground facilities. In the next chapter is information on technological developments taking place at higher altitudes. Whether or not there is any relationship between this information and the disappearance of Frederick Valentich remains to be seen.

Footnotes

1. Ball, D., A Suitable Piece of Real Estate - American Installations in Australia. Hale & Iremonger, Sydney, 1980.

2. Government Activities and Transportation Sub-committee, 96th. Congress, U. S. House of Representatives.

3. Rothwell, N., U.S. to update Pine Gap defence post. The Australian, Melbourne, August 27, 1980.

4. McRae, T., Sun, Melbourne, page 4, March 13, 1973.

5. A case in point is supplied by Paul Kelly who noted in his National article of May 22, 1978 that it was learned during repair of a dome that one of the antennas turned which meant that it could be used to track Soviet and Chinese missiles in flight and perform still other tasks than the one the Australians had been told it was to do, viz., receive signals from a geostationary satellite over Borneo.

6. Cooksey, R., Pine Gap base almost visited. Age, vol. 23, pg. 7, September 1969.

7. Australian Financial Review, vol. 10, January 1974.

8. Northern Territory News, pg. 4, February 16, 1970 and Age, pg. 7, February 16, 1970.

9. Miller, B., U.S. moves to upgrade missile warning. Aviation Week and Space Technology, pp. 16-18, December 2, 1974.

10. New York Times, March 27, 1978.

11. Reinecke, I., Australia's growing role in America's global defence. Financial Review, pg. 2, May 29, 1976.

Chapter 4

Here's Looking at You

It is common knowledge that the world's super powers have highly sophisticated surveillance capabilities today. It sometimes seems as if such capabilities are the foundation upon which national sovereignty is based. It is important for several reasons to (briefly) trace the major developments in America's orbital surveillance capability, particularly through the decade of the 1960s, during which Pine Gap was begun.

Aerospace historians will remember the U.S. Air Force's plans for a manned orbital laboratory (MOL) which would carry two astronauts. Their mission could be any number of espionage or more active surveillance operations. Publically proposed by President Lyndon Johnson in August 1965, the MOL program was unceremoniously scuttled in January 1968, the same year Pine Gap was begun. As originally conceived, the MOL was to succeed the two man Dyna-Soar project, a delta wing air and spaceflight vehicle similar in concept but not in size to the current Space Shuttle. Project Dyna-Soar had been initiated in 1962 and subsequently stopped in December 1965. A fairly consistent train of thought can be seen in these Department of Defense space projects of the 1960s. However, a significant change of emphasis took place in the direction of the design and development of unmanned orbital vehicles.

For reasons too numerous and detailed to retell here, the decision-makers changed directions: if the same or even better surveillance could be achieved from very high altitudes by unmanned and less expensive orbiting satellites why should America send up manned vehicles? This was, no doubt, the fundamental reasoning behind much of the key decisions made in the 1960s. Yet another important factor was that of achieving sufficient platform stability from which to aim telescopic and other sensors. As one aerospace periodical suggested, one of the major difficulties with the MOL

was providing for the necessary degree of pointing accuracy and stiffness with astronauts moving around inside it.

In tune with this reasoning, American aerospace designers and manufacturers developed an ever more sophisticated fleet of space platforms on which they could hang Earth surface surveillance monitoring equipment[1] and perhaps, someday, offensive weapons as well. But any satellite system in orbit must be linked to Earth by a highly efficient and reliable communications system. This is precisely where the numerous tracking stations America operates around the world enter the picture. An abbreviated list of these tracking and communications stations as of the 1960s and early '70s will serve to illustrate the truly global-spanning capability that existed then and is likely to be even wider-spanning today:

Within the Continental U.S.A. : Point Arguello, California near Vandenburg Air Force Base; White Sands, New Mexico; Corpus Christi, Texas; Elgin Air Force Base in southwest Florida; Cape Kennedy, Florida.

Outside the Continental U.S.A. : Bermuda, Canary Islands; Muchea, a small town on the west coast of Australia; Canton Island, a small coral atoll situated about half way between Australia and Hawaii; Kauai Island, Hawaii; Woomera, Australia; and Pine Gap! America's civilian space program administered by the National Aeronautics and Space Administration (NASA) that caught the imagination and acclaim of much of the world's population was actually a proving ground for later military-related communications systems, military missile tracking, and military space vehicle control systems.

About the time I began working as a research scientist for NASA I received a copy of *We Seven,* written by the first Astronaut group. Recently, upon reading through parts of this book, I discovered an interesting chapter by Alan B. Shepard Jr. dealing with NASA's global communications network specially constructed for Project Mercury but which, originally, had been designed as part of a weapons system. He pointed out that, "...of an equal magnitude technically is the world-wide tracking range...especially constructed for Project Mercury." (pg. 261). He went on to say that the direction in which the rocket was launched

was carefully preplanned (taking into account the availability of existing radar and communications facilities in Australia, Hawaii, and the southern United States, and causing the ground track of the flight path to pass across "...friendly land masses all the way - which was a political factor of some importance, since we wanted to demonstrate our peaceful and scientific intentions from the beginning and not let anyone get the idea that we had the slightest interest in high-altitude espionage." (Ibid.) The first time I read this statement it had no particular impact on me. More recently phrases like "communications facilities in Australia," "friendly land masses," and "high-altitude espionage" literally jumped out at me.

Shepard also remarked about the necessity, back in the 1960s, for the ground tracking and communications stations to be "...woven together by a tremendously intricate communications system. This included high-frequency (HF) and ultra-high-frequency (UHF) radio channels which kept the capsule in almost constant voice communication with one station or another." (pg.262) These stations received the data telemetry at a rate of more than 100 bits per second, an extremely slow data rate by today's standards. All of this information was routed to the Goddard Space Flight Center in Greenbelt, Maryland by radio, microwave relay, leased telephone lines, and cable. "The data from the two Australian stations was sent by cable direct to Vancouver, British Columbia, where it was put on leased lines to Goddard. It was also radioed as far as Hawaii, where it was put on the cable line that runs from there to Oakland, California, and then transferred to another leased telephone circuit." (pg. 264) While the total separation distance between all of these NASA tracking stations was 25,000 miles the duplication network of data transmission lines was estimated to be 140,900 miles long! "Wherever two locations are connected by cable, we use a pair of cables, not just one." said Shepard. "We take no chances on not knowing what is going on." (Ibid.)

As I reread these words I became all the more impressed with what was probably going on, only about five years after they were written, at Pine Gap.

The age of the electronic computer and what makes it "tick" - the miniaturized electronic circuit - was still in its infancy in the 1960s. Yet the fundamental computational capability was available then even though it took longer to execute calculations and fewer bits of information could be stored in the computer's memory. Nevertheless, the gigantic computer systems that occupy buildings at Pine Gap have more than likely been continuously upgraded since their initial installation, keeping pace with the state of the art. These early computers could well have performed the fundamental signal encoding and other functions assigned to them; there were also fewer Big Birds hovering overhead in those early days.

Both Pine Gap and Nurrungar are clearly a part of America's "National Technical Means" (NTM), that is, those techniques by which one nation collects and analyzes intelligence on another country. The Strategic Arms Limitations Treaty II (SALT II) prohibits any deliberate concealment activities which may impede verification of one country's intelligence collection capability of another. As one writer put it, this gentlemen's agreement to permit the one to spy on the other in the SALT II Treaty is called an NTM.

National Technical Means range from underwater sensing and transmitting equipment to underground equipment (like that at U.S. Air Force Detachment 421 at Alice Springs related to obtaining seismic disturbances world-wide) to both low and high altitude reconnaissance vehicles of many kinds. National Technical Means requires a well planned, reliable, and closely woven fabric of communication means. It also requires extensive data storage and retrieval systems in conjunction with organizations of people who can correctly interpret all of the information. If a country should find out exactly what its enemy's NTM are, it can take action to build weapons and develop other counter measures to circumvent them.

Serious investigators of what actually took place on the evening of October 21, 1978 cannot afford to overlook any reasonable possibility. With this in mind one can ask whether Frederick Valentich was somehow caught up in a test of America's National Technical Means! This possibility is discussed later.

Footnotes

1. Big Bird: America's spy in space. Flight International, pg. 165, January 22, 1977.

Chapter 5

Saturday Morning

Writing about this challenging case several years after the fact has been both helpful and harmful. While the passage of time makes some trails grow colder, it also allows other seemingly unrelated information to be uncovered. In the past, I have had an opportunity to serve as a field investigator and expert witness in numerous legal cases, most of which involved loss of life in accidents. By practical experience I have learned the usefulness of trying systematically to reconstruct the events which very likely led up to the accident. The same approach seemed appropriate here as well, even though there is no way to be sure that an accident, in the usual sense of the word, had taken place. This chapter documents what I found out. I have only included the facts that I felt were directly related to the disappearance of Frederick Paul Valentich and Cessna 182L which he was piloting.[1] Let us begin with the prevailing weather.

Saturday, October 21, 1978 dawned at approximately 6:05 am local (Melbourne) time as the sun climbed above the hills lying to the southeast of the city. The government meteorologists had called for warm sunny skies with temperatures in the 70s (all degrees will be expressed in Fahrenheit unless noted otherwise) with light breezes from the northerly direction. He turned out to be correct. A copy of a weather analysis prepared by the Bureau of Meteorology of the Australian Department of Science and the Environment after October 21st is included as appendix 5. As this report points out, conditions were perfect for night flying as there was no turbulence and visibility was excellent. "An airborne aircraft over King Is. at 1000 GMT[2] could clearly see the light from Cape Otway Lighthouse," according to the report.

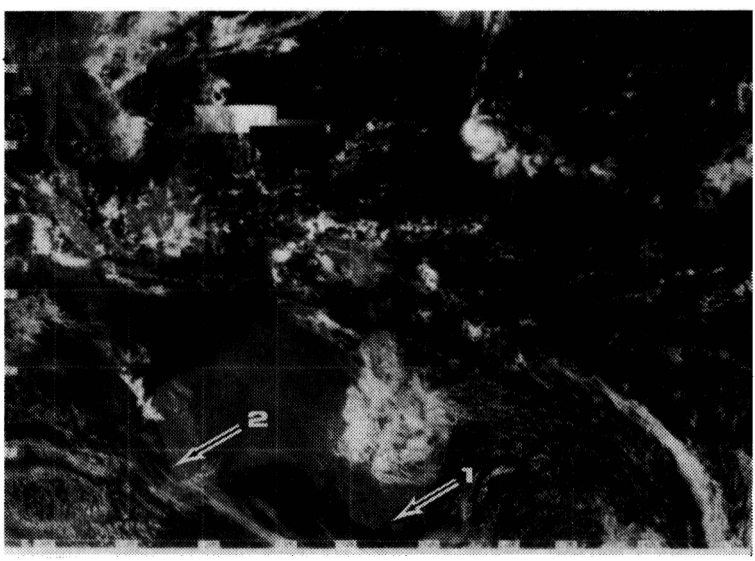
At 5:00 pm all reported surface winds were less than 10kts. Light sea breezes were present along the coast near Cape Otway during the afternoon. There probably were shallow "...inversions

of about 2C below 500 ft" in some areas at 6:00 pm. "With the onset of nocturnal cooling it is likely that shallow surface inversions of up to 3 C developed below 200 ft over the land and coastal fringe by 6:00 pm," according to the meteorological report. [C refers to degrees Celsius]

What was the cloud condition on this particular Saturday? Figure 2 is an orbital satellite photograph of the southern hemisphere taken at 2:25 am local time. Melbourne lies at the tip of arrow 1 and Perth, some 1,750 miles away, at the tip of arrow 2.

Figure 2

Weather Satellite Photo of Southern Hemisphere
for October 21, 1978.



The Cape Otway - King Island region is just visible beneath the tip of arrow 1 near the bottom of the photograph. No clouds are visible within several hundred miles of Cape Otway. Further to the West are long cirrus clouds at high altitude. At 5:00 pm a

trace of strato-cumulus clouds had developed between 5,000 and 7,000 feet altitude in the Cape Otway region. In short, visibility was excellent.

The atmospheric pressure had been fairly high all day long (1023.5 mb) and temperatures were in the 70s in much of the greater Melbourne area. As Frederick was to say later in the day, it would be "a nice day to go flying."

Frederick Valentich awoke about 7:15 am. He got up, showered, shaved, and dressed in a pair of jeans and an open neck blue shirt. "Fred came into the kitchen in a remarkably good sense of humor," his father Guido Valentich recalled. He sat down at the kitchen table at about 8:00 am and ate two pieces of toast with cheese and a chocolate drink. He did not have to be at his work, about five miles away, until 9:00 am. After eating he went back to his room and picked up the $200 (Australian dollars)[3] that he had received from the Royal Australian Air Force (RAAF) officers at Victoria Barracks in Melbourne. The officers had asked him to buy as many crayfish as he could from dock fishermen on King Island, probably kidding him a bit about various techniques he might use to talk the locals out of a wee bit more of their catch than otherwise. According to his father, Frederick also brought his UFO scrapbook with him as he came out of his room. His scrapbook was an "old school exercise book" in which he had pasted and taped clippings from local newspapers and magazines. His father could not remember whether or not his son had read any particular books on the subject of unidentified flying objects but he did remember him having read some books by von Daniken and Immanuel Velikovsky. He had also seen the movie Close Encounters of the Third Kind recently, as so many others in Melbourne had. It was a smash hit there as elsewhere.

Quite clearly, Frederick was interested in the subject of UFOs. As Guido said in a recent letter dated June 24, 1980, Fred and the rest of the family would talk about UFOs "...as an existence", such discussions taking place "...especially when Fred returned from the RAAF base of east Sale." He had spent the usual two weeks in training at the air base in August of 1978, and as Guido explained, "..to me...he was more convinced of UFO existence than ever."[4] In an attempt to follow up on this lead I

wrote to Headquarters Support Command at Victoria Barracks on December 20, 1978 requesting as much information about Frederick's attachment to the RAAF and whether or not he was in a "UFO unit" at the air base at Sale. I also inquired about the prevailing weather, radar coverage from an airbase West of Melbourne (Laverton), and their knowledge about the preparation of an official report on the case. The letter I received from the Public Relations Officer at Victoria Barracks, which was undated but which I received on January 18, 1979, did not respond to all of my questions. This letter is appendix 6. Its writer said, "...you are advised that Mr. Valentich was certainly never in a 'UFO unit' while he was an Air Training Corps cadet; no such unit exists in Australia."

Despite this direct denial, it is a fact that Frederick and his mother had seen a UFO themselves the previous June, a fact that is discussed in more detail later. A newspaper article also quoted his mother as saying, "Freddie was worried that one day a UFO might come down and divide the family...that they might take us away."

At 8:30 am Frederick left his family's yellow brick home on Avern Avenue in the suburb known as Avondale Heights. This is roughly northwest of the downtown center of Melbourne. He would not return. He got into his Fiat 1500 MKIII (1966 model) and drove down to Avondale Avenue toward the south where it intersects Raleigh road. Several miles further it turns into Maribyrnons in the little town of Moonee Ponds. Continuing on east, Frederick passed Epsom and then Ascot Vale where he (probably) turned left. One long block north on Ascot Vale brought him to the intersection of Dawson Street and Mt. Alexander Road or highway 79 as some people called it. Here, on Puckle Street, was the army surplus (disposal) shop where he worked part time.

His boss, Dick Williams,[5] greeted Fred. He liked the young man because he was so reliable, and also because of his pleasant personality, even if he was a little quiet and almost shy at times. A friend of Fred's, Gary Groci, was quoted as saying that he had a "...very stable personality...a very happy family life, a nice girlfriend and was doing what he loved to do, which was flying. He enjoyed life far too much to want to kill himself."[6] Dick

Williams and Fred talked about sports that morning from time to time as Fred checked stock on the shelves, served customers, and swept up. But, as Guido pointed out in a letter (see appendix 7 and 8), he (Guido) and Williams had spoken soon after his disappearance. Williams told him that Fred had been very quiet that morning. According to one source,6 "He mentioned something about flying over to King Island and seemed very excited" to Williams. "I'll never forget his last words as he walked outside. He looked up at the clear, blue sky and said, "It's going to be a nice day to go flying." According to Guido's account (see appendix 8), his son ended his statement with the words "see you Dick."

Dick Williams may have thought to himself that morning, "Now there's a bloke who is going places." Indeed, Frederick had been made assistant manager of the store, one indication of his trustworthiness.

The minutes ticked by slowly as Fred went about his various duties in the store, probably glancing at his wristwatch more often than usual because he was anxious to be taking off for his first night, over-water flight. He probably was carefully thinking over each step of the flight to come that evening. He had flown the same route before during daylight hours and as far as Cape Otway on several previous occasions. He was probably excited by the knowledge that over-water flights at night can be more dangerous than one might think. And he probably was thinking back to his only other night flight which had been between Melbourne's Moorabbin field to Benalla and back, only 80 miles apart and all over land. He had encountered no difficulties on that flight; personal confidence grows in almost infintesimal steps it seems.

Frederick had spent three years as a cadet in the Royal Australian Air Training Corps in West Melbourne. With a longstanding interest in an aviation career, Frederick had taken an important step toward achieving it. Mrs. Guido Valentich (Alberta) said of her son's intense interest in becoming a pilot, "I didn't take much notice until he was 17 and joined the Air Training Corps."[7] Both his parents agreed that from his very first airplane flight at age 12, when Guido and Fred went for a flight out of Moorabbin field, he had his mind made up. "Flying was the thing that made him the most happy. At first we tried to convince him to give up

the idea because we felt it was too dangerous. But he was so keen on it, he eventually talked us into letting him go for his private license." (Ibid.)

Yet something happened when Frederick was 18 that could have played a part in the events that were to take place on October 21st. He applied for, but was rejected by the RAAF for military pilot training. He didn't make it because of his poor fifth form educational level grades.

Footnotes

1. Serial number 182-58572, 1967 model. Information received from the Cessna Aircraft Company by letter dated October 16, 1980.

2. Because time may be referred to here either in local or Greenwich Mean Time (GMT), it is necessary to keep the two clearly separate. All time references that include am or pm notations will be local Melbourne time.

3. Since the official currency exchange rate was about 1.1A$ to the U.S. dollar, this amount would represent about $175.00.

4. Mr. Guido Valentich said that his son did not mention to him having seen any classified materials while at the air base. Nevertheless, another review of this matter published in December 1978 by the Center for UFO Studies (written by Allan Hendry) stated that both Fred's mother and father "...were told that during his time at Sale RAAF base as an Air Training Corps cadet, he had seen classified materials which confirmed his earlier beliefs about UFOs."

5. According to Guido Valentich, Dick Williams sold his shop following a car accident and moved to Adelaide, South Australia.

6. International UFO Reporter, vol. 3, no. 12, pg. 8, December 1978.

7. Ibid., pg. 9.

Chapter 6

Saturday Afternoon

It was probably with a growing sense of excitement that Frederick said "so long" to Dick Williams just after noon and left the store in Moonee Ponds for the drive to his meteorology class at Moorabbin field. He (most likely) drove down highway 79, through the downtown area of Melbourne and on to highway 1. The waters of Port Phillip Bay lay off to his right. The route was very familiar, and somehow the sky seemed bluer today. Proceeding down highway 1, which turns into the Nepean Highway, the whole trip was only about 18 miles.

At about 12:35 pm he pulled his car into the parking lot area at the building in which his class met. Frederick had only two more academic courses to complete for his commercial pilot's license; meteorology and airport legislation. His class did not start until 1:30[1] and he used the time to read in his assigned text dealing with the vitally important subject of meteorology, the study of weather. He was about half way through the 12 session series. Frederick was one of 15 students who were enrolled. The class was organized and presented by personnel of a firm known as "Nimbus Coaching-Meteorological Educators". With their offices located at the main Melbourne airport (Tullarmarine field), this firm provided meteorology classes for prospective commercial and senior commercial pilots. Fred's instructor was Mal N. Glower, an experienced and dedicated teacher. He had taught for many years and took his subject seriously. He did not recall having heard Frederick speak about unidentified flying objects.[2]

When the class finally broke at 5:00 pm Fred chatted with some friends for a few minutes before leaving to file his flight plan which he submitted at 5:20 pm to the Briefing Officer at the field.

Since flight plans play such a crucial role in both private as well as commercial flights for many reasons it is very important to

understand as much as possible about the one he filed. I received a copy of his flight plan in mid September 1980; it is included here as appendix 9.

Using the standard Department of Transport's "Domestic Flight Plan " form, Frederick filled out all of the required information. Since he held a valid class 4 instrument rating, he was permitted to fly at night on instruments. His was to be a "full-reporting" flight which meant that he must contact the civil authorities by radio just after take-off, upon reaching his cruise altitude, and later upon reaching Cape Otway to begin the over-water phase of flight. His flight plan called for an estimated time of departure (ETD) of 5:45 pm from Moorabbin field and a true air speed of 130 kts. He anticipated 15 kt winds out of the north and figured that the 92 miles between Cape Otway and King Island, his destination, would take another 26 minutes. But he didn't give any indication of the course he would follow between the field and the cape! Since it was very important to check whether he called Flight Service at Melbourne at the correct (anticipated) time according to his flight plan and also the probable flight conditions of winds aloft, air speed, and other factors, it was necessary to attempt a detailed reconstruction of his flight as far as Cape Otway. If it could be shown that he indeed reached the cape at the appointed time (with reasonable allowance for normal variation) it would mean that he did not make any significant unplanned "side trips." In short, it would support the overall credibility of his pre- and in-flight planning and subsequent radio communication while over the water. This reconstruction is the subject of the following chapter.

Returning to the flight plan which Frederick filed, it showed that he had taken into account the basic elements of any flight. Another aspect which was specified was the search and rescue (SAR) time he thought was reasonable for his arrival at King Island. Details of the search and rescue operation are given in chapter 15. Suffice it to say that the SAR time estimate is a means by which the authorities know when to begin searching for a pilot if he should not arrive at his intended destination within a certain period of time after his estimated time of arrival. Frederick's flight plan indicated a SAR time of 7:30 pm at King Island.

Use of the flight plan also aids the pilot in planning systematically for visual and/or electronic reference points on the ground, especially at night when what was once so familiar disappears into total darkness and flying can become so treacherous. Experienced airmen have come to respect the flight plan and the careful planning and experience that has led up to its development.

With his flight plan filed, Frederick more than likely drove to McDonald's hamburger restaurant for an evening meal as was his usual habit and then returned to the airfield to fuel his aircraft and perform his normal pre-flight check (see appendix 8).

The young pilot had studied the aircraft's operating manual so many times that he did not feel he needed to get it out of the aircraft for the exterior inspection. He unlocked the left cabin door, got in, and turned on the master switch on the center instrument panel. He noted that the ignition switch was off and visually checked the two fuel quantity gauges which showed that the wing tanks were not full[3] and would need to be topped off. After turning off the master switch he removed the locking device from the control wheel shaft - which prevents the control surfaces from moving in gusty winds on the ground - and placed it in the glove compartment. The next step was to pull out on the carburetor fuel strainer drain knob, located at the bottom edge of the instrument panel just left of the microphone, an action that drains water and sediment that may have collected in the lower sump. Frederick knew that he would have to repeat this after refueling, but he felt a little comfort in carrying out this action at this time since the tanks had not been topped off by the previous pilot. There could have been some water lying there inside the tanks ready to cause the engine to cough or stop completely in flight. One of the problems one has when renting an aircraft is not always knowing if the previous users have conscientiously followed each and every maintenance item. The thought must have occurred to Frederick many times how he would have liked to own his own plane. But that would have to wait a long time at the rate he was earning money now.

The next part of his normal "walk around," as some pilots call the pre-flight check, was at the tail of the aircraft. He got out

and removed the rudder lock at the tail. Like the control lock, this helped keep the rudder from swinging in the wind. Then he checked the hinge bolts and, grasping the rudder, gave it a gentle push back and forth to see if there was any abnormal play or looseness. Since he wasn't yet ready to fly, he left the rear tie down connected and continued on around to the trailing edge of the right wing where he next checked the aileron hinge pins and flap hinges for security.

Progressing around the wing tip to the right main gear, he bent down and scanned the tire rubber for cuts and low pressure, perhaps thinking to himself how flat the tires can get sitting overnight. It must have seemed to Frederick, as it seems to most other light plane pilots, that the tires need air when they really don't. Next he looked into the small hole in the side of the fuselage which was the static source for the airspeed system, then removed the fuel tank cap and checked the fuel level with a dip stick. It confirmed what the fuel gauges had shown, fuel was needed. From there he moved on to the propeller area.

Here he checked the propellor for nicks and then the polished cone in front of the propeller, known as the spinner, to make sure it was attached tightly and had no play. He also checked for oil leakage on the propellor and the nose wheel for correct inflation. The nose wheel strut was also inspected as he continued around to the left-hand side of the engine where he unlocked and opened the engine cowl door permitting him to see the side of the six cylinder opposed engine. He checked the oil level on the dip stick just behind the rear engine baffle, making sure it contained the full 12 quarts. He then checked to make sure the oil sump drain plug was tight and showed no signs of leakage and quickly checked the air filter on the carburetor for cleanliness and then closed and latched the cowl door. He bent down and inspected the left tire and strut as he had on the other side and again used the stick to check the fuel level in the left wing tank. As expected, it too was low.

Going a few feet to his right he checked the pitot tube opening at the leading edge of the left wing and then the fuel tank vent opening. He was almost finished now. Moving the left aileron he removed the lock on the left wing. He checked the hinge pins and flap hinges once again for wear. He was now back where he had

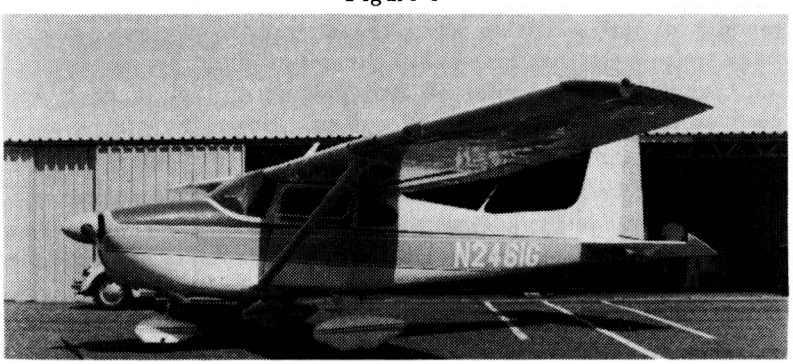
started and the pre-flight check was done, all except for untying the plane from its mooring lines and getting fuel. It was 5:55 pm and he was already well past his planned take-off time; he was impatient to be on his way.

The sun was getting lower and lower on the Western horizon, its long shadows slanted across the field from the buildings nearby. The sun would set at 6:48 pm. Frederick had planned to take off at 5:35 pm (according to his flight plan) with an estimated time of arrival at King Island some 65 minutes later, at 6:40. However, for some unknown reason, he had been delayed and had actually taken off at 6:19 pm, some 44 minutes later. Whatever it was that delayed him also probably caused him to forget to arrange for the runway lights to be turned on at King Island. He would be landing well after the sun had set; twilight landing can dangerous. But, he had forgotten this important detail and much would be made of it later, after he disappeared.

There are a number of possible reasons for a delayed take-off. It is possible that he was delayed while being served dinner or in returning to the air field in traffic. Or he may have been delayed by a greater than usual amount of air traffic using the field. A third possibility is presented in chapter 13 and will not be raised here.

Figure 3 shows the Cessna 182 model which carries four persons comfortably.

Figure 3



The young pilot untied the tail and main gear tie down lines, climbed into the cockpit and sat down in the left seat. He had picked up four bright yellow polystyrene life jackets-one for himself plus three others-from the flying school office just in case someone might ask him for a ride back to Moorabbin from King Island as had happened before. Frederick had been happy to give somebody a lift, not only as a kind of courtesy to those who were in need but because this was the kind of person he was. After putting on his own life vest and making sure it was snuggly fastened he closed the cockpit door and started his engine. Then he taxied his rented Cessna[4] over to the refueling ramp and signaled for the truck to come over to his aircraft. It was about nine minutes before take-off. He shut off the engine and waited for this important stage of the pre-flight requirement to be completed.

Fuel weighs six pounds per gallon and Cessna VH:DSJ[5] could carry 79.23 U.S. gallons (300 liters) according to several sources. The total fuel weight would have been about 475 pounds at take-off. The operating manual gives a fuel consumption rate of 11.9 gallons (45 l) per hour at cruise RPM and nominal aircraft weight thus permitting a maximum cruising range duration of 6.66 hours not taking into account the fuel required to taxi out for take-off, take-off, and climb to cruise altitude. Frederick had (very likely) already calculated these values and knew, long before he took off, his maximum range of flight. Such determinations are routine to the experienced pilot and very seldom overlooked by the novice for obvious reasons. Of course every pilot checks what is known as the "useable fuel" for all flight conditions, that is, the amount of fuel available when the aircraft is in climb, dive, or bank maneuvers that are within the design limits for the aircraft. This aircraft had a total of 39.6 gallons of fuel in each wing bladder tank for a total of 79.2 gallons. However, total unusable fuel volume, because of the location of the fuel drain within the tank, amounted to 1.5 gallons per wing tank.

As he sat in the cockpit during the fueling he finally took the time to notice all of the activity going on around him. He had been so preoccupied with his pre-flight activities that he hadn't noticed how busy the airfield was today. Considered to be the busiest airport in Australia, Moorabbin field had several air

charter companies located there as well as numerous private owners who lived in and around the greater Melbourne area. In addition, farmers and businessmen from other areas in and outside of Victoria used the two runway field for pleasure and business. The six flying schools located at the field provided even more air traffic as the student pilots made repeated touch and go landings during their flight training. As Frederick looked out across the runways he saw many aircraft at the same time. He began to wonder if he might have to wait very long to take-off. He knew that pilots who did not have night flying experience would be returning to the field before dark and that would probably delay him to some unknown extent. "I remember when I had to get down before dark," he thought, "I was sure glad that they gave me priority over aircraft wanting to take-off... now its my turn to wait for them." We will probably never know how long Frederick waited for his turn to take-off except that he finally did take-off at about 1819 hours. I began to wonder if Frederick had deliberately delayed his take-off for some reason. Could he have wanted to arrive at King Island after dark so as not to be seen from the ground, perhaps to fly even farther? Or could there be yet another reason that I didn't know about?

The refueling had not taken very long and, after signing the pink fuel delivery form, he watched as the fuel truck drove away. Now everything was ready. He adjusted his seat belt so that it remained loosely fit around his lap until just before take-off. Then he pulled back on the control wheel and also pushed it fully forward to make sure it had a full range of travel, likewise rotating it fully clockwise and then counterclockwise for the same reason. Next he cycled his electric flaps to insure that they were extended to their full 38 deg angle, as they could be seen easily from where he sat (the overhead wing's leading and trailing edges were in view from the pilot's position [see Figure 3]). He then lowered the flap switch to the first position to set them at 20 deg for take-off. Frederick wanted to reduce the take-off distance at the expense of his climb rate and intended to retract them after reaching 100 ft altitude.[6] He next would reduce the engine load to about 2450 RPM upon reaching 500 feet altitude and 23 inches of manifold pressure soon after take-off to help minimize engine wear.

Now it was 6:15 pm and the sun, low on the western horizon, was bright and round in the almost perfectly clear blue sky that evening, lighting up the blue and white Cessna's sleek body and sending long slanting shadows across the asphalt taxiway.

Following his check list he preset the propellor governor control to "High RPM", cracked the throttle 1/2 inch, and then rapidly checked the engine cowl door control to make sure it was fully open. The aircraft had not been flown for the past four hours. He mused, "probably should give the engine at least one injection of primer fuel." This accomplished, Frederick leaned forward, visually scanning for any movement outside the aircraft. Satisfied that no one was in close proximity he yelled "clear..." through his open window and turned his ignition key on to engage the starter. Little did he know that he was to depart into perhaps one of the greatest mysteries of aviation history as he encountered something so sinister that it is difficult to describe it in a hypothetical reconstruction.

The aircraft's batteries poured direct current into the starter motor which let out a high pitch whine and the sounds of meshing gears. The propellor turned over, a familiar sight to Frederick. It continued turning over with sudden bursts of acceleration until it became blurred, then ignition! The cockpit was suddenly filled with a blast of oddly comforting noise. For an aviator would always rather hear the engine's roar than the deathly silence of whistling air should it fail in flight, leaving him only a passenger in an unwilling bird, a terribly heavy, plummeting object that was not designed to fly without power. He quickly checked his oil pressure gauge for correct pressure, and then glanced at his engine RPM gauge, manifold pressure, and engine temperature gauge and, pulling back slightly on the protruding throttle, the engine willingly obeyed by slowing.

Next he preset as many of the radio frequencies as he could into his communications and navigation equipment. He started by dialing in 125.9 MHz into his radio.[7] He would have to call Tullamarine flight service upon reaching 2,000 feet altitude which was standard procedure.[8] He also (probably) set his VHF Omnidirectional Range (VOR) receiver to 117.6 MC in order to pick up the COWES radial (beacon) to the south.[9] He didn't touch his

transponder frequency.

As he was setting the frequencies, Frederick was perturbed about something. He had not gotten the grades he needed to get into the air force and he was not on the best of terms with his father.

Frederick checked his take-off and climb chart carefully, selecting the 2,400 pound gross weight as it was slightly greater than his calculated weight with full fuel load. This would give him a safety margin for take-off distance.

"Wind calm, field temperature about 64 degrees Fahrenheit, dew point +12..." the young pilot could have thought to himself, "...this should be a textbook take-off," while he checked the ground run distance once more. Finding the gross weight column for 2,400 lbs and zero knots head wind, he ran his finger horizontally to the right to the sea level and 59 degrees F column, which showed 440 feet to take-off with 20 degrees flaps. He needn't be concerned about the 895 feet needed to clear a 50 foot-tall obstacle for there weren't any. Just to be sure, once again he cross checked his probable rate of climb.

"Let's see, 2,400 pounds from sea level, flaps up, full throttle and 2600 RPM. That gives me 1,210 feet per minute at about 88 indicated," he mumbled to himself. Now he was almost ready to taxi out to the take-off end of the runway. He had his flight charts with him so he opened his sectional chart and refolded it to be able to see the relevant areas easier while in flight, carefully laying it on the seat to his right. Reaching behind him over the back of his seat, he set his UFO notebook on the floor rather than on the rear seat where he had first placed it. He didn't want the wind to flap the pages. Some of the old articles were not very well glued in and might tear off.

He was excited as he glanced back at the engine gauges and the quivering white needles indicating the pulsating signs of life of his engine. They were all within the normal ranges. He adjusted the small numbers in the Kohlsman window on his altimeter to agree with the setting given him when he filed his flight plan. Noting that the altimeter now agreed with the field elevation - and well within the allowable tolerance of + or -75 feet - he made a

final check of his instruments and released his brakes.

Figure 4 is a photograph of an instrument panel on a 1959 model Cessna 182. The flight computer located at the upper center of the photograph (enclosed with white lines) was not on Frederick Valentich's aircraft. This illustration is only provided to show the general placement of the basic flight instruments and controls.

It was now 6:16 pm and time to taxi out for his engine run-up. This too was familiar to him for he had done it many times before. Yet his classroom training had only reinforced all of the theoretical reasons for pulling close to full manifold pressure and about 1700 RPM on the ground before ever leaving the protective hold of tire contact to old mother Earth. Once again he looked left and right for people and aircraft, and seeing none, pushed in gently on the throttle and advanced the engine RPMs from a mere 750 to almost 1100. The Cessna began to tremble with an ever greater vibration and roar. Finally it began to lurch forward. The tires, long flattened from having sat in the same position, gave way to rotary motion. The night flight of Cessna VH:DSJ was about to begin.

Figure 4

Cessna 182 Instrument Panel

He pulled over into the run-up area just short of the runway and applied his brakes by pressing both rudder pedals with his toes. He increased his RPM to 1700 all the while keeping an eye on the other gauges for some telltale sign of malfunction. It's funny how strange thoughts keep coming back into one's mind at strange times. Frederick (may have) remembered back to his ground school days and those long hours of lectures about aircraft operations, about how an experienced pilot could tell if his engine might act up in flight even before he took off. Fred was never quite sure if he believed that. Certainly he had found no reason to believe it, yet.

Next he turned the magneto switch first left then right and found that the RPM remained within the normal range, finally he pulled the carburetor heat knob on. Everything checked out fine.

Frederick looked into the air in the direction from which aircraft were approaching the field. There was only one in sight several miles distant. Then he looked down the clear runway. Everything looked OK. He brushed his long wavy black hair back out of his eyes, shut the left window, tightened his seat belt, and released the brakes. The Cessna began its final taxi out onto the black asphalt Moorabbin runway. As he gained a little speed he touched his rudder to brake into the direction for take-off, right on centerline.

"Let's go!" he thought to himself, and pushing in steadily and firmly on the throttle he quickly glanced down one final time at the flap setting, "...yes, set 20, going to 2600 RPM..." he thought, as the airspeed began to climb. Forty, fifty, sixty, the airspeed needle continued its slow but steady clockwise rotation. "...shouldn't be long now...rotation!" he said out loud. His facial muscles were a little tight. His ears were filled with the engine's roar and the overhead air nozzle was beginning to blow his hair into his eyes from time to time. He was airborne!

Delta Sierra Juliet had finally let go of the Earth's powerful grasp and had entered the realm for which she had been designed. Delta Sierra Juliet was obeying all of the aerodynamic laws that for so many centuries had been unknown- but desperately sought- by would-be aeronauts around the would. This aircraft

represented a sound design in terms of its handling qualities, its balance, its lift to drag coefficient, and so many other fundamental design features. Freddie had read the owner's manual over and over and had poured through its numerous tables of handling qualities, knowing that he must become as familiar as possible with this aircraft if he was to obtain his private pilot's license...but that was so long ago now. It's too bad our memories fade so fast. Why couldn't man just read once and memorize every number in those aircraft operation manuals? It sure would make things a lot easier with no manuals to thumb through or complicated calculations to make with each new throttle or flap setting. But that's not the way it is.

It was 6:19 pm local Melbourne time and Frederick Paul Valentich was climbing into the still sunlit sky.

Back at the Flight Service Unit at Melbourne's main field, Tullamarine airport, thirty-one year old Steve Robey manned the radio and radar facility. A commercial pilot himself since 1968, Robey was a grade two flight service operator whose job it was to assist pilots while they flew in uncontrolled airspace by providing them with flight-related information. He could inform them of changes in the weather, the possibility of other air traffic in the area, or other such alerts. Robey had already received Frederick's flight plan earlier in the afternoon. He would not know for for several more minutes that the young pilot had, for some unknown reason, delayed his take-off by almost three quarters of an hour or that he would be calling in soon that he had finally taken off.

Footnotes

1. According to the class instructor, the normal starting and ending time for the class was 1:00 and 4:00 pm. According to Guido Valentich, the three and one-half hour long class started at 1:30 pm and finished at 5:00 pm (see Appendix 8).

2. Private correspondence dated August 1, 1980 to the author

from Mr. M. N. Glower.

3. It is not known for certain that Frederick had to refuel at this time except for the comment to this effect by his father (see Appendix 8). It is normal procedure to refill all fuel tanks immediately upon landing in order to help prevent water from condensing in them over time. It is possible, but not necessarily probable, that there could have been some water in his fuel tanks on this particular flight.

4. The aircraft was leased by Southern Air Services, an aircraft rental firm located at Moorabbin field. Mr. Bill C. Hicks was chief flying instructor and the owner of S.A.S. which was licensed in February 1967 to provide aircraft for rent. Of the 12 aircraft associated with S.A.S., VH-DSJ was the only aircraft lost as of January 1, 1983. Frederick had received much of his pilot training in this model. The life vests were supplied along with the aircraft as a matter of course for all over water flights. The vests measured about 23" by 35.5"

5. By international agreement, each nation has its own International Civil Aviation Organization (ICAO) registration letters/numbers. All Australian registered aircraft must have the letters VH shown prominantly. Following these letters are others which are unique to each aircraft. The "call sign" that was given to the Cessna model 182L flown by Frederick Valentich on October 21, 1978 was DSJ. Therefore, the normal radio jargon was "Delta Sierra Juliet".

6. This is a purely hypothetical yet reasonable set of events and does not necessarily represent what may have taken place.

7. The VHF radio on his aircraft was a NARCO-CON model 11A with approximately 6 watts power output. His HF radio was a REX-NTR 5D. According to the equipment list for this aircraft as it was delivered from the Cessna factory, neither radio was factory installed.

8. Personal correspondence from Paul Norman dated July 1, 1980.

9. While it is only theorized that Frederick had a VOR receiver on board, this reconstruction is entirely reasonable. The COWES beacon would have been the nearest and most readily interpretable navigation aid at this early stage of the flight. It is located on the coastline near the town of the same name on Phillip Island, SSE of Moorabbin field. This beacon is used mainly by commercial inbound aircraft from Tasmania.

Chapter 7

The First Three Legs

In order to reconstruct the probable flight path of an aircraft one must have certain basic information available. This information, at the minimum, includes aircraft performance characteristics (which is not too difficult to obtain), the pre-planned flight path which a pilot must specify on his flight plan, and the prevailing winds and weather aloft.

I was able to obtain almost all of this information from various sources and what follows is my reconstruction of the first three "legs" of Fred's flight, from Melbourne's Moorabbin field to just south of Apollo Bay. While there is a possibility that the third leg did not take place as indicated here (and will be discussed later) I have begun with the assumption that he had everything to gain and nothing to lose by exactly following his flight plan, complete with the required radio communication check upon reaching Cape Otway, the visual checks of various ground locations as the evening sky became ever darker, and full use of this on-board radio navigation equipment (probably) an Aircraft Radio Corporation VOR.[1]

With the sun still above the horizon Frederick was able to see virtually the entire rim of Port Phillip Bay far off in the distance. Indeed, he must have planned his first flight leg (and possibly his second) taking the good visibility into account. Once leaving the ground he probably climbed to 500 feet before turning to a magnetic heading of 180 degrees. This leg would be very nearly 20 nautical miles long with the town of Frankston and Mornington almost straight ahead of him. He would not have to fly along the eastern shoreline but could head out over the water of the bay and save some distance. His visibility was so good that he knew at all times where he was and the status of his flight's progress. He continued to climb at about 1100 feet per minute (at 2600 RPM and flaps retracted) and only occasionally had to adjust the fuel

mixture for smooth operation.

Upon reaching his cruise altitude of 1500 feet Frederick picked up the press-to-talk microphone, checked the 125.9 MHz transmit frequency visually, and announced, "Delta Sierra Juliet calling Melbourne control...I am at 1,500 feet cruise altitude just south of Moorabbin on my full reporting flight to King Island and return. My ETA is 7:25."

He reached his initial cruise altitude of 1,500 feet[2] in only 1.4 minutes and then leveled off, continually cross checking his directional gyro with his compass and the appearance of the two distant towns ahead. There was no appreciable indication of cross wind and the nose of his aircraft pointed directly to the direction of flight. Valentich did notice slight turbulence from time to time due to the predicted wind gusts from the North.

As he became more and more engrossed in the beautiful view of the shoreline below him he was startled by the voice of Steve Robey on his radio.

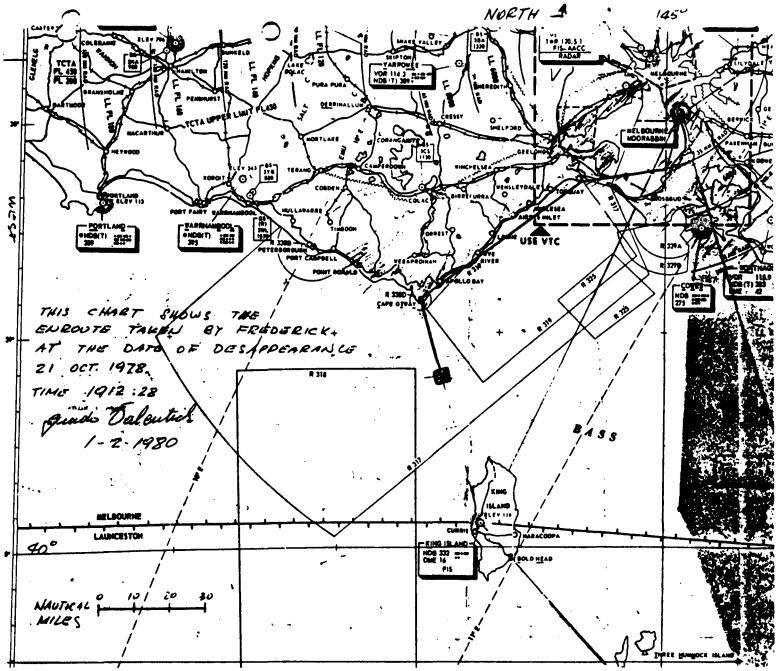
"Melbourne flight service, we copy your take-off from Moorabbin field Delta Sierra Juliet...have a good flight." the voice had said.[3] Several seconds went by and Frederick was about to acknowledge this radio call when his radio came alive once again. The controller said, "...we'll expect a call when you reach the cape."

Frederick picked up the microphone and replied, "Delta Sierra Juliet, Melbourne, roger." He replaced the small plastic microphone back in its cradle under the dash board and sat back, beginning to feel the excitement of knowing this would be his first night, over-water flight... knowing that he would be several hours closer to getting his commercial license. He thought of climbing to a higher altitude to get a better view of the towns and all the lights that were beginning to come on but decided against it. He wanted to save fuel and flight time, particularly since he was so late already. He probably thought to himself, "It's great flying right here, there's no reason to go higher, at least not quite yet. I'll wait until I get closer to the cape.[4]

Frederick's father Guido sent me a copy of an aerial chart of the Melbourne - King Island region on which he marked (in red pencil) the route flown by his son.[5] This chart is reproduced here as Figure 5.

Figure 5

Aviation Chart of Frederick's Flight Path
(Provided by Guido Valentich, January 1, 1980)



It may be noted that four straight "flight" segments were drawn beginning at Moorabbin field. I will call each of these segments "legs" hereafter. All of the first three were basically over-water. The first two and part of the third are within controlled airspace where there is radar surveillance by facilities at Melbourne's main commercial airport, Tullamarine. Knowing the path taken by the pilot in a reconstruction of an event such as this

is important in order to be able to calculate fuel usage, check point transit times, and the likelihood that alternate routes were followed.

It was near the end of June, 1980 when I received a second map from Mr. Guido Valentich dated April 19, 1979 which showed the alleged flight path of the aircraft. While this second chart is basically the same as the first one, it does differ somewhat in the first two legs. It shows Frederick flying parallel to the Eastern-most shoreline of Port Phillip Bay as far as Mornington and then turning right across the bay toward Queenscliff at the mouth of Port Phillip Bay. I was inclined to rely on the first map provided for reasons given below.

During July, 1980 I received a detailed letter from a private pilot acquaintance who flies to and from Tasmania via King Island. He is thoroughly familiar with all aspects of the flight and its proper planning. He enclosed a radio navigation chart that was current at the time Frederick had made his flight. This pilot had penciled in a straight line from Moorabbin to Cape Otway with no legs at all! The Cape Otway to King Island portion of the flight represented the second and final leg. He indicated that this path is the "mandatory single engine route." He pointed out that the minimum altitude permitted for crossing Bass Straight is 3,000 feet and that there is only a marine, non-directional beacon at Cape Otway and no radio navigational facility. Also of interest is the fact that Frederick's flight plan (see appendix 9) did not specify anything more than Melbourne to Cape Otway. No headings were included so that it is problematical which exact route was taken as far as the cape.

During his first leg, Valentich was (probably) on a magnetic heading of 180 degrees aiming for the town lights at Mornington. He would have been occupied by making airspeed, heading, and engine setting checks as well as beginning to plan for his second leg. Assuming an airspeed of about 88 kts (101 mph) during the climb to cruise altitude, he would have been very nearly two nautical miles from the field upon reaching 1,500 feet altitude.

I used the chart presented in Figure 6. The heavy dashed line shows where my calculations showed him most likely to have

flown and includes winds aloft and other information that I had available at the time. For the remainder of this narrative, all distances are in nautical miles (6080 feet) and airspeed in knots.

Point A is the Moorabbin airport and B is where he leveled off during the first leg of his flight. He reached point B at approximately 6:20:22. The winds, according to the regional forecast (see appendix 5), were to be variable reaching only 5 kts velocity at 1,000 feet altitude and shifting to 10 kts out of the North (20 degrees). This tail wind would have assisted him slightly in his climb to cruise altitude. The wind at 5,000 feet was about 10 kts from the west-northwest (350 degrees) which would probably have called for a slight, right rudder trim to counter the tail crosswind. His flight plan indicated that Frederick had anticipated a 15 kt wind from 340 degrees which was a little different from what subsequent measurements showed to be the case. The differences were minor and would not significantly affect the details of this reconstruction.

Frederick might have thought to himself how reassuring it was to know that if he flew in any direction he would eventually find land at this point of his trip. This would not be true during his third and fourth flight legs and he knew it.

The small towns and fields lying off to his left were bathed in a rich golden hue from the setting sun. Up ahead was the town of Mornington where he would turn right to begin the second leg. But Mornington was still 18 miles away and only appeared as a row of small dark spots near the shoreline. Nevertheless, these dots served as his first visual check point and, at almost 6:30 pm exactly, he arrived abreast of the town. He began his turn right by 60 degrees to a new heading of 240 degrees. He still would have been several miles off the shoreline and able to see the town and shoreline with ease. After rolling out on his new heading he once again checked his instruments. And, finding everything as they should be, he settled back in his seat a little and enjoyed the flight. He had begun the second leg of his flight; everything was going fine.

Figure 6

Roadmap of Greater Melbourne with Flight Leg One and Two (dashed)

Referring to Figure 6, I plotted leg 2 between Mornington and another town (Torquay), an air distance of 24 miles. This would have been a logical choice for a flight path because it would take him almost directly over the city of Queenscliff at the western mouth of Port Phillip Bay. Mud and Swan Islands were below him as well, but were becoming harder and harder to see in the fading light. Even with the 10 kt cross wind from his two o'clock position, Valentich would probably have maintained about 140 kts airspeed, traveling to point C in just over ten minutes. He (probably) arrived at the seacoast town of Torquay at about 6:41. Nearing the end of his second leg, Frederick could have seen the sprawling city of Geeling off to his 2 o'clock position with many other smaller municipalities scattered about, while to his left lay the great stretch of water over which he was soon going to fly. He must have found some sense of reassurance in the fact that he had yet one more leg ahead that was very near to land, from Torquay to Apollo Bay. Frederick watched in a reflective mood as the sun settled quickly over the horizon, now formed by the crest of the Cape Otway Range that ran roughly parallel to the coast line south from Torquay. Astronomically, the sun set at 6:43 but local topography and one's flight altitude can make a difference in this time. The ground off to his right was already getting darker as he banked left to a new heading of 225 degrees. He was headed for the cape and had begun his third leg of flight.

Frederick had studied the sectional charts and other air route maps and knew that he would soon be leaving controlled airspace (that volume of protected and more highly monitored airspace around Melbourne) during his third leg, just southwest of Torquay. But he would still be inside a military restricted airspace designated R 319, a long rectangular area extending from Torquay to Cape Otway along its long edge and about 25 miles out to sea. The Aeronautical Information Publication (AIP) for Australia showed that this area was reserved for military flying from the earth's surface up to 15,000 feet altitude. Upon checking the HI-LOW aeronautical chart for the areas normally used by commercial pilots, Frederick had discovered that there was yet another military restricted area, R 233, extending above 15,000 feet to an unlimited altitude beneath which he would be flying. He probably

thought to himself, "I'll be so far below that area I probably won't even see any military aircraft at all. At any rate I needn't worry about it." Area R 233 is a fan shaped region covering an area from Cape Otway all the way to King Island and allegedly used for military flying during daylight hours only. Reference to Figure 5 also indicates the presence of another military restricted area labeled R 317. Area R 317 is a huge rectangular region lying west of King Island and completely over water.

It isn't always easy to reconstruct something as intricately involved as an aircraft's flight path without having sufficient information. In this instance, I had received from Mr. Guido Valentich (accompanying his letter of November 20, 1978 [see appendix 3]) and also from Mr. Ken Williams, Assistant Director of Public Relations for the Department of Transport (DOT), Air Transport Group (with an undated letter received on February 17, 1979 [see appendix 10]) a copy of the tape transcript of the voice communication between Frederick and Melbourne's Flight Service which was published in the October 29, 1978 issue of the *Sunday Press* (Melbourne). In Mr. William's copy he included a signed margin note which read, "This is the complete transcript of communications between VH:FSJ and Melbourne Flight Service Unit covering the relevant times. The only communications not listed are the routine operational air-ground messages between the time the aircraft left Moorabbin until the pilot reported over Cape Otway." Little could I have realized the significance of this somewhat misleading statement at the time. For it was not until March 28, 1979 that I received another tape transcript of this air-to-ground radio communication from colleagues in Italy. Mr. A.R. Woodward, Assistant Secretary, Air Safety Investigation, DOT had sent my Italian colleagues a slightly longer tape transcript that included radio communications prior to the time Frederick had departed Cape Otway. This correspondence and transcript is included as Appendix 10. This correspondence is how I learned that a most interesting conversation had taken place between Frederick and Steve Robey which began at 6:53:30.[6] It is discussed here since it would have taken place during the third leg of Frederick's flight.

This conversation began some ten and one-half minutes after the sun had set.

This 35 second-long communication took place about 12 km south of the tiny town of Lorne about half-way through leg 3. So then let us review the third flight leg in order to put this radio transmission in some perspective.

Figure 6 shows that Frederick probably arrived just off the coastline at Torquay at 6:41 pm. He banked left about 15 degrees to a heading of 225 degrees flying parallel to the ever darkening sea coast below and to his right. Flying about a mile to sea he could easily make out the glow of automobile headlights moving along Great Ocean Road following the shoreline as far as Apollo Bay. It was Saturday night and there were a few more cars than normal on the highway. Fred had planned his flight carefully and had decided to fly out to sea a little just for this reason. He looked across the empty seat beside him through the door window. There, about 15 miles away in the darkness was highway one, known as Prince's Highway which led from Geelong to Winchelsea to Colac and beyond. At times he thought he could see a few tiny lights in that direction. But everything seemed so different now that the sky was deepening into royal blueish-black. The Western horizon was still very light but the Eastern horizon was almost totally dark now. Up ahead was the tiny coastal town of Anglesea and beyond that Lorne, both on the Great Ocean Road. These would be useful visual check points. He could also see Venus in the west-southwest about 22 degrees above the horizon.

The young pilot reached up and switched on his map light to be able to see the flight chart laid out beside him. He glanced back to his instrument panel from time to time. He had turned on the instrument lights since it was becoming so dark outside.

"Let's see now," he mumbled, "...one hundred forty-three indicated and 55 miles...comes out to just over 23 minutes to the cape...I'd better climb to my final cruise altitude now that I'm out of controlled air space. It's getting awfully dark out there...this quartering tail wind should help a bit...let's begin the climb now."

He gently screwed in his propellor governor control increasing the RPM to 2500 and then readjusted the manifold to 23

inches with his throttle; he reset his elevator trim to relieve the control pressure as he entered his climb to 4,000 feet. It was a gentle climb of only 500 feet per minute so that after five minutes he had reached the desired altitude. Then he eased back on the throttle until once again he read 2400 RPM and 23 inches of manifold pressure. Then he retrimmed one last time for normal cruise flight.

The time was 6:53 and he was passing dots of lights on the ground. The coastline and towns below him which were so familiar in the light of day had become strangely foreign at night except for clusters of lights that seldom had any relationship to the towns they represented. "Was that last town Lorne or someplace else?" Frederick questioned in his mind. "If I could only see the small promentory I could be sure." A tiny sensation of fear began to enter him; perhaps it was nothing but a natural counterpart of the excitement he felt on this lonely flight. "Almost anyone would feel the same way...that sky is awfully big and black," he must have thought to himself.

Stretching off to his left lay the great dark mass of water over which he was soon to fly. He must have found some reassurance in the fact that land still lay to his right. And he was still well within landing distance even if his engine should stop at this moment.

He thought to himself, "the moon won't be up until after 11:00 tonight... boy it's sure dark up here...I'll probably be able to see better with the cockpit light off."

He switched his chart light off, leaving his eyes dazzled for a brief moment, unable to see anything except the instruments and one or two groups of lights on the ground up ahead of him on the right. After a half minute he could see better and decided that he would not use the light again unless it was absolutely necessary. Anyway, he had almost memorized his route and the details along the way. He wouldn't need to see the chart again for awhile.

Suddenly he was startled by his radio which came alive. Its loud rasping static gave way to the voice of the controller at Melbourne. "Delta Sierra Juliet...Do you wish to extend your SAR time for your arrival at King Island?"

Valentich's mind raced. What's he talking about? Did I forget to do something? What's wrong...I'd better find out. So he reached forward, pulled the microphone from its bracket and raised it to his lips. He then pressed the spring loaded switch that activated the transmitter and paused a few seconds, thinking about what he wanted to say. He didn't want to admit he may have forgotten to do something...then again, he knew that the people on the ground only had his safety in mind. Then he responded, "Delta Sierra Juliet...say again."

A couple of seconds later the controller answered, "Delta Sierra Juliet... you're holding a SAR time of zero nine three zero for your arrival at King Island...on time arrival...your estimate is zero nine two eight. Do you...would you like to extend your SAR time?" The radio again went dead, its crackling sound replaced by the muffled roar of the six cylinder engine.

"So that's it!" Frederick thought, "I didn't account for getting a late start on the SAR time. Let's see, I figure I've got about 25 miles to go to the cape (Cape Otway lighthouse)...and another 48 miles to the tip of King Island. If I can hold this speed it will take about 12 minutes for the first part and another 20 for the second...that's about a half hour from now."

Frederick quickly checked his wristwatch. It read 6:53 and 50 seconds plus another 30 minutes would give 7:23...that's OK. He thought, I'd better extend it just in case..."

Once again he pressed the mike switch and said, "Delta Sierra Juliet... 'affirmative.'" "It's funny how much one little word can do," he thought.

A few more seconds went by and he heard, "Delta Sierra Juliet, roger... make it one zero zero zero." His new arrival time was extended another 32 minutes ahead. That's all there was to it. He felt a sense of reassurance now. Hadn't he just spoken with the authorities on the ground? Hadn't they seemed to have everything in control...under their surveillance? It was nice to know that there was someone listening in for your radio call. These kinds of feelings - more than verbal thoughts - flashed one by one through his mind.

Almost immediately he heard the voice from the ground reply, "Delta Sierra Juliet." Then silence again...except for the continual roar of his engine and hissing sound of the air stream as it found entry into the cabin through airways.

A dim glow of lights appeared ahead of the aircraft. They were embeded in a sea of darkness. To the West was a faint air-glow of the last stages of twilight now giving only a faint glow to the horizon. But this twilight region of the sky faded rapidly into utter black as Frederick scanned to the left, toward the South, toward his flight's destination. Somewhere out there across the water was King Island and a landing field. It was then that he suddenly remembered he had forgotten to have the runway lights turned on at the King Island field. A sudden wave of fright swept through him. He had forgotten to plan ahead. He had already violated one of the cardinal rules of airmanship...'be prepared for any eventuality.'

The young pilot kept watch out the forward window for the lights up ahead but his mind was definitely on the problem of the landing lights at King Island. "I know that I had planned to arrive on the island before the lights would be needed," he reasoned. "But that damned delay...I forgot to take it into account."[7]

He rapidly considered the alternatives that were open to him. He could call Flight Service now and explain what had happened... maybe they could call ahead for him, or he could wait and call them later when he was nearer his destination. This would save them any trouble at this time.

Frederick decided on the second alternative. But the whole thing had left him with a sense of disappointment. He had tried to be as careful as he could. He had followed the recommended guidelines for completing the flight plan to the letter. And he had made the required radio check point call in time. So far the flight had gone "by the book." All except for the SAR time change and now this. His confidence had been shaken. The dark emptiness which surrounded the plane seemed to press in upon its single, isolated occupant even more now. Young Valentich found very little comfort in the town lights which were passing off to his right. "It

must be Apollo Bay," he thought. "There's nothing around here that big...or is there? If only there were more light...if only I had left on time there would be plenty of light and I could tell if that was Apollo Bay. I would be able to see it!" A gnawing, silent fear began to build within the pilot. It was still only a vague feeling of isolation, the same kind of feeling he had had on his previous night flight. It is a feeling experienced by every aviator at some time or another...when things don't seem to be just right... when one's best plans seem to be falling apart but one can't quite find the reason why.

Little did Frederick know that some amateur fishermen out in their boats near the cape had watched him pass overhead.[8] Even had he known this it would have given him little comfort. He checked his watch again. It read 6:55 and Apollo Bay was now behind him. He only had one more visual check point left on the mainland, the lighthouse at the cape. The distance from Apollo Bay to the lighthouse by air was just about 11.5 miles and, at approximately 143 kts airspeed, Frederick should take only 4.8 minutes to reach it. But Frederick had a different idea.

In the preliminary report of the case that I received on February 17, 1979 from Ken Williams (see appendix 10) I learned that Frederick had radioed Melbourne's Flight Service Unit at 7:00 and 29 seconds that he "...was over Cape Otway." There is no independent confirmation of this, however. And there is no way to know whether the following scenario is correct that he departed the mainland some distance northeast of the cape. Frederick probably knew before he took off that he would not be visible on radar from Melbourne. As is shown by the radar coverage chart in Appendix 11, aircraft at the distance of Cape Otway would normally have had to be at or above 10,000 feet altitude in order to be detected. Of course there is the possibility of radar beam deflection caused by air temperature differences. It is a matter of record that the Melbourne radar has detected surface vessels near King Island and Cape Otway. This matter is discussed later.

Reaching forward to the radio navigation panel in front of him, Frederick dialed in 332, the assigned frequency of the omnidirectional radio navigation beacon (NDB) on King Island located near the town of Currie. Using his automatic direction finder

(ADF), he then determined that his pre-determined magnetic heading of 158 degrees would be correct for his fourth and final leg. He reasoned that, since he was to the left side of a line connecting the cape with the NDB on King Island, he could save some flight time by turning onto his fourth over-water leg before reaching the lighthouse at the cape. He was going to turn the "corner" a little early, a common practice of many pilots who flew this route. His navigation fix would help keep him on course and soon he would be able to see the lights on King Island too. Everything would be alright. So he banked left 67 degrees, out over the great expanse of pitch black water. It was 6:56 pm and he had begun the most dangerous part of his journey.

Footnotes

1. As the aircraft equipment list shows a VOR unit had not been installed at the factory. One would most likely have been installed in Australia along with the radios.

2. Aircraft flying on visual flight rules (VFR) must fly at even thousand feet altitudes plus 500 feet (e.g., 3,500; 4,500) when on a heading (magnetic) of from 0 deg to 179 deg. Aircraft on headings of from 180 deg to 359 deg must maintain even thousand feet altitude. This procedure helps maintain vertical separation between aircraft for safety.

3. Obviously, it is not possible to be certain these were the exact words used, nor does it really matter. Nevertheless, the following narrative attempts to recreate the thoughts and words of all parties with as much realism as possible taking into account what is known for sure.

4. His flight plan indicated a cruise altitude of 1,500 feet as far as Cape Otway and a 4,000 foot cruise altitude across the strait.

5. This was signed and dated February 1, 1980.

6. In the Australian Department of Transport material to be presented the local time is given in Greenwich Mean Time (GMT). To convert to local (Melbourne) time simply add ten hours to the GMT time. Thus 1853 GMT becomes 6:53 pm.

7. The solution to the problem of the runway lights at King Island came from Mr. Guido Valentich in his letter of June 24, 1980 (appendix 8) where he pointed out that a 6:40 ETA would still be eight minutes before the sun was to set at 6:48. Thus, the lights wouldn't be needed.

8. Game, P., Radio encounter of a weird kind, *Herald,* Melbourne, November 1980.

Chapter 8

The Last Leg:
Introductory Comments and Data

The single most important evidence of this strange disappearance is the tape recorded radio transmission between Frederick Valentich and Melbourne's Flight Service Unit. It is important because of its very bizarre content and also because of the fact that precise clock times are available. This chapter provides some introductory comments on this voice tape transcript and other factors that surround the case. Since the timing of the voice tape must play a central role in any reconstruction of the flight details, it is important to consider it in depth here. But before this is done let us consider some other subjects.

If Frederick followed his flight plan he would have had to fly 48 miles over Bass Strait to reach the nearest point of land on King Island. On his flight plan he had indicated a flight of 64 miles which was to the airport. Calculating the flight time for various airspeeds, I found that this leg would require only 20.1 minutes at an airspeed of 143 kts to reach the most northerly tip of the island. I also assumed that Frederick would have flown a flight path to this nearest tip of land which would require him to turn only a few degrees right toward the NDB upon reaching the island.

The typed transcript of the radio conversation that took place that night became available to the news media only because of very intense pressure put upon the Department of Transport (DOT) by the wire services. It was probably by the approval of higher authorities that Ken Williams had prepared and distributed the text that was published in the local newspapers and (subsequently) in many newspapers world wide. Upon reading this text it appeared to me that something very abnormal had taken place and that the speculations by the media and others were likely to

be wild indeed. My feelings were later confirmed.

The entire transcript exactly as I received it from colleagues in Bologna, Italy is presented in appendix 12 with one exception. During the winter of 1979 I obtained a tape cassette copy of the original voice tape with the flight controller's voice erased for some unknown reason. Based upon many hours of listening to this tape I have added several voice inflection marks and text footnotes in those instances that I felt a word(s) had been misinterpreted. Note that the word heading the left-hand column on the first page of this table has been misspelled. It should refer to Greenwich Mean Time (GMT). See footnote 6, Chapter 7.

The radio communication took place between 0900:29 and 0912:49, a total of approximately 12 minutes 13 seconds if the times given on the official transcript are correct. This recording contains a wealth of information for those who know about aviation procedures. This radio communication must be considered in any explanation of what actually took place. It is the most important piece of information available of the alleged aerial encounter. Consequently I felt that it deserved more than passing comment as one might do if one held to the hypothesis that the whole affair was merely a deliberate hoax on the part of Frederick Valentich. As I hope to show, it is not nearly that simple. Following are some issues raised by my analysis of this radio communications. I will refer to the text by time.

1. *Total length of voice tape analyzed:* The total duration of the voice tape I received and which was used in my analysis was only 6 minutes 32 seconds. Either the times given on the officially released version are incorrect or my tape has been "edited." If segments of the actual voice communications have been cut out one must ask by whom and for what reason(s). This issue alone has been raised by others; no satisfactory answers have been found so far.

Several press accounts stated that the authorities had released only those parts of the transcript that they wanted to; some sort of cover-up was alleged. Another suggestion was that

the Royal Australian Air Force was somehow implicated in the affair. It was reasoned that since the RAAF made little comment on the incident, it must be that they have something to hide! Such reasoning is specious to say the least.

Mr. Peter Nixon, a spokesman for the Minister for Transport in Canberra was claimed to have said in regard to the release of the tape recording, "We believe that air safety investigators can probably come to better conclusions than the Press...We have our own views on what happened and they certainly don't include UFOs."[1] He would not explain why the tape recording would not be released and indicated that the file would remain open (on the entire incident) until some conclusion was reached.

An article in the Sun (Melbourne) on July 9, 1980 stated that about five minutes of the tape had been cut, "...in the interest of national security."[2] A similar article appeared in the Christchurch, New Zealand *Star* of October 25, 1980. Other evidence of this possibility was also obtained.

In a personal letter to the author from Miss Rhonda Rushton dated August 25, 1980, she answered a question I had asked about whether she or her family had ever been told by any authorities that this disappearance was a secret matter. She gave the following answer.

"I was told by the Department of Transport that the Government was holding back some information which was on the tape recording. Then one day a man from the Department of Transport came into my work and, through conversation, told me that there was another 1.5 minutes of the tape recording that had not been released because the Government thought that it would cause panic and they didn't wan't (sic) that to happen. (Up to date I believe the last 1.5 minutes still has not been released)."

Who this (DOT) man was and why he would say what he (allegedly) said is not known. Also, it was not at all clear why he would seek Miss Rushton out at her work to make this disclosure. Was someone else impersonating a Government official for some reason? And, if so, what could this reason be?

Even Ken Williams, the person responsible for releasing information to the public about the case said, "The tape certainly runs longer than six minutes. It could be a half an hour. We released only the highlights."[3] Nevertheless, DOT officials claim that the tape transcript is complete.

Several newspaper accounts said that Mr. Guido Valentich had listened to the tape and that it was the same as the transcript. While he thought the tape was complete there would really be no way of him to be sure of this, particularly since he was not familiar with aviation procedures or the special jargon that is used. He did write to me that he was certain the pilot's voice on the tape was that of his son.

Perhaps the most telling argument to support the belief that the tape transcript is essentially complete, as published the next day by the news media, is the fact that almost no time had elapsed for the DOT authorities to make significant changes to the text. While they may have deleted certain segments between the first and (allegedly) last radio transmission [i.e., 0906:14 and 0912:49] or deleted the remainder of the tape following 0912:49, it is extremely unlikely that they could have made textual changes to the present version in order to cover something up. Of course the question can be raised whether the words of Steve Robey are accurate in the transcript which was released. During the summer of 1984 I had the fortunate opportunity to hear the complete and unedited version of the tape which included Steve Robey's voice. It was completely in accord with the tape transcript which was released by the DOT.

2. *Subjective Interpretations of Aerial Object:* Frederick refers to the aerial phenomenon using the following terms:

0906:14	TRAFFIC
0906:26	LARGE AIRCRAFT
0907:32	AIRCRAFT
0907:47	AIRFORCE AIRCRAFT (question)
0909:14	AFFIRMATIVE (response to FS question if he could identify the "Aircraft")

0909:28	NOT AN AIRCRAFT
0909:52	A LONG SHAPE...HAS SUCH SPEED
0910:20	GREEN LIGHT...METALLIC LIKE...SHINY ON OUTSIDE
0911:03	AIRCRAFT (question to FS regarding what type of military aircraft might be in the vicinity)
0912:09	NOT AN AIRCRAFT

I noticed a typical progression of nouns used by the pilot as the alleged phenomenon approached him. The general aviation term "traffic" was soon replaced by the term "large aircraft" and then by an even more specific term "airforce aircraft" which seemed to the pilot to be the only reasonable explanation for what he reported to FS. At 0909:14 Valentich refers to an "aircraft" only indirectly in answer to a question from FS. About 14 seconds later he seems to have made his mind up that the phenomenon is not an aircraft. I surmised that it was from this time on that Frederick would have been concentrating on the phenomenon in order to try to identify it. He would not be concentrating on flying his aircraft to the same degree he would before such an encounter. This factor could play an important role in what took place thereafter. Having committed himself to the interpretation of it not being an aircraft, Valentich only communicates perceived characteristics for the next 80 seconds [from 0909:28 to 0910:48] and does not appear to want to have to give it an identifying label. Then, at 0911:03, he asks FS for information about the possibility of military aircraft flying in his area. This question is reasonable from the standpoint that the appearance and dynamics of the strange phenomenon did not correspond to conventional aircraft. This would lead most pilots to consider unconventional aircraft which would then lead one to consider the military as its source.

Clearly, Valentich was struggling with his encounter in a logical fashion, a fashion that almost any airman would employ - from traffic to large aircraft to airforce aircraft to not an aircraft to military aircraft to not an aircraft. Particularly interesting is the fact that the DOT released the parts of this transcript with the

words "not an aircraft" on it at all! This does not sound like a cover-up to me.

In conclusion, it appears that this part of the voice communication between Valentich and Flight Service at Melbourne represents either a very cleverly contrived and conducted play act on the part of the pilot or some sort of aerial event in which lights outside the aircraft were seen to perform very dynamically and anomalously.

It is also important to note the references of Steve Robey at Flight Service to the alleged object:

0906:23	TRAFFIC
0906:46	AIRCRAFT
0907:43	LARGE AIRCRAFT (obvious reference to previous description by the pilot at 0906:26)
0907:57	AIRCRAFT
0909:11	AIRCRAFT
0909:46	AIRCRAFT
0910:17	OBJECT
0911:08	AIRCRAFT
0911:17	AIRCRAFT

Here we find an obvious and quite understandable reticence to refer to the phenomenon as anything but an aircraft. Air traffic controllers are on the ground in the security of a building and not in the air during their work hours. They try to help pilots in many ways not the least of which is by providing flight guidance and navigation information and also, at times, by providing the reassuring voice of a trained professional on the ground. Mr. Robey had no reason whatsoever to call the phenomenon anything but an aircraft. This approach would have helped the young pilot in a very real way. It would have reassured him that he was very

probably seeing some type of aircraft and not a UFO.

3. *Voice inflections:* I learned something from having the opportunity to hear the voice of Frederick during his radio transmissions. While much will be said later concerning analyses of this important piece of "evidence," I will comment on several interesting features of voice inflection.

First of all, I was unable to obtain a tape recording of Frederick's voice from his father. Such tapes would have been valuable for comparison with the tape I received. Guido stated without reservation that the tape was that of his son's voice. A more recent correspondence from a colleague in Melbourne has confirmed that the voice on the tape was, indeed, that of Frederick.

Flight controller Steve Robey was quoted in a Melbourne newspaper article in November 1980 as saying that Frederick's transmission was "...a kind of rushed communication...it sounded as though it was rattling him." This writer did not receive this same impression nor did the pilot's father.

The first impression one gets from listening to the tape is that Frederick was under reasonably good control of himself throughout almost all of the period. His questions are given in a matter-of-fact tone with a characteristic rise of inflection at the end of most statements. In several instances Frederick ended a communication with a dropping inflection; they are given below for comparison purposes.

It is reasonable to assume that Frederick, like so many other pilots, had developed a speaking style over the radio which used a rising inflection to indicate the end of a thought or transmission. This assumption is supported by reviewing the entire tape transcript. Only in five instances listed below did this not happen. The first time Frederick did not end his statement with a rising voice inflection was well before the appearance of the phenomenon. The other four took place well into the encounter.

Abnormal Voice Inflection Statements

TIME	FROM	TO	TEXT
0900:29	DSJ	FS	MELBOURNE DELTA SIERRA JULIET CAPE OTWAY (DESCENDING FOR) KING ISLAND ↰
0909:06	DSJ	FS	MY LEVEL IS FOUR AND A HALF THOUSAND ↰ FOUR FIVE ZERO ZERO ↰
0910:20	DSJ	FS	...ITS GOT A GREEN LIGHT ↲ ...AND SORT OF METALLIC LIKE ↰ ...IT'S ALL SHINY ON THE OUTSIDE ↰
0911:23	DSJ	FS	DELTA SIERRA JULIET (IT'S AH...NOR)//open microphone 2 seconds// (NOW) APPROACHING FROM THE SOUTHWEST ↰
0912:09	DSJ	FS	...IT IS HOVERING ↲ ... AND IT'S NOT AN AIRCRAFT ↰

Note: The mark ↲ indicates a rising voice inflection while the mark ↰ indicates the opposite. Three periods indicate a short pause.

The second time the voice inflection is falling represents Valentich's direct answer to a flight service question and might be interpreted to mean that he did not want to terminate the

communication (by inflecting his voice up at the end) or at least that he was expecting Steve Robey to ask more questions. The third and fourth times have to do with Frederick's visual description of the strange apparition; his dropping voice inflection would suggest that he did not want to terminate the communication but rather wanted to keep the transmission going. The fifth and last time his voice had a falling inflection is following the pregnant words "IT IS HOVERING ↶ AND IT'S NOT AN AIRCRAFT ↷. There is a more serious tone to his voice here. Of the twelve total separate statements made about the phenomenon, he ends ten (83 percent) with a rising inflection.

4. *Areas of voice emphasis:* Another analysis technique that is sometimes useful is that of comparing the content of what is said when a statement is given artificial or imputed emphasis versus when it is not. No obvious changes in the volume of Frederick's voice were noted at any point except one. This occurred at 0912:09 when he said, "...it *is* hovering - and it's *not* an aircraft." The two words in italics were given greater emphasis. I got the definite impression that he was trying to sound convincing. Thus, areas of emphasis are peculiar in this case by their absence. Or, put another way, Frederick maintained a strikingly controlled voice throughout his entire radio transmission. This lack of emotional emphasis has puzzled many investigators and would suggest either: (a) the entire affair was a deliberate hoax, or (b) the young pilot was an extremely self-controlled and well disciplined person. It is possible that Valentich experienced engine problems (cf. Appendix 4 and 12 at time 1911:50. Several private pilot friends of mine have suggested that had they been flying at night over water and their engine began to malfunction, they would get quite anxious; they felt that their voices would probably show their anxiety as well.

5. *The fact of radio transmission:* Another interesting fact that Frederick's father and others[4] have pointed out has to do with the fact that the Cessna's VHF radio would not have been able to reach Melbourne below some critical altitude which has been estimated to be about 1,000 feet for a 90 mile separation distance. Since the radio contact was loud and clear up to the final statement "Delta Sierra Juliet - Melbourne" at 0912:49, it is more

than reasonable to believe he was still at a relatively high altitude at this time.

The question remains why the transcript of this strange radio communication was released at all by the Department of Transport? One reason has already been given, namely that the news media literally demanded to know what really happened that night. But how did the press find out? UFO investigator Paul Norman provided the answer.[5]

"...this strange event was at first being treated as an ordinary aircraft disappearance. However, between 7:00 and 7:30 on that same evening, other pilots were flying and tuned to the same frequency. Several witnesses heard the pilot's final words. One of the these pilots decided to tip the press. Thus, the world learned about this strange encounter."

Despite the pressure upon the DOT to release this transcript they did not have to release it. Perhaps it was just an oversight that the aviation officials, who decided to release the bizarre facts, did not realize that its release would only fan the fires of controversy rather than quench them. Or perhaps the tape was released deliberately for some unknown reason.

6. *Metallic Sounds Ending the Tape Transmission:* The last 17 seconds of the audio tape which I received possessed strange, intermittent so-called "metallic" sounds. They begin at approximately 1912:30. Results of an attempt to duplicate these sounds in-flight from a Cessna 182 are presented in volume 3 of the *Journal of UFO Studies,* 1983. Briefly, a ubiquitous sound spectrum analyzer was used to determine the distribution of frequencies over time for both the 17 second period of sounds as well as "control" sounds which I made in flight. The control noises were generated by various means which sounded, to the author, similar to the metallic sound. These spectra are presented in Figure 7. Part (A) is for the metallic sound. Several comments are appropriate concerning it.

1. There is no evidence of voice sounds occurring during this 17 second period.

2. A relatively pure tone of 1,350 Hz (+/- 10) extends through the entire tape and probably originated in the author's own tape recorder since it also includes the author's voice when an identification leader was added.

Figure 7

Frequency Spectrum Analysis Results
of the "Metallic" Sound and Others as
Described in the Text

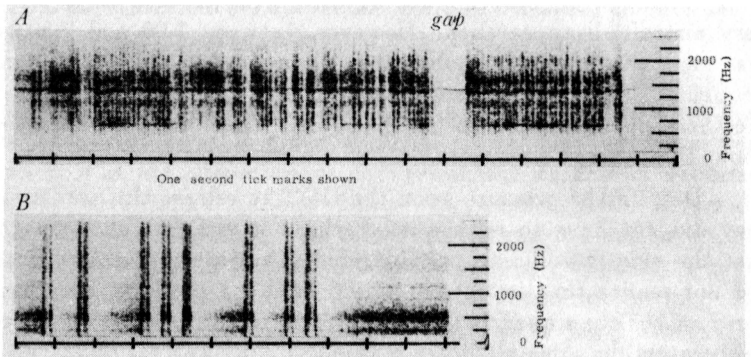


Figure 7A. Frequency spectrum analysis results. Top tracing is for original metallic noises on Valentich tape. Bottom tracing is present reconstruction tests pressing microphone transmit button while on the ground with the engine off.

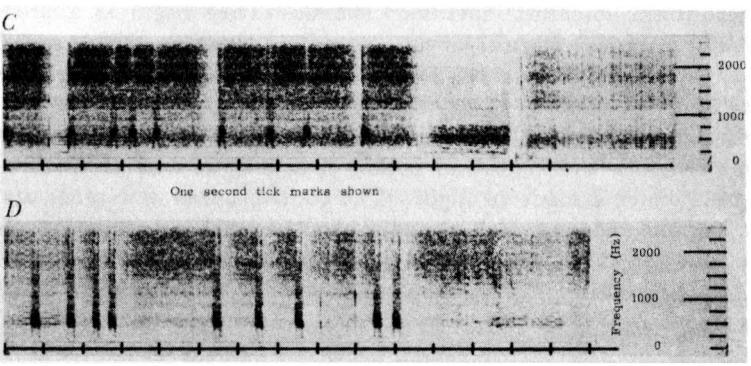


Figure 7B. Frequency spectrum analysis results. Top tracing is for reconstruction from aircraft with engine running at 2400 RPM on the ground. Bottom tracing is for present reconstruction from aircraft with engine running at 2100 RPM at 4,400 feet altitude and about 18 miles from nearest radio receiver.

3. There were two separate groupings of metallic noises. The first lasted 10.4 seconds and consisted of about 24 separate bursts of noise. Each burst lasts about 0.16 second and begins and ends with a "start" and a "stop" pulse. These initial and final pulses were relatively homogeneous from 625 to 1,750 Hz. Additionally, 14 of the 24 bursts possessed a relatively pure tone of 685 Hz. The duration between adjacent bursts varies from a minimum of 0.03 sec to a maximum of 0.23 sec. Since there are as many as five bursts per second, it is unlikely that Valentich was keying his microphone switch rapidly, perhaps to send out some distress signal. Average human reaction time is longer than these intervals.

4. There were no particular patterns to the bursts which might have been a Morse code message from the pilot. According to one source Valentich had the habit of keying the microphone button rapidly at times.

5. As part (A) of Figure 7 shows, there is a gap between the first and second bursts. This gap lasts 0.84 second and contains a single (1,350 Hz) tone, probably from the author's own recorder. The source of this gap is not known.

6. The second group of metallic noises lasts 4.04 seconds and contain bursts having the same general durations and frequencies as during the first bursts. However, there is also a repetitive tapping extending throughout this second group of noises. Each tap lasts about 0.02 sec with a frequency of from 700 to 1,300 Hz. They are separated by 0.52 second. Ten such taps are heard after this second group of metallic noises is over. Where do these "new" taps come from? Is it possible that a section of tape had been removed from the center of the metallic noises for some reason and then, during the rerecording of the last group of bursts to end the tape, another recorder introduced these taps?

   There are twelve bursts during the second group of noises, each of which start and stop with a special, wider frequency pulse.

7. The tape ends with a relatively blank period lasting 4.88 seconds. It is clear that the microphone switch had been released to stop the transmission since the volume of the background static increases regularly as is typical of time constants used in squelch circuits.

Referring to parts (B), (C), and (D) in Figure 7, they represent:

(B) Aircraft engine off, microphone transmit switch depressed rapidly eight times. Transmission distance is only about 200 yards.

(C) Aircraft engine running at 2,400 RPM, transmission switch depressed as above at about 200 yards distance.

(D) Aircraft in flight at 4,400 feet altitude with engine running at 2,100 RPM (engine manifold pressure at 21 inches). The transmission switch was depressed as above. Nine separate depressions were made within an 11.5 second-long period.

While to the ear these sounds were somewhat similar to that of the original metallic noise, it is clear that they are different in terms of the frequencies and timing. It is still not possible to identify the source of the noises during this period of 17 seconds on Valentich's voice tape. A separate research paper is now in preparation which analyzes the many times Valentich says "Delta, Sierra, Juliet" throughout this tape for signs of voice stress and other details.

In the chapters of Part II I have tried to reconstruct the last flight leg from different points of view, each of which can be related to a particular explanatory hypothesis of what happened. As before, I have tried to describe the events on-board Cessna VH:DSJ as if I were sitting in the back seat taking notes. Further, I have tried to include details which, although purely hypothetical, could have happened. By past experience I have learned how one tiny clue can lead to more critical clues, how the final disappearance of a private pilot over Australian waters at night is but the

last link in an exceedingly long chain of events. Each link is important. My own observations and conclusions about each of the following "last leg" chapters will be given later so to permit the reader to form his own opinions.

Please bear in mind that the following five chapters (chapter 9 through chapter 13) are fictionalized accounts and are intended only to try to recreate what might possibly have taken place.

Footnotes

1. Roberts, P., Missing pilot tape kept under wraps, Newspaper name not known, October 30, 1978.

2. "New hunt in pilot puzzle, *The Sun,* Melbourne, July 9, 1980, pg. 24.

3. *International UFO Reporter,* vol. 3, no. 12, Dec. 1978, pg. 8.

4. Valentich, G., My son Frederick, *The Australian UFO Bulletin,* September 1980, pg. 14. Pinkney and Ryzman point out in their book *Alien Honeycomb,* (Pan Books, Sydney, 1980; pg. 78) that at the distance of King Island VHF radios could not communicate to Melbourne below an altitude of 2,925 feet (900 m) but could at an altitude of 4,388 feet (1,350 m). At the earth's surface even half way to King Island, Frederick could not have radioed Melbourne even relying on the radio repeater station at Mt. Macedon.

5. Norman, P., Mystery deepens in pilot disappearance case, *The MUFON UFO Journal,* no. 141, November 1979, pg. 5. In a letter to the author from Mr. Norman dated December 14, 1980, he stated that Guido Valentich remembered hearing the voices of other pilots on the tape recording that included his son's voice.

PART TWO

The chapters in Part Two dealing with the last leg of the flight of Frederick Valentich are hypothetical. An attempt has been made to make the details presented here conform as closely as possible to what is known about the incident. The purpose of presenting these four chapters is to permit the reader to consider the evidence and draw his own conclusions about what took place.

Chapter 9

The Last Leg: Version One

"Melbourne," the lone pilot called into his hand mike, "Delta Sierra Juliet." He paused for only a second and then said, "Cape Otway, descending for King Island." Then he released the switch. He looked at his wrist watch. It was almost exactly 7:00 p.m.

The sky was already dark to the south and east. Only the western horizon was outlined by the beautiful sky glow produced by sunlight scattered by air molecules and particles high in the atmosphere. Frederick kept searching the darkness ahead of him for the flashing white beacon which marked his destination. "How could King Island be so small?" he thought to himself. "It's out there somewhere. I'd better cross check the gyro with my reference compass."

With the earth's surface melding into the dark sky without any visible boundary strange things can happen to even the most experienced pilots. Disorientation can set in slowly or quickly, either way the end result can be disastrous. The novice air cadet pilot found it hard to divide his attention between trying to find a white flashing light somewhere out there in the blackness and the directional gyro on his panel. With each jolt of turbulence the aircraft vibrated and heaved up and down; each movement of the plane weakened Frederick's delicate psychological bond with the pull of gravity. A sense of fear began to rise within him as he stubbornly continued out over the cold waters of Bass Strait.

Almost unconsciously he said to himself, "the crossing will only take 20 minutes so I'll go on," while an opposite, a competing thought was already forming in his mind, "...I'd better turn back and do this another time." The first thought arose out of his long standing wish to become a pilot while the second came from simple, raw fear. "What would the guys back at the barracks think if they found out I had chickened out?" In the end it was

this thought that drove him onward more than all the others.

"Let's see, airspeed 130, 135...O.K. Manifold pressure O.K., RPMs fine." he said inaudibly. Completing his instrument scan he looked up. The air outside was becoming a little rougher and he had to make larger and more frequent control wheel movements in order to bring the aircraft back into level flight. To do this without the aid of the outside world being visible required him to look at several instruments in turn, chief among them the attitude director indicator or ADI for short.

The ADI was located almost in front of Frederick and just to the left of the compass and below the top of the glare shield.

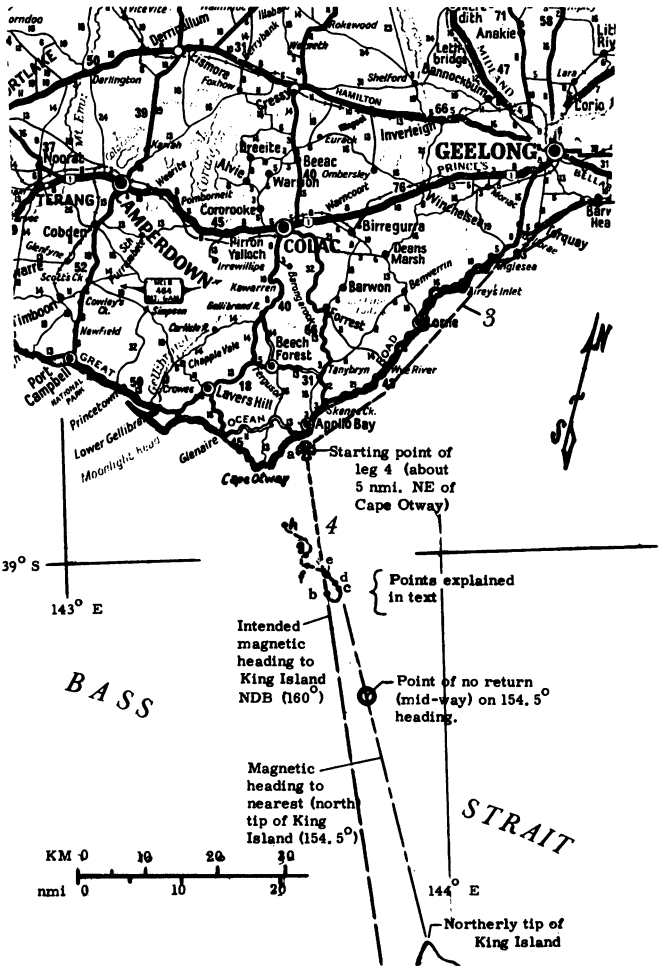
It was 7:05, almost 7:06 and the aircraft was almost six minutes out over the strait. Frederick had not looked at his directional gyro for several minutes as he was concentrating hard on maintaining a constant altitude and holding his wings level. He hadn't noticed the gyro index moving slowly but continuously more than 180 deg to the left. He didn't realize it but he was approaching the Cape Otway area from the south.

To illustrate what might have taken place, Figure 8 shows with a dashed line Frederick's (possible) flight path during his disorientation. Also shown is the intended magnetic heading to the King Island NDB of 160 deg, the flight path heading to the nearest point of land on King Island, and the point of no return on the 154.5 deg heading flight path. Labeled points are discussed in the text.

If Frederick had started out over the water about five miles before arriving at the lighthouse at Cape Otway (point a), he would not have had to turn more than about 200 deg (from point b to c) to his left to be approaching it. Even if this bank took place over only a three minute-long period it would require a turn rate of only about one degree a second. He never wondered why

Figure 8

Chart of Cape Otway Region and Hypothetical Aircraft Flight Path Related to Chapter 9



his airspeed had dropped by almost ten knots.[1] He was so absorbed by his full-time attempts to maintain the correct aircraft attitude and altitude he had not bothered with a small airspeed change. Altitude and attitude are more important in the overall scheme of things than is a small decrease in airspeed, yet in the process he had forgotten about his heading!

Just as he checked his altimeter again, reading 4,750 feet, he looked up from the panel and noticed a very bright white light ahead and somewhat to the left of his direction of flight. "What's that!" he cried. "It's too soon to be King Island." (point d). As he continued to study the light he virtually forgot his instruments altogether. "I'd better try and find out if it could be an aircraft," he mumbled as he reached for the microphone.

"Melbourne," he said, pausing just for a moment, "this is Delta Sierra Juliet. Is there any known traffic below five thousand?" Frederick had hoped that his inquiry would settle the matter and that the fellows down on the ground would maintain safe traffic separation. He was shocked when he heard the far away voice from his loud speaker say, "Delta Sierra Juliet...no known traffic."

"No known traffic! That's impossible...there must be another aircraft there they don't know of...and it's approaching me," he thought. A cold sweat began to break out on his forehead. It was very lonely in the cockpit and somehow it seemed colder than before.

"I'd better turn on my landing lights to tell him that I'm here," he thought and reached to the light switch found at the bottom center of the panel. As he leaned forward and then back again he felt a wave of dizzyness. The lights on his instrument panel swam around for several seconds. He had felt this same sensation before when flying "under the hood" as it is called, in the ground training simulator. He knew that all excessive head motion must be avoided while in flight, particularly during turns. Frederick sensed that something was dangerously wrong now. All this had taken place in a matter of seconds since his radio call. he was left-handed and had to transfer the microphone from his right to left hand to be able to reach forward to the landing light

switch. He felt a sense of frustration each time he had to make this change of hands during flight. Frederick once again held the mike up to his lips and pressed the activate button. He tried to sound calm for it was much too soon, he thought, to panic. He said, "Delta Sierra Juliet...I am," then he paused for a moment as he considered telling the ground about the air turbulence he had run into. He decided not to mention it. It didn't really matter now.

"Seems to be a large aircraft below five thousand," he continued. He let go of the mike switch and waited. He was continuing to watch the white light ahead of him. Since he knew he was at about 4500 feet altitude, and had plenty of airspace below him, he did not consider looking back down to his instruments. It would be too risky with another aircraft nearby. Valentich didn't notice the slight nose down pitch attitude he was in which made the Cape Otway lighthouse beacon seem to be above his own altitude.

"They're sure taking their time," Frederick thought. "What takes so long? I guess they must be checking on their radar or something."

After about 12 seconds he heard his radio come alive again with the words, "Delta Sierra Juliet...what type of aircraft is it?"

The pilot smiled inwardly at such a stupid question. "If I knew what kind of aircraft it was I wouldn't need to ask them...would I?" It was obvious to Frederick that the light, which now had changed into several lights, was still out there ahead of him and apparently above him. He was unaware of his very slight pitch down attitude. He also did not realize that he was using the lights to stabilize his own aircrafts' attitude. He didn't look at his compass now since he could tell if he was changing heading by a relative shift of angle between his window frame and the lights.

"Where did those other lights come from?" he wondered, not realizing that the single light outside was refracted in two by the front and rear surface of his windshield and that the primary beam from the lighthouse was also being seen because of its reflection off the almost glassy calm waters. At times he could see four separate white lights and at others only two. Only a few seconds

elapsed from the end of the transmission from flight service to the time Valentich answered.

"Delta Sierra Juliet...I cannot affirm...it is four bright," he paused for a second and then went on, "it seems to me like landing lights." He was careful not to sound excited. "Good pilots don't yell over their radios," he mused to himself. After six more seconds he once again heard the voice of the controller at Melbourne say, "Delta Sierra Juliet," and then silence.

"That must mean that he copied my transmission," Frederick reasoned. It was about then that he realized that the air was calmer than before. The realization gave him a good feeling. He knew that he could ignore his instruments a little more now and stay head up longer. Anyway, that bunch of lights outside was the strangest thing he had seen yet. He became fascinated with them. While he still thought they were on another aircraft he reasoned that it must be a long distance away since it didn't seem to be moving very much relative to his windshield frame.

Cessna VH:DSJ was still above 4,000 feet altitude but approaching the rugged coastline, now bathed in darkness. The aircraft was on a heading of very nearly 312 degrees and the separation distance between the lighthouse and aircraft was down to about 13 miles and closing fast.

The time was now 1907:30 and Valentich had still not realized his nose down attitude which was beginning to evidence itself as a slow but continuous rate of descent. He was now at about 4200 ft altitude and turning slightly to the left. The combination of these two factors made the bright lights seem like they were passing above him. He had not made a coordinated turn left which would have raised his right wing because he was still disoriented and vainly searching for external lights to tell him his attitude. He was at point e in Figure 8.

Thinking that he ought to report the activity of the unknown aerial object in front of him, the young pilot once again radioed Melbourne.

"Melbourne, this is Delta Sierra Juliet...the aircraft...has just passed over me at least a thousand feet above." he reported. He

thought to himself, "well that ought to get their attention...maybe they really don't know about other aircraft up here. Maybe its some military jet."

Valentich still had not scanned his instruments in any systematic fashion from the time he first sighted the lights. As he continued his turn to the left the lighthouse beacon had appeared to travel past him, above and from ahead to the right rear of his visual field. He was now heading approximately west (point f).

It wasn't long before he again heard the controller's voice on his speaker, a voice that was becoming a little more familiar with each transmission and a voice that seemed to form the only tangible link with life on the ground. "Delta Sierra Juliet, roger...and it... it is a large aircraft...confirm?" There was the slight tinge of disbelief in the last few words but the pilot did not catch it over the rapid staccato roar of the engine.

Almost immediately, Frederick answered, "An...unknown due to the speed its travelling." He paused for several seconds. "I think that's the reason at least," he thought to himself. "It seemed so far away at first and then it just went by above me in what seemed like seconds. Only jets can do that."

Then he continued, "...is there any airforce aircraft in the vicinity?"

This was a logical question, one which would make good sense to everyone on the ground at Melbourne. Valentich suddenly realized that by now, there must be a whole crowd of people standing around the controller's position listening in on his communications. The thought scared him. "Here goes my whole flying career," he thought. "What a fool I am. I should've never radioed down at all...whatever that thing is out there. I'll be the laughing stock of the country." This new realization seemed to paralyze the young man more than the dizzy feeling he felt. He was sweating profusely now and reached up to open the air nozzle more fully upon his face. He began to realize that he was not only disoriented but on the verge of being air sick.

His mind flashed back to words he had heard repeated more than once in his ground school classes...whenever you think you

are becoming disoriented don't trust your eyes but your instruments. "Trust the instruments... trust the instruments...". The words kept vibrating through his mind. Finally they sank to a level of his awareness that they produced action. He was startled into the realization that he was disoriented. He had been trusting his own vision. He had not been flying by instruments. He thought, "I'd better get back on them right away and stay on them... no matter if there's something out there." He immediately looked down at his panel instruments, swearing a hushed oath under his breath.

"How could I have done such a stupid thing?" he thought. Just the realization of knowing he was back on the gauges gave him a sense of comfort. But he also knew that he was in grave danger at the same time. "It's my first overwater night flight...what am I doing here?" These and other thoughts popped into his mind from moment to moment as he struggled to make sense out of the ADI and vertical situation indicator (VSI) and altimeter.

"Attitude shows me in a slight bank right...no that's left," he said out loud, as if to somehow make it more correct. "I'm dropping...better find my altitude...oh no, 3880 feet. How could that be?" Frederick thought.

Pulling back sharply on his control wheel the aircraft's nose climbed and the engine's RPM remained constant. But the climb was soon putting undue stress on the engine. Although his thought processes were slowed by the fear he felt and the fatigue that had settled over him for the past five minutes, Frederick finally understood what he had done wrong. Reaching forward, he increased the throttle setting until he read 24 inches of manifold pressure, about right for this rate of climb. Just then the controller's voice was heard again.

"Delta Sierra Juliet...no known aircraft in the vicinity." he heard. These few simple words just couldn't be accurate. "They must be checking the wrong radar," Frederick considered.

It was now 1908 exactly and Frederick was struggling to regain adequate control of his aircraft. At least he was climbing again. But where was he? He literally did not know.

In the process of banking to the right and left to regain control, Frederick had circled back to the right, placing the Cape Otway lighthouse off his left wingtip (point g). He thought to himself, "I was travelling roughly south toward King Island and that thing's off to my left, that's East." The light had reappeared into view as he swung his nose around to the right. But his angle of climb had totally obscured the lighthouse light from view until it suddenly reappeared off to his left from behind the nose cowling. Now it seemed to be below him, yet this effect was simply the result of his angle of bank.

Frederick was not going to radio anything else to the ground but, deciding that he had better continue what he had started and live with the consequences, he pressed the microphone button once again and stated in as matter-of-fact voice as he could, "Melbourne, its approaching now from due East," pausing for only a second, then he completed his communication, "towards me." He added these final two words as an afterthought. He couldn't really be sure if they were getting nearer. At this point he wasn't sure of anything. His head was still feeling the disabling effects of vestibular disorientation and dizziness.

After what seemed like a very long time he heard the controller's confirmation, "Delta Sierra Juliet."

For the next twenty seconds the pilot was kept busy trying to hold his wings level and his nose in a slight climb. With the wings located above his cockpit, each time he rolled one way or the other the lights either came into view or suddenly disappeared behind them. He had finally regained some precious altitude; his panel instrument showed 4300 feet. So he decided to throttle back a bit and remain in level flight, that is, if he could.

Frederick thought he would try to describe to the controller what was going on. He might as well come clean and admit he was lost and almost out of control. So he depressed the mike switch still another time. Just as he was about to speak he changed his mind and released the switch. "There's still time to do this...I've still got plenty of altitude and I proved to myself I can fly this thing," he reasoned. A sense of self-confidence began to return to Frederick.

"I know what I'll do," he thought, "I'll just keep on describing that strange light out there to Melbourne and see if they can help me identify it and, at the same time, help me locate where I am."

So once again he radioed, "Delta Sierra Juliet it seems to me that he's playing some sort of game...he's flying over me two...three times at a time at speeds I could not identify." He released the switch and waited.

It was now 1909:02 and only two or three seconds had gone by when the controller's voice shot back through space to the pilot. "Delta Sierra Juliet...roger...what is your actual level?"

It was probably becoming clear in the mind of Steve Robey, the man who was manning the radio and talking to Frederick, that something was terribly wrong. His question drove straight to the possible core of the problem as well as to the solution. Maintain altitude, maintain altitude, that is one of the cardinal rules of all flying and likely the primary concern that the controller had at that instant.

Frederick looked down at his altimeter and read 4500 feet. The shorter needle hovered between four and five while the longer, thinner white needle was very nearly at five. He answered, "My level is four and a half thousand...four five zero zero." He wanted to sound convincing to anyone who might be listening on the ground. He held his voice in check. "After this is all over, I'll have enough to explain as it is without complicating it any more with lousy call outs," he thought. Several seconds went by and then he heard the calm voice of the ground controller again.

"Delta Sierra Juliet...and confirm...you cannot identify the aircraft?" the words rasped out of the aircraft's loud speaker.

Frederick was glad to answer that question. "Affirmative," he responded. It was one of those odd kinds of questions which neither adds nor takes away from one's knowledge about what's going on. Frederick couldn't tell if the question meant that the controller knew and wanted to find out if he knew or that no one knew. As he thought about the question and his answer Frederick wondered what was really going on here. "Maybe Melbourne knew

all along what was up here in the sky with me, maybe they're not playing the game straight, maybe...", his thoughts were interrupted by another radio transmission. Frederick heard,

"Delta Sierra Juliet, roger...standby."

Cessna VH:DSJ and its lone occupant continued their irregular course through the pitch black skies near Cape Otway. Like a moth attracted to light, Frederick consciously or unconsciously headed toward the light, even if in wide slow turns because of his lingering disorientation. It fascinated him in a strange sort of way. Little did he realize that the light was stationary and located very close to the ground. Little did Frederick understand just how near he was to utter and final disaster. By now he had flown to within 7 miles of the lighthouse (point h). The time was 7:09 and 20 seconds.

The white light had seemed to descend in altitude since the Cessna had maintained approximately 4500 feet but had approached the lighthouse light closer and closer. For just a brief instant Frederick thought he could make out some ground lights, tiny pin points of light off to the left side of the main white light. They seemed to fade into view for a few seconds and then disappear again.[2] For this brief instant Frederick thought he recognized what the ever brightening light was before him. "It must be some marine light...maybe on a ship near King Island. But what about those other lights I just saw?" he reasoned. "Maybe my eyes were just playing tricks. The light must be on the ocean's surface...on a ship...I only wish I had some real-world horizon to look at."

The young pilot was so convinced that the light was from a ship that he impulsively lifted the microphone to his lips again and, pressing the transmit switch, said, "Melbourne...Delta Sierra Juliet...it's not an aircraft." then he paused for an instant. "Should I go ahead and tell them what I think it is before I'm certain?" he questioned himself. "I'd better not, at least not just yet." And he only said, "...it is..." breaking off any further disclosure but holding the switch down several seconds longer. He did not consider the effect this action might have on those at flight

control center, at Melbourne. Little could he know how he was rapidly becoming the center of intense interest.

Only the roar of the engine filled the cockpit now. Pleased with himself that he had brought the aircraft under some degree of control, Frederick relaxed a bit, letting down his guard. He checked his altitude once again and found that he was still at very nearly his proper height, 4500 feet. His attitude was tolerable also with only a occasional wing tip dip.

Once again his radio came alive with the familiar voice from Tullamarine airport, "Delta Sierra Juliet, Melbourne...can you describe the...er, aircraft"

Frederick smiled to himself at hearing these words. "I already told them that," he mused. "Maybe they think I'm playing a joke on them." It was in a matter-of-fact voice that he answered.

"Delta Sierra Juliet, as it's flying past it's a long shape..." he paused again for a couple of seconds still depressing the microphone switch, then he continued, "cannot identify more than that...it has such speed." Frederick continued to hold the switch down but did not speak. He was looking at the bright white light getting closer and closer. Were his eyes playing tricks on him? The light seemed to bob up and down and it seemed so much nearer now, right in front of him. Valentich did not realize that in the extremely calm sea just off the shore he was seeing an intense reflection of the lighthouse in the water.

He finally continued, "it's before me right now Melbourne." Frederick had only meant to describe what he saw. He did not qualify his statements with the facts that are absolutely necessary if others are to make sense out of the statements. Without knowing the dynamics of the aircraft, for instance, it is almost meaningless to describe the position or movement of some distant light at night. But Frederick was not aware of the critical importance of giving such details. All he could do was describe what his eyes saw as he looked out of first the left then the forward and then the right-hand windows.

Almost as soon as he had let go of the transmit switch on the microphone Frederick heard flight service say, "Delta Sierra Juliet, roger, and how large would the...er...object be?"

As he was listening to these words Frederick was suddenly overcome by sweeping waves of dizziness, only this time much more severe than before. His head felt like it was rotating and the instrument panel lights swam about. He had moved his head too fast and too many times and now he was paying the price. In his overconfidence at being able to get out of his earlier problem he had forgotten to hold his head as still as possible. The turns he was in finally produced their typical and terrible result - vertigo!

When he looked down at his instruments he had trouble keeping them in focus. The tiny white needles pointing to critical flight-related numbers seemed to waver around making it very hard to tell what they were indicating. Frederick fought back at the raw fear which had overtaken him again. He tightened his stomach muscles to increase the blood pressure higher in his head and he tried to hold his head steadier in spite of the growing instability of the aircraft's flight path. For many seconds he would concentrate on regaining a stable pitch angle and, just when it seemed that axis of control was alright he would over correct and roll one wing down sending the aircraft into a tight banking turn. It was almost fifteen seconds since he had heard flight service ask him a question. Somehow he had not felt it to be an important question. He had been too busy trying to bring his aircraft under control. Each time he looked up from the instruments he thought he could see that strange light outside somewhere. First it was on the left and then on the right. It almost seemed as if it was circling over him. The young pilot did not realize it but he was in a tight spiral turn which was descending steeper and steeper toward the sea.

Finally Frederick fumbled for the microphone which had fallen from its panel hook and raising it to his lips he said in as controlled a voice as he could, "Delta Sierra Juliet Melbourne...it seems like it's chasing me." He paused briefly as he considered what to say next. Then he continued, "What I'm doing right now is orbiting and the thing is just orbiting on top of me also...its got a green light...and...sort of metallic like...it's all shiny on the

outside."

He was so dizzy now that he had trouble finding the microphone bracket in front of him. As Freddy reached forward it felt as if an unseen force was pushing his right arm to the side. It was a force known as coriolis acceleration; it causes strange sensations, indeed. The light outside was really only secondary to him now but he had to give some kind of description to the authorities on the ground; he had thought he could see a shiny polished metal appearance outside yet he couldn't be certain. Maybe it was a reflection of the bright light off the underside of his wings. It might have resulted from the light of the source scattering off the windshield into his eyes in many star-shaped patterns that are so common to plastic windshields. "But it really did look metallic to me," he thought to himself.

As he pondered the visual description he had just given he temporarily forgot the terrible predicament he was in. He had unknowingly pulled back on the control wheel and was climbing again. It had been a gradual climb until suddenly, the sound of his stall warning buzzer broke through the mental barrier he had temporarily erected - erected by the fear that was grinding its way through him. "Oh no!" he thought, "I'm about to stall!" The idea fed his fear all the more. He pushed forward on the wheel quickly and as hard as he could. He had really only practiced stall recoveries six or seven times before with an instructor and two more by himself, never quite enjoying the experience even during the daytime when everything was easier to interpret. When it is light one can tell one's roll attitude during the stall-produced dive, but at night the earth's horizon is gone and it is much easier to become inverted or to get into some other terrifying condition.

As his speaker came alive again with the words "Delta Sierra Juliet," from the ground controller, Frederick was jolted back into thoughts of the ground personnel who must be listening in on his past communications. "What do they think's going on?" he considered to himself. "I think I can get out of this situation. All I have to do is keep my wings level, my nose level, and sufficient air speed and altitude...them I can sort everything out and get back home." These and other thoughts came and went through his consciousness.

The bright light outside had now disappeared above the windshield cut-off but it was so dark outside Frederick thought it had gone out by itself. He thought he had better report such a strange thing so, having leveled the wings and regained a semi-stable attitude, he depressed the microphone button and said, "Delta Sierra Juliet," he held the button down but didn't speak for a long time. He was thinking about what he should report. Should he really report his situation, as critical as it was, and risk losing his future aviation career; or should he continue with what had now become a sort of cover story about the unidentified white light outside? After what seemed like a very long time he went on, "it's just vanished!" speaking in a matter of fact tone.

"That may cause some raised eyebrows down there but it's better than admitting what's going on up here," he thought. "I'll just keep the communications going...in case I really do need their...they can't help me fly the plane anyway now can they?...it's up to me to get out of this..." Frederick's mind was filled with all kinds of short, conflicting thoughts which seemed to flash into his mind and leave just as quickly. It's strange how stress can produce such incoherence in thinking patterns. It wasn't long before the voice of the controller at Melbourne was heard again.

"Delta Sierra Juliet," the young pilot heard over the droning of his engine.

Almost as if he were trying to hold the radio channel open continuously, Frederick pressed the microphone button immediately after the controller's voice had died away. He held it down for a few seconds, thinking about what he was going to say. Again, he was struggling with the decision of whether to tell them what was really going on or to continue with his story about the strange light. Finally he decided on the second alternative. He spoke clearly and said, "Melbourne would you know what kind or aircraft I've got...is it a type of military aircraft?"

"It must be a military aircraft," Frederick thought to himself, "it's got fantastic maneuverability."

The young pilot had completely forgotten about the time. He had absolutely no idea how many minutes might have gone by since this whole thing began. "Where am I?" he questioned

silently. He glanced down at his wrist watch in the darkened cockpit. Finally he made out the luminous dials which read 7:11 pm. He had been flying eleven minutes over the straits. "Let's see, the total over-water flight time is twenty minutes so I should be somewhere near the mid-way point... except for the turns I made back there...my SAR time is still O.K." Frederick thought to himself. His reasoning seemed to reassure him somewhat.

Soon he heard the ground controller's voice again, "Delta Sierra Juliet... confirm the...er...aircraft just vanished." The radio transmission was unclear because of static.

Frederick answered into his hand mike, "say again." Then he waited for the reply. It came back in two seconds.

"Delta Sierra Juliet...is the aircraft still with you?" he heard the controller say. Valentich became a little irritated as he thought to himself, "what kind of answer is that? I asked about possible military traffic is out there and they answer my question with a question." He had the Cessna straightened out again and everything seemed to be under control, at least for the moment. What the young man did not know, indeed could not have known, was that the buffeting he experienced during the incipient stall and subsequent recovery had caused a small bubble of water lying at the very bottom of his fuel tank to find its way to the tank's exit tube to the engine. It was relentlessly working its way in tiny bubbles toward the carburetor along with the fuel.

Frederick peered out of the forward windshield for the light but it was not there. He looked as far as he could to his right and then quickly back to the left and then he saw it, not quite as big as it had been - a clear, white light against a pitch black background. He once again pressed the microphone switch and said, "Delta Sierra Juliet...it's ah...nor..." then he paused. "What direction is it from me?" he asked himself. He had simply assumed that he was again travelling roughly to the south and it was still north of him. But as he couldn't be sure, he glanced down at his gyro and was surprised to find that his heading wasn't south at all but toward the northeast. "If I give them my present heading they'll know for sure I'm in trouble. I'd better say that thing out there is southwest of me and then I'll turn around to regain my

correct heading to the island. So he said, "now approaching from the southwest." As soon as he finished speaking he leaned forward, replaced the microphone in its bracket, and banked right in a sharp turn rolling out on a heading of 160 deg magnetic. Just as he rechecked his airspeed and altitude his radio speaker came alive again.

"Delta Sierra Juliet," the controller said. He had acknowledged Valentich's transmission.

Five more seconds went by. It was now 7:11 and 45 seconds and the tiny bubbles of water were only inches away from the carburetor's feed nozzle. finally the inevitable effect happened. The engine began to misfire. The fuel-air mixture balance was no longer correct. Now as each piston compressed the air-fuel-water mixture and the dual spark-plugs ignited the vapor, the explosion within the cylinder was not maximal. The mixture expanded far more slowly than normal during the power stroke of the cycle. The engine's malfunction was immediately apparent to Frederick.

Almost immediately after noticing the engine's erratic operation he instinctively reached down and pulled out on the carburetor heat knob. This action opened a butterfly valve in the carburetor's air intake, diverting hot air from the exhaust heater muff around the carburetor. He looked at the carb's air temperature gauge at the top right-hand side of the panel and found, much to his surprise that it registered in the normal range. Heat wasn't needed! "What's going on here?" he thought. "If it isn't ice then what is wrong?"

Almost microscopic water droplets continued to flow up and into the carburetor's inlet nozzle. The engine continued to sputter and lurch. Frederick was again almost overwhelmed with fear as his mind raced back to those classroom lectures on "in-flight engine failures." The first thing to do in any event is to not panic. "Stay calm...stay calm," he said out loud. Still his engine coughed and sputtered and he noticed that he was losing altitude.

Then he remembered his mixture control. Just the thought of this new potential solution to try gave him hope. He quickly reached for the double-button knob near the ignition switch on the center console of his panel. Squeezing the two locking buttons

together, he pushed the knob in to achieve a richer fuel/air mixture. Then he waited. Nothing happened. The same cold sweat he had felt minutes earlier returned. Two solutions...two failures. "How many more solutions have I got?" he asked himself. He watched as his vertical speed indicator registered a descent of more than 500 feet per minute. His altitude was 4200 feet which, at the present descent rate gave him only eight plus minutes of flight time until he would hit the water.

Frederick once again reached for his microphone and, with somewhat more emotion than before but still a controlled voice said, "Delta Sierra Juliet...the engine...is rough idling...I've got it set at twenty-three, twenty-four...and the thing...is coughing." He ended his statement with his usual raised inflection as if to give the statement some degree of consistency with his previous transmissions. Then he thought, "well, I've done it now. That should alert them that I'm in trouble...I hope that they have some helpful advice for me."

Frederick had been taught the importance of making clear, concise radio transmissions. One must not talk too much nor give ambiguous information. He had just enough flight experience to take this ground school maxim too seriously. Now is when he should have talked continuously and accurately about his status. Now is when he should have been calling out 'mayday,' 'mayday' and citing all of his engine instrument readings. But he didn't, out of fear of looking foolish in the eyes of those on the ground, the authorities at the Department of Transport. His mind flashed for a moment to the room at Tullamarine where the controller must by now be surrounded by many others. He visualized the hectic activity which he must be causing, and he cringed inwardly as he considered the many questions they would be asking him when he landed...if he landed. His thought were interrupted by the voice of the controller who asked,

"Delta Sierra Juliet...roger, what are your intentions?"

Frederick replied almost immediately, "My intentions are...ah, to go to King Island...ah...Melbourne that strange aircraft is hovering on top of me again." he paused as he saw the bright white light off to his right side now. The right wing of the Cessna

was raised at a very steep angle which had built up without his notice during his thoughts of the activities at the airport. He was in a steep left bank and descending rapidly. The total lack of any ground lights made it almost impossible to judge his attitude and he had been unable to notice his overcorrection in roll control. To Valentich the distant light was invisible behind the wing. He (incorrectly) thought that the light was above him since it seemed to disappear because of his wings.

He continued his radio transmission, "it *is* hovering...and it's *not* an aircraft." As he said the word "not" he emphasized it for he had just discovered its real identity. During his brief pause in transmission, Frederick had caught sight of the vertical base of the lighthouse. He finally realized that he had been seeing a beacon on the ground and not an airborne light source. He was shocked by the realization. How could he have been so fooled? If this light was on the ground then he felt he must be very near the ground! The young pilot, already distraught and shaken by his earlier vertigo and its accompanying terrifying lack of perceptual stability, was gripped by almost total paralysis now. Everything had seemed to go wrong. He was lost at sea and his engine was running only sporadically. His altitude was dropping more and more rapidly and the cold black waters of Bass Strait were down there below him.

Frederick was about to tell the controller what the light was but had stopped for a moment to reset his mixture control. He thought that he should try making the mixture leaner since nothing had worked when he made the mixture more rich. So he pulled the mixture knobs out. He had become so concerned about his engine's problem that he thought it best to concentrate on that issue rather than explain to Melbourne what he had been seeing. That could come later.

Frederick had forgotten that turning on the carburetor heat also richens the mixture to such a point that the engine can run rough. He had left the carburetor heat full on and now had leaned the mixture. Under the extreme stress of the past minutes, he had also overlooked the fact, given in the aircraft's owner's manual in the "operating details" section, that the mixture should not be leaned out with power settings above 23 manifold pressure and

2450 RPM.

The voice of the controller was heard again over the din of the engine's coughing. "Delta Sierra Juliet..." the voice said. Then the radio was quiet again. He was still at 3,900 feet altitude. Once again he convinced himself that he would be able to gain control of his aircraft as he had already done. "Thirty-nine hundred feet is plenty of altitude," he thought. He replaced the microphone again.

Frederick could not have known what his extreme flight maneuvers had done within the compartment housing his radio and the other flight control equipment. The hours and hours of vibration and rough handling of the rental aircraft by novice pilots had helped set the stage for the tragedy which was to come. Several of the electrical bonding straps which tied the radio support bracket's potential to that of the aircraft's main frame had loosened. With time a small voltage differential was building between the aircraft's exterior surfaces and the radio housing.[3] One of the service mechanics had not used an aircraft locknut on several of the straps as he should of and the inevitable vibrations of flight had unscrewed the nuts.

Frederick found himself torn between calling Melbourne and confessing his predicament and trying to work it out himself and thereby salvage his flying career. At length he picked up the microphone again and said, "Delta Sierra Juliet - Melbourne...". He stopped speaking as he reached for the control wheel with both hands. Still holding the transmit button down, he rolled the wheel to the left and then to the right to try to level his wings. Then he pulled back on the wheel gently to try to regain straight and level flight as he had done before. As he did this the microphone rubbed against the wheel. Yet unknown to the young man, his radio transmitter was also malfunctioning now. The static build-up was intermittently causing bursts of high frequency static to be transmitted to the ground.

After about 17 seconds Frederick once again gained control of his aircraft. His altitude had dropped to 2,650 feet, still high enough to be safe. And so he relaxed his grip on the wheel, released the microphone switch, and set it down again in its

bracket. Once again he had saved himself by remaining calm and following the basics he had learned previously.

"I'll bet they're wondering what's going on up here," he pondered. His body was ringing wet now and he was very cold. He reached to turn on the cabin heater. Frederick had almost completely forgotten about the bright light somewhere outside the cockpit. Still, his self-confidence had been broken several times within the past five minutes. His head still felt dizzy and he had trouble looking straight at any one instrument for very long, it was something like being slightly drunk, a strange feeling of lightheadedness and slowed reactions. He was working hard at keeping his wings level, a relatively simple task if he kept looking at his attitude gyro. But he also had to check the other instruments, the airspeed indicator, vertical speed indicator, altimeter, tachometer, manifold pressure gauge, oil pressure gauges, and others. His visual scanning sequence had become irregular, as his intense fear required him to look at each gauge much longer than usual to make sense out of it. He had to force himself to relate one of the readings with another, and he found himself returning immediately to an instrument he had just checked as if he did not believe its first reading. In short, Frederick's piloting behavior had become haphazard; his total lack of coordination in relating the instrument readings to his subsequent flight control had placed him at the very brink of disaster. The precious seconds ticked by as the engine seemed to clear its problem for a moment and them cough again. Frederick began to pray out loud, "Oh Lord, help me...help me now...help me...".

The Cessna's engine continued to cough and sputter. Its altitude was continuing to drop slowly but steadily toward the jet black water beneath it. Frederick tried to radio Melbourne again at just under 800 feet altitude but he heard nothing over his loud speaker. It seemed like everything had gone wrong.

With the instinct born of a lifetime of familial support he said, "Our Father, which art in heaven..." His voice was calm and controlled. He had done everything he knew he should do. "I really should have made another over land night flight," he thought. "hallowed be thy name...Oh Lord help me!" he cried, his hands clenching the wheel tightly. It seemed that each time he

tried to correct for one problem he overcorrected and made it worse. His altitude was down to one hundred-forty feet now and his engine was failing to deliver the power necessary to even fly level. His vertical rate indicator showed that he was dropping at 300 feet per minute. Nothing mattered right now except staying alive. The words "stay alive, stay alive..." kept repeating in his mind. He leaned forward to try to make out the surface of the ocean below him. It was invisible. His landing light was absorbed completely.

Almost exactly two and one-half minutes later the fixed landing gear of Cessna VH:DSJ snapped off as they struck the top of an ocean swell. As they broke off the plane rose briefly into the air once again. Frederick pulled back sharply on the wheel in a frantic attempt to gain precious altitude, but it was no use.

"Oh my God, this is it..." he cried. The tiny aircraft skipped a few times across the tops of the broad sea swells and only on the second impact did the right wing tip catch the almost solid water. Frederick and the authorities would never know it but he had carried out an almost perfect water landing. It was "by the book". His attitude was just nose up and his wings were level. He was flying at about 100 kts, a bit faster than he would have liked. But it didn't matter now. It didn't matter that his flaps weren't extended or his throttle was incorrectly set. Nothing mattered now.

The lone pilot Cessna VH:DSJ looked up in time to catch a brief glimpse of an intense white beam of light there in front of his aircraft just before everything went black.

This narrative is entirely hypothetical.
Any similarity between these events and
what actually took place is coincidental.
This version attempts to recreate the
basic hypothesis of Category 1.

Postscript.

This hypothetical narrative generally follows the explanation for the disappearance that many people have given. Frederick's flight instructor, Mr. Aubrey Coates said that his young student could have become confused by the rotating beacons at Cape Otway and Cape Wickham on the North end of King Island. He said that these lights could have appeared like UFOs.[4]

This explanation was also offered by Mr. Ken Williams of the Department of Transport. Given as a personal opinion, Williams stated in the three-page official version (appendix 10):

"My opinion is that the inexperienced pilot became disoriented and that that disorientation, coupled with Venus, cockpit light reflections and flashing lighthouses, Cape Otway and King Island ahead, created in his mind an illusion that he was being accompanied by a U.F.O.

"He then lost altitude and crashed into the water, possibly in a steep turn. That, anyway, is my private opinion."

This writer finds it interesting that no mention is made of why no wreckage has ever been found despite the fact that various parts of the aircraft were specially designed to remain afloat in the case of a crash at sea. There were life jackets and bouyancy modules within the aircraft's structure. This important matter is discussed in chapter 15.

There is another variation of the disorientation hypothesis that involves pilot incapacitation. Documented instances of physiological incapacitation exist in which a pilot can become severely disoriented and undergo vertigo for various reasons; among these reasons are diet prior to or during the flight, allergic reactions, brief epileptic attacks, a blocked middle ear, or even psychological stress. Each pilot is different with different response patterns. It is not known whether Frederick somehow became incapacitated prior to or during his radio transmission period to Flight Service. His voice tape did not exhibit any clear evidence that he was experiencing such difficulties.

Another aspect to this particular explanation of how Frederick Valentich disappeared has to do with the absence of any

emergency locator transmitter signals following the crash. Recent NASA research has found that six out of every seven ELT systems failed to transmit following a plane crash and that about 75 percent of all distress signals were false alarms, i.e., a signal was emitted at a time other than a crash. The researchers found that the problem was in the ELT's sensor switch which, in some installations was too sensitive (causing the false alarms) and in other too insensitive. This sensor switch is designed to turn on the transmitter after undergoing a force of five times gravity for more than 11 one-thousandths of a second. High frequency vibrations where the beacon is mounted in light aircraft can "make" and "break" this contact more rapidly than the 11 milliseconds, "...allowing the device to ride through a crash without activating. Somewhat lower frequencies may cause false alarms, but even lower frequencies are present during a crash."[5] In addition, a special study committee of the Radio Technical Commission meeting in August, 1980 found that the location of the antenna of the ELT can strongly influence the range over which the distress signal can be detected.

And what about the radar coverage in the vicinity between Cape Otway and King Island? Some investigators have commented on the DOT statements to the effect that they were unable to pick up the Cessna aircraft on radar. The reason why they could not is readily apparent from the radar coverage chart (see appendix 11).

It is because of the relatively low altitude of the radar dishes (antenna), the curvature of the earth's surface, and the fact that radar waves travel (fundamentally) in straight lines or "line of sight" transmission, that the greater the distance an aircraft is from the antenna, the higher it must be in order to be "visible" on radar. This minimal altitude is sometimes known as the lower radar boundary. As is shown in appendix 11, the outer boundary of this region can have odd shapes because of local topographic features. The nominal coverage shown in cross hatched lines extends as far as King Island at lower radar boundary of 10,000 feet altitude. Thus, if an aircraft flew at or above 10,000 feet, it would be visible on Melbourne's radar at that distance. If it were 95 miles from Melbourne, it would have to be at very nearly 6,000

feet altitude in order to be detected. If the UFO that Frederick reported was 1,000 feet higher than his own 4,500 foot altitude, it would not be detected by radar under these nominal radar detection conditions.

Nevertheless, radar coverage does not always correspond to the theoretically calculated plots due to weather conditions that cause the radar beam ot bend in various directions. There continues to be some discrepancy with regard to the radar's coverage on the night Frederick disappeared. And there is some evidence to suggest that the radar was picking up anomalous returns, i.e., radar screen blips at locations where no objects were actually located.

The final report on this important matter has not yet been released by officials of the Australian Department of Transport. A very early press release by DOT official Ken Williams says the following with regard to radar coverage:

"It must be remembered that the flight, was being made outside controlled airspace and, therefore, as is normal, no radar watch was maintained on the aircraft. In any event, the pilot subsequently reported his altitude at 4,500 ft, which at the distance he was from the Melbourne Route Surveillance Radar head at Melbourne Airport (more than 90 miles) he was below the radar scan.

When the pilot reported unusual aerial phenomena, the Flight Service Supervisor immediately requested Air Traffic Control to make a particular radar sweep to see whether either the aircraft or the phenomena could be tracked.

The night of 21 October was warm and still and temperature inversion was experienced in the Cape Otway area. Additionally, the Otway Ranges hampered the radar scan, as a result, no identifiable return could be seen.

Communication with the aircraft was maintained from the time it left Moorabbin until 7:12:28 (EST) when unidentifiable noises described subsequently as 'metallic', were heard through the aircraft's open microphone *and the pilot failed to respond to further calls*." (emphasis mine; see appendix 10).

This official statement was disputed in the Australian newspaper *The Daily Mirror* dateline October 24th. The article said (in part): "Traffic controllers who monitored his last dramatic message on the UFO sighting were unable to pick up his Cessna 182 on their long-range radar - yet radar conditions were unusually good. 'With conditions such as Saturday's we can even pick up King Island, which is only 215 m above sea level - yet we couldn't find the plane,' a senior traffic controller said. 'We seriously doubt he was anywhere near Cape Otway...'"

Ken William's statement that the Cessna was outside of controlled airspace and that, therefore, no radar watch was being maintained on it came after the above interview with Melbourne ATC personnel, probably in an attempt to prevent further embarassment to the department. Frederick Valentich may or may not have departed from his flight plan somewhere near Cape Otway but there is absolutely no radar evidence to prove it. The fact that his calculated flight times for the first three legs as far as Cape Otway tally closely with the time he did call Melbourne to tell them that he was there would seem to confirm that he did follow his flight plan, at least that far.

The various RAAF bases in the vicinity either did not or could not assist in spotting the Cessna that night.[6]

While it is one thing to read the present scenario from the safety of one's own home or office, it is quite another to realize what it is like in the dark and noisy, vibrating cockpit of a light plane flying over a broad stretch of water at night. The reader should try to put himself in that cockpit and try to imagine what would have to happen to lead to a ditching at sea.

As a scientist, I tried to maintain an open mind and research all of the possible hypotheses that have surrounded this bizarre story. The second category of explanation is that of a deliberate hoax. This is the subject of the following chapter.

Footnotes

1. At point b he was experiencing about a twelve knot tail wind that became a headwind as he completed his turn (point c).

2. While it is not particularly crucial which lights they were, it is apparent that any number of property lights from local residences could have been seen at this point in the scenario.

3. While hypothetical, this is a reasonable explanation for the metallic noises that were transmitted near the end of Frederick's communication with Melbourne.

4. *International UFO Reporter,* vol. 3, no. 12, December 1978, pg. 4.

5. *NASA Activities,* vol. 11, no. 10, October 1980, pg. 11.

6. *International UFO Reporter,* vol. 3, no. 12, December 1978, pg. 6.

Chapter 10

The Last Leg: Version Two

"Melbourne," the young pilot called, "Delta Sierra Juliet...descending for King Island." It was very nearly 1900 hours and it was getting dark very rapidly. Things were going as planned.

Frederick Valentich had thought about this, his first night, over water flight for weeks. It was to be carried out carefully, step by step to the final destination. He had dialed in the non-directional beacon frequency from the King Island transmitter and had already noted the relative bearing on his radio navigation head. There was the Cape Otway lighthouse ahead of him by only a mile or so. He had deliberately banked left to the new magnetic heading of 160 degrees to King Island just before arriving at his radio check point. "They will never know the difference and I'll save a little time in the process," he thought to himself.

It wasn't long before he heard the reassuring words of the flight controller at Tullamarine airport, north of the city, come over the speaker, "Delta Sierra Juliet." That's all that was said, yet it was enough, as it signaled that his transmission had been received.

Frederick turned far around to his right where he saw the last few lights on the ground slowly disappearing into the darkness. The western sky was still light enough to outline the flat horizon but it was totally dark everywhere else. He checked his flight maps laying on the seat to his right. Then he verified his altitude and other engine parameters. "Altitude OK at 4500...RPM at 2200...manifold pressure is OK..." he thought to himself. He continued to check each of the primary flight instruments and only occasionally looked up from his instruments out the windshield. He remembered how seriously Aubrey Coates his other ground school instructor had emphasized staying on the instruments at night.

Frederick's destination was many miles ahead and he had purposely planned for almost optimal fuel consumption. As he had filed for a 4500 foot cruise altitude across Bass Strait, which is the normal altitude used by single engine aircraft without oxygen, he did not want to arouse any suspicion by flying any higher just to gain a little more operating range. And so the young pilot sat back and relaxed a bit as the minutes ticked away.

From the first time Frederick had made his mind up to make this "last flight," he had felt a tinge of excitement. "It would be a flight that the whole country would remember," he thought. His mind wandered back to a morning over three months before when he and his father had argued about his school grades. Frederick had been angry as has been his dad and harsh words had been exchange. Even now the young man bristled when he remembered those biting words aimed at him by his father Guido.

"How do you ever expect to amount to anything Freddie? Your grades are not so good. You don't seem to be able to meet the requirements of the RAAF..." his father had said.[1] These words kept coming back to Frederick's mind time and again, words that left a deep and lasting impression on the young man's psyche.

Each time he remembered this verbal exchange and others like it, Frederick felt a knot in his stomach. He unconsciously tightened his jaw muscles and resolved not to say anything, while at the same time coming to realize that there would be only one way to deal with his father's open criticism...he must get away. He thought that Guido would never change his mind about him. Frederick, the oldest of four children, never could discover why he had not measured up to his father's expectations. But it didn't matter any more. He had planned this flight carefully; this flight would deal with the whole situation once and for all.

Frederick checked his wrist watch. It was 7:06 pm and almost time for his first transmission. He had the piece of paper layed out beside him on top of the aerial map. There was a time written neatly beside each line of instructions; it had been carefully calculated in terms of where he would be over the water when he made each call; the calls having been deliberately planned so that there would be just the proper amount of ambiguity in their content. He did not know, indeed could not have known, whether

Melbourne radar would pick him up during the first part of his fourth flight leg. He didn't worry about their radar coverage, however, since he had read of many UFO encounters by pilots in which the object was not detected on radar.

Frederick lightly patted the money in his pocket. Its bulge gave him a feeling of reassurance that he would have something to start with upon landing.

Almost mechanically he reached forward to the microphone resting in its dashboard bracket, and lifting it to his mouth, he firmly depressed its spring-loaded button and said, "Melbourne...this is Delta Sierra Juliet. Is there any known traffic below five thousand?" With these first words Frederick had carefully and deliberately set in motion a drama that would be played out upon the wire service teletypes around the globe.

Note to the Reader

Rather than repeat the various radio conversations that took place between the pilot and the ground controller, which have already been cited, the following hypothetical narrative will commence at 7:11 and 52 seconds, some forty seconds before the final radio communication with Melbourne's Tullamarine field.

Cessna VH:DSJ had progressed steadily east-southeast on a heading of 154 deg magnetic, a carefully chosen six degrees left of the heading toward the non-directional beacon on King Island. This flight path would take him just to the left of the island where there were few people who might notice a small single engine plane flying overhead.

The plan had worked fine so far. The young man had carried it off with aplomb, never letting his excitement show over the radio. "This will make the history books," Frederick thought to himself. "But I had better not get too confident just yet. I'm not down yet and anything could happen."

During the preceding six minutes Frederick had made the radio calls to the ground within a second or two of the time called for on his script. Only when Melbourne asked him questions he had not counted on did he ad lib his answer. Yet his answers had been as consistent as possible. He wanted them to think he was going on to King Island. So when he didn't arrive they would have to search an even larger area. "Yes, everything was going as planned." he thought to himself. He felt a certain amount of pride in himself for having done so well so far and yet deep down inside he also felt guilty. He never allowed his submerged guilt feelings to reach consciousness, however. He knew within himself that he would have to face them someday, but not right away. That could come later...if at all.

He also knew that his final radio transmission had to be the most convincing of all. He had planned it more carefully than all of the rest. Details for his earlier transmissions had been taken from the UFO clippings he had cut and pasted in his scrapbook over the past five years. The sighting he and his mother had in June (1978) only reinforced his intense interest in the subject. He had carefully selected the principle visual features of "his UFO" - a long shape, metallic appearance, a green light - from among a much longer list of UFO characteristics he had read about on magazines and newspapers. They would be as convincing as any. Yet it would be the sound effects during his next radio transmission that he knew would provide the tantalizing bait for the authorities and students of UFO phenomena to ponder for a long time to come. Frederick might never be seen again but he was going to disappear "in style!" He wanted it to rival the power and beauty he had seen in the movie Close Encounters of the Third Kind. It had been the last movie he had seen.

He had to provide a realistic basis for his final UFO encounter, and an engine failure was as good a basis as any he had reasoned. And so Frederick carefully calculated his actions so that they would hear his engine sputtering and coughing in the

background. He checked his watch which showed that it was 7:12, almost the time for his "engine problem" transmission, as he had come to describe it in his mind.

"Delta Sierra Juliet...the engine is rough idling," he said carefully into the mike, pausing only a moment. Then he continued, "I've got it set at twenty-three, twenty-four...and the thing is coughing." As Frederick released the microphone switch he thought to himself, "Let's see what they do about that. I've wondered what controllers do to try to help pilots in trouble...I wonder if they panic and get all mixed up."

He had carefully timed his over water flight so that this particular call would take place very near the point of no return, a spot located about 26 nautical miles east southeast from Cape Otway. It should make his intentions seem pretty ambiguous because he would not yet have arrived at that critical spot. He figured that Melbourne probably would not be able to calculate his present position rapidly enough when he radioed this intention in to advise him to do otherwise...and yet upon later calculations, they would find out that they should have ordered him to return to the mainland.

The loud speaker on the instrument panel suddenly came alive with the familiar voice of the controller who said, "Delta Sierra Juliet...roger, what are your intentions?"

Frederick had correctly guessed that particular radio message and had already prepared his answer. "My intentions are...ah, to go to King Island...ah...Melbourne that strange aircraft is hovering on top of me again." He responded and then paused. He wanted his words to sink in down there. He wanted them to be able to visualize his little drama clearly. Finally he went on, "it is hovering...and its *not* an aircraft."

"There...that ought to make the point!" he mused. A broad grin spread out over his face, a sense of triumph filled him. He had very nearly accomplished the feat of the century, as he liked to consider it. "I'll bet they're busy now," he thought.

It wasn't long before the ground controller's voice returned, "Delta Sierra Juliet."

Almost immediately Frederick reached behind his seat for the paper bag he had placed there earlier. He had difficulty finding it and keeping his wings level at the same time. After fumbling for a few seconds he felt the crinkled paper in his fingers and lifted it into the right seat. "This is going to take a bit of doing," he considered silently. He had never carried out this particular part of the plan before.

The lone pilot felt a new sense of excitement as he made another visual check of his altitude, airspeed, and heading. "Yes, everything is alright. I'm ready for this final transmission...I wonder if they are?" he thought to himself. Then, as he had planned, he switched off his anti-collision beacon and navigation lights, becoming all but invisible now to other aircraft.

Without an autopilot, Frederick would have to continue to fly the airplane, while at the same time holding the microphone button down and making the sound effects. That would be quite a feat in itself. Frederick suddenly felt a little tinge of fear as he realized this was the most crucial part of the hoax and yet the part he had never practiced. Nevertheless, he had confidence in his own abilities and thought that he would be able to do everything without a hitch.

Once again he checked his watch and found that it was time. He removed the microphone from its bracket at 7:12 and 20 seconds, holding it in his left hand near his lips. Then he braced the control wheel between his left elbow and his torso and his knees, managing to hold the aircraft in fairly steady level flight. With his right hand he pulled the hollow metal box he had built from the bag; a box about four inches square and made of bent sheets of thin scrap iron. Frederick had worked a long time on this contraption, hammering some ten penny nail holes through its sides and bending some additional metal baffles and then gluing them securely to the insides with super glue. A fleeting thought came to his mind, "that super glue really is great stuff." He had also selected the ball bearings carefully that were inside the box.

Frederick had practiced a long time on how to hold his box to make it rattle with just the right effect. The reverberation needed to be just right from the lead weights which he had added just before screwing the sheet metal plate on top. He had

developed a dozen ways to produce metallic reverberations, but only by experimentation did he finally settle on the one he wanted, somewhat repeatable but varying in a random time sequence.

He depressed the microphone button and, leaning forward to get close to the mike, he said, "Delta Sierra Juliet-Melbourne." Then he began to shake his little metal box about eight inches away from the microphone, trying to make the pattern irregular, first with a closely spaced series of high pitched vibrations followed by a very brief pause as he rested his arm. Then he continued for another few seconds, interspersing the seventeen second-long period with several mike button presses and releases for good measure. He had counted off the seventeen seconds to himself silently and simply let go of the microphone button at the end.

"Well, that's that!" he thought, and replaced the microphone in its bracket after first setting the metal box down beside him.[2] He thought that his transmission would evoke an immediate response from the ground but it didn't, and as the seconds ticked by he became alarmed. "What if they didn't pick it up?" he thought. "What if they got only part of the sounds?" Both thoughts gave him a chill. "I can't repeat that again...it would give me away for sure," he reasoned.

The seconds continued to tick away and Frederick was feeling the first real sense of panic. "What if Melbourne is on to me? They'll be sending up interceptors any time. They'll probably even call Sale for their radar coverage and I'll be spotted for sure." he thought to himself.

Suddenly he had a new idea. "Why not simply make it look to their radar as if I'm going in?" he thought. "Why didn't I think of that earlier?"

He quickly increased the propeller's RPM using the pitch control before him and then he pushed in on the throttle. He watched as the manifold pressure increased to just over 23 inches of mercury and the tachometer showed almost 2600 RPM, the red line above which he should not go or risk real problems. After nosing over a slight bit he watched the airspeed build rapidly, 160, 170, 180 miles per hour. He leaned the fuel mixture a little and throttled back to maintain his rate of descent at 180 mph. The slip stream was almost deafening and he was glad he did not have

to make another radio transmission. It would be almost impossible to be heard now. His altitude was decreasing rapidly and he had not really considered at what altitude he should pull out of his dive. "I guess I'd better go down to fifteen hundred or so," he thought. The altimeter showed 2400 feet...the thin needle passing by the four and then the three and the two faster than Frederick had ever seen before.

The speaker emitted a faint noise over the loud hissing of the air passing over and around the cockpit. Frederick, only with difficulty, made out the words. "Delta Sierra Juliet Melbourne." His spirits lifted as he realized that his last transmission had, indeed, been received.

The tiny aircraft continued its dive toward the ocean's surface- the dark sky enveloping it completely. The young man holding the wheel was barely able to regain control at 850 feet above the water. He sighed with relief as the Cessna finally leveled off, its wings level and RPM still near the red line.

"I'd better not press my luck," he said out loud, as if speaking to someone in the cockpit with him, and with that, reduced the throttle setting and the RPM to his prior cruise setting. "Let's see, at this altitude I'll need about 2200 RPM and 20 inches for maximum range." He pulled out his pilot's manual and verified these values in the light of his overhead lamp. "Right...I'm on my way now," he shouted into the empty cockpit, "I'm on my way!"

Frederick glanced at his watch. The time had passed quickly- it was 7:20 and he could see tiny dots of light on King Island off to his right. He had flown there once before but had not been on this side of the island. His calculations showed him to be eight miles northeast of the island, and time to pick up the NDB at Tasmania.

Carefully he set a frequency of 302 into his radio navigation receiver, the frequency emitted by the Wynyard non-directional beacon. This radio transmitter, located near the coastal town of Wynyard, was one of the two main navigational beacons used by commercial flights from Australia. Frederick felt pleased with himself as he noted the ADF needle as it snapped to a new relative bearing of 127 deg magnetic. If he could maintain his current 146 knots airspeed he would be off the Hunter Islands, just north of

Tasmania, in about 25 minutes. It would be pretty dark all the way but he had gotten this far OK, and he had King Island on his right.

He turned and looked to his right. Off in the pitch black darkness were some sparkling white lights grouped in tight bunches. "That must be Grassy," he thought, "I'm getting near the southern tip of the island." From time to time he thought he could see some other lights but it was very difficult to be certain they weren't just aircraft window reflections or even stars low on the horizon. The night sky was almost perfectly clear. It was a really great night to be flying.

Valentich knew from his careful studies of Tasmania geography that he should be able to see at least some of the towns that dotted the northern coastline. The first one should be Stanley, a little to the right of his current heading and to its left Wynyard. Then there should be Burnie and Ulverstone farther left. He did not expect much beyond that, particularly at the low altitude he was now flying.

Glancing at his fuel gauges, he saw that they both registered very nearly three-quarters full, sufficient fuel to fly to Tasmania and back two and a half times! Frederick checked the position of his fuel selector valve again. It pointed at the "both on" position. Each of the wing bladder cells would continue to supply fuel to the engine at the same rate, hence he would not have any imbalance problems. All seemed to be going well and Frederick settled back in his seat and relaxed more fully than he had so far on the flight.

Frederick was glad to be alive. He had just pulled off perhaps the greatest UFO hoax in history. He could only guess what might be going on right now back in Melbourne's Tullamarine ATC building. As the minutes passed, Frederick found himself looking up from his instruments more frequently for some sign of the northern Tasmania coastline. "It should be out there somewhere," he reasoned. It was about 7:40 and he would be some 12 miles from the nearest of the Hunter Island group. It would only be another 62 miles to Wynyard... but Frederick Valentich was not going all the way to Wynyard. He had made other plans!

After what had seemed to Frederick as an unbearable amount of time, he reached his turning point. He had researched

this point more carefully than all the rest for it would give him the best chance of staying undetected. But he needed more altitude. He had originally planned to cross the Tasmanian coast at 6,500 feet altitude so that no one could hear him, but he was now at only 1,500 feet. He considered each action he would need to take to gain this altitude before he finally acted. He began his gradual climb at a steady 300 feet per minute, a rate that should put him at around 6,500 feet in 17 minutes, just about when he would cross the coastline.

He finally saw the coastal town lights he had been looking for. While he couldn't be certain which town it was, it did signal land. His overwater flight was almost over now!

After five minutes more Cessna VH:DSJ had crossed over into the airspace of Tasmania.

The single engine aircraft was on a new heading of 176 deg, its distance measuring equipment indicated 40 miles from Wynyard which was well away from the commercial flight lane between Cowes on the mainland and Wynyard Tasmania. He did not want to be spotted by any jet that might be in the vicinity. While he still had his aircraft lights off, Frederick planned to turn them on soon after passing the Tasmanian coast.

The tiny light plane passed unnoticed into Australia's neighboring island nation. No one on the ground had heard its engine nor taken special note of its red and green navigation lights. Frederick Valentich had almost completed his mysterious getaway.

Now heading for the non-directional beacon at Strahan, near the Macquarie Harbor on the western coast of Tasmania, Frederick once again checked all of his instruments and found them indicating normal readings. He thought to himself, "I love this aircraft...it's really gotten me through alot." He had another 75 miles before he would reach Strahan and he was suddenly getting a little tired. The emotional excitement of the past hour had taken its toll and Frederick wished he had something to drink. Rummaging around in his jacket pocket, he found some old Lifesavers and tearing the paper away put one in his mouth. Yet with his excitement he also felt a tinge of pride. He had carefully studied Anderson's *Principles of Air Navigation;* his knowledge of it had

served him well.

The next step would be to let down gradually, somewhere near Waratah or Zeehan if he could find either one. So he pulled off power and began his gradual descent. This was his last leg and he was glad to be landing, even though he had never landed here before. Somehow the inexperienced pilot did not feel any apprehension about this night landing reasoning that it should be merely another typical landing. There shouldn't be any reason to worry. Perhaps it was so anticlimactic compared to what had already happened that he shrugged it off now. The most difficult part would be locating the field in the dark. The little used, remote dirt strip had no radio beacon, no approach lights, and no runway lights to help him get lined up properly. Well, he would have to do the best he could.

His flight maps showed two mountains that he would have to be concerned about, Mt. Cleveland some 2970 feet high near the little town of Waratah on his flight path and Mt. Ossa 5255 ft high and situated due east of the town of Rosebery over which he was soon to fly. If he maintained at least 3500 feet altitude and maintained his straight course toward Strahan he would have no difficulty passing over these mountains. It is always hazardous flying at night in unfamiliar territory and Frederick did not want to press his luck. He was beginning to get very tired and yearned to land and then get some sleep.

Lights of tiny villages past slowly below him. Their identities were not known to the lone pilot.

Frederick checked his maps again and located the small dirt landing strip he was planning to use. He had found that each time he looked at his maps too long he would lose some control of his aircraft's attitude. Sometimes he would begin to climb and others descend in a gradual, wide spiral. Night flying was hazardous enough without also losing control because of simple inattentiveness. As he began to concentrate on the small groups of lights below him, he thought he could make out car headlights on a road. Which road it was was impossible to tell. He only had his radio navigation equipment now and he knew he must trust it completely!

Using both the DME and omni bearing read-outs on his navigation equipment, Valentich calculated that his destination was only a few miles ahead. He had almost completed his gigantic hoax, everything having gone according to the book so far. He had no reason to think that something would go wrong now. Still, he felt a strange kind of fear. He had nothing but freedom to look forward to, freedom from his father's continual nagging comments and freedom from his pleasant but potentially entangling relationship with Rhonda. He thought that he must just get away from them all and start over where no one knew him...where his past would not hamper him in his ongoing quest for a commercial license. He had chosen a very remote landing site, far away from any civilization and that would buy him time. He could abandon the plane, cover it up with a war surplus camoflage netting he had brought with him, and be far far away before anyone found it.

Frederick reached forward and switched on his landing light, its white beam spread out into nothingness ahead of him. He was descending now and the jet black darkness below him was punctuated occasionally by a farm house and yard lights which spread their warm yellow illumination over the ground. At 1,000 feet altitude he could just make out two intersecting roads. Nothing else was visible. The ground seemed so pitch dark that terrible dangers could be hiding there and no one would ever know, particularly a young pilot who was going to make a landing in the darkness.

Upon reaching 500 feet altitude he leveled off. He thought that Macquarie Harbor was off to his right somewhere; he was definitely over land, however. After several more minutes of flying in a wide circling arc he found what he was looking for, the road on the map that ran near his landing spot. He could make out several key landmarks that he had so carefully researched, long before his flight.

"Well, it's time to put the flaps down, and configure for landing," he muttered silently. Soon everything was ready, and aligned with an almost invisible and very thin rectangle of light brown earth ahead of him, Frederick carried out what was the best night landing of any he had ever done. As his wheels scraped and bounced into the loose gravel and grass he sighed with relief.

After taxiing off to one side of the runway, such as it was, he revved his engine and taxied with the aid of his landing light to an opening in the trees which lined the field on both sides. He hoped that noone had heard his engine. Turning into the opening he continued taxiing several hundred yards farther until he came to just the right spot, a smaller opening in the sparse underbrush that was just as wide as his wing span. Again he turned into the smaller clearing, scraping the wing tips on the way. It was a very remote spot far from the highway he had seen. Then he cut his engine and lights and sagged in his seat. His flight was over. His new life was about to begin.

He wondered to himself whether it had been wise not to make any contacts at all here in Tasmania. He weighed whether the need for human assistance in an emergency was worth the complete secrecy he had been able to achieve. He decided in favor of secrecy.

Frederick reached over in the darkened cockpit for his flashlight. Flipping it on he aimed it at his carefully prepared script which he had been following throughout the flight. He had taken care that no one had seen him working on it. He kept it in his UFO notebook. There at the bottom, beneath the words "camoflage cover", was an afterthought that he had scribbled only a few days previously, as much for comic relief as anything else. He read his own words, "...go find a hamburger stand."

This narrative is entirely hypothetical. Any similarity between the events given in this chapter and what actually took place is entirely coincidental. This narrative attempts to realistically recreate the key elements of hypotheses two - a deliberate hoax.

Postscript. This chapter has to do with the possibility that Frederick Valentich carried out a deliberate hoax. Further comment concerning this possibility is called for. It has been suggested that both Frederick and his father were part of a carefully contrived hoax for some reason. Writing in the *International UFO Reporter* (vol. 3 no. 12, December 1978, pg. 6), investigator Alan Hendry gives the following arguments in support of this possibility: Mr. Valentich Sr. told the press immediately after the disappearance that he believed his son was alive and was being held by people from another planet. Guido was quoted as saying, "I have a very strong feeling that my son is still alive and is being held by someone from another world." Hendry then presented these arguments against this possibility: Guido's remarks clearly represent great emotional grief. He had also said that he would rather believe that Frederick was alive on a spaceship "...than them finding wreckage of the plane." Also mentioned is the fact that Guido Valentich has continued to show a natural and progressive loss of hope as time has past.

If the speculation is correct that Frederick's father was a willing accomplice one would still need to have a motive. No such motive has been found so far.

Another speculation regarding a deliberate hoax is that Frederick never flew out over the water at all but landed somewhere on land. What evidence exists to support this possibility? Several are offered. (a) There are only conflicting reports that anyone actually saw or heard him fly over just prior to departing Cape Otway for King Island. Other than the report by the fishermen near Apollo Bay, there is only his word that he was following his flight plan. Also, since he was well below the altitude at which Melbourne's radar would have spotted him he was not visible to them. (b) Also, the lighthouse keeper at Cape Otway did not hear the plane pass overhead at 1900 hours even though he was supposed to do so. (c) It is possible that Frederick had incorrectly dialed in the NDB radial for Mt. William on a 233 degree radial which is located about 100 nmi NNW of Cape Otway rather than the King Island radial of 332 sometime during leg 3. If this occurred some wreckage should be found in the Cape Otway range or farther west.

To check out the possible argument that Frederick had not prearranged to buy crayfish from King Island fishermen because he knew that he did not have to, Paul Norman, vice president of the Victorian UFO Research Society, flew to King Island in mid 1979 to buy crayfish without ordering in advance. Deliberately waiting until 2000 hours, he found it was easy to do so. Yet another argument in favor of this hypothesis is that Frederick did not prearrange to have the runway lights turned on at King Island. The reason why he didn't had already been given. Melbourne flight service had them turned on just as soon as Frederick reported his aerial encounter.

And the fact that Cessna VH:DSJ carried more than enough fuel to reach King Island is simply that Frederick had trained in this particular type of aircraft and, no doubt felt confident flying it. Since it was a long-range model fitted with extra fuel capacity and since one is not supposed to ever takeoff with an unfilled fuel tank, it is not surprising at all that he had more than enough fuel to reach his intended destination.

Some people have claimed that Frederick's girlfriend, Rhonda Rushton had planned to meet him somewhere. The 16 year old wrote me to say that she and Fred met each other for the first time on April 21, 1978, just six months earlier at 16 Flight Headquarters, North Melbourne Air Force Base. They were simply introduced to each other by a mutual friend that night. They became better acquainted the next night at a dinner dance at the same location. She said that Fred was afraid of flying over long stretches of water. He once told her, "that if he did ever have to crash, he would rather crash on the land, because you have more chance than you have on the water. He said that you have to land the plane a certain way in the water for the plane to stay afloat." And she went on to explain her alleged meeting with Fred. Her brother had stayed home while she and her parents had driven to Apollo Bay on Thursday, October 26th "...only to have a rest from the reporters." When they arrived they drove to the Bay Pines Motel. Miss Rushton went in and asked the desk clerk, Mrs. Joyce Ford, if John Gibbs had booked in yet. Gibbs was "...a good friend of Fred and I." Miss Rushton then returned to the car. Soon Gibbs drove by and they eventually caught up with him. They all booked rooms in Apollo Bay in a different motel. The

next morning Miss Rushton was taking a walk when the motel owner came up and asked her if they were the people from Melbourne. She answered yes and asked why he had asked. He said that he had received several phone calls from news reporters in Melbourne trying to find out if she and her family were there. They said that they were on their way to Apollo Bay to interview her (again). The motel owner said that the reporters had left Melbourne at 0200 and that they had better leave early if they wanted to avoid them. He gave them an early breakfast and they left around 0315 in the morning. She and her family drove into town and waited at a news stand to find out any news about Frederick. When they finally got a newspaper it had already mentioned her brief conversation with Mrs. Ford the night before. Miss Rushton believed that the reporters "...must have rang (sic) Mrs. Ford during the night." She then said, "I didn't ask Mrs. Ford if Fred was staying at her motel or the other one." She believed that it was her brother (or another acquaintance - Greg Reaburn) who told the reporters where she was.

I also asked her to comment on press reports that she had claimed that she knew Fred was alive. I asked her if it was an accurate statement and what she meant by it. Her answer was (in part) as follows. "I had a lot of reporters interviewing me all the time, and a lot of the reporters did get things misinterpreted, and some of them printed things that weren't even true. What I did say and mean't (sic) was I did say I thought that Fred would be alive somewhere, because I couldn't believe that he was dead. All I said to the Authorities was that Fred was alive because I knew how good he was as a pilot, and if he was in trouble, I know he would do anything to save himself and the aircraft, that he was flying. What I mean't (sic) about it being top secret is that the Department of Transport told me that anything that I said would be top secret, and also the whole matter wouldn't be released to anyone, and it would be kept top secret too. They also told me that the tape of Fred is now top secret, and that I wouldn't be able to here (sic) the tape at all, but I am still trying to here (sic) that tape."

Finally, I asked Miss Rushton if he drank, smoked, or ever used any illegal drugs. She answered, "Fred didn't smoke, and he only drank socially, which was then only a few drinks. Fred, was a

person who hated people using drugs or even talking about that subject. He didn't and would never take drugs."

This information which was provided by Miss Rushton provides a rather consistent picture of Frederic Valentich. This writer is inclined to believe her and to see most of the distortions in the press accounts of what took place based more upon wishful thinking on their part than sound journalistic research.

Of course it is not possible to know for certain whether he perpetrated a deliberate hoax or not until he turns up somewhere, someday. Until that time this explanation must remain but one of several basic hypotheses.

Footnotes

1. It must be understood that this conversation is purely hypothetical and finds its basis only in the author's conjecture that is based upon facts obtained from friends and acquaintances of the Valentich family.

2. In their brief discussion on this aspect of the case, authors Pinkey and Ryzman *(Alien Honeycomb,* Pan Books, Sydney, 1980, pg. 78) said they asked a pilot about whether Frederick could have deliberately held the microphone button down throughout an entire real water landing. The pilot responded, "...just to give them that farewell sound is monumentally stupid." Such an opinion would support the belief that Frederick was at a relatively high altitude when he made this transmission at 7:12 and 28 seconds.

Chapter 11

The Last Leg: Version Three

"Melbourne," Frederick Valentich called, "Delta Sierra Juliet... descending for King Island."

"The flight had gone better than I figured it would," the lone pilot thought to himself. "But I've got to stay on my toes. This next leg is going to be the real test...really black out there. I'd better keep one eye on the ADI and the other on the altimeter... It's too bad they don't issue four eyes to pilots," he mused, a slight grin spreading across his long, thin face.

Checking his wrist watch he found that it was almost 7:00 pm. With his SAR time extended he shouldn't have any difficulty with this fourth flight segment, only about 20 minutes long. He had the Cessna trimmed for level flight and the minor air waves did not pose any difficulty for him. Only occasionally did Frederick have to make a sharp control input to level his wings. Everything seemed fine, the engine's lull seemed to contribute to his sense of well being, and his mind began to wander back to his earlier thoughts about unidentified flying objects. "Man, I sure would like to see one someday," he thought. Then he remembered the case of the Tiger Moth that had disappeared some years before while flying over this same area. "What happened back then?" he asked. "Yeh, I remember, it was in 1972, about September. The two passengers aboard her were never found nor was the old World War II aircraft. That happened during the day, I think. I wonder what happened to them?" he pondered.[1]

Whether they are beginners or veterans, pilots find themselves talking about accidents and incidents. Frederick was no exception, On several occasions he had spent hours with his friends who were also working toward their licenses, swapping stories they had heard about how light planes had gone down without any trace. These stories had a way of surfacing at odd times from the deep recesses of one's memory. Now that Frederick

was all by himself flying through the blackening sky, he suddenly remembered the disappearance of a second light aircraft in the same area he was now in.

"It was in '69, sometime in December," he thought. "A guy was flying a Fuji by himself from King Island to Melbourne. I think that he was about eight km from the cape when they heard his last radio transmission. What altitude was he at when he had his engine problem? Let me see... it was about 900, no 1,000 feet!"

The young pilot glanced through the windows of his aircraft into the pitch black night sky. It seemed to close in upon the tiny Cessna even more than it had before. "I can't see anything out there. Nothing, just blackness," he said.

"That poor guy, I don't think they ever found anything," Frederick thought to himself. "I'd better get my mind off things like that!"

Unknown to Frederick, a vehicle was, at that very moment, descending from an extremely high altitude along a path that was aimed for King Island. Little could Frederick have known the part he was about to play in a drama of gigantic proportions and of lasting significance. The metallic saucer-shaped object measured some 80 feet across at its widest dimension but was not particularly aerodynamic in its cross section. Its outer syurface was as smooth as glass and much harder, yet its lower surface possessed a strange waffle iron-like pattern. This same surface almost invisible, however, because of an extremely low reflectivity or more precisely, its low emissivity during descent into the Earth's magnetic fields.

The strange craft dropped like a rock through the ever thickening atmosphere. The drag coefficient built slowly but surely as the air became ever thicker, the molecules packed closer and closer together. It began to decelerate at 150,000 feet altitude and had reached a velocity of 1,200 mph upon reaching 75,000 feet. At 40,000 feet altitude it again decelerated, more rapidly this time, to only 400 mph. Upon reaching 15,000 feet it very quickly slowed to just under 200 mph.

The disc's trajectory had not been parabolic but linear! It was now about 30 n miles northeast of its destination, a tiny land

mass bridging a large continent to its north and a smaller one to its southeast, using the geographic coordinates of this planet. The disc's on-board sensors had detected an airborne object traveling very slowly toward King Island, as well as several other such objects flying toward and away from the large city (Melbourne) at the central southerly coast of the larger land mass. These objects were flying at considerably faster speeds and higher altitudes than the one lone object over Bass Strait.

In full conformance with the programmed surveillance flight pattern stored in the computer's peripheral unit 86-#, a number of carefully planned passes were calculated to identify the small flying object. There would be a fly-over to obtain low density, continuous, multispectral energy scans. These data would be analyzed in several seconds and would provide the answer to the lower order decision whether or not to make a second approach for subsequent information. The first pass would determine the type of propulsion system used, the presence of life forms in or on the object, its speed and acceleration in three linear and three angular dimensions simultaneously, its mass and predominant elemental constitution, and most importantly, the presence or absence of ionizing radiation. If a second identification made it would attempt to determine whether this object was of the same class of objects encountered many times before in many different areas of the planet. Tell-tail signs of intelligent control would be sought and, if certain parameters were found using an attempted communication routine with the object, a close approach-rendezvous would be carried out. It all depended upon the results of the initial fly-over.

The time was 7:06. The aerial encounter had begun. The flying disc had the immediate advantage of "earliest detection," perhaps the single-most crucial factor in any surveillance mission. But the young pilot on board the tiny aircraft possessed very good eye sight. He suddenly spotted the ever brightening white light sources emitted from the disc, an integral part of their descent system. Frederick's heart suddenly jumped. "Where did that come from all of a sudden?" he questioned. "Man, it's really moving."

Almost instinctively, the young man reached for his microphone sitting in its bracket below the instrument panel. Raising it to his lips and pressing its press-to-talk button he called, "Melbourne...this is Delta Sierra Juliet. Is there any known traffic

below five thousand?" He released the switch and waited for an answer never taking his eyes off the approaching white lights. He could make out four separate lights now.

"It must be huge," he pondered to himself. "...must be a 747 or something," he mutterered "with special landing lights on it. If it is, it's sure off course 'cause they don't fly in this direction!"

It was only after making this deduction that Frederick began to get worried. "What if they're in trouble? Maybe it's going to ditch at sea for some reason. They would want to let other aircraft know of their presence by having their landing lights on," he thought.

Almost simultaneously with this last thought came the voice of ground control, "Delta Sierra Juliet...no known traffic."

Frederick relaxed. It wasn't an aircraft in distress. It wasn't going to crash! He gave a little sigh. But all of a sudden he realized what this meant. The ground controller did not know what the lights were! The thought scared Valentich.

"If they don't know what it is then I'd better keep a sharp eye out. It could be a military aircraft in that restricted area above me," he thought. Once again, he relaxed a bit in his seat, still following the movement of the four lights with increasing interest. They seemed to have changed their course a little. They were now turning in his direction.

"Well that ought to help them look harder on radar," he mused to himself. "Even if their radar is capable of reaching a ten thousand foot base out here, I saw that thing descend from well above that altitude. They should have seen it."

Several seconds went by as Frederick scanned his instruments. Everything was alright. He had everything under control, everything that is except that strange grouping of lights out their to his left. They seemed to be getting brighter and he thought he could see the space between the four separate lights getting wider.

"It's got to be a high performance jet," Valentich thought. "Nothing else could travel that fast. Maybe its one of those Mirage IIIs I saw at Sale[2]. Man that's really a beautiful plane. Too bad I'll probably never get to fly one."

Several more seconds went by before he heard Melbourne reply, "Delta Sierra Juliet...what type of aircraft is it?"

The young RAAF cadet answered immediately, "Delta Sierra Juliet, I cannot affirm, it is four bright...". He paused for an instant as he made up his mind what to say. At the moment he could only make out the four lights, no red or green navigation lights, no anticollision beacon or other identifiable lights were visible. He went on, "...it seems to me like landing lights." That was the best he could do under the circumstances.

He grew increasingly tense as the lights got brighter and brighter. It was clear that they were headed almost directly toward him now. They might pass over him or in front by a short distance, but regardless they were on a near collision course! He reached forward and flipped on his landing light and rechecked to see that his wing tip lights were on. He wanted the object to be able to see him.

On board the disc, a bank of circuits had carried out their assigned task to a level of precision not yet possible on Earth. Using a navigation system that had been perfected more than a thousand years before on another planetary system almost five light years away, the trajectory of the craft was precise to within one-half meter except for transient deviations due to magnetic flux line anomalies and air density differences at this low altitude. Programmed into the control system was a simple scenario, a single overpass at a differential velocity between the two vehicles of 350 mph. This value was selected to provide optimal electromagnetic radiation flux density at the 2000 feet vertical separation planned. The wide angle sensors were automatically switched to mid-angle reception to improve precision. The small aircraft remained locked at the exact center of the sensors array field. A secondary sensor system continued its scan of the rest of the sky at low power output. One of the craft's sensing systems had already monitored the radiation emitted from various ground sites (radar) and had varied the wavelength cross section of the shield in order to make itself invisible at this range.

Flight Service at Melbourne's Tullamarine field radioed its acknowledgement of Frederick's previous call. All it took was three brief words, "Delta Sierra Juliet." The lone pilot knew that

he had been heard. He could only imagine what must be going on now in the darkened radar room at Tullamarine Airport. He visualized many people alternately looking at the radar screen at then at each other, while some were probably making phone calls to other facilities to check on unscheduled flights and military exercises. Frederick thought to himself, "I've probably stirred up a hornet's nest."

Frederick watched as the lights drew closer. They were sharply outlined against the black sky, yet they did not seem quite like the other Xenon landing light he had seem before from the ground. Ever since he had become interested in aviation, the young man had been an avid plane watcher and prided himself on recognizing the shapes of all the commercial jet aircraft and almost all of the smaller private aircraft. "One must learn as much as possible about these things if one wants to get into the business," he had reasoned. Yet these lights seemed different. They did not have the usual glare halo surrounding them and the light seemed purer than the other lights he had seen. The light didn't seem to taper off at the edges with the darkness; rather, it was sharply defined, somewhat like the beam of a laser. He thought to himself, "well, it's probably just the clear air up here that makes them look that way." Then he dismissed the whole subject from his mind.

The time was 7:07 and the metallic craft had overtaken the Cessna, passing quickly on toward the West. It maintained its horizontal linear flight and its computers finished the calculations, instantaneously transmitting the digested information almost vertically to another vehicle stationed in a parking orbit very nearly 22,000 miles above Australia. There were no life forms on board the smaller craft, only fantastically sophisticated sensor systems and associated information processors/transmitters. Its only function was surveillance and data transfer.

The seconds ticked by as Cessna VH:DSJ continued its flight toward King Island. Its lone pilot watched in disbelief as the strange vehicle continued its journey away from him. It didn't seem to scatter as much light into the surrounding atmosphere as aircraft landing lights usually do which puzzled Frederick. Somehow the lights were different.

He once again pressed the transmit button on his microphone and relayed this latest information to Melbourne. "Melbourne, this is Delta Sierra Juliet...the aircraft has just passed over me at least a thousand feet above." By this time he couldn't make out anything in the pitch black sky surrounding him. Everything was dark and Frederick even doubted if this strange encounter hadn't been some sort of unusual light reflection from his windows. "Why did I report it at all?" he asked himself, a feeling of chagrin creeped into him.

Soon the voice of the flight controller was heard, the words mixed with some static, "Delta Sierra Juliet...roger...and it, it is a large aircraft...confirm?" There was a certain note of incredulity in his voice which Frederick caught.

"Oh no," the young pilot muttered, "here we go now...I'll bet I never hear the end of this one, me and my big mouth. Now I know why pilots don't want to talk about seeing UFOs. They probably get hassled for evermore."

Frederick did not wait to respond to this query. All he could do now was follow through and describe what he saw.

"Ah, unknown due to the speed its traveling...is there any airforce aircraft in the vicinity?" he asked.

After several seconds the words came back, "Delta Sierra Juliet, no known aircraft in the vicinity." The radio's receiving circuit remained active for a half second after the last word and then went dead.

Frederick scanned his flight instruments once again and made sure that everything was all right. He was still at 4,500 ft on a heading of 160 degrees magnetic. His engine was running smoothly and from time to time he thought he could see a flashing light far ahead of him. "Could that be King Island already?" he asked himself. The thought seemed to give him confidence again. The unknown object had left him and now he could see lights off in the direction of his destination. "Things are improving," he thought, "...I'd sure like to find out what kind of aircraft they're flying up here. It's probably one of those high altitude reconnaissance types, in which case I'll never know for sure." He looked up from the panel and continued his out the window scan for other air traffic. Little did he know that the small disc was already

maneuvering for another pass on him.

It was now 7:08 pm. The calculations that were obtained from the earlier fly-over had been digested and transmitted to the waiting vehicle far above the Earth. The information had been precisely encoded onto an IR laser type transmitter. It had been necessary for the smaller disc to climb to an altitude of 85,000 ft in order to make this transmission beyond the distorting effect of the planet's atmosphere CO_2, where only a small fraction of the molecular species were present to scatter and absorb the ray. On board the larger vehicle the decision had been made to do a second fly-over of the small plane in order to determine other higher order parameters, chiefly the nature of the life form inside.

A brief burst of coded control data was sent back down to the disc's antennae and stored in its bubble memory-like planar media. The dynamic capacity approached that of the human brain in its volume function although its input/output synaptic connections were not nearly as sophisticated. Immediately the disc began its accelerating descent back into the atmosphere to take up an initial position very nearly where it had begun its first fly-over, east of the light plane. This procedure would help reduce the degrading effect of certain magnetic anomalies which would be encountered if another direction of travel were used. By 7:08 and ten seconds the disc had begun its horizontal run, this time at a constant 800 mph. Its computer, driving the propulsion system, was now programmed to execute three separate linear passes over the Cessna. Each pass would make identical measurements of selected reflected characteristics from the plane and also emitted characteristics. The three linear passes would permit making time and space-correlations in order to calculate signal-to-noise ratios. The same principle had been discovered only a decade and a half before on Earth, and was primarily being put to use in separating brain activity from the unavoidable background spike noise. Yet the fundamental principle was many hundreds of centuries old on the planet from which the visitors came.

The separation distance between the disc and Frederick's plane rapidly decreased. He caught sight of it out his left window as he momentarily rolled to the right, his wing having blocked him from seeing the bright white lights up until that moment. When he caught sight of them once more, he whirled around to the left

and stared in disbelief. There they were again, but much closer this time! "What in the hell's going on?" he cried. "They're sure up to something and I don't like it!"

Quickly he raised the microphone to his lips and, trying to remain as calm as he could, said, "Melbourne it's approaching now from due east," he paused briefly and then continued, "towards me." Letting go of the button, he knew that the radar controller was probably calling for his buddies to gather around the screen to see if they could see anything.

When the atmospheric conditions were just right the radar beam from Melbourne could wrap around the curvature of the Earth and detect ships in Bass Strait. But normally the line of sight from the radar's antenna out over Port Phillip Bay, and on to Cape Otway distance, prevented anything from being detected below 10,000 ft altitude. Such were the conditions this night. The Bureau of Meteorology had not measured any significant thermal gradient.[3]

The metallic disc sped directly over the aircraft. When it reached a separation distance of several thousand feet it instantaneously reversed its direction and came back over the Cessna a second time. The overhead wings of the aircraft blocked much of this action from sight and Valentich barely had time to roll his right wing up to permit him to see the object as it reversed its direction and began its second pass at him.

Frederick's mouth dropped open. He could only stare in wonder at what had just taken place. Almost instantaneously the three letters "UFO" formed in his mind. "Yes! That's what it is..." he cried out. His voice was muffled by the sound of his engine. "It's a UFO!"

The young man was more excited now than he had ever been in his life. Ever since he had read about UFOs in the newspapers and seen several TV shows, he had become enamored by thoughts of seeing one himself. He had even told a friend that if he ever had the opportunity to go aboard one he would gladly do so. As his pulse rate accelerated, he felt a strange tingling sensation all over his body. He didn't know if it was just because of the realization that he was watching a UFO or if it was some sort of direct effect produced by the object. He could vaguely remember some

clippings he had in his notebook about tingling sensations reported by UFO eye witnesses.

Meanwhile the disc had begun its second constant velocity run above the aircraft, a maneuver that would cancel any doppler errors from the first pass. It quickly moved above the aircraft, now toward the east, and came to a stop a mile away. Frederick was ready this time and went into a right wing down roll to permit him to see the object sooner as it emerged from behind the wing. He never considered changing direction to see it better. A fleeting thought entered his mind, "Wow, if I only were in a jet fighter now."

On board the disc, the sensing data had been stored and preliminary calculations made from the two runs. There had been definite evidence of carbon-oxygen-based life inside the winged vehicle, as well as motion of something in the central compartment. Very weak electro-magnetic signals had been picked up from the life form, signals highly similar to others characteristic of this planet. The signals had been all but masked by a variety of other radiation, now already classified and therefore useless to the intelligent beings who controlled this surveillance mission. One more fly-over was needed, this one much slower. Since no evidence of hostile action had been noted during any of the previous fly-overs (the rocking of the plane's wings had not been interpreted as threatening in any way), the third and final fly-over could be much slower than the others. The differential velocity would be only 75 mph and the disc would drop down to within 50 feet of the plane. Trajectory calculations made on the plane had shown that its maximum rate of climb would be only about 20 ft per second, in which case there would be sufficient separation distance to rise should the plane try to intercept the disc. The on-board flight control systems had a nominal reaction time of under one millisecond and, under emergency conditions, two orders of magnitude less than that. However, the computational power and drive energy needed to operate in such a high speed mode was considered as not appropriate here. The principle of "appropriateness" had been developed to a very high degree, indeed, it helped the intelligent beings on the larger vehicle in all of their decisions. It was something akin to the concept of "efficiency" to the people of Earth, but with a more socially interactive dimension.

Frederick listened to the sound of the ground controller's voice but continued to concentrate on the fascinating spectacle happening nearby. "Delta Sierra Juliet," came the words from the loud speaker. The pilot had almost forgotten that he was still piloting an aircraft which required almost constant manual control to prevent it from going into a stall or dive. He forced himself to look back at his instruments and was relieved to see that, despite his lack of attention to his own aircraft's flight, he was at the same altitude as before. He was, however, now headed in the wrong direction by ten degrees and so quickly made the required corrections, at the same time noting his engine was still functioning well. Looking back to his left, he realized the wing was in the way again, and rolled his right wing down ten degrees as he had done before. The white light on the disc had now dimmed considerably so that Frederick had difficulty seeing it at all. It was stationary off to his left, and he glanced back at his instruments quickly and then again at the disc. The longer he held his roll angle the more the object passed behind him. He was in a gentle right turn.

"I'd better let them in on the action," he thought, and again lifted the microphone to his lips. He pressed the button and was about to speak when he noticed that the lights were approaching him once again. He let go of the microphone button and concentrated on the approaching object, now only a few hundred feet off to his left and slightly above his own altitude. Frederick could tell that it was moving much more slowly and he was becoming more frightened than before. His fright caused him to reason that if something should happen to him the authorities on the ground would never know about what had happened. He spoke clearly into the mike. "Delta Sierra Juliet, it seems to me that he's playing some sort of game," he paused for a moment and then went on, "he's flying over me two...three times at a time at speeds I could not identify."

At the very moment Frederick was transmitting this information back to Melbourne the disc was directly over him, passing slowly toward the west. None of the aircraft's systems were affected by the disc, but then Valentich would not have noticed these tell tail signs if there had been any. He was simply too excited. His thoughts raced from subject to subject and his sensory awareness was enhanced in some respects and terribly

distorted in others.

The disc's sensing equipment had performed the required tasks and, with the information appropriately labelled and stored in memory for subsequent analysis, the disc had begun to accelerate smoothly at a steep angle to a higher location to await further commands. As it began to climb Frederick could see the four white lights he had seen before. "Those lights must be a part of its propulsion system," he thought to himself, "they seem to get brighter whenever it accelerates."

Soon Frederick heard flight control say, "Delta Sierra Juliet...roger, what is your actual level?"

Quickly rechecking his altimeter, Valentich answered, "My level is four and a half thousand...four - five - zero - zero." He thought to himself, "Why do they want to know that? I wonder if they do have me on radar after all? I'll bet they got that UFO on radar and they want me to help them spot it right now!" The thought that the authorities might have detected his UFO on radar gave him a quarter incentive to go ahead and tell them outright about the strange flying object that had just buzzed him several times. After several seconds the controller's now familiar voice came back saying, "Delta Sierra Juliet...and confirm you cannot identify the aircraft."

Frederick answered, "Affirmative!" Silently he muttered, "Well, I can't identify where its from but is sure is a UFO."

Once again he heard the controller say, "Delta Sierra Juliet, roger...stand by."

"That's an odd thing to say at a time like this," Frederick thought to himself. "What else can I do?" The young pilot, having finally decided to tell Melbourne what was happening, was running over in his mind what he would say. He wanted to be as accurate as possible, having always prided himself in his accuracy. It was just a reflection of one of his personality profile characteristics, a trait which he had valued for many years. At this point, he made another rapid instrument scan and then spoke into the microphone, "Melbourne - Delta Sierra Juliet...it's not an aircraft." Stopping very briefly and taking a little breath, he thought, "this next statement will bring the house down." He continued, "...it is...". He stopped.

High above him he could make out the UFO, now ahead of him and easily visible through his windshield. It was descending rapidly, toward him! The ordeal was not yet finished! The sight of the plummeting object stopped Frederick in mid-sentence. He was awestruck by the beauty and majesty with which the craft seemed to come toward him. "It must contain an immense amount of energy," he reasoned. "But how does it control all of that energy?"

Within five more seconds the disc had reached a position directly in front of Cessna VH:DSJ. The landing light on Frederick's plane was still on; he had totally forgotten about his own situation since encountering the object. The white light of his aircraft's sealed beam lamp shown out into the darkness, feeble in comparison to the magnificent illumination coming from the object hanging just in front of the aircraft. As Frederick swung his heading around a little to the left he suddenly could make out the surface of the disc, his landing light bouncing off the polished metal surface back into his eyes. The disc was fantastically smooth and its curves graceful.

Many seconds went by. Yet the distance between the Cessna and the disc did not change. Somehow Frederick understood that everything was going to be all right. He wouldn't collide with the disc. It was capable of doing almost anything and Frederick began to wonder if he was really flying his own aircraft now. He wondered if the object were not now guiding it through the sky. He quickly glanced at his air speed indicator. It read 134 kts. His gyro and compass were holding extremely steady, even too steady. Frederick suddenly became aware that none of the needles were moving!

"That's really fantastic," he thought. "I don't know if I could even make any changes now."

Valentich was aware of the voice of the ground controller again. "Delta Sierra Juliet...Melbourne. Can you describe the...er...aircraft?"

The moment had finally arrived and Frederick knew it. He would have to tell them about the disc that was hovering in front of him and he knew there would be no turning back. Inwardly he knew that his life would never be the same again, that until this

moment he could have returned to Melbourne as a pilot who had been buzzed by some advanced super secret military plane...but not anymore. Deep down inside he knew that this object came from another time, another place. It presented itself in a truly majestic manner, somehow emitting an energy that could only be perceived by one's spirit. Like the very low frequencies of a good hi fi system that had to be felt as visceral sensations rather than as audible sounds, this disc was surrounded by a certain presence of being. Valentich, feeling a deep sense of respect and awe for it, wondered if he even had any free will left.

Slowly he raised the microphone to his trembling lips. He hesitated several more seconds before depressing the transmit button. Drawing in a long slow breath he said, "Delta Sierra Juliet...as its flying past it's a long shape...," then stopping for several seconds to let his brain calm down, he went on, "cannot identify more than that...it has such speed..." He paused a second time, his mind reeling for some unknown reason. "Why did I say that?" he thought to himself, "it isn't moving out there." He continued speaking into the microphone, "...it's before me right now Melbourne." His last statement had been meant to correct the previous one. Right now, however, he wasn't certain that anything he was saying made any sense.

He had no sooner released the press-to-talk button when he heard the voice of the controller ask, "Delta Sierra Juliet, roger. And how large would the...er..object be?"

Frederick listened to this simple request for information but found himself strangely disinterested. It was as if he were entering another realm, being enveloped by some strange force, some dimension that made his own world of little importance. "What good would it do to answer him?" the young man thought, as if hypnotized.

Without his realizing it, Frederick had gone into a slight bank to the right during the previous radio communication. His aircraft was heading more and more westerly now, but he didn't seem to care. All he really cared about was being in the presence of that beautiful, powerful disc, which quickly accelerated to a point in front of him again. As his aircraft continued its tighter and tighter right-hand turn the disc did likewise, all the while

Frederick feeling pleasure that it showed such interest in him. Somewhere, in the vague depths of his mind, Frederick wondered if others had felt the same way during their encounters with the object.

At length Frederick remembered that Melbourne had asked him a question. "What was it?" he thought. Then he remembered, something about the disc, and he formulated an answer. "Delta Sierra Juliet - Melbourne...it seems like its chasing me...what I'm doing right now is orbiting and the thing is just orbiting on top of me also." He stopped for a moment as he studied the disc in front of him, then continued, "it's got a green light...and...sort of metallic like...it's all shiny on the outside."

Almost immediately he heard ground control respond, "Delta Sierra Juliet." The message was received. Frederick would never know just how his words had been received, however.

The nature of the disc's present surveillance mission was a simple one. To monitor the nature and behavior of this single aircraft and to determine its responsivity. How would it react to various forms of communication? Would it give any indication of having monitored the presence of the disc? Did it possess any offensive weapons? Were there life forms on board the aircraft or was it too a remotely piloted vehicle (RPV) such as itself? These and several dozen other primary questions had formed the basis of the fly-overs. So far the data obtained had fallen neatly within the limits of observations obtained from the disc's previous encounters on this planet, but there was still one further form of communications test remaining to be certain that this airborne object carried an intelligent life form. The on-board computer system began to set this test in motion.

The first step in this final test was to modulate all emitted radiation from the visible to radio wavelength over a precise length of time. A stairstep modulation would be used. Power would be emitted every $10^{0.5}$ Hz apart for 25 milliseconds before progressing to the next frequency. At about 5×10^{14} Hz the disc should disappear from view; its reflective surface would still be visible if enough illumination fell on it. All of these events were carefully programmed in a brief instant and carried out with great precision. Then, just as programmed, the craft suddenly disappeared from

Valentich's view.

"Delta Sierra Juliet," Frederick radioed as he lurched forward to see out the windshield better. His eyes saw only empty darkness. Continuing to hold the transmit button down as he looked in all directions, he felt a little disappointment as he said, "it's just vanished!"

The controller's voice came back almost instantaneously. "Delta Sierra Juliet."

Frederick wondered whether they really could see him on their radar screens. If so, his story would be far more believable. He also wondered if the ground controller wasn't just humoring him now, as his radio messages had been pretty crazy. "Who in their right mind would believe that something could simply up and disappear like that?" he pondered. The young pilot thought he would try them once more. He would see if they would admit that this fantastic thing he had just seen was really a military aircraft of some sort. He spoke in as controlled a voice as he could muster under the circumstances and said, "Melbourne, would you know what kind of aircraft I've got? Is it a type of military aircraft? while thinking to himself, "I don't care if they don't tell me, really. All I want to know is if they saw it disappear. Man, if it is we don't need to worry about any enemy from now on!" Patiently he waited for some reply from the ground.

After what seemed like an awfully long time he heard ground control reply, "Delta Sierra Juliet, confirm the ...er...aircraft just vanished."

"What kind of answer is that?" he cried out. Now he was talking to himself out loud. It really didn't matter anymore. He was only beginning to realize the stress he had been under for the past several minutes. He was gripping the control wheel so tightly that his fingers were turning white. They began to ache. His shoulder muscles were taut and there was a dull ringing in his ears as his heart pounded away at 170 beats per minute. "That's no way to help a guy in trouble," he thought to himself. "But maybe they didn't really say that. Maybe I was hearing things!"

Frederick asked the controller, "say again." Soon the response came back. "Delta Sierra Juliet...is the aircraft still with you?" The static on the radio was a little worse than before.

Something seemed to be interferring with the transmission. Frederick didn't know that it was radiation from the disc.

The bright lights far off in the distance could be seen now and they seemed to be getting nearer again. He was still in a gradual turn and they seemed to swing slowly to his right. "I must be turning or else they must be swinging to my right," he reasoned. He thought he had better report this to Melbourne so once again he radioed, "Delta Sierra Juliet...it's ah, Nor..." and then he paused as he looked back down at the compass. He thought it had read North but then remembered his banking turn left. He noticed that actually he was traveling just about due South and the lights were coming from his two o'clock position. so he continued, "...now approaching from the southwest."

Ground control did not acknowledge his transmission for 12 seconds. Valentich was already upset at the reappearance of that strange flying object and their delay made him even madder. "What's taking them so long down there? I'm up here all by myself with that thing and all they can do is waste time...".

On board the silvery disc the navigation system had already been reset for yet another pass near Cessna VH:DSJ. But this time the objective was to find out something about the magnetic shielding of the aircraft and its electron grounding characteristics. This type of in-flight test on one of the planet's aircraft had been done on several previous occasions with equivocal results. In one instance the high density flux field that the disc had emitted had produced almost instantaneous pitching in the aircraft's flight behavior. The aircraft had been a small single engine type vehicle as this one was. In another trial, the same flux field had been used under comparable atmospheric conditions and range and the much larger reaction jet aircraft had shown no significant changes in flight behavior. This had puzzled the beings who had planned the tests. They had decided to carry out another similar test to check for consistency of results. That time had arrived over the dark waters of Bass Strait.

The disc was being guided smoothly toward the tiny aircraft at an altitude only 50 feet above it. All of the external power sources on the disc had been extinguished except one visible source spanning 6×10^{14} to 10^{15} Hertz. The high power density at the

surface of the disc caused atmospheric ionization of Oxygen, Nitrogen and some Xenon so that at close range one could see a slight bluish glow with yellowish tinges radiating off the surface into the surrounding air. The fundamental experiment that was about to be carried out was produced by an electro-magnetic coupling of the disc's microwave frequency power supply with the beam of light radiating from the front end of the disc. It was the size, shape, and pointing direction of this special beam that channeled the microwave energy toward the target of interest. The fact that this beam was visible was only a by product of its basic physical characteristic - plasma containment. As the separation instance became smaller and smaller between the disc and the aircraft the beam gradually narrowed, but maintained a circular cross-section. It had been calculated that the beam's diameter at the aircraft's distance must be very nearly 260 ft in front of the aircraft so as to adequately ionize the air through which it flew.

The disc was now within one mile of the aircraft. It was 7:11 and 45 seconds local Melbourne time.

Frederick had continued to scan the darkness outside his aircraft for the bright lights and only occasionally looked back at his instruments. He was not as worried about things now as much as he had been, since nothing had happened to him on the earlier passes of the strange flying thing. The old adage was true that familiarity breeds contempt and Frederick was becoming bolder in his attitude toward whatever the flying object was. He had considered trying some form of communication with it like some other pilots had done before him. He changed his mind at the last moment, afraid. It was one thing to read how others had done something like that and another to do it oneself. He noticed that the light seemed to be getting brighter and brighter and was very nearly at his own altitude, whereas before, it had been quite a way above him. Yet he was not as alarmed as he had been on the first pass the thing had made.

Suddenly he felt a lurch as the engine began to sputter. A rush of panic swept through him. "Oh no. What now?" he thought as he chacked the tachometer. It indicated wild fluctuations as the engine seemed to almost come to a complete stop and then start up again. He had never experienced this before. Never in all of his flight training had he even heard of a reciprocating

engine coming to a full stop and then almost instantaneously start up again. It was wierd and Valentich was frightened, almost to the point of paralysis. He checked his mixture control and found it to be normal. Then he reached down and applied full carburetor heat just in case there was icing. The same problem continued and he visually checked his fuel gauges which showed more than half full. "Could there be something in the fuel lines?" he thought, "maybe there's some water or dirt." He quickly turned the cabin light on and looked down at the floor where the fuel selector valve was located. He was relieved somewhat to find that it was set at the "both on" setting. Next he checked the master switch, turning it back and forth, on and off and finally on again to see if it had malfunctioned. He was beginning to run out of things to check and he knew it.

"Delta Sierra Juliet, the engine is...is rough idling." He was getting worried and his voice was beginning to show it even though he tried to keep it under control. He continued, "I've got it set at twenty-three... twenty-four, and the thing...is coughing." Then he released the microphone button, sweat running down his face, his hands wet and cold.

Melbourne called back almost immediately this time. The now familiar voice of the controller also had a tone of urgency as he said, "Delta Sierra Juliet...roger. What are your intentions?"

Frederick barely made the words out. But this time it was not radio static that blocked them but the pounding in his head. He had never felt this way before, it was like an icy cold compress being gradually tightened around his temples. With each second the pressure and pounding became stronger. At certain moments he thought he could also hear a very high pitched whine, almost at the limit of his hearing range. But it faded in and out irregularly. His thoughts were somehow being scrambled by this pounding. All he could think of was getting down to the ground... getting away from that terrible thing out there. But he was a long way from any land and he was more and more disoriented since he had begun to concentrate upon the disc and had disregarded his navigation. Now he was paying the price. It was to be a terrible price.

All he could think of was his planned destination. He must get there, somehow. The words 'King Island,' kept repeating themselves through his brain. He tried to force himself from looking at the strangely majestic object hovering nearby him. "If I can keep my mind off it, it'll not affect me," he reasoned. Then he remembered the question from Melbourne. "What are your intentions?" He said this out loud, as if to try to force them into his consciousness where they could be dealt with. "What are my intentions?" he repeated again, placing even more emphasis on the word my. He wasn't sure anymore if he had the power to decide for himself.

At length he pressed the button on the microphone stating, "My intentions are...ah, to go to King Island...ah Melbourne that strange aircraft is hovering on top of me again," he paused again leaning forward in his seat to get a better view of the disc which had slowly risen above his own level and was approaching him. It was within a few hundred feet distance now and the sensation of pressure was becoming unbearable. He continued his communication with difficulty, "...it is hovering...and it's not an aircraft."

Frederick didn't know how much time went by before Melbourne acknowledged his transmission with the words, "Delta Sierra Juliet." When they did arrive he really didn't care anymore. They hadn't been of any help to him up to this point and probably wouldn't be any. But at least he had told them. He hadn't tried to fake it. Now they would have to deal with the situation, somehow...no that is not what he meant, he would have to deal with it, by himself. Frederick's thought processes were becoming reversed.

"I wonder if this is what it's like on drugs?" he thought. Yet his vision was sharp and stable and his hands and fingers felt alright. Only his head felt strange. Little did Frederick know that these sensations were a direct result of the radiation coming from the metallic disc that remained almost directly above him, half obscured by his windshield cut-off. "Yes, it's still up there," he thought to himself, "and the engine is still going on and off...it's something to do with that thing up there," he reasoned.

Frederick Valentich was correct.

He was going to report as many details of what was going on to Melbourne as he could so that they might do something concrete. But his mind just wouldn't react correctly. Frederick forced himself to think. His mind seemed to have slowed and one idea would seem to drag on and on without jumping to another idea as they usually did. Time wasn't normal anymore. Nothing seemed normal anymore. Frederick was well beyond the point of fearfulnes now - he was petrified and tired all at once. He sensed that he had been through a dozen lifetimes since the disc arrived above him; he was very tired and yet his muscles reacted quite well. He found he could flex his fingers and tighten his biceps. He could move his body around in the seat. "What's wrong with me?" he thought.

After several more seconds he reasoned that he should try to get away from the disc. It was strange that it took so long for him to think of it, such a simple act, yet apparently so difficult to do under these strange circumstances. Then he raised the mike to his lips again and called out, "Delta Sierra Juliet Melbourne..." he stopped speaking suddenly but kept the transmit button down. The radio continued sending to the ground at Tullamarine.

Frederick had not yet taken any evasive action. The Cessna continued in almost horizontal flight while the metallic disc remained suspended precisely above it, just 50 feet up.

The atmospheric coupling of the energy emitted from the disc had an ionizing effect upon the air molecules, however, and the effect increased as the distance between the disc and the Cessna decreased. Due to the laminar influence of this energy the gradient wasn't smooth or gradual but in steps.

The disc had now begun to lower itself upon the tiny aircraft!

As the separation distance between the two decreased the Cessna's radio transmit circuit was gradually blocked by the ionization. Due to minor air currents and consequent changes in the relative motions of the disc and aircraft the stair steps of ionization gradient had an intermittent-like effect on the radio. What reached the ground was a random series of metallic reverberations, much like keying the microphone in systems with a squelch circuit. This continued for 15 seconds before the voltage potential grew to

such a level that the radio circuit breaker popped and all further transmission ceased.[4]

Frederick finally let go of the control wheel and put both hands to his head. He tried to press in on his temples as hard as he could to somehow prevent the pounding of his own pulse from driving him mad. He covered his ears but it made no difference. The sounds of his faltering engine continued. The slip stream noise was the same. And, when he yelled out loud into the now lifeless microphone, his voice sounded exactly the same as it did with his ears uncovered. It was weird. It was as if sound was passing directly through his skull or nasal cavity or somewhere else to reach his brain rather than going its normal route through the outer ear canal, ear drum, middle ear and its nervous system. Something very weird was happening to be sure and Frederick knew it came from the disc.

He looked up a third time and was startled to see it almost touching his aircraft! The smooth underside tapered from out of sight above his cockpit roof to a sharp edge some 20 feet in front of his propellor. It was right on top of VH:DSJ now! Frederick's vision began to blur, with tiny colored lines, like lightning bolts threading their way in random directions over the surface of the aircraft's windshield. They became brighter and thicker until he couldn't see out of the window at all. Like a dynamic electrical spiderweb, these ionic currents had begun to form deep etches into the windshield. Like the relentless Colorado River gouging into the Grand Canyon's rock, these currents were leaving permanent tracings in the plastic. But no one would ever see them on this planet.

The surveillance disc had received a change of command while hovering above the plane, a decision made on board the huge ship that lay "anchored" far above the site of the current drama. The new command shot down to the disc almost instantaneously; descend and try to take control of the aircraft's flight merely on the basis of electrodynamic force. These signals had been beamed down at the speed of light on a microwave channel which prevented it from dissipating in the atmosphere. It also prevented its reception by antennae located anywhere but directly beneath the aircraft. Special encrypting could also be used if necessary but would require more time than was deemed necessary in this

instance. The commands had been carried out with precision. The biosensors on board the disc had detected clear signs of intelligent life within the cockpit; it had been this information that had tilted the decision in favor of an actual contact, if possible! Also, the apparent lack of weapons on the small aircraft had been taken into account. Processes by which these beings rationalized had been perfected through many thousands of centuries of training in logic, special dietary supplements, and neurophysiological advancements in implantable biocircuitry.

The disc had succeeded in its mission. The aircraft was no longer supported by the normal laws of aerodynamic lift. Atmospheric drag no longer entered the equation nor did the thrust created by the propeller. Only the weight of the aircraft and its contents remained normal now, or rather its mass hadn't changed. The pull of gravity remained but had been reduced to almost zero by the fact that the aircraft lay almost entirely within the same supportive field which powered the disc. This kind of experiment had been attempted only a few times before on this planet with equivocal success. Many questions could be answered from this one if everything went well.

"My eyes...I hear it coming for me...oh...oh no," Valentich moaned silently in the now quiet cockpit of Cessna VH:DSJ. He could only think of simple words, like those he had learned at home as a small boy. "Yes, thank you... I'll do better now...I like the red and blue lights there...they are my best colors." The young pilot nodded his head up and down as if giving silent answers to a stern father. His arms hung limply at his sides. He had become paralyzed in the hands of the robot disc hovering over him. It was like some giant metal mushroom rising higher and higher into the skies.[5]

This chapter is entirely fictional and based upon speculation concerning the nature of an advanced technological society and how it might interact with human beings. The temporal events presented follow the general sequence of events found on the tape transcript from Frederick Valentich.

Postscript.

This chapter attempts to recreate an actual abduction of the young pilot by an unidentified flying object (UFO). The primary intent has only been to show that both motives and means could possibly exist for such an abduction. While it is impossible to prevent inclusion of anthropomorphic projection by the author, and attempt was made to keep them to a minimum.

UFO field investigations conducted by members of the Victorian UFO Research Society have uncovered numerous eye witnesses of unexplained aerial phenomena before, during, and after the Valentich disappearance.[6] A wide range of colors, shapes, directions of travel, and other distinguishing features characterize these phenomena. Typical of so many other UFO reports, there seem to be more differences than similarites here. Yet there is one source of information concerning a possible anomalous aerial object near Cape Otway that deserves further comment.

A Melbourne plumber, Mr. Roy Manifold allegedly took a series of still color photographs of the setting sun from the beach near Cape Otway on October 21st. The location was Crayfish Bay. With his camera set on a tripod, Manifold carefully aimed the camera so that the sea's horizon was approximately centered vertically. The time was about 6:47 pm, some twenty minutes before Frederick Valentich first radioed Melbourne concerning his aerial encounter. Manifold set the automatic timer to produce a new exposure every twenty seconds. An article in *The Standard* (Melbourne), July 23, 1980, pg. 5 stated that the photographer "...did not see the object. Mr. Norman (the local investigator for the Victorian UFO Research Society) said after the photographs were processed Mr. Manifold contacted the society and told it they had been taken on the day Valentich disappeared." Photographic evidence of UFO phenomena is very common; such evidence cannot be accepted uncritically without far more documentation than is associated here.

Six frames of this film were obtained by Mr. Norman for computer enhancement by the American UFO study group, Ground Saucer Watch (GSW), Phoenix, Arizona. In their official summary report on this analysis GSW personnel state:

"Six color negatives were given to GSW for evaluation utilizing computer photographic analysis methods. All photographs reveal both foreground and background data points, in a sunset lighting mode. In frame five an anomalous image appears to be "surfacing" from the water. "In frame six, taken approximately twenty seconds later, a large cloud-like image, with a disc structure is visible above the tenuous shape. The photographer maintains he did not see the UO image. This is entirely possible as the witness was looking directly west into the sunset. There is a calm sea and the weather data supports that the wind was only in a breeze condition. "All modes of computer analysis were used to gain data in this UO sequence including: edge enhancement, color contouring, digitizing, computerizing and filtering. "The interpretations revealed the following information: 1) The first impression one is left with upon viewing the film is that the UO image is an emulsion defect. However, a close examination of the original negatives revealed that the image was not caused by any artifact on the emulsion. 2) Computer analysis revealed that the image was not any known type of cloud or weather phenomena. In fact, digital densitometry revealed a highly reflective area at the "top" of the UO image, indicative of a metallic structure. 3) There is no evidence of a hoax, especially in light of the fact that the pictures (sequence) appear to be taken in a rapid order, not exceeding 30 seconds from frame to frame. To super-impose in the last frame, a cloud-like structure, is beyond the realm of possibility in such a short time period. 4) Color contouring, used to graphically define density revealed that the disc-like portion of the UO was very bright when compared to other features in the photograph 5) digitizing for distance factoring revealed that the UO image had similar distortion characteristics of features approximately one mile from the camera/witness. 6) The top of the UO is being back-lighted by the setting sun and a reflection or glare from the UO's apparent curvilinear surface is obvious. 7) High and low pass filtering revealed a definite disc structure above the "cloud". 8) The UO image is slightly blurred due to "object" motion. The direction is slightly to the right and up. 9) The size of the UO image, based on the lens data and computer comparison of other features, reveals

and approximate size of twenty feet. The aspect ratio, diameter to thickness, is 6 to 1.

"*CONCLUSIONS:* Based on the computerized data of the pictures, it is the concenses of the GSW technicians that the images represent a bona fide unknown flying object, of moderate dimensions, apparently surrounded by a cloud-like vapor/exhaust residue."

According to the above analysis, frame five contains the anomalous image allegedly coming up out of the sea yet in the sixth frame, taken some twenty seconds later, the surface of the sea is just as calm and undisturbed as in frame four! While lack of significant cloud motion from frame to frame supports the contention that the original negative strip was probably obtained without interruption (to introduce a deliberate superimposed image) and over a fairly brief period of time, such evidence does not rule out a hoax. Indeed, one could readily contrive a partially reflecting glass plate filling the camera's field of view which could reflect into the lens the "anomalous" image. Frame to frame exposure densitometry must be done to check on this possibility.

It is also unclear why Manifold did not see the strange aerial object at all. The published photograph of frame six shows[7] an extremely dark cloud-like structure in the air but no corresponding reflection of it in the water. The intense sunset sky-glow would be expected to produce such a reflection if the cloud was actually present when the film was originally exposed. One reason given for the photographer not having seen the cloud-like image was that he was looking into the bright setting sun. This reason is not convincing since the apparent location of the cloud was at least 15 to 20 degrees arc above the horizon where the sun's disc would be. The human eye can easily perceive objects against a light sky background this far from the sun's intense disc, i.e., if the object is there in the first place.

It is the opinion of the writer that the dark cloud-like image of frame six was somehow added after the exposure was made at Cape Otway. Deputy picture editor for *The Sun* newspaper of Melbourne, Bill Tindale said, "The alleged UFO is just a dark grey, blurred blob on the negative."

The possibility that UFO reports for the Cape Otway and King Island areas for October 21, 1978 will help substantiate the hypothesis that Frederick Valentich was involved in an encounter with a UFO remains problematic. No matter how convincing these other sighting reports may be they cannot prove that Valentich had confronted a UFO.

Footnotes

1. This case occurred on September 8, 1972 somewhere between Hobart, Tasmania and the Flinders Island group just north of Tasmania. The pilot was 57 year old Max Price, a highly experienced aviator. His passenger was Brenda Hean, a conservationist who was going to skywrite a special protest message concerning the flooding of Lake Pedder in Tasmania. The aircraft took off at 10:16 am and was supposed to arrive at its destination at 12:45 pm. Although equipped with a high frequency ELT, it was never heard from again.

2. The Royal Australian Air Force has numerous Dassault Breguet Mirage III delta wing interceptor jet aircraft. This aircraft is assembled in Australia and can fly at Mach 2.2 (1460 mph) at 50,000 ft altitude and can climb to over 36,000 ft in three minutes.

3. The meteorological conditions for the Cape Otway region for the night in question are given in appendix 5. The temperature was +7 deg C at 5,000 feet; +1 deg C at 7,000 feet; and zero deg C at 10,000 feet altitude.

4. As will be discussed later, a great deal of controversy surrounds the vitally important issue of whether this really represents the end of the tape recording of this event. Of course it is not possible to know the answer to this without receiving an admission from the authorities in the Department of Transport and, perhaps the Australian Department of Defense. A number of different scenarios on what might have taken

place could be presented, each one based upon a different hypothetical transmission between the aircraft and ground station(s). This is not possible at this time; such a narrative would only seem to further cloud the issue.

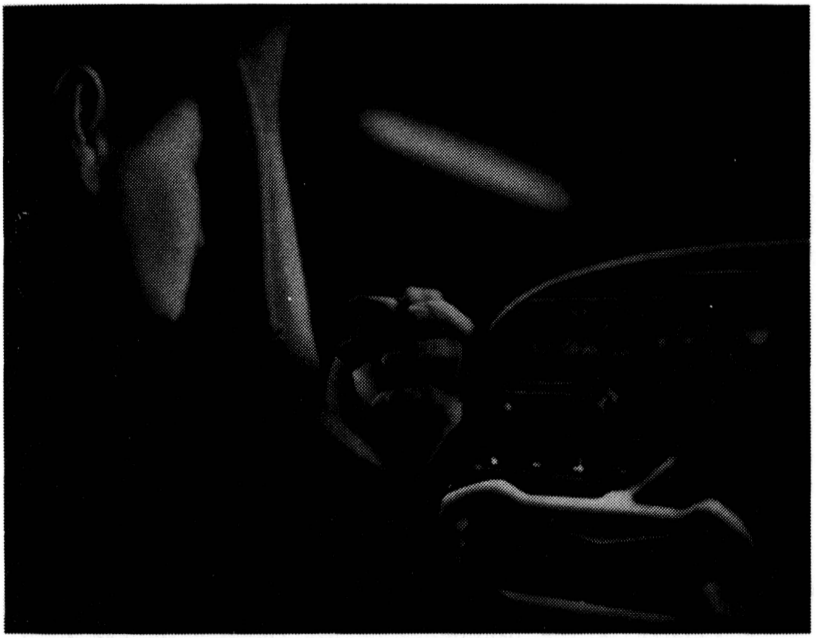
5. While the present narrative must stop here, if a portion of the radio communications tape does go on after the portion presented in chapter 8, does it contain an account of the radar contact with the disc and aircraft rising up into space?

6. A brief listing of references on these sightings include: P. Norman, Mystery deepens in pilot disappearance case, *The MUFON UFO Journal,* no. 141, November 1979, pp. 5-7; Pinkney, J., & L. Ryzman, *Alien Honeycomb,* Pan Books, Sydney, 1980, pp. 81-85; E. Jensen, UFO arsag til flyforlis? *UFO-NYT,* March 1979, pp. 87-97; Anon., The Bass Strait Mystery, *Australian UFO Bulletin,* February 1979, pp. 7-11.

7. Foley, S. UFO clue in pilot puzzle, *The Sun* (Melbourne), August 5, 1980.

Figure 9

Artist's Conception of Strange Object
Hovering Near Cessna
VH:DSJ at 7:09:52



Chapter 12

The Last Leg: Setting the Stage for Version Four

In the course of writing the various hypothetical scenarios already presented it seemed to me that they all shared something in common. Version one postulated a rather common place case of pilot disorientation and subsequent crash, an explanation offered by numerous people including the Australian Department of Transport. In version two the pilot was again the prime cause of the events. Only this time he purposely contrived a hoax. And, in the third version the pilot met his match with an unidentified flying object; this theme has also been offered before. Yet another possibility came to mind as I continued to gather information on this case. It was a possibility that I unconsciously avoided for many months. Yet the evidence continued to mount. Then, about February of 1980 I consciously decided to accept the possibility of this fourth version. I began to make discrete inquiries of friends and acquaintances about our capability to wage Star War battles in space. I began to amass a file of articles on such diverse subjects as charged particle beams and nuclear submarine communication networks. What was the overall pattern? Should I even expect to find evidence of my frightening hypothesis? Secretly I hoped I wouldn't.

Enough of the beginnings of my research on the fourth hypothesis. Simply put, it is that young Valentich was involved in a highly advanced offensive weapon. He was used in a way that would: (1) leave little if any objective evidence, (2) be surrounded in a mysterious context of alleged UFO encounter, and (3) obtain valuable direct eye witness verbal descriptions of what the aerial encounter would be like and, more importantly from military planners' viewpoint, how long a pilot might take to communicate what was taking place. These and other lesser possibilities began to emerge into a reasonable pattern of military design.

Before we begin our hypothetical presentation it should be noted that the covert involvement of the Central Intelligence Agency in the operation of the Joint Defense Space Communications Station or JDSCS for short is now a matter of record.[1]

I discovered that UFOs have been seen over the Alice Springs and Pine Gap region on a number of occasions. This is particularly interesting if one assumes that UFOs are nothing but misidentified terrestrial aircraft. The fact that UFO phenomena have been reported near U.S. nuclear missile bases, military bases with conventional weapon systems, nuclear power plants, and other strategic sites seems to fit into the same pattern. Thus, if spy aircraft from the Soviet Union were the sole cause of these UFO reports in central Australia then is the same explanation to be accepted for the UFO reports in America? I don't think so. And, if the Alice Spring UFOs were really American aircraft what was their mission? Was it to see what could be learned from an altitude of about 35,000 feet while flying along specific flight paths? Perhaps these UFOs were indeed visitors from space merely continuing their surveillance of our technology activities. Other possibilities also exist but need not be raised here.

And I also learned that a 35 year old U.S. Air Force staff sergeant and and suspected CIA agent was found dead in his Alice Springs home during the week of August 17, 1975. The West Australian News article dated August 25th said, "Investigations showed that he was in charge of American postal affairs at the U.S.-Australian base at Pine Gap, outside of Alice Springs.

"He was responsible for handling all incoming and outgoing mail and communications for Americans stationed at Pine Gap...

"The body was found partly clothed and under a single bed, with the head resting on an electric radiator."

"The Alice Springs police believe there are no suspicious circumstances, though the cause of death has not been revealed."

As these and other odd bits of information began to be assembled it seemed as if I were watching the making of a James Bond movie, complete with super spies, international intrigue and power plays of the grandest proportions. As with the assembly of any picture puzzle, it is much easier to fit each piece of the puzzle together if you have the finished picture in front of you. This kind

of task is really quite simple - a matter of color and shape recognition. But when I attempted to assemble the often unrelated bits of information surrounding Pine Gap and Nurrungar, North West Cape and Buckley Field, Colorado, Bass Strait and Sale RAAF base, I more often than not came to dead ends. It was as a result of meeting so many dead ends that I set out to prepare a sort of master historical timeline which might help me spot impossible situations or, at least, improbable ones. I called this timeline the "ST" for *Scenario Timeline*. It contained the basic U.S. military developments that had taken place since 1965 (just before the decision to establish the JDSCS facilities in Australia). Included in this ST were: Soviet and Chinese ballistic missile and U.S. ballistic missile capability, the gradual development of photographic, electronic, infra-red, and communications satellites in both low (about 100 miles) and synchronous (22,300 miles altitude) orbits, the development of high power laser, neutron particle, and charged particle technology, Soviet and American anti-satellite activities, alleged CIA involvement in deliberate UFO simulations, and numerous other historical events of a political nature. The ST chart grew to large proportions. It had some major threads with apparent continuity but sooner or later the threads broke. When this happened I had to start over, tracing a new thread as best I could. These threads broke when classified information was involved. Sometimes they ended because I did not have access to classified material. Other times they ended because I did not have access to some other document or individual that allegedly would have given continuity to the thread. There appeared to be a genuine continuity to the events, as if the very force of the need for human personalization (or self actualization) within a single lifetime had merged one event quickly along into another.

I could never be certain that the activities of the Australian labor party, which continuously sought to expose the Pine Gap operation to the Australian people and the world was not a precision tool of the Soviet Union. But in the end it didn't matter. And likewise, I could not find a conclusive tie between reported UFO sightings over Alice Springs and many other similar reports over other regions of Australia. My reasoning in this case was simple. If UFO reports could be found from one rather isolated region of Australia such as Alice Springs that differed significantly from

other UFO reports centered around Melbourne then it seemed reasonable to assume the origin of the two sets of reports differed. This line of reasoning was subject to obvious criticism but served as a useful starting point for my research on the ST.

In a similar vein, if the Pine Gap facility might be related not only to defensive type operations which are briefly summarized in Chapter 3 but also to very advanced active, offensive type operations of even the most rudimentary type, then it seemed reasonable to look for some possible symptoms of such research. Perhaps naively I reasoned, where there is smoke there is fire. Thus, where there is radioactive material there may be telltale radiation effects; where there is an inordinate amount of electricity consumption within a communications facility there may well be something else going on besides communications.

What is known about Pine Gap? I was able to determine the following information. *First,* Pine Gap is powered by its own generators. One source[2] stated that the center has six 1,500 HP conventional electrical generators which consume 1,800 gallons of diesel fuel per day. The source of this information does not believe that there is a nuclear energy power station despite the high consumption rate of water at the site. *Second,* the entire Alice Springs area including Pine Gap is supplied by a huge subterranean water source deep within the Mercenie sandstone strata which dates back to the Palaeozoic era. Fed by the Roe Creek, Tod Rivers and other underground springs, this basic supply is over 1,000 years old. This water is brought to the surface by 12 production bores with five more more being driven.[3] An attempt to catch and save rainfall was made and abandoned because of the high rate of evaporation that occurs and the low rainfall in the area. Thus, the known water supply appears to be adequate to support the approximately 16,000 people at Alice Springs and the several hundred who work at Pine Gap. *Third.* The Pine Gap facility itself was begun in 1965. Comprising a 50 acre site some 15 miles SW of Alice Springs, this top secret installation has at least six antennae of various sizes and pointing capability. Two radomes were installed originally in 1968 and by late in 1968 two more were added and completed by mid 1969 according to Ian Reinecke.[4] By 1977 there were five radomes measuring about 110 ft, 70 ft, 40 ft, and 18 ft. based upon studies by Dr. Desmond Ball currently at

The International Institute for Strategic Studies, London but originally of the Strategic and Defense Studies Centre in the Research School of Pacific Studies at the Australian National University in Canberra.

At the JDSCS at Pine Gap a number of the individual buildings have been identified. Figure 1, obtained in the Summer of 1978, shows the latest and the largest antenna being covered with a perspex sphere cover. Some idea of the size of these domes is given by the white trailer located in front of the largest dome. The long low building just to the left of the two domes is the computer center which houses an IBM 360/20 digital computer.

Several sources indicated that control rooms more than 1000 meters (about 3000 ft) underground provide bomb proof shelter for the more than 400 personnel present, about half Americans.[5]

Little is actually known about specific equipment at Pine Gap and it is not really important for present purposes. An abbreviated list includes (1) Cary spectrophotometers "which can enable the facility to pick up the missiles with precision, allowing standard monitoring equipment to take over..."[6] The reference is made to missiles launched from American submarines and intended for Chinese targets. (2) IBM 360/20 computer (originally) and probably expanded in 1975, (3) C-band transmitters and receivers which permit high data transfer rates on the order of 6 gigahertz to the satellite(s) and about 4 gigahertz back to earth, (4) very low frequency antennae for communications with submarines, (5) high frequency antenna on the northern boundary of the site which provides a direct link with the U.S. base at Clark Field in the Philippines, (6) a large solid tower several feet square and more than 30 m tall located about 300 m west of the site. Ball maintains that this tower contains special radio frequency control and stability checking equipment. No doubt there are also extensive support facilities as well for the sophisticated communications and tracking equipment. Where there are technicians to maintain existing electro-optical and digital equipment there are usually also scientists who design and supervise the construction of advanced equipment. If it is postulated that advanced laser and particle physics research is being conducted at Pine Gap the high water consumption rate becomes more reasonable. These average consumption rate figures per month for the 1971 to 1975 period are given here:

1971 (999,900 gallons); 1972 (917,347 gallons); 1973 (962,491 gallons); 1974 (586,740 gallons); and 1975 (806,071 gallons). These rates amount to an average of 10,254,120 gallons per year over this period. If there are about 450 people employed at Pine Gap and the work day is represented y a fully manned three shift period with equal numbers of people (150 people per shift), then each person and technical function consumes 62.4 gallons of water per shift day! Support of air conditioners during hot weather must account for a portion of the water consumption rate such that seasonal fluctuations should become apparent in such usage. Ball mentions that the water usage is quite seasonal, peaking in December/January and falling off in the winter months of July/August. The minimum water usage month during each of these five years accounted for from 52 to 79 percent of the mean monthly usage; this still amounts to abut 38.4 gallons per person per day! However, not all 450 workers are responsible for an equal proportion of the water usage. It has been estimated that of the 226 Australians working at the base only about 16 are involved in carrying out any technical functions.[7] It may be assumed that about one-half of the 228 Americans there actually are involved in advanced technological research that requires high amounts of water. Thus, these (estimated) 130 persons account for an average of 5,000 gallons per day each allowing for other utility water usage.

But Pine Gap does not stand alone in a possible link with the disappearance of Frederick Valentich. Also implicated is another American installation already alluded to in chapter 3, namely, Woomera (also called *Nurrungar*) only some 550 miles south of Pine Gap and 780 mile s northwest of Melbourne. A receiving station for very high resolution photographs taken by the American "Big Bird" photoreconnaissance satellite at about 100 miles altitude, Nurrungar began operations as a research center for anti-missile defense under *Project Sparta* (Special Anti-Missile Reentry Test Australia). This project, like earlier British run efforts *Project Dazzle* and *Gaslight*), was to try to find a way of discriminating between an actual ballistic missile warhead and decoys coming through the atmosphere. Use of multiple decoys could severely confuse and even nullify much of a nation's anti-missile defense system. Project Sparta used the obsolete Redstone rocket

to which solid fuel second and third stage boosters were added and the first flight took place one night late in November 1966.[8] Later information indicated that Nurrungar was equipped to detect infra-red emissions of missile launches through the reception of signals from the 647 satellite stationed over the Indian Ocean and Western hemisphere.[9] This satellite system was first launched in 1971 and used a new design of mosaic sensors.

Because of the known launches of these test rockets in the late 1960's in conjunction with monitoring operations at Nurrungar, an analysis of reported UFO activity in the area should be performed; such analyses could prove most interesting regard to the possibility that these atmospheric tests were misinterpreted as being UFO flights.

One tie that I feel is important in relating both Pine Gap and Nurrungar to the disappearance of Frederick Valentich is the very high degree of accuracy that is available in both communicating and tracking (and controlling) low altitude orbital satellites. Earth orbiting targets the size of basketballs can be tracked from earth surface radars. Likewise, objects only several feet across can be detected from orbital satellites given certain viewing and other conditions. It would be a relatively simple matter for a satellite system to track the motion of a small single engine aircraft with a wing span of about 36 feet and a length of 28 feet travelling at 140 knots at 4,500 feet altitude.[10] Yet merely tracking the motion of a target is not sufficient to disable it. One must also transmit energy to it in an appropriate form.

It is postulated here that scientists and engineers had developed an ultra high power beam capable of being precisely aimed from two or more mobile ground stations. It is also postulated that with sufficient precision to aim each beam at a given target, the accumulation of heat energy within the metallic and plastic structures of the target would be sufficient to cause significant damage and even malfunction. Determining how much beam power is needed to destroy or damage different kinds of targets is one of the objectives of America's Defense Advanced Research Projects Agency (DARPA) in its "Space Laser Triad" program according to a recent Aviation Week and Space Technology magazine article.[11]

Footnotes

1. The interested reader is referred to several outstanding references on this important point.

   a. Lindsey, R., *The Falcon and the Snowman,* Simon & Schuster, New York, 1979.

   b. Freney, Denis, The CIA's Australian Connection, Pp. 22-42. (Private Publication), 1977.

   c. MacCallum, M., New facts on the CIA, *Nation Review,* May 5-11, 1977, Pp. 680-681.

   d. Pinwill, W., The secrets of Pine Gap, *Australian Penthouse,* 1979, Pp. 63-68.

   e. Ball, Desmond, US Bases - Implications for Australia's Security - Part I, *Pacific Defense Reporter,* June 1979, Pp. 110-112.

   f. Ball, Desmond, American bases - Implications for Australia's Security - Part 2. *Pacific Defense Reporter,* July 1979, Pp. 49-53.

   g. Hansard, House of Representatives, May 4, 1977, Pg. 1521.

   (Note: In this CIA statement prepared for the Australian Security Intelligence Organization, Pine Gap was said to be "vital to both of our services and countries.").

   h. Newman, Barry, Just what goes on at 'the space base' deep in Australia?, *Wall Street Journal,* Oct. 6, 1979.

   (Note: The original leak that Pine Gap was a CIA operation came in Nov. 1975 by Brian Toohey.)

2. Ball, D., *A Suitable Piece of Real Estate,* Hale & Iremonger, Sydney, 1980, pp. 60-61.

3. Mr. Noel Gee, the first construction supervisor of the initial bore dug at Pine Gap and his superiors originally sought a supply of 4.5 million liters per day "...but settled for considerably less, about 900,000 litres, ranging up to 1.8 million litres in summer." (W. Pinwill, The Secrets of Pine Gap, *Penthouse* (Australian ed.), Pp. 63-68, 1979).

4. Reinecke, Ian, Australia's growing role in America's global defense, *Financial Review,* May 29, 1978, Pp. 2-3.

5. Argo, Peter, Shock Skylab Report, *The Sunday Times,* (Perth), Sept. 2, 1979, Pg, 1,7.

6. The Australian Quarterly, December 1968, Pp. 12-20.

7. Canberra Times, May 11, 1977.

8. Daley, M., Australia-Silent space-race partner, *Centralian Advocate,* December 15, 1966.

9. Reinecke, Ian, Australia's growing role in America's global defense, *Financial Review,* May 20, 1976, pp. 2-3.

10. A DARPA funded study (code named Talon Gold), has begun to determine the critical pointing and tracking accuracy needed for a space-based laser. In addition, the space shuttle has already carried an experiment on laser beam pointing to try to achieve an accuracy of at least 0.2 microradians or about 0.0000114 degree arc!

11. Technical Survey: Particle Beams, Laser Weapons, *Aviation Week & Space Technology,* July 28, 1980, pg. 63.

Chapter 13

The Last Leg: Version Four

The radar intercept and communications complex at East Sale Royal Air Force Base was busier than usual this sixteenth day of October, 1978. The complex of rooms, and similar rooms at other air bases, was tied into the radar control and reporting system known as 'Hub-cap'. First introduced into RAAF operations in 1968, this system permitted extremely rapid communications and coordination among all of the Australian bases. One room contained a floor to ceiling sheet of clear glass on which were etched many concentric circles around a point. That point was Sale air base. From this same point radiated many straight lines that divided the plotting surface into twelve pie shaped wedges. A team of plotters worked continuously marking the location, identity, and movement "tracks" of the airborne targets. The radar plotting boards at Point Cook, Laverton, and East Sale were all especially cluttered this day.

It was Monday afternoon and the staff sergeant monitoring one of these large electronic portholes into the sky, known as a plan plot intercept screen, had not taken his eyes off the green dots and lines for over a half hour. His eyes were watering and he was beginning to feel a headache creeping up into the front of his head. He lit another cigarette with the still glowing tobacco from the stub hanging from his lips and momentarily lurched forward in his seat.

"What's that?" he grunted to himself. He was oblivious to two men in uniform standing just behind him. They were watching the screen as intently as he was.

"Try increasing the range to 250," one of the officers suggested. There was a sense of frustration in his voice that had been

the natural result of having watched the abnormally high amount of air activity over Wilson's Promontory, a low projection of land into Bass Strait about 75 miles southwest of Sale. He and the others were frustrated because they could not positively identify all of the "blips" on the screen before them. The peaks of Mount Hunter and Mount Roundback were apparent as were the still higher peaks of Mount Latroe and Mount Wilson, both over 2100 feet. But they couldn't make contact with several of the airborne objects that had been moving faster than any jet aircraft.

Wing Commander Oliver, the senior officer in charge, had studied the screen intently for many minutes. He had noticed the strange appearance and disappearance of an "unknown" at an extremely high altitude. He broke the silence.

"That bloke right there, I've been watching him. Notice how he seems to hover in one spot for a minute or two and then almost instantaneously moves to another spot. But there's no regular pattern to his movement." He glanced at the two men briefly and then looked back at the screen.

The other two men exchanged glances and also turned back to the green glowing phosphor display. There they saw a series of parallel dashed lines painting themselves across the face of the screen. But these newly emerging lines were not artificially generated tracer lines from some internal device to aid the operator in finging some coordinate location. These lines were being produced by something high over Wilson's Promontory! Something was alternately controlling its radar cross-section in a highly regular manner. Something was happening that they had never seen before.

"What 'av we got up there?" the second officer, Lt. Greenslade, asked. "Maybe we could look around a bit. I...I wouldn't mind takin' it on myself." He added with a grin.

Wing Commander Oliver shot a glance at the obviously inexperienced jet pilot beside him and thought, "my Lord, what kind of men are they putting out these days? Nobody would have volunteered in the old days..." He paused and then smiled.

"Nobody except maybe me," he mused. He had felt a certain kinship with Greenslade before this; his remark had only served to further strengthen their friendship. Yet neither man had ever spoken about anything except official RAAF assignments. Their paths crossed only here in the radar room.

Lt. Greenslade had been placed on temporary assignment to Sale from Amberley in Queensland where the number six fighter squadron was based. Only he and another pilot had been sent to Sale to "provide technical training backup to pilot trainees in advanced combat maneuvers," as his orders read.

"Commander!" the sergeant shouted, "look...look at that maneuver!" His voice was trembling; He almost coughed as he failed to exhale the cigarette smoke before shouting out these words.

The officers stared in disbelief as the formerly single green dot on the screen fragmented into three dots, each travelling in different directions and each at a different velocity!

"That's the most incredible thing I've ever..." the young pilot stammered. His last words were blotted out by the loud buzzer alarm. The initial stages of a scramble alert had begun.

"Now what's goin' on?" Greenslade cried. "Now's my chance to see what's up," he said in an excited voice.

"Yeh, I know that you're on standby alert but what makes you think this alert has anything to do with that bogey out there?" the commander asked.

Greenslade glanced nervously at this watch and then at his superior officer. He knew that he had no more than four minutes to get over to the hanger where his jet interceptor was waiting; the ground crew was already swarming over it.

"It's got to sir," he answered as he saluted and ran out of the room.

The radar room was beginning to fill with people. There were men in business suits and others in officer's uniforms. All of them were strangely silent, huddling in small groups around the

active radar screens.

Wing Commander Oliver could recognize only a few of the visitors. He had met Dr. Binghamton and Dr. Wright on several previous occasions having to do with radar antenna design meetings, back when he was stationed at RAAF headquarters. He knew that these two men were considered the country's leading experts on the details of radar beam propagation. He also recognized John Allison-Bigh, a towering man in clothes that never seemed to fit him. Allison-Bigh was the military attache to the American - Australian Intergovernmental Scientific Cooperation Office, or AISC for short. He was well suited to the task for it involved high level liason with U.S. State Department and Department of Defense officials. While Oliver had known Allison-Bigh for many years he had found little to like in the man. Oliver also knew most of the other RAAF officers who had come into the room. There were three of four others present whom he did not know at all; he turned his attention back to the PPI screen near by.

The radar operator had made light grease pencil tracings on an overlay to show the tracts being left by whatever it was over Wilson's Promontory. Oliver bent down closer to the glowing screen and said., "Things are pretty screwed up, eh? That's the most incredible thing I've ever seen, what with its splitting into three like that."

Just then the clanging sound of a new alarm went off signalling that the scramble operation had been cancelled.

"What the..." Oliver thought to himself. "Those things are still up there and they cancel the launch!" His thoughts were interrupted by the voice of one of the visitors who had quietly come up behind him.

"Excuse me, my name is Arch Davis." The well dressed young said pleasantly, as if to ease some of the tension that filled the room. He continued, "Some of us are assigned at Russell Offices in Canberra, Department of Scientific Studies...you know, advanced intelligence and such. He paused to let the words take

effect and then continued. "We have come to brief your staff on what's going on. I think the time has come to get on with it." He looke Oliver square in the face as he said this.

Oliver looked straight back into Davis' steel blue eyes without quivering, sudden anger building inside him. "What's this? They've come to tell us what's going on! We're always the last to know what's going on..." he thought, the corners of his lips pressed thightly together in an attempt to keep from showing his anger.

With some effort he managed to say, "Oh." His voice could not conceal his emotions and the younger man pretended not to notice. He continued, "Yes sir, if you know something about what's going, we'd certainly like to know...Let me locate a conference room so that we can talk." As Oliver turned back to the radar screen momentarily Dr. Davis glanced down at his watch and announced, "They'll be disappearing now."

As soon as the words had been utered, the three green blips suddenly vanished from the screen! Wing Commander Oliver just stared in disbelief. It was as if the visitor had caused the event to happen.

"If you and your staff that can break away, will you please follow us? A room has already been arranged for and the general will met us there." With a slight motion of his arm, Dr. Davis and the other three visitors headed for the doorway followed by Oliver and a group of other officers. Only the staff sergeant and two other intercept officers remained watching the now almost lifeless radar screens.

As the door to the conference room clicked shut behind the last man Dr. Davis walked to the podium and said, "What I am about to tell you is top secret, gentlemen. You will talk about it to absolutely no one. Is that understood?"

Everyone either nodded or said yes, including the commandant of the base, general Albright. The long pause between this group affirmation and Davis' next statement further emphasized the gravity of what he was about to say. At length he cleared his

throat, threw a brief knowing look at one of his colleagues, and began, "Perhaps by now you have all heard about some sort of top secret testing by the Americans out of Nurrungar over the past several months. They have just informed our Defense Department through official channels that we should expect to see certain evidences of their high altitude research showing up on our air defense radar, particularly in the coastal region within 200 km of Melbourne. Gentlemen, the Americans did not get very specific about this research. They did say that it would involve extremely high power density plasma research and that it would appear at moderate to high altitudes. They also said that they would attempt to let us know in advance of any test so that our authorities could notify aircraft flying in the area."

The young scientist stopped for a few moments to look around the room. He sensed the alarm and dismay that was beginning to be felt by his audience. He continued, "yes, I think I know something of what you're all thinking about now. And I am as concerned as you probably are... No, I don't know why they didn't tell us any more than this and, no, I don't think we will be able to find out...at least through official channels. You know better than we do how they can put road blocks in the way of responding to official queries. Nevertheless, several of us at the university have developed a most-likely scenario about what's happening. In the interests of our national security my colleagues and I have come here to brief you on this possibility, and I must reemphasize that it is only a possibility, a technological guess...at what they may be up to."

Wing Commander Oliver sat rigidly in his hard-backed seat. He had listened very carefully. He had caught the emotional loading of the words as well. Oliver's 25 years in the service had taught him the value of attending mentally on many levels at once during a briefing such as this one. He thought, "He speaks with real authority, as if he had the inside scoop. What if he really does know but must pretend not to? I'll bet he does. Anyway, we'll have to assume he doesn't!" His fleeting thought was broken by Davis' voice once again.

"Before I begin this technical briefing I want to introduce my colleagues here with me. First, there is Dr. Abram who works in the Advanced Physics Section of the university. His specialty is that of atmospheric optics and propagation efficiency. Next to him is Dr. Willis Harmount in our plasma containment section. Dr. Harmount has been closely monitoring the Pine Gap operations...at a distance if you know what I mean. He is going to make a few remarks a bit later. Sitting over there in the green high-back chair is Dr. Anders. He is a research fellow from the Institute of International Studies in London. Actually he is one of us originally and has only spent the past three years in London on a temporary project." Turning toward Anders, Davis said, "When is your appointment up Ray?"

The young man replied, "actually it'll be a matter of months now. Our final report is due out by the turn of the year." With that Davis turned back to the RAAF officers and went on. "Finally, I want to introduce Mr. Calvert Thompson. Mr. Thompson is our representative to the Australian press on these kinds of affairs. I believe you already know Drs. Binghamton and Wright from previous meetings...and also John Allison-Bigh here to my right. He serves as the attache to our Intergovernmental Scientific Cooperation Office."

The way that Dr. Davis gave Allison-Bigh's affiliation made it clear to everyone that he did not think highly of him. He knew that his words would be interpreted pretty much as he meant them.

Wing Commander Oliver thought to himself, "some cooperation office that is...apparently he hasn't changed the way he tries to do things." His eyes were riveted on the speaker who was about to go on.

"Well, gentlemen, that's everyone but myself. I hold a Ph.D. from Oxford University, England, in the joint fields of nuclear physics and chemical engineering. My major research interests lie in the areas of particle beam propagation and ferromagnetic energy containment. And so you can see that my

colleagues and I span a considerable breadth of scientific interests. Now let me get on to the matter at hand." He paused and turned to the wide blackboard that covered one entire wall of the conference room.

"What I will do is sketch for your the basic points in this American activity that we are fairly sure of at this time. Then you may ask questions. Then I will ask several others to come up and add some more speculative comments as they may or may not apply to this scenario. All right? In this square labeled number one, I will write 'Advanced communications capability'." He finished writing and stepped several paces to his right and said, "...and in square two is 'Advanced tracking capability'." Once again the young man - who was rapidly turning into a college professor in the way he emphasized each point and drew the boxes on the board - continued, "Finally, over here in square three, I'll put 'Energy Requirements'. Now let me try to show you how these three subjects are linked together. Our scenario is one based on the firm belief that the American's are using both Pine Gap and Nurrungar as elements under squares one and two. There is little doubt about this. But what about the third square? Where does this come in? Perhaps because of the extremely high amount of electrical power needed to carry out plasma containment research. And where there is a great need for power there is a concomitant need for some form of cooling. Gentlemen, that could mean a large water supply or research conducted in outer space, or some combination of them both!" He glanced around the room at the officers present. He couldn't find any indication of understanding in their faces. He had aimed a little too high over their heads so he took a new tact.

"What this all may mean is that the Americans are going ahead with a radically new type of energy source for their laser research. This is known as a burst reactor and it pumps products of fission into the material used inside the laser. That means very great amounts of concentrated energy, gentlemen. Just let me say that magnetocumulative generators, as they're called, are also under development by the Soviets at Saryshagan so the Americans

must be concerned. Once again he looked at the group. He found that his second shot had hit the mark. It is better in the long run to get to the point directly, if possible, to save precious time and spare the audience from further embarrassment of having to be told a third time what one was talking about.

The young man turned back to the board and went on, "Yes, virtually everything seemed to point at this possibility from our own internal analyses of their activity. But the communique that we received on the tenth of October, concerning their activities didn't fit our analysis. In fact what they said they were doing was quite different from our analysis. It suggested a new and independent research activity...except for one thing which I will get to shortly. What they told us officially was what I have already mentioned, specifically that they were going to do certain plasma research in the atmosphere...near a highly populated urban area. Gentlemen, I need not spell out for you the potential risks that could be involved here, risks involving our mutual political and economic agreement, and as importantly, our mutual scientific exchanges both inside an outside of the defense establishment. The Americans have left us entirely out of this one!" Again, Davis turnd back to his audience, now becoming impatient to get on with the rest of his message.

"We know that within the Directed Energy Office of America's Defense Advanced Research Projects Agency, space defense is the highest priority. High energy laser research being conducted under the code name Alpha is planned that will use a five million watt cylindrical, continuous wave mode, hydrogen-fluoride laser at 2.7 microns. Of course they are working on many other types of systems as well. Gentlemen, as recently as this year they showed that a high average power infrared laser could be focused over very great distances. Such a capability is needed for weapons applications of course. It is interesting that the system is under development by TRW and Rocketdyne. I should not have to remind you of TRW's ties with the Pine Gap operation.

Gentlemen, this brings me to the new line of work they seem to be pursuing. American scientists have discovered that certain

cosmic rays, specifically alpha particles or helium nuclei, both of which come from outer space, can seriously disrupt the functioning of microcomputer circuits. They found that alpha particle beams with an energy six orders of magnitude less than other particle beam weapons now being developed could compromise the microprocessors used in space guidance systems. And so you can see that the development of such an advanced weapon would be of top priority to the Americans. Instead of destroying the enemy's missiles or orbital satellites through brute force of an explosion it might be possible merely to confuse its electronic brain, so to speak."

A quiet buzzer sounded from the rear of the room. A red light flashed on and off above the only door. "That signals a request for entry," one of the officers said in a matter-of-fact tone, and upon rising, said, "I'll see who it is."

Several moments later the officer came over to Oliver and whispered in his ear, "It's Lt. Greenslade, sir. He requests permission to join the briefing."

Oliver thought for several moments, running his right forefinger up and down the side of his nose. Then he answered in a hushed tone, "Tell the Lieutenant that I'll talk with him later...tell him that we can't go back over the information already given now." The officer turned and transmitted the message to the eager young pilot in the hall.

"Lt., would you please place the do not disturb sign on the door?" Oliver said. Then, turning to the others present, he smiled and said "it's only to prevent further interruptions."

"Dr. Davis, earlier you said something about their doing very high energy research. Just what do you mean by high energy?" asked one of the officers.

Davis replied, "Well, I don't know for sure but I think that we're talking in terms of at least one million watts average power or a single extended duration pulse energy of about 15 mega joules. He turned back to the diagram in an attempt to turn the discussion back to his briefing.

"Now let me outline some facts related to square three. The U.S. has been spending a large sum of money on microwave power transmission. Yet, this means is limited to line of sight conditions, as I'm sure you all realize. If a low altitude orbiting satellite could be used as a reception and transmission station, then energy generated on Earth's surface could be beamed up to this station and redirected in virtually any direction. But this still doesn't prove anything definitely. What else do we know? We know from our monitoring of utility records in Alice Springs that the water bores production has been increased by about 25 percent within the past 14 months. We also know that the population of Alice Springs has not increased by more than about 3 percent and that there are no new manufacturing activities there. So where is all of this water going? To Pine Gap for some reason. And, as I said previously, water is needed to cool nuclear reactors and other equipment associated with fusion and other high energy-related research. But what else do we know? We know that the U.S. Air Force's C5-A flights into Alice Springs have delivered very large trucks and trailers within the past year. Yet no one knows where they went or what they are for. Gentlemen, we think that we now know what they were used for."

Once again he stopped, only this time to take a drink of water from a paper cup that sat on the fiberboard meal tray beside the podium. He cleared his throat and continued, "In a few words, we believe the Americans have developed a highly mobile energy reception and retransmission capability. This station is based upon truck transport in perhaps as few as six to eight separate lorries...it can probably be set up in one day's time, and it probably plays a central role in some type of advanced weapons system."

Oliver and the other officers turned to look at each other. Their eyes were wide open with looks of disbelief spread across their faces. No one said a word, however.

"Now let me outline a hypothetical battle strike scenario for you," Dr. Davis went on. "Let us suppose that North West Cape has just been rendered inoperative by an enemy. Part or all of

America's communication capability to her atomic subs has been knocked out. Each submarine is effectively on its own. Each commander must decide what to do. Obviously such a situation is totally unacceptable to the Americans and they need a backup communications system. Notice that we are back to square one here." At this point he wrote the words "submarine com." beneath the words Pine Gap and Nurrungar. He continued his presentation, "Where could one locate the VLF antenna needed? Of course there are several possibilities. Perhaps the best of the alternatives is ships at sea where great mobility is possible. But where does one generate the energy needed to operate these transmitters? Perhaps on-board motor generators is a possibility. But we think that the Americans are also going ahead with new means of generating power anywhere and sending it up via their satelites to other locations on earth. This brings us to the second square. What better use of their current satellite tracking capability, now in place, is there than the one I've been talking about. Both Pine Gap and Nurrungar are already fully capable of sending and receiving telecommunications messages to orbit. Now consider what would happen to their ability to communicate with their submarines if Pine Gap and Nurrungar and North West Cape were knocked out? They would need a back-up system. There is reason to believe that they are now planning such a laser-based back up system. Three firms are now working on this blue-green laser system. It is quite simple in principle. It would either be located in space and radiate a communications beam directly down using an earth to space satellite radio link modulation or it would be located on the earth pointing upard to a reflector satellite which would aim the beam back down to the submarines. If they had this kind of communications system it would give them the kind of back-up they need. Yet they still need the capability of generating the required power.

"And why not make these power staions portable if possible? The scenario gets fairly technical from here on, gentlemen, but I'll be glad to go on if you like." he said.

The young man relaxed as he waited for their decision.

"Well, I for one, would rather hear from your colleagues and then maybe we might come back to the details," Oliver said. The other officers present nodded in agreement.

"All right," replied Davis, "Willis, would you go next?"

Dr. Willis Harmount was in his sixties. His hair was graying well past the temples and he was stooped over - obviously from a life-time of studying and, more recently, concentrating on computer display screens. Dr. Harmount was one of the relatively few his age who had made an effort to keep up in the new and exciting field of microprocessor technology and all it offered to those who would plumb the depths of machine code and architectural design and optimized flow charts.

Harmount rose slowly and came forward to the podium. He, too, spoke like a professor, but with the unmistakably clear accent of one who had spent a lifetime in the Sydney area. The huge Australian continent did not produce very pronounced differences in dialect, but there were small, telltail signs. At length he adjusted his glasses and began his presentation, saying, "Well now, we have very rapidly presented the overall scenario and now we would like to amplify a bit on several side issues.

"Dr. Davis mentioned the American's possible use of lorries in their mobile energy research facility, as I shall call it, MERF for short. Excuse this unfortunate acronym, personally I hate them. But to go on, my own studies in the field of plasma generation and containment over the years has shown the feasibility of achieving very great pressures for significantly long durations, at least within small volumes. For such work one needs super cooling capability and other highly sophisticated control equipment, yet it is now within the state of the art. Most experts now believe that the basis for military applications of most particle beam technology is going to be based upon what is known as inertial confinement fusion energy. Up until recently, weapons development was only a by-product of such research. Now it is becoming the central focus. And, as Dr. Davis has already mentioned, the Soviets have made

impressive breakthroughs as well at their Saryshagan test facility. Some of us think that they have developed a pulsed-iodine, exploding flash wire pumped laser. Don't worry about what it means my friends. It just means that they're working on some hybrid systems just like the Americans which could have real potential as future weapons systems. Some "Bear" watchers think that a pulse power source is being used to generate the needed energy for particle beam weapons.

Harmount stopped for a moment, looking at his audience. Some were already showing signs of sleep onset. The old man thought to hiself, "I'd better change my tactics or I'll lose them." Then he turned to the black board.

"Here, I shall draw some wavy line upward from the ground...here," he began, gesturing toward the bottom of the dusty black surface. "Each wavy line represents a separate beam; each must have its own generator, beam expander, and transmitter, and each must somehow either be converted into some useful form of energy or sent someplace else for conversion. Next I shall draw a box at each end of each wavy line; the bottom box is for the ground support system and the top one for the utilization station, as I shall call it. The bottom box is basically a phased array of separate Mersenne telescopes and mirrors to achieve coherent optical period. Zero optical path differences and simultaneously phased multiple wavelength beams may, therefore, be achieved. Of course under some circumstances this upper box could be an enemy's vehicle. Finally, let me connect all of the ground station boxes with lines to represent the command and control tie lines needed to coordinate everything.

"Gentlemen," he went on, "it is important to recognize the fact that a defensive satellite mission is far easier to carry out than an anti-ballistic missile mission."

It was becoming obvious to everyone in the room that Harmount was not at ease lecturing. He turned to look at his listeners every few seconds to see their reactions to what he said. His mannerism was to hesitate briefly after every few words which gave his

speech much less coherence than everyone would have liked.

He turned back to the board, studying it at length, almost oblivious of the men behind him. At length he spoke again, "gentlemen, I am not one hundred percent certain of what I am about to tell you but there is a...ah...a reasonably good chance of it being correct. I have calculated the size and weight of a super concentrated, magnetic containment chamber usable in particle or laser beam research and have found that given sufficient power and cooling, it would fit on a modified lorry."

Once again he stopped and began drawing tiny sketches of trucks near each ground station box. He first drew one truck beside each box, complete with window detail, wheel spokes, and other meticulous details. The seconds and then the minutes ticked by. Harmount was absorbed in his drawings. No one said anything; only the occasional screech of the chalk filled the still room. He continued to draw four detailed trucks by each box. His concentration was almost complete.

The men sitting behind him looked at one another. Somehow the tenor of the briefing had been broken. Willis Harmount's seeming lapse in competence had startled everyone into an embarrasing silence, everyone that is except the old man's colleagues, Arch Davis and Dr. Abram, who had watched this happen on previous occasions. Each had cringed during those earlier periods when the old man's faculties seemed to close in upon him for a period of time, when, like during a petit mal, he became oblivious to everything but his own private world. And each of them had finally come to accept these episodes as some unavoidable consequence of their friend's aging process.

"Harmount is still very sharp," Arch Davis thought to himself. "I know that, but they don't."

Davis turned to the others in the room and noted the various attempts they were making to conceal their uncomfortable feelings. As he was just about to break the silence, to spare Willis further embarrassment, the old man suddenly shook his head several times and gasped out loud while simultaneously jerking himself erect to

look at what he had drawn on the board. Then he turned halfway toward the group and said, "I'm sorry, gentlemen, I seem to have..." He said nothing more nor did anyone else.

Dr. Davis cleared his throat and then exclaimed, "Dr. Harmount, will you outline for us the means of getting the power to each mobile station?" Everyone in the room relaxed at hearing the request, somehow shifting the emotional focus from Willis to the blackboard once more. He brought the chalk back up to the board's surface.

"Yes, of course," the old man replied, "you see, each ground station must be capable of generating high power levels in support of independent beam propagation upward to its receiving station. But gentlemen, there is another possibility that few have thought of. What if, and I must emphasize again that this is only speculative, what if most, or all, of these ground stations were not generators of independent beams or rays but rather reflectors! Almost no power would be needed at all. All that would be needed is enough power for the inertial navigation platforms and mirror reflector gymbols. This scenario opens up all kinds of possibilities for battlefield deployment, but of course you gentlemen are better versed in such matters than I am."

The width of the projected beam could be as large as the target vehicle itself or as small as only a few centimeters across, depending upon the type of target involved and the method selected for disabling it. For what is known as a large aperture beam system, the relatively small original laser beam is sent through a beam expander, something like an inverted telescope. It expands the beam to enable it to be projected great distances. But because the beam is made to contract with increasing distance, it arrives at the target as a tightly compacted coherent ray. The laser's wavelength determines the beam's divergence angle which is inversely proportional to the diameter of the exit end of the expander..." The old man looked at the men before him. He suddenly realized that he had, once again, been carried away. Only this time it was with too much detail.

"What I'm suggesting, then, is the possibility that the Americans have brought into our country mobile, high energy generating and/or reflecting ground stations, which they are using in conjunction with some new satellite system that either has already been launched or will be launched soon," Dr. Harmount declared. He turned, squarely facing his audience. He sought some reaction to his disclosure. He couldn't detect any.

Several seconds went by. Finally, three officers' arms went up almost simultaneously. One of them, not waiting to be acknowledged, said, "Doctor, I'd like to ask a question."

Harmount nodded.

"Doctor, you have said that these mobile stations are a part of an American high evergy transmission system. I want to know for what purpose? Ah, do you have any idea of what use such a system might be?"

At this everyone leaned forward to hear his answer.

"Yes...yes, I've given that a good deal of thought. I think that what they're up to is the development of an entirely new offensive weapon of the anti-satellite type," he began. "I don't know whether this system, which we think is at Pine Gap, is a ground based version of something that may eventually be sent up into orbit or not, but I am fairly certain they are now trying to perfect the mobile aspects of their communication and tracking systems as well as refining the energy generation and storage aspects. Of course this brings us back to our original three squares here, on the board." At this he nodded to the second RAAF officer whose hand had been raised.

"Dr. Harmount," a middle-aged officer, with only a fringe of light brown hair remaining around his shiny bald head, responded, "I would like to have your opinion on whether or not the Americans have let your group in on anything at all about their project?"

"My colleague, Dr. Davis will have to respond to that question. Dr. Davis?" he replied.

Once again Arch Davis stood up and walked to the podium. Turning, he replied, "Well, you see, our office has been doing a bit of inquiring both here and abroad. We have known for some time about the lorries which the U.S. Air Force had been stockpiling at their Vandenburg base in California. And we knew about their C5-A deliveries of large diameter antennas to Alice Springs. We speculated that these were heavy metal substrate mirrors rather than expanded core metal antennas on the basis of mass and acceleration calculations we made off movie films we took at the airport. And we also..."

His words were cut off by the officer, who exclaimed. "Yes sir...but I was more concerned with information you may have gotten directly from the Americans themselves, not from our own intelligence operations."

Dr. Davis smiled briefly while looking directly at his questioner. He thought to himself, "there's no point in avoiding the issue," and continued, "No sir. We have heard nothing from the Americans about any of this except the very recent communique which I mentioned to you earlier. Let me read you parts of their statement that are related to this briefing."

He reached inside his breast pocket and withdrew the folded letter, quickly searched through the text until he found what he was looking for, and read: "This office has been authorized to transmit the following information to you pursuant to regulation DOD-421.51 concerning top secret joint military operations." Dr. Davis then skipped down in the letter and continued,

"...Operation Lanternslide...yes, here it is. 'You are hereby advised that certain segments of the American detachment to Australia, working in full cooperation with officials of the Australian Defense Department, will be engaged in Operation Lanternslide which will commence on or about 10 October 1978. This operation will be coordinated by the director of the Joint Defense Space Communications Station, Pine Gap. It will involve the use of very high power density generators and may produce certain unusual appearing phenomena in the atmosphere between 5,000 and 75,000

feet altitude. Please be advised that should civilians or military personnel report such anomalous phenomena to you during this test period, approximately centered over the southerly coastal region of Australia (south of our Nurrungar station) it will most likely represent results of this project.'"

Dr. Davis stopped reading and placed the letter back in his pocket. "So you see gentlemen, we know very little about what's going on. Most of what we've told you is based on our own research. Consequently it is speculative."

Someone in the back of the room said in hushed tone, "yeh, and maybe what the Yanks have told us is speculative too."

"I believe there was another question." It was Wing Commander Oliver who stood and came forward to where Davis and Harmount were standing.

"You gentlemen have seemed to raise far more questions than you have answered so far. How was it that you knew exactly when the radar blips would disappear? Was that cited in that letter? And..." he was interrupted by Dr. Davis.

"Wing Commander Oliver, you seem to have a way of getting right to the point don't you?" he began. "No this letter said nothing about the current atmospheric tests, nor did it say anything about the possibility of our radar picking the phenomena up." Once again he paused momentarily to structure what he was about to say.

"I am sorry to have to say this, but I can't disclose how we know about these particular details. Please believe me when I say that personally I would rather disclose it, but I can't." At this he shot a glance over at Allison-Bigh who remained in his relaxed posture, head bent forward, eyes on the floor. Allison-Bigh seemed almost asleep during the meeting, as if he had heard it all before. "Oh," Oliver began, "then I have only one more question. How long will you gentlemen be here at Sale and what can we do to make your stay more pleasant?"

He realized that further questioning would be fruitless and that Davis was signaling the end of the briefing with his remark. He also knew, by experience, that he would have a better chance of finding out what he wanted to know from Davis - in private.

"Thank you Commander. We very much appreciate your kindness. We can stay for only another half-hour. The helicopter which brought us down is waiting to go back. And, as we had earlier agreed that we would like to take a closer look at your radar antennas and power generating equipment, I imagine that will take up all of the time remaining; please don't plan tea or anything special." Then, turning toward his colleagues while speaking to Oliver and the other officers Davis said, "Please excuse us...if you will."

The group of visitors swept out of the conference room en masse, retracing their steps down the hall as far as the radar room, where several broke away and entered. Arch Davis, Dr. Harmount, and Binghamton continued on down the hall, turned right and left the building into the hot sunlight. They walked straight toward the radar antenna buildings located several hundred yards away. It was obvious they knew exactly where they were going. The RAAF officer assigned to accompany them had to walk briskly to keep up.

At four o'clock the government helicopter rose into the clear blue sky, its rotors hacking into the warm, thin air, and soon it was out of sight. The slight northerly wind puffed a yellow wind sock erect at the end of the runway, one of the symbols that remained from a bygone era of aviation. Now pilots flew down invisible electronic beams in the sky to the runway and received information about weather patterns a thousand miles away from satellites.

Wing Commander Oliver had returned to the radar room and the PPI screen, looking in vain for the strange blips he had watched earlier. But they were gone. The screen was almost lifeless by comparison, and even though it indicated more than a dozen aircraft traveling in all directions and speeds, none of them

were any longer interesting. They could have been traveling at the speed of sound and not have interested Oliver, for he had watched something so fantastic that afternoon he felt he would never find anything to compare with it.

He hadn't stood there more than a few minutes before Lt. Greenslade came into the room, making a bee line toward him. The younger man was wearing his flight suit with its many pockets in the legs and chest, each bulging with pencils, notebooks, and other odd assorted things a pilot needs in flight. He could be heard swishing across the linoleum floor.

"Hello sir," the pilot began. "Why was the scramble cancelled?"

"All they said was that the bogeys had disappeared," he answered. "...but I sure would like to find out what they were. I'll bet they had something to do with the radar contacts we had." It was clear that Greenslade would have given anything to learn what had happened at the briefing, but the young man was careful not to ask about it. Nevertheless, his words betrayed his curiosity.

"You know, we got as far as taxiing out to the take-off point before getting the call-back signal. I, for one, was ready to go up there and see those crazy...whatever they are, for myself. Ah, I guess you were aware of the bogeys' location when the scramble was cancelled." He tried not to sound too curious but he really wanted to know what was going on. Purposely, he stopped short of his real question.

The two men just stood there looking at each other; Oliver couldn't tell him anything about the scientific briefing. Even though Greenslade had a Top Secret clearance, as did all qualified interceptor pilots, still he didn't have a need to know about this matter. It was just another of the government's security maintenance guidelines, guidelines which were formulated to protect the disclosure and dissemination of sensitive information. Such regulations tended to break down trust between close friends at times, as was happening in these moments of silence.

The following day passed quickly for Oliver. Yet he could not forget the bizarre radar traces he had seen the day before. They were so strange, so totally novel, that he had spent several hours talking to the senior maintenance man in charge of the entire radar facility. They had discussed anomalous radar propagation, where the transmitted beam of radiation can bounce off layers of air that are at different temperature, like an invisible tunnel that channels the beam in the wrong direction. Anomalous propagation can produce numerous targets on the screen from a single target in the air. It can make surface vessels become visible even though they may be over the horizon. Oliver had wanted to learn more than he already knew about radar, which wasn't a whole lot up to then.

Wednesday, the eighteenth day of October dawned sunny with some signs of a weather change from the West, where all of the clouds seemed to come from at East Sale. Wing Commander Oliver was awakened from his sleep by the phone beside his bed. Its insistent ringing finally found its way into his consciousness. It would not let him go; he thrust his arm out from underneath the warm blankets for the receiver. Then he rolled onto his back and said, "Oliver here...hello."

He heard a familiar voice at the other end of the line say, "Hello, Wing Commander Oliver?" He strainded to try to remember who it was. Then his mind cleared and he knew. It was Dr. Davis of Canberra.

He replied, "Yes. Is that you Davis?"

"Quite right sir. I'm terribly sorry to disturb you at this hour but there is something you should know right away. Is this a secure line?" he asked.

"No it isn't. Could you call me back in about half an hour at my office? I've got one there. It's listed in the directory you have if you will go through our security switchboard." he went on.

Davis said, "Alright...make it forty five minutes...just in case you need the extra time. O.K?"

"That's great, doctor, and thanks." Oliver hung up and lay looking at the ceiling. He wondered what could be so important. Then he jumped out of bed, dressed, and drove as fast as he could to his office. He got there ten minutes before Davis' call arrived.

"Hello, is that you Commander?" the voice on the other end of the phone line squawked. It was the voice scrambler system, one of the earliest models ever made. It made everyone's voice practically unintelligible. Most users didn't like it for that reason. Oliver was no different. He shouted into the mouthpiece, "Yes...yes it's me. Go ahead with your message Davis. I will try to make out what you're saying."

There was more crackling on the line and then it seemed to quiet down as Dr. Davis spoke. "We have just received word from the Office of the Director, JDSCS, Pine Gap concerning another test of Operation Lanternslide," he began. "It will commence on the evening of 21 October at approximately 1900 local Melbourne time. And here I quote directly... 'Since local sunset is at 1848 hours subject tests may become visible from the air and ground. Since only limited testing of our equipment has been carried out after dark it is unknown exactly what kinds of visual phenomena may occur. We would suggest that no official news announcement be made to the public since this is a highly classified test. Such disclosure would not be to the best interests of either of our governments.' End quote." Davis said.

Each man sat quietly for several moments, pondering what this communique really meant. It was Oliver who spoke first.

"Dr. Davis it seems to me that all they are saying is to not overreact when we spot whatever it is we spot. It does not say anything about our not checking it out on our own..." He paused for a time, deciding if he would share his thought with his caller. Finally he went on. "Arch... what do you think of the idea of seeing for ouselves, up close- what's going on? I see no particular reason for not doing this in light of the fact that they told us about it early; they seem to be taking the liberty of carrying out their tests over highly populated areas; we have the capability of doing so."

There was a long pause at the other end of the line. Finally Davis responded. "I...I really don't know about that course of action... I think that I'd better check with those higher up on that...If you don't hear from me on the issue just consider that we never spoke about it. Do you understand what I'm saying?"

"Yes," Oliver answered quickly. Then he said, "I'll begin to make the arrangements right away just in case. Is there anything else?"

"No," Davis answered. Then, quickly, he added, "yes, yes there is one more thing. I really don't understand yet how it may fit in but you should know about it. You may have heard about an American installation in South Island, New Zealand, near Christchurch."

Oliver was silent for a few moments, trying to remember back to something he had overheard at an officer's party. "What was it?" he thought to himself. Then he said, "I do remember hearing something about an American group in the area. I think that it was at Mount John wasn't it?" Then not waiting for a response he continued, "and...there's something else that I found unusual at the time. I recall that the person who was talking about the installation said they were not military personnel but rather academic types...from some university, I believe."

"Precisely. Our sources indicate that this activity may have some relationship to those at Pine Gap and Nurrungar but just what it is we still don't know. Well, at any rate, that should be the concern of the New Zealanders shouldn't it?" Arch Davis said. He continued "Anyway, would you see what you can find out for us?"

"...sure will," he answered. "Is there anything else Davis?"

The voice at the other end of the line was beginning to become garbled for some reason. Oliver heard him say, "Nothing else for now. Please keep us informed of what you uncover on this thing." The electronic circuitry of the scrambler could not mask all of the emotion in his voice and Oliver knew he had gotten an unofficial go-ahead for his plan. He was eager to get started.

Wing Commander Oliver had rushed to his office so fast he had not been able to shave or wash. It was 0735 so he decided simply to stay at the base without returning home. Using his second travel kit which he kept in his closet he went to the lavatory to shower and shave. Then he returned to his office where he called the base locator to put out a call to General Albright, commandant at Sale. "This thing can't go any farther without checking with the old man," he thought. General Albright was one of the best in the country. He had slowly but deliberately built real trust within his senior staff and he had the ability to draw together the kind of support team and facilities that a first class fighting force required. Oliver was as proud as any of the officers to be assigned under the General.

After several minutes the voice of the General's staff aide came on the line. He said, "Yes, Wing Commander. Did you want to talk with the general right away or could it wait? He's in the shower right now."

Oliver answered, "Well, corporal, it can wait for a half hour or so. O.K.?" He hoped that he had conveyed the sense of urgency necessary to get his request to the top of the general's attentional in-basket. Then he heard the corporal's voice relaying his message to the general. A minute later the corporal returned to the line.

"Commander Oliver, the general will see you at 0800 in his office," replied the aide.

"Thanks a lot," Oliver answered, and then hung up.

Next Oliver dialed the base locator again to trace the whereabouts of Lt. Greenslade. Before long he was found, having breakfast in the officer's mess with some friends. He arrived in Oliver's office -on the double- in several minutes, slightly out of breath. As he burst through the door he exclaimed, "Wing Commander Oliver...Lt. Greenslade reporting as ordered." He saluted briskly and only with a slight deference to the older man.

"Relax, Jim," the senior man said. "I want to talk with you about a possible mission. If we get the go ahead it should prove to

be very interesting...something to do with those American tests in the atmosphere I mentioned briefly in the radar room the other day."

"What tests captain?" Greenslade asked, a quizzical tone in his voice. He was looking intently at the older man. He sensed that something had been let slip that shouldn't have but he didn't know what it was.

"Ah...I mean, some possible, ah...phenomena in the atmosphere that, ah...our scientists are interested in." Oliver was obviously stuttering. He could not conceal his dilemma. He went on, "...Jim, please forget that I ever said what I said. All I wanted to talk with you about is your present assessment of the new mods to the Mirage III's Marconi doppler radar..." He did not look at the younger man as he said this. He had made a security blunder that could possibly cost him his commission if it was discovered. Yet the younger man present didn't even know what it was that had been disclosed nor that it was secure information. What he did recognize was Oliver's inept attempt to cover something up.

Greenslade was smart enough to follow the new questioning without showing that he was particularly interested in what had been said. "All right sir. If I may be permitted to go get my notebook on that I'll be glad to review my findings. I got them done yesterday." He replied, waiting for the other man to indicate what he wanted done.

At length Oliver said, "That'll be fine, say in a half-hour...here!"

Lt. Greenslade saluted without saying a word, did an about-face, and left the room. An awful silence remained. Oliver still felt a little numb and sat down heavily in his polished wooden seat with corduroy padded cushion he had bought in Melbourne several years earlier. "Oh Lord, that was too close..." he mused, giving his head a little shake from side to side in an attempt to clear his senses. "How could I have been so hairbrained?" These and other brief self-incriminations finally subsided and he got himself under control once again. One last reprimand entered his mind, "why

did I assume that General Albright would approve this flight anyway? Yet I went ahead and disclose it to Greenslade! I must be loosing my mind." He was jolted back into reality by the sound of his telephone.

"Hello, Wing Commander Oliver?" the voice said at the other end.

"This is Oliver," he replied.

"This is sergeant Tucker, at Victoria Barracks. You remember we spoke some time ago about the party we are planning for Sunday the 22nd here in Melbourne? I am calling for Captain Donders and Smithe who are at R&D at Laverton today. They wanted to know if you were planning to make it or not?" The sergeant paused for his answer. The long pause that followed indicated that Oliver was deep in thought about something. He had had an idea and needed to pursue it some distance in his mind before answering.

"Yes sergeant, ...yes, I very much want to be there for the gathering. Would you ask Captain Smithe to call me at his convenience...but hopefully some time today?" He asked.

"Of course sir," the other man said. "Is that all?"

Once again Oliver paused for some time before responding. Then he replied, "Yes sergeant, that's all...and thank you for calling, thank you indeed." A thin smile crept across his face as he hung up the receiver.

It was almost 0800 hours so Oliver took a quick look at himself in the small mirror hanging on the inside of his closet door and, finding himself as presentable as he ever would be, he left for the general's office, two stories up in the opposite wing of the building. The general's office enjoyed a magnificent view of the runways and countryside that rolled away into the distance. The 'Old Man' prided himself on being on top of operations from his desk.

General Albright had started his flying career six years before the Japanese had invaded the Philippines. He had qualified

in a Bristol Bulldog, a single seat bi-plane with fabric covering and noisy but powerful radial engine. He had been one of the proud pilots who, on November 10, 1934, had taken part in the spectacular Laverton mission as he had called it. The aerial formation over-flights were to climax the Melbourne Centenary celebrations; they were also to send an unmistakable message to the Japanese then many thousands of miles to the North. C.W.A. Scott and T. Campbell Black had just won the Mildenhall to Melbourne air race flying a D.H. Comet. It had taken them two days, twenty-two hours, fifty-four minutes, and eighteen seconds! Albright had known both men personally.

But times had changed. The Second World War had forced his beloved air force into a new era of high technology that sometimes made him feel as if machines were going to replace his men. The RAAF was now a long way from its 138 officers and 61 cadets and 1,166 airmen in the permanent air force of June 1936. The Wapiti fighter aircraft had been replaced by aluminum skinned turbojet aircraft with afterburners. There were now sixteen operational squadrons backed by the resources of two major functional commands. And two of these squadrons were equipped with F-4E Phantom jet aircraft while four others were equipped with French designed but Australian built Mirage III aircraft. Then there were several squadrons with maritime aircraft and another two with Iroquois ground support helicopters. The list went on and on. General Albright knew it by heart and he was proud to be a part of it all. His ken for effective planning was acknowledged when he was placed in command of the historic trans-Pacific delivery flight of 24 F-4Es from the West coast of the USA to Honolulu, Guam, and finally to Amberley, Queensland. KC 135 jet tankers had refuelled them enroute back in September and October of 1970. The exercise had called for every ounce of mental and physical energy he had. And he had pulled it off without a major hitch. It was then that he been appointed Commander of the East Sale RAAF base. That had been his "reward" as he liked to call it. There was always a tinge of remorse in his voice when he shared this "promotion" with close friends. Yet life wasn't so bad here at the

southeast tip of the continent. It was away from the bureaucratic wrangling at headquarters and the inane social functions that were held all the time now...now that peace had returned to much of the world.

Wing Commander Oliver smiled as he saluted the general. "Thank you for seeing me on such short notice general," he began.

"Quite all right, Commander, quite all right. Here, have a seat," he said as he motioned Oliver toward a dark green leather sofa, a memento of his stay in Singapore following the war. He had it made specifically to his own specifications. All of the officers knew how proud he was of it; indeed, they knew they were being honored when he asked someone to sit on it. It was Oliver's turn. Sitting there, Oliver faced the reinforced plate glass windows and overhanging green sun shade that could be raised or lowered at will by a rotating handle in the wall. The general's desk was located to one side of the windowed area so that full daylight fell on its top. Albright had planned everything including the illumination needed to work.

"Now, tell me what's on your mind?" the general said as he settled into his own high-backed chair behind the enormous teak desk.

"Well sir," the younger officer began, "it's regarding our visit by Drs. Harmount, Davis, and others from Canberra Monday. They presented some pretty wild ideas..."

He was interrupted by general Albright who said, "I know all about that. What I don't know about is what that has to do with Sale Royal Air Force Base." His emphasis of the word Sale made it clear that he had better be certain of his facts before opening his mouth. At length Oliver replied.

"I received a security level call this morning at 0725 from Dr. Davis of the Canberra Office of Scientific Studies. He was here on Monday with the others for the briefing. He told me that he had heard from the director at Pine Gap about their next atmospheric test. Sir, it is going to be about two hours after sunset this Saturday. He also made a point to tell us that whatever it

was might become visible from the air and the ground but he didn't know what it would look like, at least he said he didn't." responded Oliver. He studied the old man's face intently as he spoke, searching for some sign of the impending response. There was none. General Albright just sat stock still looking down at his leather topped desk. He drummed his fingers a few times as if to try to fill the silence with something. He was deep in thought and Oliver knew that he should not invade it at any cost.

At length the general looked up and smiled as he quipped, "All right, so what's new about all this?"

His question caught Oliver off guard, speechless for a moment. Then he realized that the old man was not really interested in his answer for the question was meant to allow both men to approach the whole matter from a different direction for awhile.

"This is not the first time the Americans have done something like this to us," Albright began, his words punctuated by a little extra emphasis borne of some bitterness from his past. "By God, they never tell us anything until after it's all over! We always have to find out on our own."

Oliver smiled at these words. They indicated that the suggestion he had in mind also had occurred to the general. Everyone knew that it was always better to let someone think he had come up with an idea to get a job done. He said quickly, "That's an interesting idea sir," giving a little emphasis to the word 'that's.'

"What is?" the general replied, looking over at the younger officer, a man with real promotion potential.

"Why, your idea of going up to see for ourselves sir," he answered. "It could be carried out in such a way that they couldn't tell if it was deliberate or unintentional."

General Albright sat looking at Oliver for only an instant before exclaiming, "quite right, an excellent idea that we must think about in more detail. Commander Oliver, I want you to

prepare a staff briefing on your proposed method on this matter and I want it ready by 1800 hours tomorrow night!" Then almost as if Oliver had not been sitting across from him the old man got up from his desk, and not waiting for Oliver's salute, nodded only briefly and exited from the room through a side door that everyone knew led to an inner corridor to a second set of offices he commanded.

Oliver's mind was already jumping ahead to the details for his plan. Inwardly he was pleased at being given this particular responsibility and he firmly intended to do the best job he could. He got right to work.

Back in his office he made a phone call to Captain Smithe at Victoria Barracks. Finally he heard the phone ring at the other end stop and the familiar voice of George Smithe, his buddy from jet pilot training days and Korea. George was still one of the top pilots in the wing. He was probably still a proficient pilot yet time has a way of dulling the senses and slowing the reflexes that are so vital to the combat pilot. Even a year or two flying a desk can change an ace into a flying corpse. Oliver had always respected George for his uncanny ability to read between the lines. He was able to watch a man's face and know what he was going to talk about. This skill had been of great help to George as he advanced up the officer ranks, sometimes reading the forehead furrows of some CO in time to make the appropriate remark, othertimes knowing when to keep his mouth shut.

"George, is that you?" Oliver shouted.

"I knew it would be you Oliver," the other man answered. "Sergeant Tucker told me that you had called. Actually, I was just about to ring you up myself...about our party." Without waiting for a response he went on, "...you are coming aren't you?" Then the line went silent. Oliver answered.

"Well George, I was looking forward to being there, you know, for old times' sake and all that. But something has just come up and I might not be able to now." He had tried not to tip George off to anything yet inside himself he knew he couldn't

conceal the whole story. George took the bait.

"You old master mucker. What are you up to now?" asked Smithe. "Come on, out with it."

"I know you'd find me out, George. But before I tell you anything would you confirm that we're on a security line." he said.

"Yes, of course we are my friend," he answered, "go ahead."

"Well, it is a bit of a long story and I really don't have time to go throught it all now. I'll just hit the high spots," replied Oliver, making sure that his office door was shut. "George, we may have an opportunity to take a close look at some American weapons tests in the atmosphere in your area. They just told us that the next one would be this Saturday at about 2030 hours and that it might become visible from the air and from the ground. I just talked with the old man and he wants me to pull a complete plan together by 1800 hours tomorrow. George, I will need your help with this thing, O.K.?" he paused for only a moment before continuing, "I really do need an expert pilot who is on flight status for this job...I want you to head it up."

"Whoa, hold on there mate," the other man cried. "Don't tell me anything more about whatever it is you're planning. Didn't you know that I've been canned for a couple of weeks now?"

The words shocked Oliver. He hadn't known anything about it and the news disturbed him deeply. After a long pause he said, "can you tell me about it? What happened George?"

"Oh don't get upset there...the med officer just told me he found a slight heart murmur and that I should take it easy for awhile. Nothing to be concerned about," he replied. His voice seemed a slight bit feebler than before as he said the words. He was having some trouble maintaining his normally bold front with his close friend.

"I, I really didn't know," Oliver stammered. Thoughts of his own mortality crept into his mind as they seemed to do more and more frequently. At 46, he wasn't as young as he thought he

would be at 46. He had always convinced himself that he would stay 32 forever. His personal exercise and tailored diet seemed to be doing the trick. Yet he had always fought away the more subtle concerns about his heart and all of the other unseen organs of his body that could go bad overnight, without much warning, with devastating effects on one's career. This news had struck a cord he had repressed for too long. Now he had to face it in his close friend. These and other thoughts flashed through his mind as he went on, "...well I always knew that you could find a way to take life easy in the midst of a war...but things are pretty quiet these days. You really don't need to fake this sort of thing, not now."

He had meant to make a joke out of the words but they didn't come out right. They had a hollow ring. His timing was off. George knew immediately what Oliver was going through.

"Look here Oliver, this is my problem an I'll not have you or anyone else butting their heads into it. I feel just fine...in fact I've never felt better. You watch, I'll be back on the line in two weeks... but that won't help you will it?"

"No it won't," Oliver answered. "I've got to get an aircraft up there next Saturday night with a good observer on-board who will let us know exactly what's going on and who can call in one of our interceptors if necessary. But that's going to be only one part of my plan George. At the same time I want to have simultaneous IR ground monitoring of the whole affair, that is if there's anything to see!"

There was another pause. At length Smithe said, "I've got just the bloke for the job, and he won't be as likely to blow you cover 'cause he's flyin' a private plane out of a non-military field. He even took some pilot training at Sale as as cadet," he added.

This information had caught Oliver completely off guard. He had not even considered this kind of possibility. But the more he thought about it the more he felt it was an idea with real merit. He asked, "...but what about this guy's trustworthiness? Can he be relied on to keep his mouth shut about his part? Can he give us a full and complete description of what he sees? And how

about..." he was cut off in the middle of his question by Smithe.

"Look here, Oliver," I'm not on the stand. Calm down and let me take a crack at settling your nerves. The bloke I've got in mind is a twenty year old RAAF cadet. I've known him for over a year now and he's extremely reliable...for a twenty year old that is." Oliver heard Smithe laugh as he said this. "...he's been workin' on his commercial ticket and is going to King Island this Saturday to log instrument time and also to but us some crayfish for the party. He seems just the sort of observer we need."

"I don't know George. I'll have to think about it for awhile. Please hold tight on this thing for the time being...I'll get back to you, O.K.?" Oliver replied.

"That's AOK, mate," the other man responded. "Mum's the word and good luck. Oh, by the way, who can I tell about this?"

Oliver paused and then said, "absolutely no one, not yet. Do you understand?"

"O.K....got it for now." he answered.

"Well then, let's cut this off George. How about putting in an extra nine holes for me this afternoon?" Oliver asked.

"I'd love to but the doc said to cut out all of my active vices, including golf...something about letting me settle down into a stress control period, or something like that. Those MDs sure can't communicate can they. Cheerio." he said, and the line went dead.

The rest of the day flew by for Oliver as he poured over aeronautical charts, radar antenna lobe diagrams, meteorological computer projections, and other items, some of which he had to search out at diverse places at the base. One of these places was a hanger in which three jet interceptors sat in silence, waiting. It didn't matter that officially Sale was a pilot training base, many times there were combat-ready aircraft stationed there. This particular hanger was where the electronic and optical schematic diagrams were kept on all of the weapon's delivery systems and radio communications systems.

After several minutes of searching, he found the master sergeant who knew more about this equipment than anyone else. Oliver asked him whether or not there was a portable radio transmitter available that would fit into a small space. The question was met with a surprised look that spoke volumes. The sergeant knew better than to ask any questions. All he needed was the proper authorization and he would be satisfied. Oliver knew that he must have been wondering if he had ideas of starting up a business on the outside or something. But he only had to mention that General Albright had asked him check and the sergeant quickly checked his inventory notebooks; they indicated that two such sets were available. Both were 15 watt sets with a nominal transmission range of 75 miles on a "cooperative day" as he put it.

Oliver thanked him and returned to his office to continue planning the operation. Soon it was evening and he glanced at his watch. He had worked till well past midnight, engrossed in the plan that was developing. The plan was scribbled on many pieces of paper spread across his desk. He sat back in his seat and stretched, then, scooping the papers into one pile, put them into a string-tie manila envelope and wound the string in a figure eight around the posts. Then he locked the envelope in his bottom desk drawer and went home to sleep.

He really didn't have to waken the next morning since he had lain half conscious through the night. He had struggled with Smithe's suggestion to involve a civilian in what was basically a military job. He had pondered all sides of the matter without coming up with any good reasons for not employing him. He found some comfort that the general would have to make the last decision, yet he also knew that the manner in which he presented this option would make a big difference in the general's decision.

Finally the two hands of his bed-side alarm clock pointed in the direction of getting up, in the direction of his conducting a high level briefing to the senior staff at the base that evening.

The day went quickly as he consolidated his many scraps of paper into a semi-final typed version that, somehow, brought the

scores of diagrams and facts, equipment and time-lines together. He felt proud of the final briefing report as he typed its cover sheet with the words "Intercept Mission Plan - 21 October 1978" typed in capital letters across the top.

About twenty-five of the senior staff assembled around the huge wooden conference table in the briefing room. Each was at his pre-assigned place with the general's chair, at the middle of one side of the table facing the inside wall, still empty. Everyone knew his penchant for a modest but nevertheless distinctive entrance when everyone else was waiting. Rank had its priviledges. It was mainly because General Albright was always so prompt that his officers didn't really mind this small inconvenience.

Wing Commander Oliver arrived precisely one minute before the briefing was to begin. He pulled his seat back from the table, sat down, and waited for the general to arrive with the others. Lt. Greenslade was sitting almost directly across from him.

"What's up, Oliver?" one of the newer officers asked. Before he could answer the side door to the conference room opened and the general came in. Almost in perfect unison, everyone present rose to attention, their arms raised in a salute. The sound of the proverbial pin would have been deafening at that moment had one fallen on the conference table top.

"At ease gentlemen. Please be seated," he began. "The reason you have been called here tonight is to listen to a special briefing by Wing Commander Oliver who, as you know, is in charge of our radar intercept and advanced surveillance groups here at Sale. Before I turn the meeting over to him, though, I just want to say that each of you has done an outstanding job here. I have reviewed your job functions with our personnel people within the past several weeks and I found a great deal to praise and very little to condemn. I wouldn't be surprised if some of you will be hearing from personnel in the near future about this matter." He paused momentarily and turned toward Oliver. "Commander Oliver, we are anxious to hear what you've planned." He motioned to Oliver that the floor had been relinquished to him.

The younger man knew from past experience that the general always controlled the floor so that whether he was sitting at the table, standing at the podium, or was someplace else, he still commanded the attention of the meeting.

Oliver replied, "Thank you sir. If you don't mind I'll speak from right here...Gentlemen. General Albright had asked me to present to you plans for a rather unusual mission this coming Saturday. I will cover the following key planning points this evening: overall objective, several implementation plans, communications and surveillance plans, and emergency-rescue plans. Let me begin with the overall objective." He glanced around the table quickly and found every eye on him. He wondered how may already knew what was going on.

"The overall objective here is to find out what kind of testing the American's are doing in the middle and upper atmosphere probably using very high energy projectors on the ground. We have received word that they are going to carry out their second such test in what they call Operation Lanternslide. It began on 10 October and is directed out of Pine Gap." he began.

At the words 'Pine Gap', several officers exchanged glances and seemed to take even more interest in his words.

"Gentlemen, we really have not been told very much about what's going on...so the general felt that it was about time to find out. We do know that certain 'unusual phenomena' could appear in the atmosphere between 5,000 and about 75,000 feet altitude' and that these phenomena may become visible from the ground and also the air. What we don't know is what the phenomenon is or how dangerous it is. Now if it becomes visible it is possible that commercial air crew coming into Melbourne from Tasmania may see it. Of course the whole countryside could see it if it were like an atomic fireball but we just don't know anything more than that. Luckily, the altitudes that have been indicated for the tests are high enough to permit our radar to make contact from several sites. Consequently, one of the aspects of this plan is a coordinated command and control center here at Sale where all

information will be collected, displayed, and analyzed."

The room was as still as if no one had been present. All eyes were fixed on Oliver.

"Now let me turn to two possible plans to implement this mission. In the first one, which I find the most attractive by the way, we would instrument one of our best intercept fighters for FLIR and infrared tracking capability and sent it up to look for the phenomenon and to get data on it. Of course this plan would mean letting them know we mean to find out what they're up to. In the second plan we would outfit a private plane with a military band radio transmitter/receiver so the pilot could communicate with us about what he saw. This approach would give us the cover of someone just having inadvertently stumbled in upon their test. We could put some special monitoring equipment on the light plane if necessary...but I don't think that is warranted, at least not yet. And the pilot could even call in our interceptor if necessary. We believe that they will be carrying on these tests for some time. If this is true then we will have other chances to monitor them."

"Now let me very briefly cover the special surveillance plans that would be needed to support this mission." he said. Captain Oliver was just getting warmed up to his assigned task. He had planned each step very carefully and this was only his staff summary. He was only going over the very basic plans to give everyone an integrated overview of what was to follow.

"What I will propose here is a three-way surveillance of both the phenomenon and aircraft. One part will be ground radar from at least two and possibly three sites. The second part will be photographic from two ground sites - Wilson's Promontory and Apollo Bay. Of course there could be others. The third part will be the pilot's observations and on-board surveillance equipment. After some thought on the matter, I feel it us unwise to bring in the Navy in this. We can do the job ourselves." As he said this he glance over at the general. The old man's expression didn't change nor did he speak. It was clear to Oliver that his suggestion

was to remain just a suggestion for the time being.

"Continuous communications will be maintained on military frequencies between all ground sites. We can record them here. In addition, we would set up a tie line to Canberra to the OSS there." he went on. "They also want to know what the American's are up to...to supplement other information they have.

Oliver stopped momentarily and took a sip from the cup of tea which had by now cooled to the point of undrinkability to a good Australian. The Australians and the Britich had much in common in this respect. Then he continued.

"Since we don't know whether this test is offensive or defensive in nature we can't take any chances. That is why we also need an emergency rescue plan. Of course the usual search and rescue capability is available if we fly an RAAF pilot in this mission. If he went down the Navy pick up force would be called in. But if we used a non-military aircraft we would have other means to pick him up...should he be affected." Oliver had chosen these last words carefully. He did not want to alarm the men at the table or bias the general away from this plan. He could not bring himself to say that the private plane might crash or disintegrate.

"My suggestion is that we arrange for several fishing boats to be spotted in Bass Strait just in case they're needed. Each would need a special radio transceiver. Our normal ground police could handle a land pickup should the pilot go down. I have firgured that the whole operation would take about sixteen RAAF people and perhaps three or four civilians. And now that I've given you a very brief overview of the plan without details I will go back to the beginning and try to fill them in. Please feel free to ask questions as we go along, gentlemen." he continued.

Oliver felt tired as he concluded his briefing, almost two hours to the minute after he had begun. "And so, gentlemen, we have an excellent opportunity to learn something of importance about Operation Lanternslide. If this mission is approved I imagine that most of you will be involved. I cannot close without saying that this is precisely our kind of mission. We've got the men

and the equipment and we've got the opportunity." He paused briefly and then concluded, "thank you for your patience."

He sat down in his place, his back and shoulder muscles felt sore and he had a very slight headache. He glanced around the table quickly as the general began to speak.

"Gentlemen," the general announced, "Wing Commander Oliver has put together a good surveillance mission. Several alternative courses of action have been suggested which I will take under advisement for the time being. But I want to hear from you first." The old man turned to the staff officers before him, going from man to man in turn. Each was permitted to speak his mind. Oliver listened intently as questions were raised about his plan and he answered as best he could based upon his previous studies.. Several substantive points were raised for which Oliver was glad since they could have significantly degraded the quality and quantity of in-flight information obtained from the aircraft. He took notes all the while.

Albright concluded the open comment session, as it was called, by saying, "All right. The various details and basic courses of action will be considered carefully, however, we will conduct this mission!"

The last remark struck Oliver unexpectedly. He hadn't thought that the general would make his decision so quickly.

The general went on, "I expect you all to give Commander Oliver your full cooperation in this thing. I will see to the Canberra connections." Then he turned to Oliver and smiled saying, "...thank you for this briefing. I'll be getting back to you. Good evening gentlemen."

Everyone stood to attention quickly and saluted as the old man left the room, exiting briskly through the side doorway.

When the door had closed behind the general the officers began picking up their papers to leave. Several had already turned to Oliver to ask specific questions. He turned to the rest of the group and cleared his throat. Everyone became quiet.

"Say, let me hold you here just a moment more if you please. There is one more thing that I'd like you all to know about this whole affair. Of course the general already knows it. It is that we have some strong indications that this atmospheric testing is closely related to anti-satellite tracking and destruction tests. If this is true it could be dangerous...in the vicinity of the tests I mean. I really can't say anything more than that... and, thanks for you patience. My staff will be in touch with you tomorrow. Good evening."

For the second night in a row Oliver didn't sleep well. His mind was constantly turning the many details of his mission oer an over, seeking some flaw, some unanticipated weakness. Finally, at 0300 hours he drifted off into a light sleep which somehow deepened to the point that by 1700 hours his alarm clock barely woke him. He really couldn't tell how long it had rung before he slammed his hand down on the off button.

It was Friday, October 20th and only one day before the "intercept," as he had come to think of it. There was a lot of loose ends to tie up today and he soon was wide awake and readying himself for work. "It's a good thing I'm a bachelor," he thought to himself. "I would drive any wife crazy."

Friday morning was spent in making telephone calls, holding a staff meeting with the radar operators and their back-up team, and checking with General Albright. He had called the general's office at 1000 hours, hoping that it would not be too early nor too late in his decision making process about the mission approach to be taken.

He heard the general's aide answer, "Hello, this is Corporal Jennings."

"Hello Corporal," Oliver began, "This is Wing Commander Oliver. Did General Albright leave a message for me?" There was a brief period of silence on the other end of the line followed by, "uh, let me see. Would you hold a minute and I'll check?"

Oliver heard the clunk of the receiver as it was set on a table. After a minute the corporal's voice returned. "Yes, here we

are. I knew that I saw a message here for you. Do you want me to read it to you or will you come up?"

"Would you please read it to me?" I'm pretty rushed today." he answered.

"Yes sir," came the reply. "Proceed with your plans. I will return from my trip to talk to the Air Board at Russell Offices by 1930 hours Friday with final word from staff there. Plan to use both kinds of aircraft. I'll tell you why when I return. Carry on - good luck."

"That's all it says, commander," the aide exclaimed. "Shall I hold it here for your pick up or send it down through inter-office mail?"

"Oh, you'd better send it down if you please." Oliver responded. Then he added, "...and thank you corporal. Thank you very much. "Then he hung up and settled back into his chair thinking.

"Plan to use both kinds of aircraft..." he mused. "That's a twist I hadn't counted on...I'd better get right on it.

He remained on the phone for the better part of the next three hours giving specific orders concerning aircraft equipment, communications channels, and setting up the specific chain of command for the mission. There was only one big question mark remaining, the pilot of the light plane. He knew that he had better tie up that loose end right now.

"Hello George," Oliver began once the call had been completed, "how're you doing today?" Then without waiting for a reply he went on, "say I'm sorry to say that I won't be able to make it to the party on Sunday."

"Well now, mate, it wouldn't have anything to do with that little frolic you mentioned earlier would it?" the other man asked. He went on, "somehow I knew that you'd get caught up in it. You just can't keep your nose out of business can you?"

"Why George, I dont't know what you're talking about. It's just that I have to keep the vigil so that people like you can have

your parties in security." There was a ring of humor in his voice. "Actually, George, I do need your help in this one. You remember the cadet you mentioned? Well we've got the go ahead on using him. Does he know how to use a military radio transceiver unit?"

"Why I don't know but I can find out in a hurry. Is there anything else you need to know?" the other man asked.

"Yes. What kind of person is he? Like can he hold his tongue if we... if we had to let him in on some of the inside information?" Oliver responded.

"Listen here my friend, Freddie is a damn good pilot and he is reliable. He even reminds me a little of you years ago...but don't let that scare you off. From all I can tell he is just the man to do the job..." Smithe exclaimed. As an afterthought he added, "...and he can keep a secret. Several of the officers here have remarked to me about that... separately."

"O.K. George, I'll take your word for it...so here's what we would like you to do without telling anyone else there..." said Oliver.

The two men spoke for a long time as the various details of the mission were finalized.

"And one more thing George," Oliver added. "I really don't think we should fill him in on what is really going on here. He can give us the same basic visual information we need if he thinks he is observing an RAAF test. Then, if he should talk to people afterwards, he won't spill the beans. It'll be a lot neater, I think," he said. He could hear Smithe breathing heavily at the other end of the line, like he was suddenly out of breath. Oliver waited for the other man to speak. When he didn't for some time he asked, "...George, are you O.K.?"

At length the voice at the other end came back, "...yes. I'm alright... now...say mate, don't you worry...worry about Freddie. He'll do just fine. I'll...I'll... see to that." Smithe's words were short and choppy. They lacked the smooth coherence they usually had. It was as if he had to take tiny breaths between words.

Oliver was becoming concerned, not only for his old friend but also for the mission.

Oliver thought to himself, "Well there's nothing I can do from this distance for him, although I could call doc Ambruster...no, I'd just better wait this out." Then he said, mustering as cheerful a voice as he could, "Hey that's great George. We really appreciate you help...for everything. Would you please let me know the bloke's response to this request not later than 2200 hours tonight?"

"Affirmative my friend," Smithe responded. "I'll do just that. So long for now."

"Goodby George," Oliver murmured, and hung up.

Commander Oliver had time to eat a quick snack for dinner in the officer's mess. He was about to get up when he spotted Lt. Greenslade approaching him, an intense look on his face.

The young pilot spoke first, "sir, who is going to be the pilot of the intercept mission? I mean, if there was any chance of...I mean..." his words trailed off into silence. He knew that he may have overstepped his authority, yet he wanted to do this mission so badly he could taste it.

Oliver smiled at his young colleague for a moment and said, "You really want to fly this one pretty bad don't you, Jim?"

"You bet I do, sir," he answered. "And I have been fully checked out on the APR-38 system. It seems only fitting that since it was designed and built by the Americans that it be tested out on one of their own sets."

While the pilot's logic was not without flaws it caused Oliver to break out in a laugh. He said, "That's not a bad idea, not a bad idea at all. What is its E-M coverage Jim?"

"Well sir, it will detect and classify all of the microwave frequencies now in use as well as some IR sources. And the FLIR capability will get us into those low power regions in the IR that the APR-38 system won't reach. Finally, the radar's output can be fed to either a head down or head up display as needed. Of

course we will have to pay some weight penalty in terms of Shrike or Harm missiles." he recounted.

"Lieutenant, I'm sorry if I didn't make this clear. There will be no armament on the aircraft at all. This is strictly a recon flight!" he said.

Lt. Greenslade sat down in his chair suddenly, dumbfounded. He didn't say anything for awhile. When he did his voice was not as bold or enthusiastic as before. He asked, "Commander, how sure are we that we won't need some weapons capability?"

"Quite sure," the older officer replied. He watched the young man intently, seeking some sign that this discussion signalled a change of heart about his flying the mission.

The young pilot went on, "Well, that bird can outmaneuver almost anything that flies so it really won't matter anyway." He became silent as he remembered something that had happened several days before. He had been talking with the night section chief of radar operations who had brought up the subject of unidentified bogies on the radar which had been seen since the 20th. Greenslade wondered if there might be a link between these sightings and the American tests. Deep down inside him, Jim Greenslade knew that he had to become a part of this operation. He felt a sense of personal destiny about being in on the flight that might possibly uncover *the* secret which the defence department needed to know. He had also followed the growing number of newspaper reports of UFOs that had been appearing in the press for some weeks. Sightings had been reported all over Victoria, King Island, Tasmania, and other Australian provinces as well. He pondered to himself whether these reports might somehow have been triggered by the American tests. The period of silence was broken by the usual sounds of a cafeteria: metal trays and silverware on their rail runways, the clinking of glassware, people talking, and the ubiquitous cash register sounds.

At length Oliver spoke. "All right Lieutenant, you'll fly the mission tomorrow night. But I want Pat Tanner on board as your radar intercept officer. He's one of the best." Then as an

afterthought, he added, "...you may need him more than you think."

Jim Greenslade grinned from ear to ear. He exclaimed, "Thank you sir. I, I really appreciate this. If you'll excuse me I want to get started on some pre-flight right away." He rose quickly from his chair, saluted, and retreated out of sight through the swinging doors of the cafeteria.

"What enthusiasm," Oliver thought to himself, "he'll do." Finishing his tea, Oliver returned to his office where he went over the mission plan once more. "Let's see here," he thought to himself, "...team briefing at 0900 hours...final equipment check at 1100 hours at the flight line...call George at noon...final communications network check at 1430 hours...aircraft takeoff at 1900 hours...yes, everything seems to be ready."

October 21st dawned clear and sunny. The base meteorologist had predicted perfect flying weather. It was going to be a warm evening with only a trace of stratrocumulus clouds from 5 to 7 thousand feet and scattered cirrus at 30,000 feet. The thermal lapse rate up to 10,000 feet was relatively smooth and should not cause any radar problems.

Oliver rose at 0630 and was at his office by 0815. The first thing he did was to check with his staff in the radar room. He found everything was in order including the communications network that had been "made operational" by a special maintenance team throughout the night. A priority phone link had also been arranged for between the Department of Transport's Melbourne office and the air base just in case it was needed. Oliver did not plan to use it, however, unless it was absolutely necessary. "The civil authorities don't need to know what we're up to," he had reasoned, "they have enough to worry about with the heavy air traffic they handle daily." He had reasoned that should the public see something in the night sky they probably would contact the Melbourne airport who would pass the information on to the civil authorities. They would probably contact the RAAF duty officer in Victoria Barracks, Canberra, or perhaps East Sale.

His phone rang as he was contemplating his detailed plans. He lifted the receiver to his ear and heard the familiar voice of George Smithe at the other end of the line.

"Hello, Oliver, is that you?" the caller began.

"Right-o...George. I was going to call you this morning. ...so glad you saved me the effort. What's up?"

"Well, there might be a minor hitch in our operation. I don't know quite yet but I wanted to keep you informed at any rate." the other officer answered.

Oliver sat forward in his chair, listening intently. Wrinkles spread across his forehead and he pursed his lips, concentrating on his own thoughts about what could have gone wrong.

"O.K. George I'm ready. Do go on...we're on a security line at my end, how about you?" he asked.

"Yes, of course," Smithe responded. Then he said, "...you remember my suggestion that we ask this young pilot to be our observer? Well, I've talked with him about it and he is willing enough...but he said he wasn't checked out in the operation of the military transceiver nor was he too sure of his night instrument flying capabilities. He really was excited about helping out and he didn't ask what was going on...his only concern was in being able to do what we needed done. How's that for the right spirit?" But without waiting for a response he continued, "Oliver, I still think he's just the man we need. I know that I can teach him in short order how to operate the set." Then his voice changed a bit. Oliver recognized that a joke was coming. He had heard this intonation many times before.

"This chap is as sharp right now in his career as you were after ten years in yours...except for his humility Oliver...except for that. You always were a humble bloke to the point of exasperation. You know, it almost drove me nuts...whenever you would..." Smithe went on. But he was cut off in mid sentence.

"Hey, that's all well and good," Oliver interrupted, but it doesn't need to occupy us right now. George, do you think he can

really handle the job? Can he let us know exactly what's happening?"

"I'm sure he can, " the other man replied. "...with my help." he added, a slight indication remained in his voice that he was trying to make a joke. It seemed to Oliver that he was trying too hard. It gave him an unsettled feeling. There was too much riding on this operation to blow it because of a relatively inexperienced civilian pilot. Oliver deliberately did not tell Smithe about the involvement of the RAAF jet. It would serve as a kind of test of the young pilot's observational powers. Oliver had, however, briefed Jim and Pat about the details of their intercept on the Cessna 182. They needed to know this. And he had arranged to be given an afternoon briefing on all of the regularly scheduled commercial flights to and from Melbourne between 1830 and 2100 hours local time. An innocuous phone call to the DOT headquarters, 188 Queen Street in Melbourne had failed to discover the records of any flight plans by unscheduled aircraft for that time or place. These and other thoughts filed through his mind quickly during the pause. Then he spoke.

"George, there's something else I'd like you to do for me. Would you please go over to Tullamarine this morning and track down a copy of all of the unscheduled flight plans they've got? I need to know who is going where from a half hour before to two or so hours after our 1900 hours target time within a 200 km radius of Melbourne...can you do it for me...without raising any big question?"

The voice at the other end of the line said, "You know I can...it's as well as done already, matey. To whom should I cable the results?"

"As soon as you find out anything ring me up here George. It could be very important. There shouldn't be any delay...O.K.?" Oliver said. He had tried to sound authoritative. But sometimes it is hard to be taken seriously when familiarity between long time friends had eroded the boundary of military authority. Oliver decided against making his command any stronger than it was

already.

"O.K.," Smithe repeated back, "it's as good as done. I'll call you just as soon as I get back. Oh...and one more thing. I just wanted you to know that your people sure got things moving out at Laverton yesterday. I don't know what you told them but it sure worked...they tracked down two working transceivers, you know, the ones we used to play with in the old days...five watts apiece. I've got both of them in my trunk right now along with all the cables and clamps it needs...'should fit in his aircraft nicely even if he does have to set it on the right seat."

"George, did the R and D boys check it out fully?"

"They sure did, my friend," he answered. "I stayed right there to give 'em a hand too. I can be at the field when Valentich arrives for his pre-flight. Installation should only take about half an hour."

Oliver felt a sense of relief since everything was falling into place nicely. He replied, "George...you're one of a kind. I'll wait for your call here in my office. If you can't reach me here try the radar room, O.K.? So long for now."

"Cheerio mate," George answered and then the line went silent.

The rest of the morning passed quickly. It was lunch time before Oliver realized it. But he wasn't hungry at all. He got a cup of tea out of the machine down the hall and returned to his office. He knew that he should check one last time with the general, just to clear things.

"Well, there's no time like the present," he thought to himself. Then he realized that General Albright was probably at lunch so he decided to wait until 1300 hours. He took his first sip of tea and almost spit it out it was so hot. "That blasted machine is never the same," he muttered, "yesterday it was luke warm and today it's hot as blazes." He set the paper cup on his desk and sat down, putting his feet up on the desk's top. Leaning back in his chair he stretched and then relaxed for the first time in several

hours.

Up on the ceiling above him he saw the tiny black dots in the acoustical tiles. As he let his eyes defocus the dots seemed to get larger and swim about. It was an exercise he thought would somehow do his eyes' muscles some good. He couldn't remember where he had heard about the exercise though. As he leaned back just relaxing he heard the footsteps of someone approaching down the hall.

"O damn," he thought, "...just when I thought I'd have a little rest."

To his surprise General Albright walked through the doorway.

"So that's the reason I didn't recognize the footsteps," he mused to himself. He pulled his feet off the desk as quickly as he could and stood at attention, his shirt hanging almost completely out of his pants. The general returned his salute and gave him the coldest looks he had ever seen. Something was very wrong.

"Wing Commander, I regret dropping in on you like this but I have something to say to you." He did not wait for a reply but went right on. "This operation tonight has gone straight up to the Air Board. I saw them yesterday. Let me tell you, they don't like it. They don't like it at all!" His voice indicated that he was struggling with something. "They didn't want us to become involved at all..." he paused for a moment and then said, "if it hadn't been for that man Allison-Bigh we would be calling the whole thing off right now. He's the one who convinced them."

Oliver watched the old man's countenance carefully. He saw an aging man who had paid the price of leadership many times before. "It must be a terribly lonely job," he thought.

General Albright went on, "Oliver, I tell you they seem to be..." he didn't finish the sentence.

"Yes sir," Oliver responded in as sympathetic a voice as he could muster.

"Sit down. I want to tell you what was accomplished yesterday." The general sat in the hard wooden chair beside Oliver's desk..pulling it out a ways first to be able to stretch his legs. "First of all, the Air Board had already been briefed about the American tests...several days before we were. It seems that they too had considered some kind of reconnaissance of what the yanks were up to. They spent a full day on it too. Their own people had suggested setting up some Nunn-Baker Cameras at various places until they found out that there wasn't enough time to do this. Then they considered bringing some C-130s with four or five special observers on board to cruise the area. But they considered the risk to be too great and dropped the plan. As they went through each of their ideas I could see where it was going. They just didn't want to confront the Americans even if it was our airspace. Well, that's when they asked about my plan...which was really your plan Oliver." He looked at the younger man briefly to see his reaction and then continued.

"I took about five minutes and gave them an overview of the main elements particularly about the instrumented jet interceptor...who is going to fly it by the way?" he asked.

"Lt. Greenslade sir, and Pat Tanner in back. They're as good a team as we have, sir," he responded and then became quiet again.

"Fine. Fine. They wanted to know about the young civilian pilot too..." he let his words trail off. Then he looked Oliver straight in the eye and exclaimed, "Why didn't you tell me there would be a civilian involved here? Why in heaven's name didn't you mention it at all?"

Oliver sat dumbfounded. He had committed an unpardonable military sin and he realized immediately how serious his error had been. He stammered, "I...why I...sir please believe me that I really thought you knew. I guess I was so wrapped up in the whole plan that I overlooked...".

"Overlooked is right!" General Albright shouted. "And it almost cost us this operation! I had to do some quick thinking to

justify such a plan. But they didn't buy it! They didn't buy it one bit!"

Once again Oliver felt a sense of shock. "Why...what do you mean sir?" he asked.

"Can't you see man? What if someone found out that we had employed a civilian for a potentially hazardous mission like this one? It would be the best publicity the Navy ever had, to say the least. When you said that we would involve a private aircraft you led me to believe it would be piloted by an air force officer...not a civilian!" he said. His voice had not begun to soften. He leaned forward in his seat toward the trembling officer.

"Now, tell me once again who this civilian is and how you happened to pick him," Albright demanded.

"Well sir, you see..." he hesitated in order to regain some composure and somehow put his thoughts in a semblance of order. "His name is Frederick Valentich. He's 20 years old and has an unrestricted license with a night VMC endorsement. He had been an air cadet for several years as well... and he was highly recommended to me sir."

"By whom?"

"It was by Captain George Smithe, an old buddy of mine," he answered. He was about to continue when he was interrupted.

"You don't mean the Smithe who made all those kills in Korea do you Oliver?" the old man asked.

"Why yes, that's the man...we flew together in the same wing," Oliver replied. "Do you know him sir?"

"Well we all certainly know about him, a sort of national hero isn't he? I just wish I'd known that fact yesterday...but it really doesn't matter now?" Albright said. He really didn't expect an answer. Then he went on, "Oliver, the civilian is out and that's all there is to it. It's all right if we can send up an officer in that plane but definitely not a civilian. Is that clear?" he asked. This time he expected an answer.

"Yes sir," Oliver replied crisply.

"And one more thing. The Air Board wants to be patched into the communications net. Is that going to be any difficulty?" the general asked.

"No sir," he replied once again. "At least I don't believe there should be any difficulty."

"Commander Oliver see that there isn't!" commanded General Albright as he rose from the chair. Then he turned and left the room, ignoring Oliver's salute.

"Man oh man. What an ordeal that was," he thought to himself. "I never want to go through that again. I've really botched the job."

Oliver almost immediately reached for the telephone. He dialed Victoria Barracks in the hope he could still catch Smithe. His call finally went through; he heard the phone at the other end ring over and over. He let it ring some more just in case someone might answer it. He thought to himself, "oh were is that sergeant now?" Then he hung up in disgust.

After his second attempt to reach Smithe he made arrangements for a special phone tie to be made between the radar room, which was to serve as the control center tonight, and the RAAF Headquarters. The young airman he spoke to said it would be no difficulty at all. Yet by now Oliver had begun to distrust his own ability to get things done. He shouldn't delegate so much. "It got you into trouble," he reasoned.

As the day passed he became increasingly irritated with himself, with George, and with the whole Royal Air Force for ever giving him his commission. He found himself swearing under his breath, something he had not done since his combat days back in the 50's.

Each time his phone rang his heart leapt. But each time it was someone else. George did not call. "What's happened to him?" he wondered. "I'd better drive over to Melbourne myself and track him down before it's too late. If necessary, I can fly

that aircraft myself." Looking at his watch he saw that it was already approaching 1300 hours. Remembering the communications system check he had scheduled for 1430, he called one of the junior officers assigned to the operation and made arrangements for him to take charge. Oliver would be in Melbourne at the time. He judged that he would just be able to go there and get back in time for the interceptor's takeoff at 1852 hours. But it would be tight at best and he knew it.

Rather than go through all of the paperwork and other necessary but time consuming arrangements to check out a plane, he drove the 150 miles in just under 3 hours, slowing only slightly for the towns along the route. He pulled through the sentry gate at Laverton at 1535 hours, returning the sergeant's salute by a tap of his hat's brim. After parking he entered the headquarters building, heading straight for George's office. It was on the second floor, right wing, in the back. It had no view to speak of except a small grass-covered yard, houses, and chain link fences. He burst through the outer door of the office complex of which George's was but one. A petite brunette airman sat typing at her desk, looking up only when Oliver cleared his throat.

"Airman, I'm Wing Commander Oliver and I'm looking for Captain Smithe. Where is he?" he barked, slightly out of breath.

The young woman smiled and answered, "Well sir, he is checked out to Melbourne. That's all he said when he left." She sensed that whatever it was troubling Oliver was very important. Yet there was nothing more that she could do. She added, "sir, I believe Captain Smithe said something about Moorabbin. I can't recall what he said."

Oliver thanked her and went into Smithe's office, closing the door behind him. He quickly picked up the phone to dial an old friend at a flight school at the airport but hung up just as quickly. He realized that no one was to know about the operation. He realized that he had gotten himself into a terrible situation by not telling the general about Valentich's involvement. His only recourse was to try to track Smithe down at Moorabbin, without attracting

too much attention. He ran out to his car and, backing out of the parking place, drove rapidly out through the main gate and onto Prince's Highway driving first northeast and then swinging to the right to the southeast of High Street and then Nepean. It was 1603 hours before Oliver drove the RAAF sedan onto the Moorabbin field and parked in as inconspicuous a spot as he could find. He had taken his coat, tie, and hat off. His dark blue shirt and slacks and polished black shoes still made him stand out from the casually dressed civilians. He even removed his plastic name badge from his shirt pocket.

He had looked for some sign of George's car but it wasn't there, anywhere. He walked briskly over to the flight briefing desk in the main building where he had hoped he would find his friend. But he only saw a small group of student pilots and their instructor filling out practice flight plans at some stand-up desks nearby. Turning around, he retraced his steps to his car, feeling a growing sense of dread that he might not be able to stop the young man in time. But Oliver wasn't the kind of man to give up this easily. He checked his watch again. It was 1605 hours. He had only an hour left in which to locate George and stop this part of the plan. There was no way for him to know that the young pilot was, at this very moment attending a meteorology class in a classroom nearby.

Oliver stood by the side of the car looking up into the clear blue sky. For an instant he was carried away by thoughts of days long ago when he had taken his first airplane flight at the age of 16. It was his uncle who had arranged for it, as a special birthday present. He had never forgotten it. The memories were forever etched in his mind, a series of pleasant and exciting recollections of being able to look down at the ant-like automobiles and tiny dots which were houses scattered around the rich green fields. He remembered this flight from time to time and he found himself smiling. He was brought back to the present by the sound of a Piper dual-place airplane reving up its engine out on the tarmac. It was a familiar sound but had long-since been replaced by the deafening whine of turbo-jet engines.

He decided to call George's office just in case he had returned there. As he retraced his steps across the pavement to the main building he felt a cold sweat starting to form on his forehead. "What if I can't stop him in time? What if he slips by me?" These and other thoughts began to grow in Oliver's mind. "I'm going to be sacked for sure, why didn't I get all the details on Valentich when I could have? George could have given them to me days ago." Then he got an idea.

After calling his friend's number only to talk to the pretty airman he had met earlier, Oliver decided to risk exposing his air force identity if he must to locate this young pilot. Again, out of nervousness, he checked the time. It was 1609. He went to the Briefing Officer's desk and said, "Hello. I'd like to inquire about a flight plan on a Cessna flown by a Mr. Frederick Valentich today?"

The middle aged man behind the counter grunted and then glanced up through his glasses at Oliver. "Who did you say?" he asked.

Frederick Valentich, and the aircraft is a Cessna 182," he replied.

The officer grunted again and answered, "what d'ya want to know for?" He peered at Oliver more carefully than before, as if no one had ever requested such information before this .

"You see," the officer began, "he's an old friend of mine and I just wanted to see him off, that's all." He stopped for a moment, watching the man's reaction. Then he continued, "Frederick said that he'd be taking off around this time but I couldn't locate his plane."

"Well, let me see," the Briefing Officer replied, "I guess I can check for you...you say his name Valentich? If it's here it shouldn't be too difficult to find."

The man went to a desk file and thumbed rapidly through the upper-most pile. When he didn't find what he was looking for he turned back to Oliver and asked, "are you sure your friend said

today? I don't find a flight plan here for anyone with that name. I'm afraid I can't help you, sir." He had emphasized the word 'sir' just slightly, as if he knew Oliver was a military officer. Then he returned to the counter, lips pursed, shaking his head back and forth. "No, there isn't any flight plan filed here."

Retracing his steps again to the parking lot he felt a growing pain in the pit of his stomach, like a hot poker was being pressed into his navel with greater and greater force. He got into his car and sat there quietly for several minutes, trying not to panic. "Should I go back to Sale or stay here longer and hope George arrives?" he asked himself. "There is no guarantee that he'll arrive for a long time...I'm going back and try to coordinate everything as I first planned," he thought to himself. "I'll probably be able to communicate with George by then, he did say that he would be calling in." The thought gave him some sense of peace during the long trip East, along Prince's Highway through Dandenong and then Warragul and Trafalgar. He passed through Morwell at 1821 hours, the sun dipping lower on the clear blue western horizon. It was fortunate for Oliver that the Saturday traffic was light, it allowed him to make good speed on the final 30 miles between Traralgon and Sale. He finally pulled through the white painted guard gate at the air base at 1844 hours, only a little more than seven minutes before the Phantom was supposed to take off. He knew that there would be a lot questions to answer and, if he couldn't stop Valentich from taking off, he would be in deep trouble. He would probably be court martialed and dishonorably discharged. He forced these frightening thoughts from his mind as best he could, driving directly to the lot beside his building. Rushing inside to his office, he immediately called George's office. He let the phone ring fifteen times before sighing out loud, dropping the receiver onto the hook out of dispair. He thought, "where is he? He must have gone back to his office or at least someplace to try to call me." Then the thought struck him, "...maybe he did call while I was gone. Maybe he left a message!" Immediately he called the base operator and asked, "Do you have any messages for Wing Commander Oliver from Captain George

Smithe at Laverton?" His heart fell as he heard her say, "No sir. I have no messages for you from him. But there are several others, one from General Albright marked urgent. Shall I read it to you?"

Oliver was quiet for a moment, bracing himself against what he knew must be coming. At length he answered , "yes."

"Commander, the message was received at 1435 hours marked urgent," she began. "To Wing Commander Oliver, Radar Operations Branch. Where in hell are you? Report to me personally as soon as you receive this message." Then she added, "...that's all it says, sir." She sounded almost apologetic. She knew that Oliver was in some sort of trouble.

Oliver thanked her weakly and hung up. "I'd better get up there right away...before any more time goes by," he thought, as he ran down the hallway, then bounding up the main stairway to the general's office.

As he entered the outer office the general's aide met his glance with a curious smile, as if to say, "we thought we'd never see you again." But he said, "Hello Commander. I'm afraid you just missed the general. He just left for the radar ops room...and he was in a hurry."

Oliver turned toward the doorway and said, "Thank you, I'll go there right away." He caught a glance at the wall clock in the hallway outside the general's office and saw that it was 1846. A thought flashed into his mind.

"If I could reach George and stop the pilot before seeing the general he wouldn't be the wiser. All I'd have to explain is being gone from the base." He was bouyed by the idea and raced for his own office.

Flipping on the light switch as he entered, Oliver quickly crossed to the desk where he noticed a small pile of manila envelopes and other official letters in his basket. He thumbed through the pile as he dialed George's number at Laverton. Again it rang without a response. Then Oliver looked up his number at the barracks and tried it. On the fifth ring he heard the most

welcome voice he had ever heard in his life. It was George but he sounded different than he had ever sounded before.

"Hello," George answered weakly, "who's this?"

"George, is that you? It's me, Oliver." he came back. "Look George, there's not a moment to lose. Where have you been this afternoon? I tried to locate you all day." He paused for a few seconds and, not waiting for a response, went on, "George, we've got to stop that young pilot from taking off. He's...". He was interrupted by his friends faltering voice.

"Ollie, it's too late." he replied. "He's already in the air!"

Wing Commander Oliver slowly lowered the receiver onto its cradle and closed his eyes.

> The fictionalized events of this chapter follow the general sequence of events of Frederick Valentich's afternoon of October 21, 1978. The possible outcome of such a scenario as this need not be speculated upon for there is the pilot's own voice transcript which has already been presented and analyzed.

Postscript. The scenario just presented was personally repugnant to me. Yet it does represent a possible explanation for what took place. Only brief mention of this kind of possibility is found in the literature, indeed, one would expect that no one would be willing to come forward to provide verification for it. However, according to veteran UFO investigator Paul Norman[1] there was a pilot flying that same night who not only heard the conversation between Valentich and Flight Service but who heard a request from the ground that he change frequencies for a message. This unnamed pilot also switched radio frequencies. According to Norman, "...the message came from the Defense Department, instructing Valentich to check on an unknown target since he was the only pilot in that vicinity." I have been unable so far to determine who

this pilot was.

It is a documented fact that there were many strange and unexplainable lights and angularly large objects in the skies over Victoria before and after October 21st. According to field investigations conducted by members of the Victorian UFO Research Society and reported in several publications,[2] UFO reports were received from Tasmania and King Island, from Melbourne to west of Warrnambool. It is also a documented fact that a Melbourne plumber, Roy Manifold took color photographs at Crayfish Bay near Cape Otway on October 21st of the sunset twenty seconds apart in order to show a timed sequence effect of the colors. It is the 6th frame, obtained twenty seconds later, that is of most interest for it shows a "cloud-like image, with a disc structure...visible."[3,4] The details regarding these photos are provided in the postscript to Chapter 11 and will not be repeated here.

Still, all of this is circumstantial evidence in support of the hypothesis that Frederick Valentich was somehow involved in an advanced weapons test. All that has been attempted is to try to show that means could have been available to carry out such tests.

The present senario attempted to explain Frederick's delay in taking off as being the result of having to install the military radio in his plane (with the assistance of an RAAF officer). Also discussed was the possibility of radar contact with the atmospheric tests over Bass Strait and, perhaps more significantly, a motive for the young man to have been flying when and where he did. Even though he had not been accepted for RAAF pilot training there is every reason to believe that he would have been ready to assist them in any reasonable mission, particularly one that involved flying. Flying to King Island to buy crayfish may or may not have been the real reason he made this flight, of course. The present scenario suggests how this fact might be integrated into another quite different basic explanation of what took place.

As with the previous chapters dealing with Valentich's last flight leg, this version has several possible variations. Certainly,

young Valentich need not have know anything about the occurrence of military tests in the atmosphere and may have simply been the victim of circumstance, stumbling in on the tests by mistake. And these alleged tests need not necessarily have been conducted by the United States but rather the Australian government. Yet the U.S. appears to possess a greater capability for performing them. Also, these atmospheric tests may, perhaps, have involved air- or space-borne vehicles rather than mobile ground facilities. The author's review of current weapons technology makes this possibility problematical at best. If the atmospheric test alluded to here actually did take place they would have been of a very rudimentary nature.

Postulation of Frederick Valentich's involvement with possible laser or particle beam weapons tests finds some support from the behavior of the strange phenomenon as described by the pilot. It is apparent that his Cessna aircraft was the focus of "interest" of the phenomenon since the strange light(s) approached the aircraft from different directions, flew over it many times, flew in tight circles directly above it, and remained in the vicinity of the aircraft for many minutes. If his aircraft had been accidently or deliberately chosen as an airborne target, perhaps simply for tests of advanced tracking and control systems, it would seem reasonable that target "lock-on" would not be achieved immediately but might require making passes along different trajectories. The alleged instantaneous disappearance of the strange object reported by Valentich at 0910:48 might be explained as being due to turning the beam off. The object was then reported, thirty-five seconds later, approaching from the southwest. A flying object possessing that mass would need to undergo extremely high acceleration to reposition itself even a few miles away to begin another pass at the aircraft. It is acknowledged that there could have been more than one flying object involved beside the one reported by Valentich.

Finally, it must be emphasized that absolutely no debris has ever been found of the Cessna aircraft. If the present "weapons testing" hypothesis is correct one must somehow account for this

fact. Could an entire aircraft be so totally destroyed that no trace remains? It is extremely unlikely, short of a nuclear detonation nearby. Perhaps the aircraft was subjected to such a great energy that most of it melted and fell into the sea and sank. Unless and until some wreckage is found, this fact will form a central part of the mystery.

Footnotes

1. Norman, P., Mystery deepens in pilot disappearance case, *The MUFON UFO Journal,* no. 141, November 1979, pg. 5.

2. Money, L., 5 Sightings of Mystery Skycraft, *The Herald,* Melbourne, November 25, 1978.

3. Foley, S., UFO clue in pilot puzzle, *The Sun,* Melbourne, August 5, 1980.

4. Sighting may be clue on missing pilot, *The Standard,* Melbourne, July 23, 1980, pg. 5.

PART THREE

This is the final section of *Melbourne Episode - Case Study of a Missing Pilot*. It covers such subjects as how the Valentich family learned that Frederick was missing, details of the search and rescue, a brief review of the various hypotheses concerning what might have taken place, and a sad postscript to the whole affair.

Chapter 14

Immediate Aftermath: The Valentichs Learn the Truth

In a special article which Guido wrote for *The Australian UFO Bulletin* (see appendix 13), he told the anguishing events of October 22nd when Frederick had not returned home as he had planned. Mr. and Mrs. Valentich must have slept fitfully Saturday night, wondering if Frederick had had some trouble on his night flight. "He probably stayed overnight on King Island," they most likely reasoned together. It was not until 0930 Sunday morning while listening to radio station 3AW that they heard the terrible news that an aircraft had disappeared while flying between Cape Otway and King Island.[1] As Guido wrote,

"Immediately, I started chasing the Department of Transport officials and after telephoning three different persons, finally had confirmation that it was my own son involved in the particular incident, and then I had to wait till 7:00 pm to know more details on the developments of search and rescue. But in the meantime about 10:30 am, news reporters started calling me and it was then for the first time that I learned that the incident was surrounded by a UFO case. It was on the 6pm TV news that I saw sub-titles of what Frederick reported on radio..."

Mr. Guido Valentich called an automobile towing service later on Sunday and arranged to have his son's car towed home. One source indicated that the car was removed from the airfield lot about 11:00 am.

On Monday, October 23rd, the Valentich's telephone began to ring incessantly. Calls came from America, New Zealand, and even Germany. Both the long distance and the local callers expressed their sympathy along with various requests for

information. Some of the callers said that they too had seen a large light in the sky recently, a statement that gave real encouragement to Guido. It encouraged him because he had begun to realize the larger significance of the the event, regardless of what might turn out to be the final answer to his son's disappearance. Guido was beginning to understand the common bond that people have with one another after encountering the enigmatic UFO phenomemon. He could find some encouragement in the knowledge that he wasn't alone anymore in his experience. People around the world had, each in their own ways, shared their concerns with him. People did care. He found a great deal to ponder in the weeks and months ahead.

Author Pinkney[2] has pointed out that the Department of Transport, less than twenty four hours after the disappearance and under very intense pressure from the press, released an "alleged transcript" of the voice tape. Never before had such a thing been done. The transcript was published in the morning mewspapers of October 23, 1978, the following Monday.

In a December 26, 1978 interview with Guido Valentich, the reporter from Melbourne's *Australian* was to write, "The latest sightings, together with their radar confirmation, just go to show that something is going on. Who is really to know what happened to my son? The New Zealand reports are similar to what my son told air traffic control before losing radio contact. I have learned from UFO experts in the U.S. that a pilot recently disappeared in similar circumstances. I now believe the Federal Government must know more than it is telling the Australian public. So far, all it has done is to cover the entire UFO phenomenon with an aura of fantasy. But how can you argue with positive radar sightings? And why is it that no one from the air force has come ot see me to discuss the matter? No one wants to explain."

A separate set of occurrences was taking place at the Moorabbin airport on Saturday night, the 21st. There was no mention of a possible UFO involvement at that time, only that a pilot and plane were missing over Bass Strait. Following is an account of what took place at Moorabbin field on Sunday morning,

October 22nd according to a colleague who went there to try to find out what he could about the disappearance.

"I first heard the UFO connection (on) Sunday afternoon, the 22nd at which time I phoned a pilot at Moorabbin, who told me at that time, 'It was a 50/50 chance of light reflections.' He said, "he would know more after the meeting.

"I then phoned Judy Magee, an ex-air hostess who is currently the President VUFORS (Victoria UFO Research Society) that I was picking her up and we were going to Moorabbin Aero Club where we are members.

"We were the first customers in the dining room. When we gave our order about 6:00 pm, Judy asked the waitress, "What's all this about a pilot being paced by a UFO? The waitress replyed (sic), 'There has been a meeting and fellows were told not to divulge anything.' All she knew was the pilot's name and call letters.

"After we finished our meal we went into the bar room and I looked around for the pilot whom I had phoned. I saw no one at the bar that I wanted to approach. We stayed around for awhile hoping someone would show up who would be a position to tell us something.

"I went back (the) next morning and found one of the DOT pilots there. I walked up to the bar alongside of him and before I opened my mouth he waved his hand and said, "I don't know a damned thing." This was a pilot who was interested in UFOs and we had often discussed the subject. Although I have been back often and we have discussed other subjects, he hasn't mentioned a UFO to me and I haven't pushed him.

"Later that same evening, Monday (the) 23rd, the pilot whom I had previously phoned came in and told me that there was doubt that Frederick was where he said he was. Whether this was an honest opinion or because the officials were trying to make it look that way...I don't know, but have since found that Frederick's plane was seen near Cape Otway at the time he was supposed to be there. So that was pilot number 2 who has not discussed the

subject with me since. There is no doubt that the officials tried to keep the UFO out of the picture. That is, (the) DOT pilots. There have been several other pilots from other companies who have discussed the case with me, mostly questions and my answer is always the same, I don't know whether (sic) he went up or down or disintegrated.

"It was from a private pilot that the statement came about (a) tip to the press. I am in Melbourne now and am trying to get additional information."[3]

Unfortunately, little more information could be obtained. The author wrote to Ken Williams, Assistant Director of Public Relations for the Department of Transport in Melbourne for information on December 21, 1978, January 12, 1980, and May 25, 1980 without receiving a reply.

The only official word that has been received from any civil authority regarding this strange disappearance is the Aircraft Accident Investigation Summary Report (Ref. No. V116/783/1047) signed by A. R. Woodward and dated April 27, 1982. In box 7 on this form entitled "Opinion as to Cause" are the words...

> "The reason for the disappearance of the aircraft has not been determined."

Could it be that the investigative report might disclose information that could embarrass either their own military establishment or the American government? Such a report would have to explain why an RAAF four engine P3B Orion search and rescue aircraft of the Maritime Reconnaissance Squadron 10 was brought in so quickly from Edinburgh, South Australia. The officially released details of this search are presented in the following chapter. And such a report would have to provide some reasonable explanation for the bizarre verbal description of the aerial phenomenon reported by Frederick. It appears as though the Australian authorities know a great deal more about what happened

than they admit officially. It remains to be determined why they steadfastly refuse to release any substantive information.

Footnotes

1. A minor discrepancy exists at this point due to an interview Guido had for a TV episode of the American program "In Search of". During this interview he said that there was still no sign of Fred by 0830 Sunday morning and he was just about to get on the phone when two men in blue slacks walked in the front door to tell them that their son was missing.

2. Pinkney, J., *Alien Honeycomb,* Pan Books, Sydney, 1980.

3. Private correspondence dated December 11, 1980 in author's files.

Chapter 15

Search and Rescue

Details of the search and rescue activities form a story in themselves. However, space does not permit more than an abbreviated retelling here.

The moment the Frederick radioed Flight Service that something very strange was taking place at about 0906, the first "alert" phase of the search and rescue (SAR) operation was activated. According to a public statement by Ken Williams (see appendix 11) that was distributed to many people around the world in response to their inquiries, the initial phase was "...upgraded to the distress phase and th Rescue Co-ordination Centre at Melbourne Airport was activated at 0912:28 when radio contact had ceased. Arrangements were made to launch a search and rescue mission immediately."

William's statement goes on to say, "A night search by a light aircraft was made covering the route and the last known position of VH-DSJ but nothing further was seen or heard of the aircraft or its pilot.

"Subsequent appeals to the public by radio and the other media for sighting and hearing reports of the aircraft yielded no information relevant to VH-DSJ or the phenomena." One might ask whether the light aircraft that was sent up that Saturday night was outfitted with the kind of receiver which would locate the signal that would have been emitted by the Cessna's emergency locator transmitter (ELT).[1] The two standard frequencies were 121.5 and 243 megahertz.[2]

At the time of this writing it is not known how the RAAF Maritime Reconnaissance Squadron 10 based at Edinburgh, South Australia was contacted nor whether the dispatch of a military

aircraft with highly specialized detection and tracking equipment on board is considered standard operating procedure in such cases. Nevertheless, a P3B four engine Orion aircraft did take part in the search for the Cessna and its pilot. On board the Orion was Flt. Lt. Bill Sigston who was to navigate the carefully planned criss cross search pattern known as a "tracking crawl." With a top speed of only about 380 mph, these Lockheed built aircraft were specially suited for such missions. Some of these aircraft were outfitted with special anti-submarine weapons such as rockets, mines, and bombs while others carried highly sophisticated photographic and electronic listening gear.

Someone probably called the Australian Coast Surveillance Organization who issued an alert to all ships and other surface craft to be on the looked for any signs of wreckage in the Bass Strait area. The authorities knew that the ocean's temperature was only about eight degrees above freezing and that a man could not survive very long in such cold water. Only if Frederick had been wearing special cold water gear could he have survived very long. There is no indication that he had such gear.

The RAAF's search aircraft conducted a carefully planned search all day Sunday the 22nd. At one point they spotted an oil slick about 18 miles north of King Island and dropped a buoy with a radio transmitting beacon at the spot. The oily area seemed too large to have been caused by a light plane, however. A small boat travelled to the spot from Warrnambool and recovered some of the oil. A chemistry laboratory at the Australian Defense Department Materials Research Laboratory at Maribyrnong reported that it was probably "marine diesel" and not aircraft fuel. Of course there is no independent confirmation of this statement's truthfulness.

The RAAF's Orion search aircraft continued its flights during Monday, Tuesday, and Wednesday as well. One might question why the government would go to such great expense just to find a single engine private aircraft. On Wednesday, they sighted some debris about 4 km from an oil slick. A merchant ship in the area changed course and proceeded to the site. They reported

finding fruit cartons, plastic bags, and ship's rubbish. The official air-sea search was called off officially the night of Wednesday October 25th. This did not stop various private individuals from continuing their own search efforts, however.

The night that Frederick Valentich disappeared "...a light aircraft initiated a visual and radio search"[3] without any success. Interestingly, there is no record of any private aircraft search flights having taken place on Sunday the 23rd. On Monday, a citizen flying a Nomad aircraft searched from Warrnambool to Cape Otway, a 100 km stretch of coast. The Great Ocean Road followed most of this coastline and connected numerous small towns. Another Cessna aircraft was used to search the area on and around King Island.

One source reported that by Wednesday night a total of eight different aircraft had spent 70 hours covering about 7,000 square miles (Ibid.)[4]. This source also mentioned that a pilot flying at 4,000 feet altitude reported seeing an aircraft under the surface of the ocean. However, reference to marine charts showed that the water's depth there was 180 feet. This fact combined with the fact that the seas were rough because of a gale led the Department of Transport to decide not to follow up on the report.

One last attempt to spot some wreckage from the air was made later in the week by the pilot of an Aero Commander who flew along many miles of beaches hoping that the wind and waves might wash something ashore.

After the RAAF had ceased its active involvement in the search phase the Air Safety Investigation Branch of the Department of Transport took over on October 26th. While the RAAF may have withdrawn from actively searching for the pilot and aircraft there is some evidence that they had not yet stopped being highly interested in the whole affair. Author John Pinkney wrote that, before the news of the event was broadcast, personnel at Moorabbin field were approached by "government officials" who told them that a pilot had been lost and that there might be rumors about a UFO being involved. Allegedly, they were told

not to talk to reporters abut these rumors. It has been impossible to obtain independent confirmation of these claims which appear to sound like the familiar journalistic license that has been encountered from time to time throughout this case.

"Two weeks after Frederick's incident," Guido wrote,[5] "the Search and Rescue Department from Tullamarine, invited me to their briefing office to show me the structure of four days search which they directed under a pre-calculated search plan. I was introduced to Mr. Eddie, Chief Co-ordinator Rescue, and Mr. Pat Maky, his assistant. In our conversation, there were few theories surrounding the incident which they cannot proclaim an accident, but unofficially (as usual) Mr. Eddie expressed his own opinion...he still said the Cessna simply ditched in the water and within a minute disappeared taking the pilot with it... without first investigating or considering that the long range Cessna 182 being constructed with modular units certain sections of the plane should be floating in the event of a crash impact in the water." The article entitled "My Son Frederick", presented in appendix 13 presents further facts concerning this subject.

Footnotes

1. It must be pointed out that a recent study in America on the functional reliability of these emergency locator transmitters has shown that a large percentage of them fail to operate as designed.

2. It should also be noted that a Cessna field service representative wrote me (letter dated July 10, 1980) that this aircraft would not have had an ELT installed at the factory since it was not being offered as a customer option at that time.

3. *International UFO Reporter,*

4. Valentich, G., My son Frederick, *The Australian UFO Bulletin,* September 1980, pg. 13.

Chapter 16

Reviewing the Possibilities

The time has come to review the evidence for each of the four basic hypotheses concerning what might have happened to Frederick Valentich.

Hypothesis One. -Pilot Disorientation and Crash- The author had a great deal of difficulty in writing Chapter 9 so as to make it support this hypothesis. Even for a relatively inexperienced pilot, too many events would have had to take place within only a few minutes to culminate in a crash. Yet vertigo can be totally debilitating; many people have lost their lives to its effects.

Hypothesis Two. -Deliberate Hoax- The various reasons why this possibility is not considered seriously by the author have been presented in Chapter 10. Among these reasons is the fact that no trace of the aircraft has ever turned up. If Valentich had actually sold the Cessna, its registration number eventually would have been discovered by an aviation inspector or other authorities. Nevertheless, just as automobiles have been stolen and given new identities, the same might be true for a small aircraft. The aircraft may also have been disassembled and sold part by part by someone. Yet perhaps the strongest evidence against this possibility is the personality and social upbringing of young Valentich. He was raised with good values and had earned a solid reputation of being a hard worker who was serious about his future in aviation. The author found nothing that pointed toward such an illegal act on the part of the pilot.

Hypothesis Three. -Encounter with a UFO- The author cautions anyone against dismissing this possibility out of hand without first studying the enormous body of knowledge surrounding unidentified aerial phenomena. Of course such an encounter

sounds ridiculous to those who uncritically accept the common view that our planet has not (yet) been visited by extraterrestrial beings. Yet the author's long-standing research on sighting reports by pilots has provided literally thousands of examples of unbelievable aerial encounters with apparently solid objects which displayed far superior flight performance. Indeed, he is now preparing a comprehensive review of these findings. And so hypothesis three should remain open for the time being.

Hypothesis Four. -Involvement in Advanced Weapons Testing- This scenario was particularly challenging to write because it is possible to achieve so much through the use of fiction even though the scientific reality may not have caught up. It is left up to history to show whether the sophistication in beam technology (by any nation) was as far along in 1978 as suggested here.

It is left up to the reader to decide whether any of these hypotheses is correct. As mentioned earlier in this book, there are other categories of explanations for the disappearance of Frederick Valentich. They include weather-related aircraft damage, deliberate or unintentional involvement in drug running from Tasmania, and sabotage. None of these possibilities warranted an in-depth discussion based upon the facts that were available.

The mystery remains unanswered!

Chapter 17

A Sad Postscript

At the time of writing and completing this book (February 1981; October 1985, respectively) Frederick Paul Valentich still has not been found. The suffering and anguish of his family and friends may have subsided to some degree yet they still live in hope. On the first anniversary of his disappearance his father composed a homely poem that expressed his continuing faith that his son would someday return. This poem is included in appendix 14 since it sheds light on Guido's sincere attempt to deal emotionally with his loss.

With the approach of the second anniversary of the disappearance Guido prepared a statement for the Australian UFO Bulletin (September 1980 edition). In this report he recounts the events of the morning following Frederick's disappearance. Clearly, the Valentich family was totally unprepared for the shocking news they received by way of a local radio station at 0930. By 1030 Sunday morning the reporters began to telephone. Not insignificantly, Guido stated that as he and his wife watched the evening news on television and saw sub-titles of what their son had reported, they both "...felt a little relief because we know that Frederick was a firm believer in UFO's and perhaps he wouldn't mind having a close encounter with a UFO." This attempt to put the whole affair in a little happier light was subsequently cast in the somber light of reality when, on the second anniversary of Frederick's disappearance, Guido drove back to a bluff at Cape Otway where he sat looking out over the ocean.

Perhaps there is really no proper way to conclude this account which includes so much that is bizarre and unanswered and tinged in sadness. Yet the faith that Guido and Alberta continue to maintain after many years - that their son will yet return

from somewhere - stands as a great tribute to their love. While he sat on the wind swept cliff overlooking Bass Strait, Guido explained why he had made this vigil.

"It is a pilgrimage of respect, of hope that he will return," he said.

"It is like Jesus Christ, it is up to you whether you believe or not.

"I don't believe Freddy crashed in the sea.

"My feeling...he is still alive."[1]

Footnote

1. Ross, D., Father keeps watch for UFO pilot. *The Herald,* Melbourne, October 22, 1980.

List of Persons Involved

Note: From time to time persons known to be involved in this case are referred to by their initials. To facilitate the identification of these persons they are listed here alphabetically with a brief reference to the part they played.

Immediate Family:

Alberta and Guido Valentich	Mother, Father
Richard, age 12	brother
Olivia, age 4	sister (twin)
Laura, age 4	sister (twin)

Close Friends and Acquaintances:

Dick Williams,	Owner of store in which Frederick worked
Ronald Grandy, Sqdrn. Leader, RAAF	RAAF superior who selected Fred as a training instructor.
Rhonda Rushton, age 16	Personal friend of Fred's
Don Sowman, Chief flying instructor, Southern Air Services	Acquaintance
Aubrey Coates, Southern Air Services	Fred's flight instructor
Gary Groci	Friend of family

Government Officials: (*Department of Transport*)

DOT, Melbourne, (ltr. dtd. 12-19-78)

Kenneth Williams, Asst. Director of Public Relations, DOT, Air Transport Group, Melbourne

P.J. Nixon, Minister for Transport, Canberra, (ltr. dtd. 5-1-79)

Steve Robey, Flight Controller, Morrabbin airport tower, Melbourne

Ian Smith, Air Safety Investigations Branch (has tapes)

(Royal Australian Air Force)

Colin Chaliss, Wing Commander, East Sale Air Base, RAAF, Sqdr. Leader Rose, RAAF Headquarters, Canberra

K. Llewelyn, Public Relations Officer, RAAF, Victoria Barracks, Melbourne, (ltr. dtd. 6-5-79)

Sqdr. Leader Ronald Grandy

(Other Depts.)

R.K. Stibbs, Department of Science and the Environment, Bureau of Meteorology, Melbourne, (ltr. to rfh dtd. 11-5-79)

Eye witnesses of Possibly Related UFO Events:

Colin and Isabel Morgan, Bank Manager, State	Both sighted UFO with green light,

Savings Bank, City West Branch, age 59	shining from Melbourne at same time as Valentich's sighting.
Dr. William and (Mrs.) Billie Hamilton-Smith,	Both sighted a "bright" star-shaped object in the area" about 15 min earlier.
Mrs. Barbara Bishop, Queensland	Saw UFO same night

Others Not Involved with UFO Investigation:

Mrs. Joyce Ford, owner of motel at Apollo Bay, Bay Pines Motel,

George Smith, former mgr. of Tasmanian Aero-Club

Colin Kerby, St. Kilda,

Sgt. J. Woodward, Police Dept., Currie, King Island, was notified of "strange lights North of the island."

Arthur Schutt, Schutt Aviation Co., Melbourne, (interviewed by the press)

Michael Falls, Flight Instructor, Great Pacific Aeroplane Co., Melbourne, (interviewed by Christchurch STAR)

Sgt. B.C. Klemm, Police Dept., Apollo Bay,

Peter Phillips, pilot of Fuji Aircraft who disappeared in the same area at age 25 on 12-24-69.

Max Price, age 57
Mrs. Brenda Hean
Both disappeared on 9-8-72 over Bass Strait in an aircraft.

UFO Investigators:

Paul Norman, The Victorian UFO Research Society, P.O. Box 43, Morabbin, Victoria, Australia 3189.

Keith Basterfield, The Australian Centre for UFO Studies, 3 Park Lake Drive, Wynn Vale, 5127, South Australia.

Dr. Michael Duggin, University of Sydney, Minerals Research Lab., North Ryde, N.S.W. 34 Wingrove Road, Epping, NSW 2121, Australia.

James J. Kibel, Victoria, 3126 Australia.

Alan Tasker, Australian UFO Research.

Paul Jackson, Tasmanian UFO Centre.

Rocky Wood, Earth Colonization Research Association.

William C. Chalker, Director of UFO Research, Lane Cove, NSW

Roger Thornwell, Christchurch, New Zealand.

D. Anderiesz, Noble Park, Victoria.

Erling Jensen, author of "UFO arsag til flyforlis?", UFO

NYT, 3-79, Pp. 87-97.

Members of the Press:

Lawrence Money, interviewed Mrs. Valentich.

Ron Caylor, National Enquirer, article 1-16-79.

Michael Dawes, interviewed Mr. Guido Valentich.

J. Butler,

Jim Dillon, Renison, King Island

Leonard Lee

APPENDICES

Appendix 1

Palo Alto (California) Times Article
October 23, 1978, Page 1

10/21/78

'It isn't an aircraft. It's . . .' pilot spots UFO, then vanishes

MELBOURNE, Australia (UPI) — "It isn't an aircraft. It's . . ."

Moments after pilot Frederick Valentich told an Australian control tower an unidentified flying object with four green lights was chasing him, radio transmission was cut off, and nothing more was heard from the 20-year-old pilot or his single engine Cessna 182.

A full-scale search by the Australian air force resumed today for the plane — and its lone occupant — whose last known position was over the Bass Strait, 130 miles south of Melbourne.

Transport Department official Kenneth Williams said Valentich radioed Melbourne Flight Service Control Saturday at 7:06 p.m. (2:06 a.m. PDT Sunday) and reported a UFO was following him at 4,500 feet.

He described his pursuer as "a green light and sort of metallic light on the outside."

Ground control said there was no air traffic in the area below 5,000 feet.

Valentich disagreed.

"It has four bright lights — appear to be landing lights. Aircraft has just passed over me about 1,000 feet above."

Can you identify the aircraft, control asked.

"It isn't an aircraft. It's ..." Then silence.

Two minutes later, Valentich's voice rasped over the radio again.

"Melbourne, it's approaching from due east toward me ... It seems to be playing some sort of game ... Flying at a speed I cannot estimate ... it is flying past ... It is a long shape ... Cannot identify more than that ... coming for me right now ... It seems to be stationary ... I'm orbiting (circling) and the thing is orbiting on top of me also ... It has a green light and sort of metallic light on the outside."

Suddenly, Valentich reported his engine was choking.

Metallic scratching replaced the pilot's voice. Then there was no sound at all.

When the aircraft did not arrive at King Island on schedule, investigators began an air search, but found no sign of the aircraft.

Air force planes sighted an oil slick about 18 miles north of King Island, but transport officials said it was not made by a light aircraft.

An Air Transport official said Valentich had been flying for 18 months and was accumulating hours for a commercial pilot's license.

"It is possible that he could have become disoriented," the official said.

"The aircraft could have inverted and he could have seen the reflections of the Cape Otway and King Island lighthouses on the clouds above him."

He said the Cessna's engine would fail if it was flown upside down.

Valentich's father said his son has been interested in UFO's for many years, and reported sighting one about 18 months ago.

"But whether a UFO has had anything to do with his disappearance in his plane is something I'm not sure about," the father said.

Palo Alto Times, Pg. 1, October 23, 1978 Cr. o.f. Files

Appendix 2

Author's Letter to Flight Service Control, Melbourne dated October 23, 1978

CENTER FOR UFO STUDIES
P.O. BOX 11 – NORTHFIELD, ILLINOIS 60093

J. ALLEN HYNEK
DIRECTOR

October 23, 1978

Director
Flight Service Control
Melbourne Airport
Melbourne, Australia

Dear sir:

As a scientific consultant to the Center for UFO Studies in the United States, I am investigating sightings of anomalous aerial phenomena by pilots. Recently I read a news article of such a sighting by a Mr. Frederick Valentich flying a Cessna 182. According to the UPI dispatch he reported seeing something very abnormal and then was lost contact with by ground radio. I am writing to you for your kind assistance in this matter. Would you be so kind as to try to complete the enclosed report form or pass it on to someone who is in a position to complete the details? Your assistance is very much appreciated by those of us who are only concerned with trying to discover the true nature of the phenomenon involved. You will receive no publicity since all our records are kept confidential.

I would be particularly interested in the weather in the region within about a 150 mile radius of Melbourne on October 21, 1978 up to an altitude of 7,500 feet. Were any voice tapes maintained? If so could a copy be forwarded for research purposes only? Finally, I would very much like to correspond with Mr. Valentich Sr. Could you provide me with his address?

On behalf of the Center for UFO Studies let me thank you in advance for any assistance you may provide. I will be pleased to send you a copy of any report that may be prepared on this case.

Very sincerely,

Richard F. Haines, Ph.D.
Research Consultant

Please use the following address in any correspondence to save time:

325 Langton Avenue
Los Altos, California 94022
U.S.A.

[illegible]

Appendix 3

Letter to Author from Guido Valentich
dated November 20, 1978

18, Arvern Ave.
Avondale Heights, 3034
Vic., Australia

Mr. Richard F. Haines Ph.D.
Research Consultant
325, Lengton Ave.
LOS ITOS, Cal. 94022, U.S.A.

November 20, 1978

Dear Sir,

With reference to letter to Flight Control Service, Tullamarine, of October 23, 1978, I have been informed of your wishes.

As father of missing pilot, Frederick Valentich, over Bass Strait on Saturday, October 21, 1978 19.12:28 hours, I was told that you would like some information regarding my son's mysterious disappearance.

Therefore, I am writing to you, offering my cooperation in order to solve the mysterious circumstances surrounding my son's disappearance --- my family is still waiting and hoping for his safe return.

I am enclosing a written copy of radio communications between my son and Flight Service on the day Saturday, Oct. 21, 1978. It is a very accurate report.

I have also enclosed a photo of my son, which I took last January, while he was attending a flying course.

Yours faithfully,

Guido Valentich

G. VALENTICH

Appendix 4

Sunday Press, Melbourne Newspaper Article
of October 21, 1978

VH:DSJ

10-21-78

WHAT THE PILOT REPORTED

OCT. 21 1978

THIS is the conversation Frederick Valentich, flying Cessna DSJ, had with Melbourne Flight Service (FS) before he vanished. The times are based on the 24-hour clock system:

1906:14 — DSJ: Melbourne this is Delta Sierra Juliet is there any known traffic below five thousand.
FS: Delta Sierra Juliet no known traffic.
DSJ: Delta Sierra Juliet I am, seems (to) be a large aircraft, below five thousand.

1906:44 — FS: Delta Sierra Juliet what type of aircraft is it?
DSJ: Delta Sierra Juliet I cannot affirm it is four bright, it seems to me like landing lights.

1907 — FS: Delta Sierra Juliet.

1907:31 — DSJ: Melbourne this (is) Delta Sierra Juliet the aircraft has just passed over me at least a thousand feet above.
FS: Delta Sierra Juliet roger and it is a large aircraft confirmed?
DSJ: Er unknown, due to the speed it's travelling is there any airforce aircraft in the vicinity?
FS: Delta Sierra Juliet no known aircraft in the vicinity.

1908:18 — DSJ: Melbourne it's approaching now from due east towards me.
FS: Delta Sierra Juliet.

1908:41 — (Open microphone for two seconds)

1908:48 — DSJ: Delta Sierra Juliet it seems to me that he's flying over me two three times at a time at speeds I could not identify.

1909 — FS: Delta Sierra Juliet roger what is your actual level?
DSJ: My level is four and a half thousand four five zero zero.
FS: — Delta Sierra Juliet and you confirm you cannot identify the aircraft.
DSJ: Affirmative.
FS: Delta Sierra Juliet roger standby.

1909:27 — DSJ: Melbourne Delta Sierra Juliet it's not an aircraft it is (open microphone for two seconds)

1909:42 — FS: Delta Sierra Juliet Melbourne can you describe the er aircraft?
DSJ: Delta Sierra Juliet as it's flying past its a long shape (open microphone for three seconds) cannot identify more than that it has such speed (open microphone for three seconds) before me right now Melbourne.

1910 — FS: Delta Sierra Juliet roger and how large would the er object be?

1910:19 — DSJ: Delta Sierra Juliet Melbourne it seems like its stationary what I'm doing right now is orbiting and the thing is just orbiting on top of me also, it's got a green light and sort of metallic (like) its all shiny (on) the outside.
FS: Delta Sierra Juliet.

1910:46 — DSJ: Delta Sierra Juliet (open microphone for five seconds) it's just vanished.
FS: Delta Sierra Juliet

1911 — DSJ: Melbourne would you know what kind of aircraft I've got is it (a type) military aircraft?
FS: Delta Sierra Juliet confirm the er aircraft just vanished?
DSJ: Say again.
FS: Delta Sierra Juliet is the aircraft still with you?
DSJ: Delta Sierra Juliet (its ah nor) (open microphone for two seconds) now approaching from the southwest.
FS: Delta Sierra Juliet.

1911:50 — DSJ: Delta Sierra Juliet the engine is is rough idling I've got it set at twenty three twenty four and the thing is (coughing).
FS: Delta Sierra Juliet roger what are your intentions?
DSJ: My intentions are ah to go to King Island ah Melbourne that strange aircraft is hovering on top of me again it (open microphone for two seconds) is hovering and its not an aircraft.
FS: Delta Sierra Juliet.

1912:28 — DSJ: Delta Sierra Juliet Melbourne (open microphone for 17 seconds).

THE single-engined Cessna 182 piloted by Frederick Valentich is the third light aircraft to disappear in Bass Strait in the past eight years.

On December 24, 1969, Peter Phillips, 25, who was flying a Fuji low-wing aircraft, disappeared without trace.

Phillips was flying from King Island to Moorabbin.

Civil Aviation Department officials reported that Phillips' last radio message said that he was about 8 km off Cape Otway, at an altitude of 300 metres and had developed engine trouble.

Contact was then lost.

The plane is believed to have crashed into the sea. No trace of the pilot or the plane was ever found.

On September 8, 1972, an old World War II Tiger Moth with two people on board disappeared between Hobart and Flinders Island in Bass Strait.

Despite an extensive air and sea search, no trace of the plane or its passengers was ever found.

The plane disappeared on the first leg of a trip to Canberra where it was to "sky write" in protest against the flooding of Lake Pedder, in Tasmania.

On board were pilot/owner Mr Max Price, 57, and conservationist, Mrs Brenda Hean who had chartered the plane.

Mr Price has been described as a "very experienced pilot" who had completely restored his plane.

The plane left Cambridge Airport near Hobart at 10.16 am on September 8 and was expected to refuel at 12.45 pm on Flinders Island. There was enough fuel in the plane to last till 2.30 pm.

Sightings

There were 22 sightings of the plane as it made its way up the east coast of Tasmania. Civil Aviation Department officials said that the last report they had of the plane was at St. Helens. They had no contact with the pilot.

On board the Tiger Moth was a high frequency radio survival beacon, but its signal was not heard.

On October 21, 1978, a third light aircraft disappeared in Bass Strait.

Three planes in eight years. All have vanished without trace.

Confidence? Or do we have another Bermuda Triangle?

SUNDAY PRESS, OCTOBER 29, 1978

Appendix 5

Bureau of Meteorology Report for Time and Place of Incident

DEPARTMENT OF SCIENCE AND THE ENVIRONMENT

BUREAU OF METEOROLOGY
Regional Office Vic. Cnr Spring & La Trobe Sts Melbourne
Telephone: 662 2555 Area Code: 03 Telegrams: WHR Melbourne Telex: AA30544

POSTAL ADDRESS: REGIONAL DIRECTOR, BUREAU OF METEOROLOGY, P.O. BOX 1636M, MELB. VIC. 3001

IN REPLY PLEASE QUOTE

METEOROLOGICAL CONDITIONS, MOORABBIN - CAPE OTWAY - KING ISLAND
0830/0930 GMT 21/10/1978

1. At 0800 GMT 21/10/78 a broad ridge of weak gradient extended westward from eastern Bass Strait through southwest Victoria toward Adelaide.

- The pressure range was; Melbourne 1023.5 mb, Cape Otway 1023.2 mb and King Is. 1022.6 mb
- Surface isotherms;
- 21°C Melbourne - Warrnambool
- 17°C Wilsons Prom - Point Lonsdale - Cape Otway
- 13°C Lat 40 S Long 146½E - Lat 39½ S Long 144½E - Lat 40½ S Long 144E - Lat 39½ S Long 143½E

2. Conditions were perfect for night flying. Although a trace of stratocumulus at 5000/7000 ft and scattered cirrus at 30,000 ft were reported, no cloud was detectable between the Victorian Ranges and the northern Tasmania coast on the infra-red satellite pictures at 0600 and 0900 GMT. There was no turbulence and visibility was excellent. An airborne aircraft over King Is. at 1000 GMT could clearly see the light from Cape Otway Lighthouse 50 km.

3. At 0800 GMT all reported surface winds were less than 10 knots. Cape Otway reported calm. Since light sea-breezes occurred along the coast during the afternoon, it is likely that shallow inversions of about 2C below 500 ft still existed in some areas at 0900 GMT. With the onset of nocturnal cooling it is likely that shallow surface inversions of up to 3C developed below 200 ft over the land and coastal fringe by 0900 GMT. It is considered that there were no surface inversions over the sea but rather very stable, possibly isothermal layers below 1000 ft.

4. Laverton* radiosonde at 1100 GMT indicated a subsidence inversion of 3°C between 7000 ft and 8000 ft. This inversion probably extended south to Cape Otway but further south toward King Island, the inversion would be less defined and possibly just an isothermal layer.

* ≃ 91 miles NW of Bass Strait

../2

Appendix 5
(continued)

- 2 -

5. Winds and temperatures along the route were probably:

Moorabbin/Cape Otway. The Dew Points are estimates only.

1000 ft	Variable 5 knots	Temp + 16	Dew Point + 11
2000 "	020/10	" + 14	" + 6
5000 "	350/10	" + 7	" Zero
7000 "	310/15	" + 1	" - 3
10000 "	270/20	" zero	" dry

Cape Otway/King Island

1000	340/10	Temp + 13	Dew Point + 10
2000	330/15	" + 11	" + 7
5000	320/15	" + 7	" + 2
7000	310/20	" + 4	" Zero
10000	290/25	" zero	" dry

6. *Meteorological balloon flights were carried out at Mt Gambier and Laverton at 3 pm. Both balloons had burst by 0630 GMT. The next balloon flights were not carried out until 1100 GMT.

* ≃170 mi WNW of Cape Otway

(R.K. STIBBS)
for Regional Director, Vic

Appendix 6

Letter to Author from K. Llewelyn, Public Relations Officer, RAAF.

ROYAL AUSTRALIAN AIR FORCE

TELEPHONE:

Headquarters Support Command
RAAF
Victoria Barracks
MELBOURNE VIC 3004

IN REPLY QUOTE 5/6/1/Air (16)

Richard F. Haines Ph.D.
325 Langton Avenue
LOS ALTOS
CALIFORNIA 94022 USA

Dear Sir,

REQUEST FOR INFORMATION ON
MISSING PILOT, MR F. VALENTICH

This Headquarters is able to provide little of the information requested in your letter of 20 December 1978 concerning the missing Melbourne pilot, Mr F. Valentich.

As you are aware, Mr Valentich was a civilian pilot in a private aircraft at the time contact with him was lost. Investigation of the circumstances of his disappearance is, therefore, being conducted by the Department of Transport (Air Safety Investigation Branch). Royal Australian Air Force involvement has been limited to participation in the search for the missing aircraft at the request of the civilian authorities during the period immediately following Mr Valentich's disappearance.

This Headquarters cannot say whether or not the Department of Transport will publish the findings of its investigation in due course; that will be a matter for decision by the Minister responsible.

In the meantime, you are advised that Mr Valentich was certainly never in a 'UFO unit' while he was an Air Training Corps cadet; no such unit exists in Australia.

Yours faithfully,

(K. LLEWELYN)
Public Relations Officer
(Melbourne)

Appendix 7

Letter to Guido Valentich from Author Dated May 24, 1980.

7

325 Langton Avenue
Los Altos, Calif. 94022 USA
May 24, 1980

Mr. Guido Valentich
18, Avern Avenue
Avondale Heights, 3034
Victoria, Australia

Dear Mr. Valentich:

I wanted to write to thank you for your kind letter of January 31, 1980 with some very useful information for my continuing analysis and study of Frederick's disappearance. While I have not received much cooperation from the Department of Transport authorities in this matter I have been helped by Paul Norman and several other civilians in the Melbourne area. This letter is to respectfully request some more information which only you can supply and which could be important to the analysis. Any assistance would be appreciated. My questions are as follows:

1. On the day your son disappeared, what time did he leave your home? What street route would he have probably taken to his job and then to the air field? Perhaps you could send an old street map with the route marked in ink (etc.). I am trying to reconstruct the events of the entire day before he took off.
2. Can you or your wife recall what he had for breakfast that morning? While I do not think it is a very strong possibility, I am looking into the possibility of some type of pilot incapacitation in flight which can happen under some circumstances.
3. Was Fred right or left handed? What was his vision? His hearing?
4. Can you tell me anything at all about his notebook of UFO clippings? Specifically, my interest is in any clippings obtained from your local newspapers during the one or two months prior to his disappearance. For instance, do you recall any UFO articles printed during this period which Frederick commented to you or your family about? If so what was the approx. date of the article(s)? Did he take this notebook with him on the flight or leave it home?
5. Could you please give me the address for Mr. Dick Williams at Fred's work?
6. Do you know who talked with Fred at Moorabbin airport just before he took off? I would like to write to them.
7. Did you ever go flying with your son? If so about when?
8. Regarding the voice tape recording which you heard, have you asked anyone at the Department of Transport for a personal copy (which they might give you). If you should be able to obtain a copy it is possible to do many tests and analyses on such things as the voice stress present, frequency analyses of background noises, engine performance, etc. I would be able and willing to perform such tests (strictly on a confidential basis) should you be able to get a copy of this tape.

Appendix 7
(continued)

9. Could you provide me with the address of Miss Ronda Rushton and also call her to say of my professional interest and concern in helping you in this case? I understand that she may well not want to become further involved. But, as you know, I am deeply involved in such cases on a professional basis and have the best interests of you and your family at heart. Any assistance would be appreciated.

10. Upon reading some of the clippings of this case I learned that your wife and Fred had sighted a UFO sometime previously to his flight. Could you give any further details of this sighting and, (particularly) Fred's reaction to it in the days following? This could be quite important.

I realize that there are many questions here and I almost hesitated writing to you again for help...but there is noone else to turn to. Therefore, I do hope you will be willing to help me. For your information, the only correspondence I have received from the Dept. of Transport was a weather report for that date and time. My letter of January 12, 1980 to Mr. Ken Williams has not been answered for some unknown reason. I waited this long to write him again in order to give him enough time to reply to this earlier letter. My hunch is that he probably knows very little of the inside information on this case and is telling the public only carefully edited information which is given to him.

My personal regards,

Very sincerely yours,

Richard F. Haines

Richard F. Haines, Ph. D.
Research Consultant

P. S. It has occurred to me that it would be extremely useful and important to listen to a tape recording of your son's voice. Would you have one I could borrow? Any type would be useable. Thank you very much.

cc: files

Appendix 8

Letter to Author from Guido Valentich Dated June 24, 1980

24 JUNE 1980

I8 Avern Avenue
Avondale Heights
Victoria 3034
Australia

Mr. Richard F. Haines Ph. D.
Research Consultant
325 Langton Avenue
Los Altas
California 94022
U.S.A.

Dear Mr. Haines.

I received your letter dated May 24 I980, on 2 of June I980 and I would like to apologies for my delay, but I'am sure you will appreciated due to extended inquirie with varies peoples.
Before I going to far, I like to thankyou for your expression to be so deeply involved on your professional basis and have best interests of our family at heart.
With hope to make myself understanding that this coments are the most onest and sincere, Frederick (Fred) disappearance represent a big tragedy in our family, he is our first child in the new family on a new country born on 9 of june I958 and by coincident same day as my wife Alberta and our latest twins Lara & Olivia who where born also on June 9 I974, then we have another son Richard age I4 born in April like me, but for many good reason, Fred is a simbol in our family, however if you refer to I. U. R. vol. 3 no.I2 of Dec.I978,I have find that the report is one of most accurate in any aspect.

Q. I & 2: Saturday morning 8.00 am. Fred came into the kichen an rimarkable good sence of humour, somthing that did not happen for a long time, then sat at the table and have some breakfast, consisting of two toast with chees and cocolate drink, then left home at 8.30 am. for I0 min. drive to work which start at 9.00 am. to the army disposal shop at Moonee Ponds, (with Mr. dick Williams). Finish work at I2.00 noon then left the shop to drive the car (FIAT I500 manual MK.III I966) to Moorabbin via city, (see included map) to attended a 3½ hours meteorology class with Mr. Mal N. Glower for NIMBUS COUCHING, as he finish the class at 5.00 pm. and have a chatte with some guys he then went to fill the flight plan, and, as record shown that he had submited at 5.2o pm. after this perhaps I spose, he went to McDonald for an hamburger, retturned to the air field, rifilled with gas the cessna I82 and _____ pick up 4 life jackets, thi is just in case sombody may ask him for a lift back from King Island as it happened before, finaly depart from Moorabbin airport to King Island at 6.I9 pm.

.../2

Appendix 8
(continued)

Note, that in my little investigation over many coments why Fred did not arrange to have the King Laland aeredrome lights on for his arrival, I discovered, becouse Fred submitted his flight plan at 5.20 pm. then allowed 15 min. to embarc and depart plus 65 min. of flying travel would make 6.40 pm. time of arrival at K. Island and note: the sun set was 6.48 pm. therefore was no need of light. The unknowing thing is why, what took so long for Fred to take off from Moorabbin.

Q. 3: Fred was left hand in general, but he could do 80% with the right hand also, he juste play Piano, which required coordination, Vision and hearing where verry good.

Q. 4: His note book wasn't anything much big, he had an old school exercize book where for few years he collect some particolar newspaper or magazine clipping of UFO mainly from local editions and maybe some foreing book, but I'am sorry, I can't recollect any specific name or date, he read few books of UFO, some from Erich von Daniken and Velikovsky's theory, seena few movies including the latest Clouse Encounter of the thirth Kind, besides we talk about UFO at home as an existence, especially when Fred retturn from R.A.A.F. base of east Sale after two weeks with Air Training Corps, he seems to me that he was more convinced of UFO existence then ever. But never mentioned that he have seen any classified materials. August 1978.

Q. 5: I can't helpyou in finding Dick Williams becouse he sold his shop at Moonee Ponds after had a car accident and went to Adelaide South Australia, however I've spocked with him soon after Fred disappearance, and he said that been a verry quat morning with little talking, exept when Fred leavad the shop, Dick was most impres what Fred said: as he just got out of the door, looked up at the clear and blue sky and said: it's going to be a nice day to go flying, see you Dick.

Q. 6: I'ven't being able to obtan any nome as jet, but I'm in the proces of getting a list of names, and as soon know sambody I'll let you have.

Q. 7: Yes I've, being twice, one time with a cessna 172 for 3½ hours cross country, second time with aerobatic plane CITABRIA tail wheel also cross coutry, nice memories. Fred was planig to get an endorsement on a six seater plane to be able take all the famyly for a trip just short before October 21 th.

Q. 8: Regarding the voice tape recording I heard, I have asked the department of transport for acopy, and they consent to give me one in due corse, but will only be the voice of my son and not comlete with trafic contreller, Steve Robey, so at the moment I dont heve one, neither have another tape voice of Fred, but one thing I'm certain and sure, that the tape you heard posses from P. N. is the voice of my Fred, and I supose that is the best could get so far.

Q. 9 Miss Renda Rushton, she is still a good frend of as she come often visit as and bring gifts for the twins, in fact I spoken to her recently, and she said that will be happy to cooperate. The address is: 3 Bradford av. Preston VIC. 3072 Australia.

.../3

Appendix 8
(continued)

PAGE 3

Q. IO: Yes, it must been September 1977, about 8.30 pm. when my wife went to set the window for the night, and have been attracted by a bright light in the sky looking to West at an elevation of 30° W. and after wathing for 3 min. she call Fred to come and see, at first Fred said it's an aircraft, but then stood too long at the same place, and they been watching for another 3 min. expecting the light to turn North for the aireport, but suddenly the light went sharp and fast to South, riaction on Fred was quait normal but seems concern more that his younger brother Richard dont come to know wat was going on.

Before I conlude this letter I would like to ad a little more regarding one of the bigest evidence that surround the incident of my son disappearance, and that is the bigest coincidence of an amateur photographer: Roy Manifold, who took thispicture of an UFO about 20 min. before Fred vanished. Maybe, yourfull knoledge of this, from Paul Norman, however, I've include a clip edited by me from news papers, so you can recognize to wat I refering without me going to the full history.

In your last letter I realize how much unsuccessful you have been tohave a reply from the Dep. of Transport, so I've telephone Mr. Ken Williams as to remember your request, and he realized the great lack to reply, and promise to move on.

Once again I'm sorry not been able to fulfil all your need, but plaase do not hesitate to write again becouse a great part of my existance is based to a solution on the incident of my son Frederick.

Yours sincerely
Guido Valentich
Guido Valentich

Appendix 9

Domestic Flight Plan for Frederick Valentich's Flight

DEPARTMENT OF TRANSPORT

DOMESTIC FLIGHT PLAN

Addressees

Aircraft Ident. DSJ | IFR I | NVFR NV | VFR V | Class of Operation PVT. | ANR 203 | Aircraft Typ C 182

VHF V R. | HF H V. | VOR E | DM

Departure Point MB FOR Landing Points KI – MB. | EDT 0745 | ATD

Route Segments	LSALT	FL or ALT	TAS	TR MAG	Wind	HDG MAG	GS	Dist.	ETI	FLT ETA	ATA	GS	ETA next Pos'n	Flt Proc., etc.
MB.	1500	8050	130		340/15									
CTY.	4000			225		232	135	92	41					
KI.	1500			155		155	145	64	28					
		6050.												
KI.	1500													
					340/15									
CTY.	4000			334		335	115	64	34.					
MB.	1500	8050		045		039	124	92	44.					
									137					

	Alternate	Landing Point	Level	Time Interval	Flight Proc.	Route	LSALT
ALTN	For		/			Via	
ALTN	For		/			Via	
ALTN	For		/			Via	

Remarks: FURTHER SAR TBA.

CLIAS 80 | IAS / | Mach | Survival Beacon LX | Pilot Status L | Captain VALENTICH | Company SAS.

STAGE MB.MB.	Min	Gal/lb	Min	Gal/lb	Min	Gal/lb	Min	Gal/lb	Min	Gal/lb
12										
Climb	10									
Cruise										
Altn										
Sub-Total										
Variable Reserve										
Fixed Reserve	45									
Holding										
Taxi										
Fuel Required	193									
Margin (Cruise rate)										
TOTAL ENDCE	300									

Operational Approval: X 286 F — SAR — Approved ... Air Traffic Controller

GENERAL AVIATION AIRCRAFT	IF NOT ON FULL REPORTING →	Sartime 0930.	For arrival at KI.	To (A.O. Unit) /	By (method)
	SURVIVAL GEAR CARRIED →	☐ First aid	☐ Life jackets	☐ Emergency rations	☐ Water	Other
	PHONE NUMBERS AT LANDING POINTS →			POB /	End of Daylight

REMEMBER TO CANCEL SARWATCH AND OBTAIN ACKNOWLEDGMENT

Appendix 10

Undated Form Letter to Author from Ken Williams, Assistant Director, Public Relations, DOT

2-11-79 10-21-78

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF TRANSPORT

188 QUEEN STREET
MELBOURNE

Telephone: 62 0131 (Area Code 03)
Telegrams: AVIAT, MELBOURNE
Telex: 30499 and 30276
Postal Address: Box 1839Q, G.P.O.
MELBOURNE 3001

In reply quote

Dear Mr Haines,

To begin with, I must apologise for the delay in answering your letter regarding the flight of the Cessna aircraft VH-DGJ which disappeared over Bass Strait on Saturday, 21 October 1978.

Firstly, the pilot of the Cessna held an unrestricted private pilot's licence with a night V.M.C. (visual meteorological conditions) endorsement. This permitted him to operate at night in conditions which enabled him to have constant reference to the ground.

On 21 October, the pilot filed a carefully prepared flight plan with the Briefing Officer at Moorabbin Airport for a private night VMC operation to King Island - and return.

The flight was to be conducted outside controlled airspace.

He planned his course direct from Moorabbin, Victoria's main general aviation airport, across Port Phillip Bay, to Cape Otway, which is the turning and reporting point for light aircraft about to cross Bass Strait to King Island and Tasmania.

The pilot left Moorabbin at 6.19 pm on 21 October and operations to Cape Otway were normal.

At 7 pm the pilot reported to Melbourne Flight Service, at Melbourne Airport, Tullamarine, which was working the flight, that he was over Cape Otway. In the absence of any other comment, it must be assumed that nothing untoward was happening to either the aircraft or the pilot at that time.

The first indication the pilot gave of any unusual circumstances was at 7.06 when he requested information on any known traffic below 5000 feet in his area.

It must be remembered that the flight was being made outside controlled airspace and, therefore, as is normal, no radar watch was maintained on the aircraft.

In any event, the pilot subsequently reported his altitude as 3,000 ft, which at the distance he was from the Melbourne area surveillance Radar head at Melbourne Airport (more than 90 miles) he was below the radar scan.

.../

Appendix 10
(continued)

When the pilot reported unusual aerial phenomena, the Flight Service Supervisor immediately requested Air Traffic Control to make a particular radar sweep to see whether either the aircraft or the phenomena could be tracked.

weather

The night of 21 October was warm and still and temperature inversion was experienced in the Cape Otway area. Additionally, the Otway Ranges hampered the radar scan, as a result, no identifiable return could be seen.

Communication with the aircraft was maintained from the time it left Moorabbin until 7.12:28 (EST) when unidentifiable noises described subsequently as 'metallic', were heard through the aircraft's open microphone and the pilot failed to respond to further calls.

At this time, the Search and Rescue alert phase was upgraded to the distress phase and the Rescue Co-ordination Centre at Melbourne Airport was activated. Arrangements were made to launch a search and rescue mission immediately.

A night search by a light aircraft was made covering the route and the last known position of VH-DSJ but nothing further was seen or heard of the aircraft or its pilot.

Subsequent appeals to the public by radio and the other media for sighting and hearing reports of the aircraft yielded no information relevant to VH-DSJ or the phenomena.

The resulting publicity, however, did generate some public response to the newspapers and the Department from people remote from Cape Otway about 'objects in the sky' over Port Phillip's metropolitan area and along the bayside.

While the Department is still investigating the 'incident' - as no wreckage has been found it is not classified as 'accident' - naturally it has no official comment on the probable cause of the disappearance.

Unofficially, however, and I must stress that this is my personal opinion and not, repeat not, that of the Department - the pilot, 20 years old was not an experienced pilot. He had about 150-200 hours total flying time: held an unrestricted private pilot licence but was working toward a commercial licence.

He had not long held the night VMC rating; his night flying was extremely limited and this was his first night flight over water.

His flight plan, according to the Briefing Officer at Moorabbin Airport, was very carefully prepared for a two way flight to King Island. However, by design or inexperience, he did not arrange to have the King Island aerodrome lights turned on for his arrival, as is usual practice. He had an ETA at King Island of 7.26 pm.

weather

The night was almost cloudless: the air was still and warm, it was a period of moderate humidity and there was haze in the sky. The moon did not rise until about 11 pm.

Appendix 10
(continued)

My opinion is that the inexperienced pilot became disoriented and that that disorientation, coupled with Venus, city light reflections and flashing lighthouses, Cape Otway behind and King Island ahead, created in his mind an illusion that he was being accompanied by a U.F.O.

He then lost altitude and crashed into the water, possibly in a steep turn.

That, anyway, is my private opinion.

The Department has noted the speculation that the pilot may have falsely reported his position for some unknown reason; that he may have crashed in the rugged Otway Range, or that he may have flown to another destination. However, on the facts, the Department has no reason to believe that the pilot was anywhere other than where he reported - over Cape Otway - and that he ditched in Bass Strait.

The aircraft carried fuel for 300 minutes flight giving it an effective range of 1046 kilometres at 130 knots.

In the thorough 4-day search which followed the aircraft's disappearance, seven civil aircraft, a Royal Australian Air Force long-range Orion and several fishing vessels, searched an area of 5000 square nautical miles without sighting any material which could be positively identified as having come from the missing aircraft.

The search was officially suspended on 25 October. However, all aircraft and shipping transitting the area between Cape Otway and King Island or crossing the datum point off Cape Otway have been asked to maintain a watch for possible wreckage.

Should any wreckage be found which can be positively associated with the missing VH-DSJ, the search will be reactivated.

Enclosed is a copy of the radio transmission between the aircraft and the ground covering the relevant section of the flight.

It is interesting to note that the pilot at no time showed any emotion during transmission. His communications were conducted in a 'normal tone'.

I regret that it is Departmental policy not to allow the tape to be replayed to other than official personnel.

The Department's file on the missing VH-DSJ is still open but because no wreckage has been found, its air safety investigators are unable to determine a probable cause of the disappearance and so, without speculation, compile a report of the incident.

Yours sincerely,

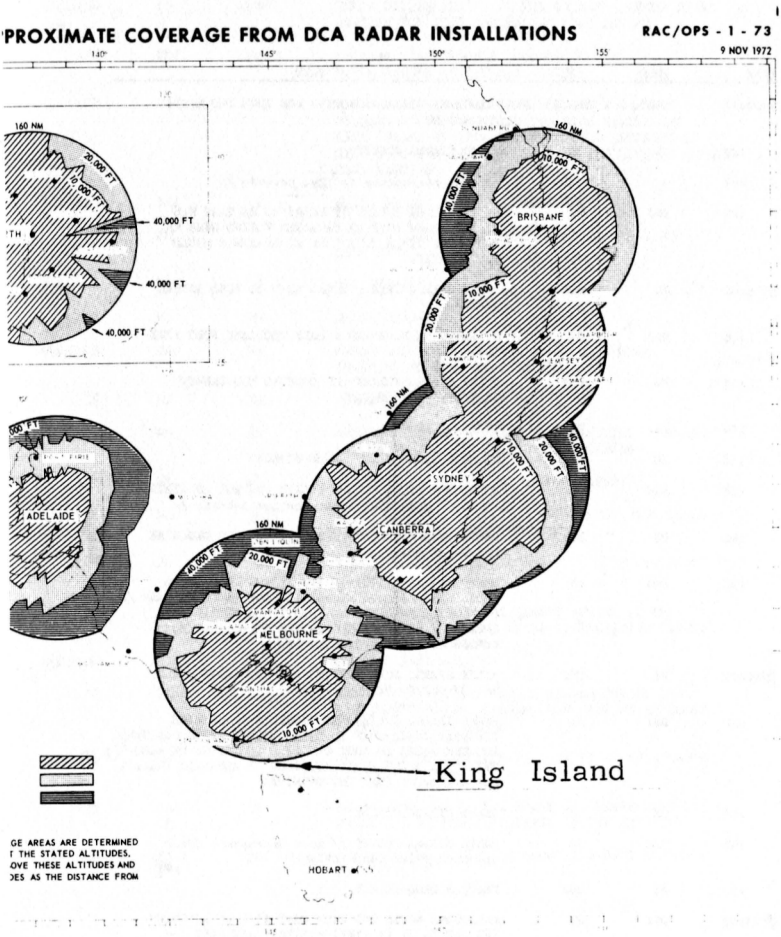
Ken Williams

Ken Williams
Assistant Director
PUBLIC RELATIONS

P.S. Jamie and you the other details you requested when I receive the information from the Commonwealth Bureau of Meteorology.

Appendix 11

Chart Showing Approximate DCA Radar Installation Coverage Dated November 9, 1972



Appendix 12

Transcript of Valentich's Voice Tape as Provided by A. R. Woodward, Assistant Secretary DOT to Roberto Farabone, Bologna, Italy on December 19, 1978

TIME	FROM	TO	TEXT
0908:18	DSJ	FS	MELBOURNE ITS APPROACHING NOW FROM DUE EAST TOWARDS ME
:28	FS	DSJ	DELTA SIERRA JULIET
:42			// open microphone for two seconds //
:49	DSJ	FS	DELTA SIERRA JULIET IT SEEMS TO ME THAT HES PLAYING SOME SORT OF GAME HES FLYING OVER ME TWO THREE TIMES AT A TIME AT SPEEDS I COULD NOT IDENTIFY
0909:02	FS	DSJ	DELTA SIERRA JULIET ROGER WHAT IS YOUR ACTUAL LEVEL
:06	DSJ	FS	MY LEVEL IS FOUR AND A HALF THOUSAND, FOUR FIVE ZERO ZERO
:11	FS	DSJ	DELTA SIERRA JULIET AND CONFIRM YOU CANNOT IDENTIFY THE AIRCRAFT
:14	DSJ	FS	AFFIRMATIVE
:18	FS	DSJ	DELTA SIERRA JULIET ROGER STANDBY
:28	DSJ	FS	MELBOURNE DELTA SIERRA JULIET ITS NOT AN AIRCRAFT IT IS // open microphone for two seconds //
:46	FS	DSJ	DELTA SIERRA JULIET MELBOURNE CAN YOU DESCRIBE THE ER AIRCRAFT
:52	DSJ	FS	DELTA SIERRA JULIET AS ITS FLYING PAST ITS A LONG SHAPE // open microphone for three seconds // (CANNOT) IDENTIFY MORE THAN (THAT IT HAS SUCH SPEED) // open microphone for 5 seconds // ITS BEFORE ME RIGHT NOW MELBOURNE
0910:07	FS	DSJ	DELTA SIERRA JULIET ROGER AND HOW LARGE WOULD THE ER OBJECT BE (CHASING ME)
:20	DSJ	FS	DELTA SIERRA JULIET MELBOURNE IT SEEMS LIKE ITS (STATIONARY) WHAT IM DOING RIGHT NOW IS ORBITING AND THE THING IS JUST ORBITING ON TOP OF ME ALSO (2 sec) ITS GOT A GREEN LIGHT) AND/SORT OF METALLIC (LIKE) ITS ALL SHINY (ON) THE OUTSIDE
:43	FS	DSJ	DELTA SIERRA JULIET
:48	DSJ	FS	DELTA SIERRA JULIET // open microphone for 5 seconds // ITS JUST VANISHED
:57	FS	DSJ	DELTA SIERRA JULIET
0911:03	DSJ	FS	MELBOURNE WOULD YOU KNOW WHAT KIND OF AIRCRAFT IVE GOT IS IT (A TYPE) MILITARY AIRCRAFT

Appendix 12
(continued)

TITLE	FROM	TO	TEXT
0853:30	FS	DSJ	DELTA SIERRA JULIET DO YOU WISH TO EXTEND YOUR SARTIME FOR YOUR ARRIVAL AT KING ISLAND
:38	DSJ	FS	// open microphone 2 seconds // DELTA SIERRA JULIET SAY AGAIN
:42	FS	DSJ	DELTA SIERRA JULIET YOURE HOLDING A SARTIME OF ZERO NINE THREE ZERO FOR YOUR ARRIVAL AT KING ISLAND ON TIME INTERVAL YOUR ESTIMATE IS ZERO NINE TWO EIGHT DYOU WOULD YOU LIKE TO EXTEND YOUR SARTIME
:54	DSJ	FS	DELTA SIERRA JULIET AFFIRMATIVE
:58	FS	DSJ	DELTA SIERRA JULIET ROGER MAKE IT ONE ZERO ZERO ZERO
0854:03	DSJ	FS	AFFIRMATIVE
:05	FS	DSJ	DELTA SIERRA JULIET
0900:29	DSJ	FS	MELBOURNE DELTA SIERRA JULIET CAPE OTWAY (DESCENDING FOR) KING ISLAND
:38	FS	DSJ	DELTA SIERRA JULIET
0906:14	DSJ	FS	MELBOURNE THIS IS DELTA SIERRA JULIET IS THERE ANY KNOWN TRAFFIC BELOW FIVE THOUSAND
:23	FS	DSJ	DELTA SIERRA JULIET NO KNOWN TRAFFIC
:26	DSJ	FS	DELTA SIERRA JULIET I AM SEEMS (TO) BE A LARGE AIRCRAFT BELOW FIVE THOUSAND
:46	FS	DSJ	D D DELTA SIERRA JULIET WHAT TYPE OF AIRCRAFT IS IT
:50	DSJ	FS	DELTA SIERRA JULIET I CANNOT AFFIRM IT IS FOUR BRIGHT IT SEEMS TO ME LIKE LANDING LIGHTS
0907:04	FS	DSJ	DELTA SIERRA JULIET
:32	DSJ	FS	MELBOURNE THIS (IS) DELTA SIERRA JULIET THE AIRCRAFT HAS JUST PASSED OVER OVER ME AT LEAST A THOUSAND FEET ABOVE
:43	FS	DSJ	DELTA SIERRA JULIET ROGER AND IT IT IS A LARGE AIRCRAFT CONFIRM
:47	DSJ	FS	ER UNKNOWN DUE TO THE SPEED ITS TRAVELLING IS THERE ANY AIRFORCE AIRCRAFT IN THE VICINITY
:57	FS	DSJ	DELTA SIERRA JULIET NO KNOWN AIRCRAFT IN THE VICINITY

Appendix 12
(continued)

- 3 -

TIME	FROM	TO	TEXT
:08	FS	DSJ	DELTA SIERRA JULIET CONFIRM THE ER AIRCRAFT JUST VANISHED
:14	DSJ	FS	SAY AGAIN
:17	FS	DSJ	DELTA SIERRA JULIET IS THE AIRCRAFT STILL WITH YOU
:23	DSJ	FS	DELTA SIERRA JULIET (ITS AH NOW) // open microphone 2 seconds // (NOW) APPROACHING FROM THE SOUTHWEST
:37	FS	DSJ	DELTA SIERRA JULIET
:52	DSJ	FS	DELTA SIERRA JULIET THE ENGINE IS IS ROUGH IDLING IVE GOT IT SET AT TWENTY THREE TWENTY FOUR AND THE THING IS (COUGHING)
0912:04	FS	DSJ	DELTA SIERRA JULIET ROGER WHAT ARE YOUR INTENTIONS
:09	DSJ	FS	MY INTENTIONS ARE AH TO GO TO KING ISLAND AH MELBOURNE THAT STRANGE AIRCRAFT IS HOVERING ON TOP OF ME AGAIN // two second open microphone // IT IS HOVERING AND ITS NOT AN AIRCRAFT
:22	FS	DSJ	DELTA SIERRA JULIET
:28	DSJ	FS	DELTA SIERRA JULIET MELBOURNE // 17 seconds open microphone //
1912 :49	FS	DSJ	DELTA SIERRA JULIET MELBOURNE

Appendix 13

"My Son Frederick" by Guido Valentich as Published in the September 1980 Edition of The Australian UFO Bulletin

MY SON FREDERICK

BY GUIDO VALENTICH.

It is my pleasure for this privilege of expressing my own view concerning the disappearance of my son, Frederick, through The Australian UFO Bulletin.

It is almost two years since Frederick vanished, after reporting for the second time "that strange aircraft is hovering" ....2 seconds....."is hovering, and it's not an aircraft". About 8 seconds before radio contact was lost with Melbourne flight service at 1912:20 hours of October 21st, 1978, and for some technical reason my family and I had to learn the following day, Sunday 22nd, on Radio 3AW at 9.30 am, the tragic news of an aircraft disappearance between Cape Otway and King Island. Immediately, I started chasing the Department of Transport officials and after telephoning three different persons, finally had confirmation that it was my own son involved in the particular incident, and then I had to wait till 7.00 pm to know more details on the developments of search and rescue. But in the meantime about 10.30 am, news reporters started calling me and it was then for the first time that I learned that the incident was surrounded by a UFO case. It was on the 6 pm TV news that I saw sub-titles of what Frederick reported on radio and despite the great shock of the day, my wife and myself felt a little relief because we knew that Frederick was a firm believer in UFO's and perhaps he wouldn't mind having a close contact with a UFO.

On Monday, 23rd October, my telephone started ringing as early as 8 o'clock in the morning with an average of 15 min. intervals...calls were coming not only from Melbourne but interstate and also from overseas..U.S.A., New Zealand and Germany. It was in this instant that I realized how important the event was, especially when a person from the U.S.A. telephoned me for 20 minutes to encourage me to believe what Frederick reported, because he also had an experience of a UFO sighting in a remote air strip in the countryside at night. Plus many local calls and letters I've received from various people living near Sale, East Victoria and on the Peninsula who have seen a large light at night illuminating a football oval better than any artificial conventional light by the S.E.C., and in my judgement after about 50 of these encouraging statements from people that I never met concerning the unfortunate circumstances in which I was placed, I can only accept those to be very genuine and honest comments.

However, the Department of Transport was interested in rescue only of pilot in trouble and not saying much about UFO. Only when I asked them they admitted that was a rare case but denied UFO exist and yet they have performed one of the biggest searches for a private pilot, with four different aircraft including an Orion equipped with sophisticated devices such as airborne radar, low level radar and sonor detector and which came all the way from a S.A. R.A.A.F. Base.

Two weeks after Frederick's incident, the Search and Rescue Department from Tullamarine, invited me to their briefing office to show me the structure of four days search which they directed under a pre-calculated search plan. I was introduced to Mr. Eddie, Chief Co-ordinator Rescue, and Mr. Pat Maly, his assistant. In our conversation, there were few theories surrounding the incident which they cannot proclaim an accident, but unofficially (as usual) Mr. Eddie expressed his own opinion. Despite my broken heart from the incident he still said the Cessna simply ditched in the water and within a minute disappeared taking the pilot with it...without first investigating or considering that the long range Cessna 182 being

Appendix 14

Poem "Dear Frederick" by Guido Valentich Adapted by Chris Emmerson and Dated October 21, 1979

'DEAR FREDERICK'

One year now has passed and still,
Upon your return so much will be mystery.

You took off from Moorabbin
Over water so to fly,
From the daylight into darkness
Up near the clouds so high,
Like other pilots you had known
Who had worked hard for their skill,
You'd studied hard and practised long
With such an eager will.

One whole night when by that we
Had not had news of your arrival,
When informed by the authorities
We took fright for your survival,
Many pilots in their fragile craft
Searched Bass Strait, but in vain,
In all our minds your whereabouts
A mystery shall remain.

The stories and assumptions
Of some people still abound,
Who say they know exactly
Just where you can be found,
But they can't explain the reason
For the fact that you're not there,
And they can't explain your message
You transmitted on the air.

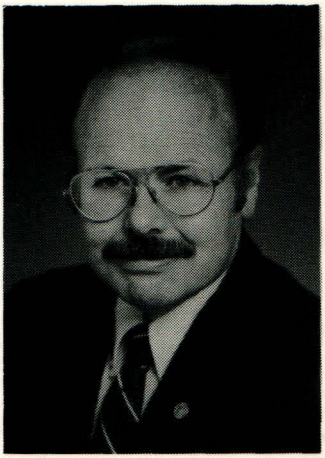
We feel that you'll come back to us
But when is up to you,
We're waiting for you every day
That's all we've left to do,
We're thinking of you Frederick
And we hope you are aware,
That our hearts are always with you
Where you are, no matter where.

21 October, 1979. ADAPTED BY CHRIS EMMERSON

"Melbourne Episode - Case Study of a Missing Pilot" describes one of the most fantastic and bizarre events in the annals of aviation. A young private pilot radioed to Melbourne aviation authorities of an unidentified luminous phenomenon which seemed to approach him, hover nearby, circle over his own airplane and then suddenly vanish. Then the pilot and airplane disappeared without any trace. This book documents the events leading up to this mysterious incident in 1978. With the precision of a research scientist, the author brings his professional investigative background to bear on many seemingly contradictory and unrelated events such as Valentich's long-standing serious intentions to become a commercial pilot versus allegations that he staged the whole incident. Other possibly related facts include the presence of CIA personnel at a super secret base in central Australia and the author's analysis of strange "metallic" sounds made during the last minutes of his radio transmission.

The first half of the book is factual, presenting all of the available information; the second half was comprised of four fictional chapters presenting realistic narratives of what might have taken place that night. The reader must decide for himself which is most likely in this gripping account. Its outcome is both surprising and entertaining.

About the Author



Richard F. Haines, Ph.D., a research scientist for NASA since 1967, has investigated numerous aviation accidents and incidents for the FAA, NTSB, and attorneys. He serves on the Safety and the Human Factors Committees of the Aerospace Medical Association, is a member of the International Society of Air Saftey Investigators, S.A.E., Sigma Xi, and other organizations. Dr. Haines has written two books on UFO topics and over 50 scientific and technical articles and more than 20 serious articles on unidentified aerial phenomena. He holds three US Patents and is cited in Who's Who in America, American Men and Women of Science, Jane's Who's Who in Aviation and Aerospace and 15 others. This book represents his continuing attempt to bring to the attention of his colleagues serious unexplained phenomena. He lives with his wife and two daughters in Los Altos, California.