CRITICAL INCIDENT STRESS DEBRIEFING

INSTRUCTOR "A" THESIS

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Topic

Critical Incident Stress is a profound human psychological and physiological response to traumatic events. The model of Critical Incident Stress Debriefing, developed by Dr Jeffrey T. Mitchell, has been widely adopted by emergency services organisations throughout the world.

Could this model be utilised by the Australian Parachute Federation to provide practical assistance for parachutists who are involved in fatalities or serious injury incidents?

Abstract

The medical affliction of Post Traumatic Stress Disorder has been shown as avoidable in some cases where the initial symptoms of Critical Incident Stress are identified and resolved. Generally CIS is seen as a precursor to PTSD, however, only a small number of persons suffering from CIS symptoms will continue on to develop PTSD. This paper aims at examining the various elements of CIS and PTSD and discusses the necessary components for a successful recovery from exposure to a traumatic event. The major elements examined are those of information, peer support, ventilation and coping skills.

The current Victorian Parachute Council model for dealing with traumatic incidents and the Post Incident Resource Kit that has been issued to every Victorian training drop zone will be examined in some detail. Also, a brief comparison with other states and regions in Australia will be conducted.

The pyscho educational model of Critical Incident Stress Debriefing by Dr Jeffrey T. Mitchell forms the principal part of this paper. The seven stages of the formal CISD are : Introduction, Fact, Thought, Reaction, Symptom, Teaching, and Re-entry phases. Each of these phases, as well as the overall objectives of the CISD process will be critically examined and a possible extrapolation of the process to the Australian Parachute Federation system evaluated.

The less formal process of the mini debrief will be examined and compared in the light of existing custom and traditions in the Australian skydiving fraternity. Many of the identified features of the existing practices can be readily identified in the concept of the mini debrief and it is strongly recommended that these similarities should be built on and developed. The over riding recommendation is that the mini debrief should be incorporated into the APF system with some of the features of the CISD process also being adopted. Such implementation should be administered almost entirely at local or regional council level with the central APF body acting as a facilitator and information resource for the various areas.

In view of the complexity and likely prohibitive cost of adopting the full CISD model into the APF system, it is not recommended that this course be further pursued. However, the relevant and appropriate guidelines and principles of the CISD may well be utilised in the establishment of an appropriate peer support network.

Glossary of Terms and Abbreviations

AAD	Automatic Activation Device - mechanical or electronic device to activate parachute after certain pre-set time or altitude has elapsed.
APA	American Psychiatric Association
APF	Australian Parachute Federation
BASI	Bureau of Air Safety Investigations
CIS	Critical Incident Stress - a psychological and/or physiological reaction to a traumatic event or incident
CISM	Critical Incident Stress Management
CISD	Critical Incident Stress De-Briefing - a formal debriefing of persons who have been involved in a critical incident.
DZSO	Drop Zone Safety Officer - qualified parachutist appointed to oversee safety requirements and compliance with regulations at a parachuting operation
PTSD	Post Traumatic Stress Disorder - a psychiatric condition defined and identified by a specific group of symptoms relating to exposure to a traumatic incident or event.
SAR	Search and Rescue
SARBC	Search and Rescue Society of British Columbia
VPC	Victorian Parachute Council
VSES	Victorian State Emergency Services
"Whuffo"	A skydiving term for a non-skydiving person. Said to originate from the early days of the sport in the United States when parachutists would unexpectedly land in farmers fields. Legend has it that they would be invariably asked the question of "Whuffo you jump outa that airplane?"

1. Introduction

1.1. Overview

Critical Incident Stress (CIS) is an adverse psychological and/or physiological response to specific stressful or traumatic events. Continued or repeated exposure to stressful situations or the failure to effectively resolve the effects of CIS, can result in long term damage to persons affected. In the short term, the disruptive effects of the cognitive dissonance that CIS produces can increase the danger factor in a high risk sport, such as parachuting, to unacceptably high levels.

In recent years emergency services managers around the world have begun to recognise the need to quickly and effectively deal with CIS in order to maintain a healthy and viable workforce. With the recognition that almost 90% of all emergency workers will at some stage of their service be at least once adversely affected by the effects of CIS, **(Mitchell - 1985)**, many organisations are now introducing pro-active programs designed to ensure that early identification of symptoms and appropriate referrals are made.

One of the primary tools in this area is the Critical Incident Stress Debrief (CISD). This technique is based on the principles put forward by Dr Jeffrey T. Mitchell of the University of Maryland, during the mid 1970s. Since the introduction of CISD's at that time, the technique has developed into a formalised debriefing system that is used by hundreds of law enforcement and emergency services agencies throughout the world. The system involves the use of specially trained mental health professionals acting as team leaders of small groups of mobile on call CISD teams. The system relies heavily on peer support and input and at least two members of the CISD are specially trained peer volunteers.

1.2. Aim of Paper

This paper will examine two stress related phenomena arising from the exposure of humans to critical incidents. The features of CIS will be discussed then compared with the more serious affliction of Post Traumatic Stress Disorder (PTSD). Both conditions will be considered in light of the sport of parachuting and some of the particular risk factors peculiar to each examined.

The primary focus of the paper will be centred around the model of CISD established by Dr Mitchell and a close examination made of his techniques and procedures. The purpose of this examination will be to evaluate the value of extrapolating the full CISD program into the Australian Parachute Federation (APF) structure. In determining an appropriate recommendation consideration will be given to the system established in 1994 by the Victorian Parachute Council (VPC) as well as anecdotal and empirical research examining the situation in the various other regions of Australia.

The paper will also examine the relatively recent development of the practice of mini debriefing currently utilised by the Search and Rescue Society of British Columbia and explore possibilities for inclusion in the APF structure.

The paper will conclude with an evaluation of options and appropriate recommendations for the APF to consider in the post management of stress related incidents in the sport of parachuting in Australia.

Much of the material utilised in the research of this paper is based on emergency services experience and practices both in Australia and overseas. This reliance has been made necessary by the fact that these services are the ones most likely to deal with the issues and problems raised by CIS and PTSD. Many emergency services personnel will experience more critical incidents in a single working month than most other occupations will in a lifetime. This constant dealing with high levels of CIS has forced many emergency organisations to critically review their procedures for dealing with the ravaging effects of CIS and PTSD amongst their human resource base. In even the most cursory examination of material concerning traumatology, the emergency services dominated the research material that was available.

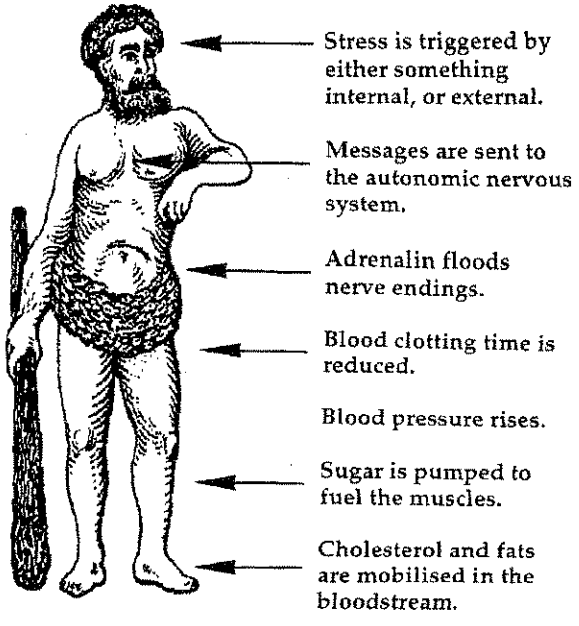
2. Stress

2.1. General Stress Responses

Varying types of stress are integral parts of most facets of modern day living. We are all subjected to different types of stress throughout each day of our lives, and it should be noted that not all stress is bad for us. Stress can be a positive emotion through which it is possible to access and enhance various higher levels of performance. All first jump students will feel higher than usual stress levels, some, to the point where the stress level becomes too high and sensory overload occurs. When stress levels are at these higher levels their performance is almost invariably adversely affected and techniques such as over-learning the reserve procedures must be utilised in order to ensure the safe conduct of the jump.

This type of stress is usually only of short duration and once the jump is completed the euphoria of the adrenalin rush that the stress has created overcomes the negative feelings of fear and dysfunctionality. The over-excited, babbling first jumper who has just safely landed provides instructors with a constant example of this dramatic change in stress functions and response. The student's body has reacted to a perceived great danger (falling from an aircraft for the first time) and produced masses of chemicals to initiate an automatic response. When this response is inappropriate or the danger is perceived to have passed (they survive the jump) then these chemicals are still in their system and effect the brain with waves of euphoria and pleasant feelings whilst they return back to normal, non aroused levels. This physically based chemical response has been well documented as occurring in a variety of stress related experiences in human beings.

The human body is the ongoing result of tens of thousands of years of evolution and has developed a number of these in built physiological responses to situations that are perceived as either threatening or dangerous. Once the human brain is triggered to respond to a stressor then certain specific automatic physiological responses occur. These stressors may be either external, i.e. a perceived danger such as a parachute malfunction, or internal, such as excessive worrying about past performances. In either case, the body recognises the warning signs and commences to react. The basis of these reactions can be traced back to prehistoric learning processes where the basic option to the threatened caveman was either "flight or fight". Put simply, the response that the body anticipated was that the brain is about to make a cognitive decision to either stand ground and fight the threat, or else it would perceive the threat was of too high a magnitude and physiologically prepare the body to run away.



(©Reprinted with the kind permission of Dr Michael Tunnecliffe)

The advantage to the evolving human species with the "flight or fight" option was that the automatic response of the brain was identical, regardless of what the eventual conscious decision of the brain was to be. Whether the body was going to fight or run, the same chemical stimulants from the brain were released.

Upon perceiving a stressful situation (i.e. danger), the hypothalamus region of the brain is activated and the pituitary glands begin the secretion of adrenalin. The influx of adrenalin into the blood stream raises the heart rate and blood pressure of the person. Additional sugar is released into the blood stream and is pumped to the muscle areas. As well, cholesterol and fats are released into the blood stream and the body is now primed for immediate physical action. It now remains for the cognitive section of the brain to determine what this action will be, i.e. "flight or fight".

All of these responses are primal in nature, and the conscious mind has little or no control over their activation. The problem occurs when these stress reactions of the body occur over long periods of time and there is no physical outlet or psychological resolution of the perceived threat.

> "The effect of prolonged stress on mice has been long known - their adrenal glands, which release the hormones, become discoloured and distended. Their thyroid and lymph nodes shrivel and their stomachs break out in bleeding ulcers. The risks for prolonged stress are as high for humans. Heart attacks are the most common outcome, caused by rapid irregular beating of the heart and damage to the walls of the arteries from the high levels of adrenalin and cholesterol." **(Smith - 1994)**

The importance of the early recognition of the physical signs and symptoms of stress will become more evident in the later evaluation of debriefing techniques.

2.2. Critical Incident Stress

Critical incident stress is a symptomatic response to a specific traumatic event in an individual's immediate or recent past. Historically the symptoms of CIS have been associated with an individual's exposure to war and combat situations. In 1871 during the American Civil War Dr DaCosta identified a condition amongst the combatants he described as "irritable heart". In his descriptions most modern commentators would easily identify some of the symptoms of acute anxiety in response to overwhelming stressors. **(Andreasen - 1985)**

By the time of World War One (1914-1918) the condition was described as "shell shock" and of the 80,000 front line Allied troops who were treated for mental disorders during and following the conflict, most were diagnosed as simply "shell shocked". **(Spillane - 1990)**

Similar diagnoses were made of veterans returning from World War Two, (1939-1945), although by now the influence of modern psychiatric medicine was starting to show. Accordingly, these troops were diagnosed as suffering from previously unresolved subconscious conflicts that were triggered by their horrific combat experiences. The various labels given to these patients included "traumatic war neurosis", "combat neurosis" and "gross stress reaction". **(Andreasen - 1985)** By 1945, 111,000 American troops had been diagnosed as suffering from these types of "combat fatigue".

As the available literature and research on combat veterans continued to grow throughout the early 1950's a number of researchers began to observe and describe similar symptoms in patients who had been exposed to overwhelming stressors during peace time. Patients who had experienced horrendous industrial accidents, natural catastrophes or major fires also reported very similar cognitive and emotional responses to those of the combat veterans. Accordingly in 1952 "gross stress

reaction" was included for the first time in the standard text of the "Diagnostic and Statistical Manual of Mental Disorders", which was the diagnostic reference commonly used to identify mental disorders. **(Rosine - 1996)**

By the time that the next generation of combat veterans began returning home from Vietnam, the condition, (by whatever name it was referred to), was well established as a specific reaction to overwhelming or horrendous stressors.

As mentioned previously, this paper focuses on the specific variation of stress reaction known as Critical Incident Stress. If undetected or unresolved by the individual, CIS can develop into the more serious disorder known as Post Traumatic Stress Disorder. CIS differs from the mere physiological responses to stress as it manifests in three separate but connected areas of the individual. CIS may present any or some physical, cognitive or emotional symptoms.

CIS is, by definition, a response to a specific critical incident, although the onset is markedly enhanced by either repeated exposure to similar incidents or even to other stressors that may be unconnected but still affecting the individual concerned. CIS is therefore a cumulative responder and factors in an individual's life that appear unconnected may, nonetheless, be having an additional effect on what appears to be the central critical incident.

Critical incidents are typically identified as sudden powerful events that fall outside the range of ordinary human experiences and would therefore be considered most likely to be extremely distressing to almost anyone similarly exposed to the incident. **(Kureczka - 1996)**

Hence, a critical incident will generally involve totally unexpected emotional trauma to the individual in a manner that could not possibly have been predicted or foreseen. Any actual definition of precisely what constitutes a critical incident must remain somewhat fluid and open. What effects one participant involved in a traumatic experience may not have any effect at all on the person standing alongside. Alternatively the same incident may well precipitate entirely opposite responses from persons who each received an identical amount of exposure.

Although there is a cumulative effect of CIS it should not be confused with the day to day accumulation of stressors and worries that most people can adequately cope with. Typical CIS will involve a major single catastrophic event that was experienced or witnessed by the persons involved. This incident may in turn act as a catalyst for the manifestation of symptoms that are in fact more directly related to previous exposures that the individual may have experienced. Alternatively, the critical incident may, in itself, be so overpowering that the individual's defence and coping mechanisms are overcome.

In either case, CIS can be recognised by the extraordinary emotion produced that overwhelms the normal coping ability and skills of an affected individual. Such a

response will generally occur immediately at or soon after the critical event occurring.

2.3. Critical Incident Stress and Parachuting

In the sport of parachuting CIS is most likely to be encountered after involvement with a fatality or serious injury incident. Occurrences of fatalities provide convincing examples of the powerful emotional trauma that can be caused to both participants (i.e. investigators, instructors, or drop zone staff) as well as by-standers who, although not directly involved, may be just as adversely affected.

Skydivers suffering from relatively prolonged bouts of CIS are exposed to considerable personal risk until the underlying trauma problems are identified and resolved. Erratic emotional responses to otherwise innocuous stimuli can create hazardous situations and poor judgement. Personnel in positions of responsibility, such as instructors or DZSOs, need to be in full control of their mental and emotional facilities. The effects of CIS in these people could adversely affect their judgement in determining the safe parameters of parachuting operations under their control.

On a more individual level, the adverse effects of CIS in the cognitive area of the brain functions could also lead to disaster. A person badly affected by this type of stress may experience considerable difficulty in performing even the most routine of tasks - even those tasks that they have personally performed hundreds, if not thousands, of times before. Routine tasks such as turning on and calibrating an AAD, performing a 4 line check after a canopy has been disconnected, or even recalling the correct sequence of a reserve deployment drill, can all become very difficult, if not impossible, for a badly stressed parachutist.

Many of the signs and symptoms of the emotional, cognitive and physical elements of CIS are further discussed in detail in the VPC Traumatic Event Information Sheet, (Appendix A)

Parachuting is a sport that requires constant vigilance and awareness by all participants. Clearly, extreme manifestations of CIS have the potential to disrupt the sport and lower the safety standards of parachuting operations. Taking this into account, it becomes apparent it is in the interests of all participants of the sport to see that these concerns are addressed. CIS need not be a major problem if it is correctly (and quickly) identified and resolved.

Failure to properly address the issues of CIS as soon as possible after the event creates a potential safety hazard for everybody on the drop zone as well as exposes the individuals involved to the risk of developing the condition of Post Traumatic Stress Disorder. As many of the features later displayed in PTSD will also be present as precursors in the symptoms of CIS, a closer examination of the predominant features of PTSD will now be conducted.

3. Post Traumatic Stress Disorder

3.1. Medical Definition

Unresolved emotional stress following a critical incident exposure (or a culmination of critical incidents and other factors affecting the individuals life) can result in the onset of Post Traumatic Stress Disorder. This term is the common medical diagnostic category used to describe symptoms typically arising from an emotionally traumatic event. The American Psychiatric Association has defined PTSD as "...the development of characteristic symptoms following a psychologically disturbing event that is outside the range of human experience." **(APA - 1994**)

The symptoms of PTSD are far more intrusive and debilitating than CIS and will often require long term professional counselling and possibly medication to be effectively resolved.

3.2. Symptoms of PTSD

The three main symptom clusters in PTSD are :

(a) **Intrusive recollections** - where the person suffers uncontrolled memories of the traumatic incident. The repeated re-experiencing of the event may take place in either the fully conscious state or manifest as nightmares during sleep. These intrusions may be so severe that the person begins to develop fear and anxiety responses in anticipation that the traumatic event, or one similar, is about to recur.

(b) **Avoidance** - occurs when the person begins to actively reduce their exposure to either people, objects or places that might trigger off intrusive recollections. These withdrawal strategies can include attempts to not even think about or feel emotions that may remind them of the event. Frequently, substance abuse is used by the person (i.e. excessive use of alcohol and/or other drugs) to deaden their sense of general perception of their immediate reality, thereby limiting opportunities to experience the unwanted intrusive memories. Severe avoidance symptoms can result in the cessation of former social ties and a marked withdrawal of contact with family and friends. Clinical depression is often the final result of this cluster of symptoms.

(c) **Hyper-arousal** - involves the physiological signs of increased arousal such as exaggerated startle response, or hyper-vigilance. In this cluster the person affected will feel in a constant state of high readiness, always anticipating and expecting immediate danger. The long term physiological results of hyper-arousal can include increased heart attack risk caused by the rapid and irregular beating of the heart as well as

damage to the walls of the arteries caused by the prolonged high levels of adrenalins and cholesterol in the blood stream. **(Baldwin - 1996)**

It should be emphasised here that these symptoms must persist for a period longer than 30 days before a formal diagnosis of PTSD is possible. Many persons suffering from CIS will experience some, if not all of the elements of these symptom clusters. However, it is only in a few extreme and persistent cases that PTSD or associated disorders will develop. PTSD is considered a prototypical traumatic disorder, but other variations on the theme of trauma include the emergence of related disorders such as depression, anxiety or dissociation. **(Baldwin - 1996)**

If not correctly diagnosed and treated then strategies that may have been considered as normal coping mechanisms may develop into disorders. For example most people will acknowledge that they will dissociate to some degree from unpleasant or traumatic events. That is, they simply choose to mentally dissociate themselves from the event. However, at the extreme end of the scale, over-dissociation can develop into Dissociative Identity Disorder, which is a very complex personality disorder requiring highly specialised treatment. The APA officially lists PTSD as an anxiety disorder, however there is some professional argument that it should be listed with the dissociative disorders.

In any case, PTSD, is a psychiatric condition that requires professional medical and psychiatric help in order to be resolved or contained. It is not within the scope of this paper to cover various treatment regimes or theories. It is sufficient to recognise PTSD as a psychiatric disorder which has the very serious potential to adversely effect the sufferer.

3.3. Long Term Risks

Long term PTSD is believed to adversely effect the somatic memory in which the recollection of the trauma is stored. A particular danger is that all of these effects tend to be cumulative within the body and mind of the person affected. In his article, "The Body Keeps Score", B.A. Vanderkolk demonstrates the co-relationship between all three major symptom clusters.

> "...Continued physiological hyper-arousal and altered stress hormone secretion affect the ongoing evaluation of sensory stimuli as well. Although memory is ordinarily an active and constructive process, in PTSD failure of declarative memory may lead to organisation of the trauma on a somatosensory level (as visual images or physical sensations) that is relatively impervious to change. The inability of people with PTSD to integrate traumatic experiences and their tendency, instead, to continuously relive the past are mirrored hormonally in the misinterpretation of innocuous stimuli as potential threats..."
>
> **(Vanderkolk - 1994)**

Repeated, multiple or chronic exposure to traumatic events will increase the likelihood of PTSD and such repeated exposures are likely to create a disorder regime that is much harder to effectively treat. Epidemiological estimates concerning the rate of occurrence of PTSD place the American general population at about 1% risk of developing PTSD after exposure to a critical incident. **(Baldwin - 1996)** However, this risk factor rises to between 4% and 10% for American law enforcement officers. **(Blak - 1991)** This much higher rate of risk in law enforcement officers is directly attributable to the continued exposure of such persons to critical incidents.

However, a number of positive strategies can be adopted in order to reduce the risk of PTSD developing from exposure to critical incidents. Four of the major recognised components for a successful CIS recovery program are information, peer support, ventilation of feelings and the development of coping skills.

4. Components for Critical Incident Recovery

4.1. Information

There is overwhelming evidence to indicate that persons exposed to a critical incident and who receive accurate and timely information about the likely consequences of such exposure are more prone to making quick and successful recoveries from CIS. As stated previously, the proper resolution of CIS can prevent the development of PTSD and must therefore be a high priority in any stress management program.

Those persons exposed to a traumatic event who do not have information concerning the likely consequences may believe that they are experiencing some form of mental illness or incapacity. The cognitive dysfunctionality and overwhelming emotions can themselves be sources of increased anxiety and fear. These symptoms will require addressing before effective attention can be directed to the root cause of the CIS being suffered.

Accurate information from such sources as the booklet from The National Trauma Clinic, "Trauma and Its Consequences", can provide people with the information that they need to understand the probable symptoms and will enable them to better cope with the various stages of the psychological process they are being forced to undertake.

The concept of disseminating information detailing CIS symptoms as wide as possible has been recently further developed by the Victorian State Emergency Service (VSES). In a pilot program launched in early 1996 in the south eastern suburbs of Melbourne, all local police and VSES volunteers were issued with information cards designed to be given to non-participants (i.e. witnesses who were not injured) who were present at road trauma incidents. A copy of the card is attached at Appendix "B" This card provides very basic information regarding CIS

symptoms as well as 24 hour referral contact numbers. At the time of writing the program was yet to be fully assessed, however anecdotal evidence from the regional VSES as well as police in the area, was very positive, whilst acknowledging that actual results would be very difficult to quantify. **(Cosgriff - 1996)**

4.2. Peer Support

Almost every emergency service in Australia that has developed some form of CIS management strategy that includes a component of peer support. The Victorian Ambulance Service has a core group of 75 trained peers who work in conjunction with 22 specially trained mental health professionals. The group offers sessional work for affected employees, a 24 hour crisis line staffed by volunteer peer workers and various referral avenues. Overall management of the scheme is provided by a full time peer co-ordinator and a quarter time clinical director. In a similar vein, the VSES has a core group of 36 trained peer volunteers and two on call psychologists. Both systems operate closely along the guidelines of Dr. Jeffrey Mitchell's CISD program and recognise the value of the peer supporters in the CISD process. **(Robinson et al - 1995)**

The NSW Fire Brigade also relies heavily on volunteer peer involvement with a group of 34 peers supported by an industrial chaplain and co-ordinated by a full time clinical director. The emphasis of this team is particularly on early intervention tactics and education of non-affected employees. The rationale behind educating non-affected personnel is that a well informed and prepared person is less likely to be adversely affected by CIS symptoms as their prior knowledge has provided them with built in coping strategies. The emphasis from the NSW Fire Brigade group is definitely on reaching out to employees and not just waiting for calls after incidents. The pro-activeness linked with the credibility of peer involvement has proven to be a successful combination. The motto of the group has been well circulated in internal publications and memos throughout the Brigade:

> *"If in a spin, give us a ring - if in doubt, let's talk it out."*

All such promotions are also coupled with assurances of confidentiality and trust that can only really be obtained through genuine peer involvement.

(Fire News - Winter 1996)

From a skydivers perspective, the element of peer support would be crucial to the success of any form of CIS management strategy. Parachutists traditionally view themselves as somewhat "living on the edge" personalities who engage in risk taking adventure activities. Possibly this attitude is a legacy from the early "barnstorming" showmen of the 1920s who went around the rural communities of the United States promoting the dare devil antics of their wing walking and skydiving acts. Whatever the origins the attitude is prevalent throughout the sport and, in common with many similar adventure sports, parachuting tends to "self select" personalities who have

high tolerance to certain types of stress and enjoy continued participation in adrenalin based activities.

This type of selection process can leave parachutists at a somewhat greater risk of severe adverse psychological reactions to the initial stages of CIS. Personalities who believe they are invulnerable to the effects of stress encounter far greater difficulty in dealing with the uncontrolled cognitive, emotional or physical symptoms of CIS when they begin to appear. At this point the value of the peer support element is recognised. Most skydivers will feel far more comfortable discussing their emotional and other responses to a traumatic event with other skydivers. The common bond of parachuting already exists and is strengthened when similar experiences and feelings are discussed.

From an anecdotal perspective I was involved in a parachuting fatality several years ago and was directed by my employer to attend a counselling session prior to recommencing duty. This was a standard practice at that time for all state employed emergency services workers involved in a traumatic death incident. I attended the session as directed and was greeted by a young counsellor whose first words were to jokingly question the "...sanity of anyone who would jump out of a perfectly serviceable aeroplane..." Most parachutists have heard this phrase and it created an instant sense of non empathy between myself and this counsellor. To me he became just another "whuffo" with whom I felt absolutely no empathy or interest in discussing my feelings about the incident with. I tolerated the single mandatory session and left as soon as possible.

Appropriate peer support and input into the counselling process would greatly reduce the possibility of such an attitude from a counsellor.

4.3. Ventilation

Detailed discussion of a traumatic event is an important element of successful post trauma recovery and yet it is often the area that is most actively avoided by the persons involved, as well as families and friends. Many friends go to great lengths to avoid mentioning anything that may remind the affected person of the incident. The phrase, "You've just got to put this behind you and get on with your life..." is often used to terminate any discussion of the incident or its effects. Although the motives of such avoidance are well intentioned the bottling up of emotion and information can often be quite harmful to persons involved in coping with CIS.

Ventilation is a valuable tool in enabling those involved to learn more about the event and how to understand and cope with their feelings towards it. People who are given the opportunity to openly discuss the experience and more likely to feel support from those listening to them. Such opening up also provides the chance to learn more about the incident from the perspective of some of the other participants. Correctly managed, this process may well relieve some participants of unnecessary guilt feelings they may be experiencing when they are provided with accurate

information about the event. Simply "not talking about it" denies them the chance to learn from the experience.

Also, people who are able to openly discuss their experience, reactions and feelings in a non-judgemental environment, are more likely to be able to recognise the changes in themselves and with this understanding be able to develop appropriate, positive, coping skills.

Again, returning to my experience following a fatality, not surprisingly, I personally received far more benefit and comfort from talking about my reactions and feelings with other parachutists, particularly instructors who telephoned or visited me soon after the event. Although not realising it at the time, I was in fact benefiting from the opportunity to ventilate my feelings and the support of my peers made this process much easier.

4.4. Coping Skills

Having accepted that many of the symptoms of CIS are normal reactions to the overwhelming effect of a traumatic event, the final phase of recovery should concentrate on imparting coping skills to the individuals who have been affected. Every person affected by CIS will develop some form of coping mechanism to allow them to adjust to their new reality. However, some of these mechanisms may be negative in nature and, rather than assisting in resolving the situation, instead will prolong the effects of CIS, and possibly lead the person further down the path towards PTSD.

Many of the common mental defence strategies are those which are denial based. The affected person may channel energy into mentally denying that the event took place, thereby creating a withdrawal reaction from all persons, places or events that may remind them of the true state of their current reality. Although research in this area of negative coping strategies is limited, such approaches are common and generally thought to have no negative implications if only utilised in the short term or early stages following the event.

However, the long term effectiveness of denial based strategies is at best questionable and some research goes so far as to indicate that continual denial of a situation can lead to severe displacement behaviours which are counter productive to the recovery of the individual. Such severe displacement behaviour may include alcohol and substance abuse, domestic violence or continual loss or temper and control. **(Tunnecliffe - 1995)**

To be successful the final recovery component must effectively pass on positive long term coping skills that the individual can assimilate into their every day practices and thought patterns. Such skills will be tailored by the individual to suit their own beliefs and feelings towards the critical incident.

Effective coping skills include techniques such as:

- acknowledgment that the incident has had an effect
- thought stopping and concentration re-direction
- anger control and management techniques
- participation in support groups
- utilisation of mental imagery processes
- sleep pattern re-establishment techniques
- use of positive self talk and self imagery
- returning to work or normal routine as soon as possible

Professional counselling and advice may be necessary for some people to understand and adapt some of these coping skills to their specific needs. However many are not technically complicated and the mere provision of the information, coupled with a basic understanding of CIS, is often enough to aid the person through the recovery process

5. Victorian Parachute Council Model

5.1. History

In late 1993 a senior member of the APF was killed in a parachuting accident at the Corowa drop zone in the region of the VPC. Approximately four weeks later a first jump student also died at the same drop zone location. Several members of the APF were unfortunate enough to be involved in both incidents. Also, a number of personnel were who were just recovering from the initial tragedy were forcefully reminded of their situation when the second incident occurred. Several of these jumpers reported significant and disturbing flash backs and cognitive dissonance as a result of the second fatality.

In response to this situation the VPC arranged for trauma counselling for several APF members. Unfortunately there was no standing plan or procedure in place to deal with this type of situation and there was no accountability placed on the expenditure of council funds. This resulted in substantial amounts of money being paid for counselling, which was certainly needed, but was not the intention of the VPC to solely finance. In evaluating the benefits of the council's actions it was found that those members who had been helped had benefited greatly from the provision of professional counselling as well as the informal peer support network that existed throughout Australia. Accordingly the VPC established a protocol to ensure that future events of this nature would be handled more efficiently.

5.2. Protocol

The protocol aimed at a balanced approach to CIS management that ensured immediate service is available for affected jumpers. The protocol aimed at three main areas of action:

(a) Preparation for future incidents.

This facet recognised that immediately following a parachuting fatality is not the time to start thinking about what counselling or post incident resources are going to be required. Experience taught the VPC that it required reliable accurate information to be on site at all drop zones so that it would be readily accessible in the event of a fatality or serious injury occurring.

This information was designed to provide a simple format to enable jumpers to prepare for the normal psychological reactions that they could expect following a critical incident. The information was contained in a Post Incident Resource Kit provided by the VPC to every training drop zone through the relevant Chief Instructor. These kits were provided free of charge by the VPC and yearly up dates are provided to ensure the currency of information.

The preparation phase also involved the establishment of supportive peer network throughout the region. A number of experienced jumpers who had previously been involved in fatalities or other critical incidents involving parachuting, were contacted and agreed to provide peer support to affected persons if required. This phase recognised the existing, but informal, structure that largely ensures that peer support takes place. Three VPC representatives were allocated the responsibility of ensuring that this peer support network it made available to affected jumpers. These representatives were also given the authority of the council to implement the following two stages.

(b) Debriefings

The VPC representatives are authorised to arrange, at council expense, for a professional trauma counsellor to attend anywhere in Victoria to conduct a debriefing of all persons present. This type of debrief is not necessarily along the lines of a formal CISD but rather aims at providing people with the necessary information to gain a basic understanding of some likely reaction symptoms that may occur in themselves or others. The debrief also provides additional referral material so that individual counselling can be arranged if required.

The current arrangements allow for trained counsellors to be on-site as required 24 hours a day throughout the Victorian region. These counsellors are regionally based through the National Trauma Clinic. To date, this service has not been utilised, however these standing arrangements exist in the event that an urgent professional debriefing may be required.

(c) Individual counselling

The final aspect of the VPC standing plan involves the provision of access to trained trauma counsellors for individuals who may later experience the debilitating effects

of CIS following a traumatic incident at a drop zone. The three VPC representatives are authorised to arrange two counselling sessions with accredited trauma counsellors. The VPC has undertaken to meet the cost of these sessions. The representatives can also arrange low cost additional sessions at the expense of the individual involved if further counselling is required. Current costs range between $10 and $40 per hourly sessions. Most providers charge on an ability to pay basis and many will provide free counselling that is referred to them through a local community health centre.

The overall objective of the VPC protocol has been to provide members with the necessary information to begin the recovery process following a traumatic event. This initial information is then able to be supplemented by formal debriefing or individual counselling as required.

5.3. Post Incident Resource Kit

The central feature of the VPC strategy is the Post Incident Resource Kit. This comprises an A4 folder of plastic inserts containing various items of information. A copy of the kit was provided to each training organisation in 1994 and is updated on a yearly basis. The updating was found to be necessary as various institutions and services change telephone numbers and contact persons fairly frequently.

It was recommended that the kit be left at the drop zone in a discreet location where it can be readily accessed by staff who may require it. Most drop zones keep the material behind the manifest or in the proximity of the APF incident book.

Each kit is comprised of the following documents:

- Explanatory letter to Chief Instructor
- VPC representatives contact telephone numbers
- Copies of the Traumatic Events Information Sheet (with contact numbers)
- Guidelines for conducting a "Mini debriefing"
- Support material from "Lifeline"
- Support material from "Griefline"
- Copy of booklet "Experiences of Grief"
- Copy of booklet "Trauma and its Consequences" (National Trauma Clinic)
- Individual numbers and contact persons specific to the area of the drop zone
- Copy of booklet "Aircraft Crash Procedures for Police Officers and Emergency Personnel" from Bureau of Air Safety

5.4. Shortcomings of the VPC Model

Many of the initial shortcomings of the VPC's response to the two fatalities at Corowa have been overcome by the adoption of the above protocol. When the council initially agreed to pay for counselling for affected members there was no limit

on the number of sessions, nor any quality assurance as the type or qualifications of the counsellor engaged. As a consequence a substantial amount of money was committed without any vetting process being administered. The delegation of council authority to the three representatives has ensured that in the future only qualified personnel are used and the limit of two sessions protects the financial integrity of the program.

However, despite these improvements, several areas of deficiency still exist and act to limit the overall effectiveness of the plan.

Firstly, the plan is physically restricted to the Victorian region. In setting up the framework the VPC restricted access to jumpers who are registered within the Victorian region. This may act as a limiting factor for interstate or international jumpers who happen to be present at a critical incident whilst in Victoria. In immediate practical terms, this is unlikely to cause difficulty, as the spirit of the plan was certainly not to exclude any APF member merely because of their affiliation to another state or region. The current interpretation is that any APF member who needs this type of assistance arising from an incident in Victoria will receive help and the VPC will pay the expenses incurred. However, there nonetheless remains the restriction in council minutes and future administrators may not be so liberal in their interpretation. Some type of national plan or protocol with established interstate reciprocal agreements would overcome this difficulty.

Secondly, the plan relies on the continued input of a few dedicated individuals. For the protocol to be workable and effective, the information provided must be absolutely reliable and up to date. Outdated or inaccurate information at the time of a crisis occurring may be the direct cause of an increase in stress and trauma and not the intended reverse. Of course, many similar projects, such as coaching or judging, equally rely on the drive of individual members, and in this respect, the VPC plan is by no means unique.

Finally, the VPC plan remains outside the formal APF instructor syllabus framework. This means that new instructors are not automatically informed as to the availability of these resources. A recent straw poll conducted by myself at two major drop zones revealed that of 12 Victorian jumpmasters who had received their ratings in the past 18 months, only one was aware of the existence of the kit, and he was unable to offer any information as to how he would be able to access it following a critical incident.

Again, this type of situation is by no means unique to the VPC standing plan. The Victorian Ambulance Service provides a world class crisis line for immediate accessibility to peer support groups and professional counsellors. 96% of ambulance officers in a recent survey were well aware of the service that is available to them, however only 41% actually knew how to access it. **(Robinson et al - 1995)**

6. Other Australian Regions Policies and Procedures

6.1. Other Formal Policies in Australia

During the research for this paper, all APF regional councils were contacted and inquiries made concerning the specific policies or practices that may exist in their particular region. These inquiries immediately revealed that there is no other formal system to arrange trauma counselling, facilitate debriefs or provide trauma/stress information to parachutists who may have been involved in a critical incident. The VPC model is the only operating system in Australia. Several council representatives contacted stated that they were aware of the Victorian system, having being present at the 1995 APF Technical Conference in Sydney where the Chairman of the VPC, Terry Smith, gave a brief presentation on the concept. One council has formally placed the matter on their agenda but to date has not made any further progress in establishing a system.

In view of the relative infrequency of critical incidents in the sport throughout Australia, this lack of preparedness is not surprising. Indeed, the primary motivation behind the VPC establishing a standing plan, was the series of fatalities and serious injuries in the state that occurred in such a short period of time during 1993-1994. Arguably, had these tragedies not occurred so close to each other, then it is most likely that the VPC would also have not seen any particular need to act in the manner that it did.

Although some of the regional council Chairpersons contacted expressed some concern as to the possible cost of such a scheme being implemented in their area, all expressed interest in learning more about the concept.

6.2. Existing Practices Following a Critical Incident

Although Victoria is the only region currently with a standing plan for dealing with critical incidents with regard to trauma and stress counselling, there nonetheless exists a fairly uniform practice of dealing with such events throughout the sport in general.

A substantial amount of anecdotal evidence, as well as personal experience, indicates that a number of similar features are to be found in post critical incident behaviour at drop zones throughout Australia. Many of these reactions, if analysed by the participants, would be seen as a perfectly "natural" response to the emotional trauma of the incident, and, in effect, they are precisely that.

The APF has instilled into the instructor network the appropriate responses by senior APF members to deal with the immediate problems of a critical incident. The Area Safety Officer, Chief Instructor, DZSO, and other instructor rating holders are all well aware of the need to preserve the scene and equipment at any serious incident and the liaison with investigating officials from such agencies as local police or BASI is

fairly well established. The APF Instructor's Manual contains specific procedures to be followed and all instructors are exposed to this when obtaining or revalidating their ratings.

However, once the initial response phase is completed and the body/injured person has been removed the "official" nature of the incident decreases and individuals generally begin to feel the emotional effects of what they have just experienced. In the majority of incidents examined or described for this paper a consistent formula of response was noticed. The following points were common to many of the critical incidents experienced by parachutists in recent years in Australia.

(1) An informal meeting of persons present at the incident or otherwise involved is generally held. This meeting is usually instigated by one of the senior instructors present at the scene and generally held at the drop zone where the incident occurred.

(2) Generally, the meeting occurs within hours of the initial response to the incident being completed - therefore, usually on the same day or early the following morning.

(3) Some of these meetings have simply been an information sharing exercise amongst those present, others have specifically sought to reassure participants of specific facts surrounding the incident, i.e. to reassure other first jump students following a student fatality. In either case there is generally a leadership role adopted by some person in authority at the drop zone. This person could be the Chief Instructor, DZSO or perhaps the DZ operator.

(4) In the event that no such person has taken the lead and arranged any type of group meeting, there has still been an overwhelming tendency for people to simply sit around and talk about the incident. Again, at these early stages the emphasis of these discussions tends to focus on establishing what went wrong to cause the tragedy and not on how people are feeling about the incident.

(5) There is a tradition of getting aircraft and jumpers back in the air as soon as possible following a fatality or serious injury. This is generally believed to aid in restoring both personal confidence as well as restoring a feeling of normality around the drop zone.

(6) There is also a tradition of alcohol being consumed (sometimes in large quantities) at such group gatherings. Also, depending on the culture of the particular drop zone, the use of illicit substances, i.e. Indian hemp smoking, is often used to help people deal with their initial responses to the trauma.

6.3. National Response to Critical Incidents

The essentially local nature of most responses to critical incidents does not entirely exclude the APF from assisting members in its role as the national administrator of the sport in Australia. However, no formal standardised response plan to critical incidents exists at this point in time. The current APF response to critical incidents tends to be a rather "ad hoc" reaction that involves the National Examiner contacting local officials (generally the DZ operator and local council representatives) and ensuring that some form of counselling has been either arranged or offered to potentially traumatised persons. This tends to be a fairly effective system that is appropriate for the level of assistance that could be expected from the generally geographically remote Canberra base of the APF.

However, this approach has several weaknesses that may adversely affect future effectiveness.

There is no formalised structure to ensure that counselling is arranged and, where appropriate, paid for by the APF. Currently the National Examiner is the one who performs this task, but, as often is the case with informal arrangements, there is no guarantee that someone will remember to do the job for him if he is somehow not available. The lack of formalised guidelines could cause a lapse in the quality of the service provided for jumpers when they most need it. There is also no specific budget to finance any required counselling or other assistance, the current funding arrangements being met from a fund in the APF for "Serious Accident Investigation". Other APF officers have access to this fund, i.e. Area Safety Officers, and therefore there is no guarantee that funds will be available if required in an emergency.

7. Critical Incident Stress Management Program

7.1. Components of CISM

A full CIS management program based on the CISD model is comprised of four main components, the major one of which is the formal CISD. In effect, CISM provides a continuum of intervention strategies which are inter-related but not entirely dependent on each other.

The four components are :

* on-site debriefing
* initial defusing (or mini debriefing)
* formal CISD
* follow up CISD and support

Each of these parts of the process may be used in resolving an incident and a selection of some or all of them will depend on the nature of the critical event and participants' initial reaction to it. Some incidents will require all four components, whilst others may only need the initial responses to successfully resolve the CIS symptoms that may manifest. **(Rosine - 1993)**

7.2. On-site debriefing

This is a service provided at the scene of a critical incident during the earliest possible stage of the incident. A trained and specifically dedicated person takes part in the response stage of the operation by carefully observing and monitoring attending personnel for signs of any acute stress reaction. This observer is in attendance specifically for this purpose and should have no other role in dealing with the critical incident. The task of the observer also requires him to notify the person in charge of personnel at the incident of any such persons who appear to be suffering acute or abnormal stress reactions and to offer suggestions, where appropriate, for relief or re-assignment of duties to a less stressful function.

The primary aim of this observer is to provide direct assistance to affected personnel in helping them deal with their immediate emotional reactions and, as a result, many of these personnel are able to return to their duties without further assistance.

The dedicated observer need not be a mental health qualified professional, in most cases, a specifically trained peer worker can perform the role well.

7.3. Initial Defusing (Mini Debriefing)

This strategy can be used within a few hours of resolving the critical incident and can act as an indicator for the need to conduct a formal CISD or not. As the crucial first 24 hour period is yet to have elapsed at this stage, many participants will be yet to feel the full effects of the emotional aftershocks that may well still be coming. The purpose of this initial defusing is primarily to provide people with sufficient accurate information to enable them to better cope with the cognitive, emotional and physical reactions when they occur.

This stage may also be conducted by a specially trained peer worker who has the requisite skills to recognise CIS reactions. In addition, this person requires a high level of communication skills in order to not only provide the information concerning likely effects of the CIS, but to also effectively impart various prevention and coping techniques amongst the participants.

This technique has been highly refined by the Search and Rescue Society of British Columbia and will be examined further in section 9 of this paper.

7.4. Formal Critical Incident Stress Debriefing

The third level of intervention is that of the formal CISD. This is the only technique for which a trained mental health professional as team leader is a mandatory element.

"The use of a professional leader is imperative because the issues raised during the CISD have the potential to overwhelm an untrained facilitatior" **(Armstrong, O'Callahan and Marmar - 1991)**

The formal CISD is a psycho-educational (as distinct from psycho-therapeutical) process and is examined in detail in Section 8 of this paper.

7.5. Follow up Support Service

The follow up phase of the CISM model is that of necessary follow up and offering of support services.

Volunteer peer support workers are generally utilised in this phase with the intention of checking up on various affected persons at appropriate times following the critical incident. Individual circumstances will dictate exactly when and how much follow up support is required. Significant anniversaries may influence the need for follow up, i.e. one month, six months, one year or other significant time cycle marker. Also appropriate follow up must be available at any time an affected person finds themselves unable to cope with the unresolved CIS that the incident has generated for them.

Again, individual circumstances will decide what level of follow up is required and in many instances a simple telephone call check will suffice. If any further support is required it may be conducted on either an individual or group basis and in extreme cases of multiple participants experiencing cognitive or emotional dissidence then another formal CISD may be deemed necessary.

The individual characteristics and needs of the organisation involved can also be taken into account in determining the level and type of follow up. The London Metropolitan Police routinely follow up every CISD by sending all participants confidential questionnaires as well as checking health records for abnormal sickness levels or any general changes in behavioural patterns. **(Casey - 1993)**

8. Critical Incident Stress Debriefing (CISD)

8.1. History and Overview

Dr Jeffrey T. Mitchell from the University of Maryland is generally credited with pioneering the CISD concept in the United States. Introduced in 1981, the CISD program aims at reducing the emotional and psychological effects of exposure to a critical incident before they can develop into serious psychological disorders such as PTSD. CISD's, or psychological debriefings as they are sometimes called, are designed as a group meeting forum to review and examine the impressions and

reactions that witnesses, survivors or other emergency workers may experience during or immediately following involvement in critical incidents.

The CISD process aims being an initial short term intervention strategy aimed at offsetting or reducing the harmful cumulative psychological effects of critical incident exposure. In recognising this aim it should be emphasised that the technique is not psychotherapy nor is it some type of "mass counselling". Psychotherapy is strictly the realm of medical qualified mental health professionals and requires individual diagnosis and treatment. Likewise, counselling should be individualised and by nature, non directive. CISD, in comparison, is a formalised and structured process that seeks to take participants through seven distinct phases.

> "It (the CISD) is neither an operational debrief, nor for evidence gathering purposes, nor even a blame seeking session. The sole reason for holding it is to reduce unnecessary psychological after-effects and ensure the long-term physical and mental well-being of the participants."
>
> **(Beckley - 1994)**

The technique is now widely in use throughout the world and is firmly established as a management and human resource tool that provides employees and others with a proper facility to recover from exposure to a critical incident. The Federal Bureau of Investigation (FBI) was one of the first major institutions to implement the program. In the period from 1983 to 1990 the FBI formed over 100 CISD teams who conducted in excess of 4500 debriefings throughout the United States. Current figures are now more than triple those of these initial years. **(Conroy - 1991)**

8.2. Participants and Convening a CISD

Ideally a CISD should be convened between 24 and 72 hours following the critical event occurring. Less than 24 hours is not optimal as the initial signs of disruptive shock will still be prevalent, and the participants will not have had sufficient time to sufficiently gather their thoughts or reflect on their emotional responses to the incident. Also, the first 24 hours after an event tend to be usually pre-occupied with the initial reaction and investigation phases and conducting a formal CISD would simply not be convenient in most cases. However, the recommended maximum period of 72 hours should also not be exceeded. Participants who may be having difficulty coping with the adverse affects of CIS require assistance and information quickly before inappropriate coping skills become ingrained. **(Mitchell - 1985)**

The participant list must be limited to only those persons involved or directly affected by the critical incident. Debriefing teams are generally composed of trained mental health professionals (generally in the role of team leader) and volunteer peer support workers. The volunteer peer support persons will have received training prior to be assigned to a team and generally the closer the match of the peer supporter to the target group involved, the greater the affinity felt amongst the group, and the higher the prospect of a successful debriefing taking place. The peer

supporters will have been trained to identify the effects of critical incidents and the physical and emotional symptoms that may begin to manifest in affected participants. They must also be fully cognisant in the signs and symptoms of delayed stress reactions and be prepared to maintain contact and follow up with the participants for some time after the formal debrief has concluded. If additional individual counselling is needed after the CISD, then the peer supporters must also have access to contacts for referring participants to one on one counselling.

The training of these peer supporters is vitally important to the success of the CISD process. Such training is not particularly difficult or onerous and no formal academic qualification is needed before commencement. Generally courses take between 2 and 4 days full time, and on going professional guidance and support is provided by the mental health professional team leader.

The full CISD is a seven stage process which may necessitate a number of hours being devoted to the debrief. Each phase is an integral part of a cumulative process and should not be attempted to be conducted out of sequence.

8.3. Introduction Phase

In the initial phase of the CISD process a number of vital elements are established. The team leader will introduce themselves and the peer support workers to the group and then explain the procedure that the CISD will utilise.

Dr Mitchell advises that at the earliest possible time in the CISD the participants are told that they will be asked three distinct questions during their time together. The knowledge that these questions will be asked forewarns participants of the likely nature of their input, as well as giving them time to consider their answers.

(CISD Training Video - 1991)

In this preliminary stage the participants are encouraged to participate and the emphasis is made that the process is a supportive one and is not to be used as either an operational debrief or as any type of critique of performance.

The three questions asked are :

(a) Who are you?
(b) What was your role?
(c) What did you see?

Confidentiality is a cornerstone of the process and all participants must be completely assured that any information that is provided in the CISD remains within the group.

To bind the principles of a formal CISD together, the following ground rules must be established, explained and understood by all present:

1. All present must acknowledge the confidentiality of what is about to occur.
2. No media are to be present.
3. Only those who were involved or directly affected by the incident are to be present.
4. No notes or recordings of any kind are to be made.
5. Express only your thoughts, feelings and emotions about the critical incident. Don't comment on what you think other persons were or should have been thinking.
6. There will be no breaks during the time of the CISD (usually about 2-3 hours)

It is only after all of these pre-conditions are accepted by participants that the CISD can actually commence.

8.4. Fact Phase

In this phase participants are asked to share information about the part of the critical incident that they experienced. They will be asked to relate exactly what they saw, heard, touched, smelled or did during an incident. This stage provides the opportunity for members to "ease" into the following phases relating to their own reactions to the event. Many emergency services workers are professional witnesses (especially police and fire personnel) and will easily relate to the task of detailing who did what and where during the incident. By allowing them this opportunity to relay information in a manner with which they are likely to feel comfortable, the more unfamiliar concept of talking about feelings and reactions is made easier.

The fact phase is also important as it establishes common ground between the participants and "...allows individual members to form a more complete understanding of what transpired during the critical incident and provides a forum for personnel to begin to process their experience...". **(Rosine - 1993)**

It is during this phase that each participant will be asked the three preliminary questions outlined in the introductory phase.

8.5. Thought Phase

By this stage, the participants have each detailed what their specific involvement in the critical incident was and how each of them fitted into the overall scenario of what

was happening at the time. Each has heard how the other parts of the incident have been dealt with and would therefore, hopefully have a clearer understanding of the role that they actually played in determining the overall incident.

The purpose of the thought phase is to allow participants to describe their emotional response at the time of the incident. A typical lead-in question from the team leader would be along the lines of:

"What was your first thought upon arriving at the scene?", or,

"What was your immediate reaction when you first heard about the accident?"

An important aim of this phase is to allow the participants to develop "ownership" of their part in the incident. The logical mind tells them that the facts of the critical incident are now basically "out there" somewhere and cannot really be altered or changed by them now. However, what they can successfully alter is how they feel about these facts and how they each cope with their newly altered reality.

8.6. The Reaction Phase

Following the examination of their initial emotional reactions to the scene, participants are now drawn into further examining how they feel about the incident now. This phase is used to focus on their cognitive response to the particularly stressful elements of the incident and to express their feelings as a reaction to what they have been exposed to in the critical incident. This is arguably one of the most detailed parts of the process and experienced debriefers using the CISD model generally set aside the majority of the time available for this section.

Basically, this phase deals with learning to live with the event. Every experience lived through by a human being is dealt with on two separate but nonetheless inter-related levels. That is, every experience is interpreted as :

Cognitive - what we think about the experience, and,
Emotional - what we feel about the experience.

The principal aim of this phase is to move the participants away from the cognitive perspective and into the emotional response to the critical incident. This transition provides the best opportunity for ventilation of pent up feelings of distress or grief and must therefore be carefully monitored by the team conducting the debriefing. Useful lead-in questions to help participants move from the cognitive to the emotional include :

"When this incident finally settled down, and you got off 'auto pilot', what was your very first thought?" (opens discussion regarding initial reactions to stressful incident), or,

"If you could go back in time and erase just ONE aspect of the event, which would it be?(focuses on the important reactions being felt now by participants)

The value of the opportunity for ventilation in this phase cannot be underestimated and the trained team members need to be particularly vigilant for the emergence of warning signs that a participant is not coping well with the new reality and may require further follow up assistance.

8.7. Symptom Phase

Following a general discussion of likely responses to the critical incident, participants are then asked if they have had any symptoms, physical or psychological since the event. Emphasis is laid heavily on reassuring participants that these reactions are some of the normal human responses to abnormal circumstances.

The symptom phase is another transitional stage, this time, moving back to the cognitive responses of the participants. However the earlier move from cognitive to emotional focussed on what they had experienced to what they now felt about it. This return to cognitive analysis focuses on thinking about what they are now feeling and attempting to develop strategies for dealing with their changed conditions and circumstances.

Harmful stress will generally result in a change in behaviour. This change can be either internal (prolonged depression, dissociation) or external (violence towards others, alcohol/substance abuse). If involvement in this critical incident has caused changes in behaviour, then these must be acknowledged (either privately or during the CISD) and then examined to determine likely long term effects.

In evaluating symptomatic response to the critical incident, focus by the participants should be on issues such as why was this event different from others I have been involved in and why did it effect me in this manner?

The peer group workers are particularly significant during this phase. They should provide a believable platform, based largely on empathy and common experience, on which the participants can compare and evaluate their own reactions to the crisis.

8.8. Teaching Phase

The sixth phase concentrates on teaching participants various techniques relating to both prevention and coping strategies. This phase acknowledges that merely ventilating emotional responses is not enough, and the emphasis is now clearly on moving from the specific reactions and responses to the general symptoms that may be encountered in the future. This emphasis focuses on reassuring the participants

that their feelings and post incident experiences are normal reactions to this type of event.

Here, general questions are invited and information about various stress management techniques and coping strategies is offered, along with contact points for further referral or advice if required. The teaching phase revolves around the specific reactions to the incident, i.e. stress, grief, depression, and not the incident itself.

It is vital that the participants are given this opportunity in this phase to normalise their emotional responses to the crisis and thereby be able to enter the final phase of re-entry.

8.9. Re-Entry Phase

The final phase of the formal CISD is aimed at normalising the feelings and reactions of the participants so that they may return to their previous functioning levels. The re-entry phase may involve a less formal atmosphere, in which perhaps refreshments are provided and participants given the opportunity to informally chat about any issue arising from the CISD. However, the team leader and peer supporters must be alert to the mention of any significant issue arising that has not already been discussed and worked through the process. If any significant new issue is uncovered, then the group must return to the fourth phase, (Reaction) and work that particular issue through to the final re-entry point.

The team leader should take the final opportunity to impress once again on participants of the confidential nature of what they have just undergone. During the final, less formal session, individuals can discreetly be assessed by team members and those deemed to possibly be in need of additional support, should be offered appropriate referral information. Such information should be either made generally available to the group as a whole, or discreetly offered to targeted individuals whom the team members feel may particularly benefit from additional support.

Lastly, an attempt should be made to finish the session on some sort of positive note. Although the participants may well be feeling upset and disturbed by their current situation and emotions, the team leader should emphasise a positive outlook and perhaps encourage participants to engage in some activity that they usually enjoy, even if, at the moment, they do not particularly feel like doing so. This will greatly assist them in regaining a sense of normality in their coming to terms with their altered situation.

Lastly, it is important that the CISD does not finish on a "down" note, but rather instils in the participants some type of positive direction as to where they are going to from where they find themselves at the moment. Reflection on enjoyable activities will assist in this regard.

8.10. General Considerations for Conducting a CISD

The Federal Bureau of Investigation has developed a number of additional guidelines that must be considered when their agents plan a CISD.

(a) Wherever possible, the CISD team leader should be a trained mental health professional. Some of the emotions ventilated during a CISD can be devastatingly strong and need firm guidance and handling. Also a trained mental health professional is better equipped to correctly identify early those individuals who are experiencing significant problems that may require specialised treatment.

(b) Timing is critical. As mentioned previously a CISD should ideally take place within 24 to 72 hours after the resolution of a critical incident.

(c) It is vital that the attitude maintained throughout a CISD remains positive. No one during a CISD should criticise what any other participant has to say. Failure to abide by this guideline will restrict the inclinations of people to openly discuss their cognitive and emotional reactions to the incident and thereby dramatically reduce the effectiveness of the CISD.

(d) Confidentiality cannot be overstated. Failure to be able to adequately assure participants of total confidentiality undermines the entire process.

(e) Overuse of the CISD techniques can dilute its effectiveness. Therefore, a full CISD should only be used in response to truly critical situations.**(Snow -1990)**

8.11. Dangers of Debriefing

One of the major dangers of the debriefing process is the adverse effects of well intentioned but unqualified debriefers. These people may genuinely wish to offer emotional support and assistance but simply do not possess the required communication skills or observation traits necessary to provide effective long term assistance. Many friends and relatives of affected persons will fall into this category and can cause traumatised persons a great deal of additional unnecessary distress and angst by failing to recognise various signs and symptoms of CIS. As discussed earlier, failure to quickly identify these warning signals almost invariably prolongs the recovery process.

This is not to say that untrained friends and relatives cannot, or should not, play a vital role in the recovery process of their loved one. However, they need accurate information upon which to base their assistance and to know the parameters of behaviour or reaction beyond which professional help should be sought. Under no circumstances should an untrained person attempt to convene a formal CISD. A badly run and out of control CISD format has the potential to create far more stress and aggravation that it resolves. The danger of untrained personnel facilitating such

a process is that the emotion likely to be ventilated may not be directed in a productive manner and the CISD will quickly deteriorate into a series of accusatory arguments amongst the participants.

Another frequently reported danger of the debriefing process affects the professional mental health workers and peer supporters who are repeatedly exposed to other people's grief and stress reactions. This condition is known by several terms, such as, "compassion fatigue", "vicarious traumatisation" or "secondary traumatisation". Generally the symptoms are less severe than those affected by the critical incident in the first person, but such symptoms can be nonetheless quite powerful. Dr David Baldwin describes three major risk factors for secondary traumatisation. They are:

(1) Repeated exposure to the stories (or images) of multiple trauma victims
(2) Workers empathic sensitivity to suffering of those being helped
(3) Any of the workers own unresolved emotional issues that relate to the suffering being seen in others. **(Baldwin - 1996)**

Secondary traumatisation requires recognition of the problem by the worker and an appropriate stress management or stress reduction strategies. For example a CISD team leader with very young children of their own may be experiencing great difficulty in conducting CISD's that relate to the death of young children. A suitable stress reduction strategy in this case may be to see if other duties were available and then arrange for a colleague to handle cases involving young children. Extreme cases of secondary traumatisation will require professional debriefing and counselling.

9. Mini Debriefing

9.1. Search & Rescue Society of British Columbia (SARBC)

The Search & Rescue Society of British Columbia was founded in December 1983 and since that time has developed into the primary response body for emergency management throughout British Columbia. The region covered is approximately equal in both size and population to that of New South Wales in Australia. The SARBC operates the Emergency Response Center in Victoria BC which has primary responsibility for organising and coordinating all land search emergencies in the region. The Society is a non-profit, professional and uniformed body that relies on corporate sponsorships, service clubs, public subscriptions and donations.

In addition to the SAR response function the SARBC has a number of pro-active programs aimed at preventing emergencies as well as helping people recover from crisis situations. Over 85,000 Canadian children have been exposed to the "Lost in the Woods" education program and survival workshops that the SARBC facilitates.

As part of the overall research function a large number of programs have been examined and evaluated for practical application in the general SAR field. One such

program has been the CISM model established by Dr Jeffrey Mitchell. The Society has basically endorsed and adopted the CISD practice with both its own staff members as well as other agency personnel and members of the public who may have been exposed to a traumatic event.

9.2. Mini Debriefing or Initial Defusing

Whilst acknowledging the effectiveness of the formal CISD in reducing the negative effects of CIS, the SARBC also trains their team leaders to consider the utilisation of a mini debrief immediately following a critical incident in those circumstances where either a trained mental health professional is not available, (and therefore a formal CISD should not be attempted) or if the event is of a relatively minor nature and the team leader feels that personnel may benefit from an initial defusing session.

The advantages of a mini debrief are that they are relatively cheap and easy to establish and run, and the holding of one does not exclude the possibility of later convening a formal CISD. In fact, the mini debrief, if utilised correctly, should be used to ascertain if a formal CISD is needed or not.

9.3. Training Required

The mini debrief does not require the participation of a qualified mental health professional as the CISD process does. However, some elementary training for the team leader is still necessary for the process to work effectively. Each SARBC team leader receives an initial 250 hours training in various SAR aspects and techniques. Dependent on the level reached in the organisation, each team leader is then also required to attend a minimum of 12 hours training per month to remain current, with upper levels of search management being required to attend weekly training sessions.

Included in this training are basic stress recognition techniques and the information relating to coping strategies is also imparted. This is the only training that is required to conduct a mini debrief and, along with many other similar organisations, the training for CIS recognition and initial defusing is between 16 and 24 hours of contact classroom work. (i.e. 2 to 4 days)

To ensure some level of affinity with the group being debriefed, the SARBC recommends that debriefers be at the peer level or no more than one supervisor level higher. It is recommended that senior management should not attempt the task. Inclusion of senior management staff is thought to stifle openness by participants who may feel reluctant to disclose their full feelings in front of these upper management personnel, particularly when those feelings may involve criticism of procedures or practises of the organisation.

9.4. Guidelines for a Mini Debriefing

A number of information sheets concerning CIS have been made available by the SARBC to assist persons who have been exposed to critical incidents. Dr Toby Snelgrove, a stress consultant, has provided a comprehensive set of guidelines for team leaders contemplating conducting a mini debriefing. (A full copy of the information sheet appears at Appendix "C" of this paper.)

The 12 main guidelines recommended by Dr Snelgrove are:

1. Not everyone can conduct mini debriefings.
2. You must be seen as an ally to the crew you plan to debrief.
3. Make the rules clear. This is to be a debriefing, not a critique.
4. Pick a time and place that is comfortable and where there will be no interruptions.
5. Do not assume how the participants are feeling.
6. Don't force the group process, but get each individual to contribute at least once.
7. Stop criticism of others.
8. Do not permit tough, insensitive comments or any "gallows humour".
9. Watch for the non-participant, especially the one who is visibly shaken.
10. If the mini debriefing becomes emotional, do not stop until all the grief and pain is out.
11. End the session with some form of "Where do we go from here?" question.
12. Finally, after the session is over, you should contact a trained debriefer and debrief yourself.

Many of the rules and suggested guidelines are identical for both the mini debriefing and the formal CISD. However the mini debriefing is not intended as such a formal process as the CISD and therefore has no specific stages through which the group must be worked

However, the same dangers and pitfalls that were discussed earlier regarding formal CISDs equally apply to mini debriefings.

More and more organisations, such as the SARBC, are utilising the mini debriefing strategy as an initial response to critical incidents. If done correctly, with appropriate planning and training, the mini debrief is an effective safety net that not only provides participants with accurate information and coping strategies, but also acts

as a litmus test of both the group and individuals to identify if further professional assistance is required.

The Nursing Board of South Australia has recognised the benefit of peer supporters in this type of process without the automatic inclusion of expensive mental health professionals in the first instance.

> "...even though the ability to debrief requires skill and knowledge, it does not require specialist knowledge...the most important skills are listening, reflecting and clarification skills."**(NBSA Nursing News - Jan 1993)**

The underlying premise of the SARBC regarding mini debriefings is to "go for it". The society believes that far more damage will be done by avoiding an initial defusing session when one was really needed than if an unnecessary mini debriefings were to be held.

10. Options and Evaluations

10.1. Need for CISM

Prior to any evaluation of the options put forward by this paper, it may first be prudent to consider the level of anticipated need for this kind of CISM program in the sport of parachuting.

For the 21 year period of 1975 to 1995 a total of 68 fatalities occurred throughout Australia. This calculates to an average 3.24 fatalities per year with a highest incidence of seven (1982) and the lowest of one (1975 and 1981). A full list of figures is contained in Appendix "D".

However, an average such as this can be misleading when considered in isolation as the overall number of participants in the sport has increased from approximately 1300 in 1975 to approximately 39,000 in 1995. Despite this huge increase in the participation rate, the overall fatality figures have in fact fallen in a statistically significant manner of the same period. This can be calculated in the number of fatalities per thousand jumpers of 0.77 in 1975 to 0.07 in 1995.

The point to be made from this figures is that, based on current data and trends, the APF can expect an average of about 3 fatalities each year. That is, APF planning for such incidents should be geared around the likelihood of an average of 3 times per year parachutists somewhere in Australia are likely to be exposed to massive levels of CIS following involvement in or witnessing of a parachuting fatality.

Figures involving serious injury are much harder to calculate as the current recording system used by the APF database cannot effectively distinguish between a serious leg injury, (i.e. amputation) and a hairline fracture of the big toe. Both are simply recorded as broken bone injuries. However, a breakdown of the figures for

1991 to 1995 reveal that a total of 462 injuries listed as various broken limbs or multiple injuries were reported to the APF. This means that on average, 92.4 serious injuries occur throughout Australia each year. Unfortunately there is no certain means of determining how many of these injuries may have been traumatic enough to be deemed as critical incidents. However it is reasonable to assume that some would certainly have involved high levels of stress amongst participants and witnesses.

Due to the uncertainty of determining the nature of serious injuries it would be statistically safer to evaluate the three options based on the known fatality average of 3.24 deaths per year. There is no doubt fatalities represent the highest possible likelihood for CIS to be suffered by the largest number of participants and would be logical events for which some form of counselling would be of the most benefit.

10.2. Option One - Maintain the Status Quo

(a) Examination of Option - Advantages

The current situation within the APF has a number of distinct advantages. Firstly, the current system already exists, and has operated with overall success for a considerable number of years with little empirical evidence to suggest that it does not have the capacity to continue doing so. The option of retaining the status quo is therefore able to rightly claim that members interests and needs are already being well serviced and there is no need for the disruption of change in the current environment. The principle logical argument for maintaining this option is that something that is not broken hardly requires fixing.

Such a system is also a very cost-effective means of dealing with the problem of CIS following members involvement in traumatic events. As will be examined in the following section, the establishment and maintenance costs for a professional trauma counselling network can be very expensive.

The final advantage of the status quo is that is highly localised in nature and therefore able to respond to incidents very soon after they have occurred. Responses of this nature are more likely to be personalised to the situation and the individuals who need assistance. By having localised input and direction the existing informal network ensures an appropriate level of response that would be difficult, if not impossible, to accurately assess from the geographically remote APF headquarters in Canberra.

The informal group meeting following a critical incident is a widely established practice throughout the Australian skydiving community and appears to address many of the needs of those who have attended them. These meetings are seen to provide an adequate venue for affected parachutists to discuss the incident and to ventilate their feelings. Many of the guidelines of the SARBC Mini Debriefing model

are adhered to in these meetings, although most convenors would be totally unaware of their existence.

(b) Examination of Option - Disadvantages

The system is by its very nature, ad hoc and informal. This lack of formalised structure means that appropriate action and information may or may not get to where it is needed. The system relies entirely on different individuals knowledge, assessment skills and availability to respond to a critical incident. In the absence of a formalised standard response it would be fair to assume that the quality and availability of accurate and current information would vary from site to site throughout Australia.

Perhaps this issue of the quality of information is the most serious flaw in the current scenario. There is a noticeable lack of standardised forms of information that could be made available to parachutists in the immediate time following a critical incident. In effect, there is simply no definitive standard of quality control for the information that may be propagated and distributed amongst APF members. This lack of standards could see inappropriate, out of date or even downright incorrect information being made available to members. During the critical time period following a traumatic event, the value of accurate information is inestimable and any system being evaluated for the APF must be able to guarantee the complete integrity of any information that it disseminates. The current system does not satisfy this vital criteria.

Also, because the APF response relies on the office of the National Examiner, there is no formalised back up for situations when he/she may be unavailable, unaware of the situation, or even perhaps, involved themselves in a critical incident.

There are no established after hours contacts for those people who are yet to become part of the general informal skydiving network. Many low number jumpers would have no idea of who or how to contact senior APF members in their region and may well be missed by the informal safety net of established skydivers.

The unstructured group meeting following a critical incident does not have any formalised guidelines to follow and may therefore not necessarily achieve a positive outcome. Indeed, without adequate control and direction, these meetings can deteriorate into misdirected emotional ventilations and accusations that can adversely effect the very people that it is trying to assist. Lastly, inappropriate grieving or coping skills may be inadvertently passed on at these meetings if sufficient warning information has not been provided to the convenors. Many initial coping skills, such as alcohol and substance abuse, can create further ongoing problems if they are not considered as a part of the overall recovery process following a critical incident.

(c) Evaluation

The current system appears to be working fairly well, however when tested by the tragic incidents in Corowa 1993-94, it was found to be lacking in some areas. In effect, it appears to work well when there is no accumulation of crises. I believe that the status quo provides a solid foundation upon which to build an appropriate level of response to critical incidents, but that, as it stands at the moment, several significant opportunities for improvement exist.

10.3. Option Two - Establish a Full CISD Network

(a) Advantages

The establishment of a full system to provide a formal CISD network throughout Australia would resolve many of the existing deficiencies of the status quo.

Such a proposed system would enable all parachutists exposed to a critical incident to have immediate access to qualified mental health professionals to assist them to make some form of sense of their experience and to utilise a structured group process that would aim at reducing tension and feelings of abnormality by sharing individual reactions to the incident.

Parachutists would have access to accurate and current information concerning the resolution of CIS and would be far better prepared than at present to understand further reactions by receiving this type of information in a controlled, non-threatening environment.

In addition, appropriate and positive coping strategies and skills could be imparted to group participants as well as further referrals to other groups, counselling services or other external resources.

The implementation of a formal CISD network would ensure that all affected parachutists receive the same high standard of quality information as well as the benefit of professionally monitored follow up support.

The credibility of a CISD program within the APF would be guaranteed by the mandatory inclusion of the peer support element. This would ensure high level involvement in all CISDs for skydivers by skydivers. The similarity of experience coupled with an overall understanding of the sport would ensure the empathetic bond between the group and the CISD leaders would be quickly established. The need for credible personnel to be trained in this field would be obvious in the success of a CISD program and there would be many parachutists amply qualified by both their years of involvement in the sport as well as their exposure to critical incidents in that time, to fulfil this need.

(b) Disadvantages

The primary disadvantage to the establishment of a full CISD network throughout the Australian skydiving community is that of cost. Although the CISD model would undoubtably provide quality debriefing and ongoing counselling facilities to affected personnel, the cost of establishing and maintaining such a system would far outweigh the anticipated benefits. Taking a state region such as New South Wales as an example, at least 20 trained peer support personnel would need to be trained and then maintained in training currency at least once every two years. Of these 20 jumpers, some would leave the sport and require replacement and the additional costs associated with training new peer supporters would have to be factored into an evaluation of the proposal. Accredited training for a peer support worker takes around two to three days full time and costs between $600 and $800 for each participant. These figures would imply a minimum start up cost of around $12,000 just for the NSW region alone to have sufficient peer supporters trained. An overall budget in excess of $60,000 would have to be considered for Australian wide training. The ongoing costs of maintaining the level of trained personnel would also need to be closely examined.

Also, sufficient trained mental health professionals would have to be identified and approached in each region to ensure that they were available to be called out to conduct a CISD at possibly very short notice. Locating and assessing these health professionals would require considerable time and effort on the part of the APF personnel establishing the system. The logistical network that would need to be established prior to activation would therefore also incur substantial costs in travelling, time and accreditation. To ensure that the required standard of the mental health personnel is maintained, it is likely that a central role would have to be taken by somebody in the central APF administration, thus further adding to the initial set up costs.

Therefore, in this very basic financial analysis, it would not be unreasonable to speculate that in the vicinity of $100,000 would be needed to establish the basic system. Bearing in mind that this money would have to have been allocated and spent prior to any type of critical incident occurring as these financial resources are being committed solely to set up the system, and not to the activation costs. Additional monies would also have to be allocated from either APF or state regional councils for the fees and expenses of the team leaders and peer supporters in the event of a critical incident response being required.

Aside from the monetary considerations, there is also the element of the mandatory nature of CISDs that has aided in making them so successful in the emergency services fields. Many police and emergency service administrators have made attendance at a CISD following a critical incident mandatory and, in some cases, such attendance forms part of the terms and conditions of individual workers' contracts of employment. This has led to a general acceptance of the need to attend CISDs amongst the participants and the attendance is both required and expected of all involved personnel.

Members of the Australian parachuting community cannot be expected to attend any type of debriefing on a mandatory basis. Such a direction would be foreign to the sub-culture of skydiving and likely to meet with a great deal of resistance, especially from those jumpers who may need assistance the most. There is simply neither the precedence nor the machinery to enforce any type of compulsory attendance amongst Australian parachutists. The only real coercive powers that the APF has at its disposal are those of the disciplinary procedure and any suggestion of the use of these powers in these types of circumstances would be most inappropriate and likely to prove counter productive.

(c) Evaluation

The implementation of the full CISD program by the APF would not be cost effective, nor, in the long run, productive. With the average of only 3.24 fatalities per year throughout Australia, there is simply not enough need for this level of counselling and debriefing. The system would be extremely expensive to establish and maintain and, as it would receive such little use, very likely to lapse into an ineffective and irrelevant program in a few years following it's adoption.

10.4. Option Three - Adopt the Mini Debrief with Peer Support and Referrals

(a) Advantages

The final option to be considered seeks to establish some form of common ground between the existing informal structure and the highly formalised debriefing process of the CISD. In doing so, this option capitalises on many of the advantages of the current system, particularly concentrating on the existing practices of informal group meetings following a critical incident, as well as the localised knowledge and administration of any follow up support that may be required.

By adopting the mini debrief concept and incorporating it with trained peer supporters and referral information, the APF would be in a position to ensure that quality information and appropriate support is provided to traumatised members by a well trained and resourced local contact person. The underlying premise of this option is to build on and improve some of the long established existing practices and to use them as conduits to provide members with the necessary information to enable them to develop positive coping skills and strategies in response to the critical incident.

(i) The Mini Debrief

A mini debrief held along the lines of the SARBC recommendations (Appendix "C") would enhance the process that already follows most critical incidents on a drop zone. However, this is not the formal CISD and therefore does not require a formal

structured process to be worked through, nor does it require a trained mental health professional to lead the group. Instead this option would enable the group leader of such a meeting, i.e. a Chief Instructor, DZSO, or other senior figure, to utilise the guidelines in conducting the meeting. The adoption of these guidelines would ensure that the leader is aware of most of the pitfalls facing an unqualified debriefer, as well as alerting him/her to signs of cognitive distress that may require further attention in the very near future.

By incorporating the mini debrief into the existing informal group meeting practice there is likely to be very little, if any resistance to the implementation. In fact, most participants would be unlikely to be aware of the change as the guidelines would act as merely unobtrusive beacons for the debriefer and not as publicly stated objectives and stages as is the case with the CISD.

The mini debrief as a concept would be extremely easy to implement. To get the information to various drop zones and centres, an information sheet such as the one issued by the SARBC (Appendix "C") would be circulated via the management of a particular venue. This would enable any potential meeting leader to have immediate access to a non-technical set of guidelines aimed at optimising the benefits of an informal group meeting following a critical incident.

(ii) Peer Support Persons

Again, the aim of this part of this option is to utilise one of the best elements of the existing structure and develop a cost effective and improved system as a result.

Here, the peer supporters would act as contact or liaison officers for a particular region. They would not form a part of a formal CISD team involved in structured debriefings, but would, if they felt able to be of assistance, be able to attend informal group meetings to offer peer support and provide access to appropriate information and resources if required. Of course, not all informal group meetings would be appropriate as some tightly knit and emotionally affected jumpers may not automatically welcome even other skydivers at that particular time of their grieving.

Instead, the peer supporters would simply make contact with the venue or drop zone and after detailing what services/information are available, inquire as to what the needs of the people there might be. Some training would be desirable in this role but not essential. The VPC model has successfully used substantially untrained personnel in this role for the past three years without encountering any significant problems. If such training was required a number of suitably accredited training institutions around Australia offer short term courses that would be suitable for this type of service. If sufficient national interest were to be shown in the concept, then a qualified trainer could be engaged by the APF to attend a Technical Conference and with two to three days full time training, a substantial number of APF jumpers could be more than adequately qualified.

The number of peer supporters in this option would be far fewer than needed in the CISD model, with perhaps as few as three being required per council region. With fewer peer supporters needing training, the cost would be substantially less, and the possibility of the APF conducting sufficient training within its own instructor validation system should also be considered. The concept of "train the trainer" is now well established in general industry and the benefits of such a program could well apply here.

(iii) Referrals and Information

The final phase of this option involves the provision of accurate and current information concerning both the effects of and reactions to CIS as well as appropriately qualified referral agencies and support services. Again, this need not be an expensive, nor overly time consuming exercise. The VPC experience indicates that, although involving a fair amount of time to establish the information base, it does not cost a great deal, and requires only a yearly up date to ensure currency. By simply using the Traumatic Events Information Sheet (Appendix "A") as widely as possible, it was found that most participants were satisfied with that level of information, and very few contacted the VPC representatives for further referrals or counselling services.

(b) Disadvantages

Ironically, the primary advantage of each of the three canvassed options has also the potential to be their most significant disadvantage. The localised nature of the APF administration structure means that it is vital for the long term viability of any proposal to have regional council support. Failure to gain council acceptance of any of the proposed options, and in particular the new concept of mini debriefings and peer supporters, will effectively end any prospect of success.

The existing system will continue to operate with the current minimal level of support from the APF and any implementation of the full CISD program would require extensive national support and co-ordination. However, the option of adopting the mini debrief and the associated support features will almost entirely devolve down to local council level. If the concept does not receive substantial council support in a region then it cannot succeed. The APF would be limited to a secretariat and facilitation role in the implementation, but does not have the local knowledge or resources to run such a scheme from the offices in Canberra. Therefore a solid level of council support would be an absolute prerequisite before any implementation could be considered.

As with any change to the status quo, some resistance from within the APF organisation should be anticipated. Some initial resistance to the VPC scheme was encountered during its inception. Such resistance was largely from some of the older male members of the skydiving community, most notably those with extensive previous military experience. The APF remains a predominantly male administered

organisation, with men occupying the majority of administrative and leadership positions throughout the organisation. In view of this fact, it is not unreasonable to predict some form of resistance to a strategy that is perhaps viewed as somewhat effeminate and soft by some of these "old soldiers". This opposition is likely to be dispelled upon explaining to these members that the techniques of both mini debriefing and CISD's are adapted from those extensively researched and used by the current military. The validity of these types of programs can be readily established to the satisfaction of most people when the proven benefits are explained and, if need be, demonstrated. However, some initial resistance should still be anticipated.

11. Recommendation

11.1. Option Three - Mini Debrief Process with Peer Support and Referrals

In recommending the final option for implementation by the APF there is nonetheless considerable acknowledgment of the benefits of the other concepts that were examined. The existing system allows for considerable local involvement and "ownership" of any scheme that a regional council should choose to implement, and the preferred option should be introduced in a manner that ensures councils are consulted and encouraged to become involved at the earliest planning stages. This will ensure commitment to the overall scheme and by fostering feelings of ownership by the various councils will also aid in increasing the longevity of the system.

The preferred option should be implemented with sufficient flexibility to enable interested individuals and councils to examine and extrapolate from the CISD model in order to better suit their local needs. Although the examination of the CISD process in this paper revealed that it was far in excess of the needs of the APF, this assessment should not be interpreted as grounds for dismissing many of the useful points and features of the system. Many of the fundamental principles and guidelines of the CISD model can be applied to virtually any post incident recovery program.

Lastly, it is also recommended that consideration be given to including basic CIS information into the instructor training syllabus of the APF. This would enable a basic awareness of the likely occurrence and problems of CIS to be inculcated into the instructor network. The flow of information in this manner would quickly extend throughout the APF general population as new jumpmasters qualified for their ratings. This would provide long term benefits to the organisation

12. Conclusion

The recommendation for the mini debriefing concept with appropriate peer and information support is one that the APF could quickly and cost effectively implement throughout Australia. However, it is not recommended that the APF adopt the role of

a primary function in the implementation. The distance from the APF office and the various regions around Australia logically dictates that the regional council bodies will be those most involved in establishing and maintaining their own support networks.

The role of the APF envisaged as a central facilitator is clearly in keeping with the APF mission statement.

> ***"The Australian Parachute Federation exists to administer and represent Australian Sport Parachuting. We aim to achieve this by promoting and maintaining a high level of safety and by improving the standard of Sport Parachuting by encouraging participation and excellence in performance."***

There is no doubt that the stated objectives of safety and participation in the mission statement will be substantially enhanced by the adoption of a standardised response to critical incidents. As an organisation the APF invests substantial amounts of money in the small number of elite level athletes who represent Australia in international competition. This proposal would enable the APF with very little financial outlay, to provide positive potential assistance to every Australian parachutist should they ever need CIS advice or counselling.

However, a final word of caution - the VPC experience following the two fatalities at Corowa clearly demonstrated the need for preparation and planning. Immediately following a critical incident is certainly not the time to start wondering about the best ways to respond or react. In effect, the time for planning and establishing the necessary information links is now.

After all, the worst that can possibly occur is that we never have cause to use them!!

VICTORIAN PARACHUTE COUNCIL Inc.

TRAUMATIC EVENTS INFORMATION SHEET

You have experienced a traumatic event.

Even though the event may be over for the time being, you may now be experiencing, or may experience later, some very strong emotional or physical reactions. Such reactions are very common and it is quite normal for people in your position to suffer emotional "aftershocks" for some time after they have passed through a horrific event.

Sometimes these emotional aftershocks appear immediately after the traumatic event. Sometimes they may appear a few hours or a few days later.

In some isolated cases these reactions do not occur until weeks, or even maybe months, have passed. Sometimes subsequent events may trigger emotional aftershocks whereby seemingly unrelated incidents can have a dramatic effect on you.

In fact, the only truly predictable thing about these reactions is that they are usually quite unpredictable.

When these emotional or physical symptoms occur, they may last only a few days, or a few weeks, or even a few months. On very rare occasions they will persist even longer, depending on the severity of the traumatic event as well as the subsequent experiences of the person involved.

With the understanding and support of friends and peers, the symptoms usually pass much more quickly.

In some rare instances the event is so traumatic and painful that professional assistance from a counsellor is required. This does not imply any suggestion of craziness or weakness on the part of the person affected, it simply means that their coping mechanisms have been overcome by the strength of the trauma. If this is the case, then time is of the utmost importance.. Recovery prospects are greatly enhanced if professional assistance is sought as soon as possible after the event - before the emotional aftershocks have developed a strong grip.

At the end of this paper you will find contact numbers for a support network established by the Victorian Parachute Council as a free service to Victorian jumpers. If, after reading this document, you feel that yourself, or someone you know, has been adversely affected by this traumatic event then RING THE NUMBERS NOW!!!

(1) Common Signs and Symptoms of a Traumatised Person

(a) Physical Signs

- Nausea
- Upset stomach
- Tremors (lips, hands)
- Generally feeling clumsy and unco-ordinated
- Profuse sweating - particularly in mild weather conditions
- Chills
- Diarrhoea
- Dizziness
- Chest pain (should be checked by qualified medical personnel)
- Rapid heart beat
- Rapid breathing
- Increased blood pressure
- Muscular aches
- Sleep disturbances

(b) Cognitive Signs (i.e. thought processes)

- Slowed thinking
- Difficulty in making decisions and problem solving (Go for reserve or not?)
- General confusion
- Disorientation (especially regarding actual time and place)
- Difficulty in calculating (What is my current altitude?)
- Difficulty in concentrating or poor attention span
- Memory problems
- Difficulty in naming common everyday objects
- Distressing dreams - not necessarily related directly to the traumatic event
- Seeing the event over and over in the mind

Obviously the potential risk factor in a sport such as parachuting is greatly increased when an individual is confronted with any difficultly in the cognitive functioning area. This element of mental confusion and the inability to make immediate decisions (particularly in a freefall environment) must be addressed as a matter of first priority before the person resumes jumping. Failure to identify and deal with these symptoms is simply courting disaster.

(c) Emotional Signs

- Anxiety, fear or guilt
- Feelings of grief and depression
- General sadness

- Feeling lost and abandoned ("Nobody cares about me)
- Feeling isolated (Nobody understands what I am going through)
- Feeling extremely protective of, or fearful for the safety of loved ones
- Wanting to hide or limit contact with other people
- Anger and suspicion
- General irritability
- Feeling emotionally numb - not being able to feel any emotions
- Being easily startled or shocked by minor incidents

(2) Some Typical Reactions to Expect following a Traumatic Event

These signs or feelings are most common in the three days immediately following a traumatic event or exposure to a traumatic scene. They can persist for up to four weeks in varying degrees of occurrence and intensity. However, it must be remembered that actual time frames are difficult to predict as each individual will tend to adapt to their own new reality at differing rates. These reactions should be seen as being part of the natural process of interpreting the world around you and reacting to new experiences.

- Changes in appetite
- Alterations in sleep patterns
- Withdrawal from friends and family
- Re-living the event or constantly brooding over the circumstances
- Concern about returning to the drop zone where the incident occurred
- Fear about own safety (Should I keep jumping? I could be next)
- Difficulty in concentrating on the task at hand
- Feelings of unreality about the event
- Physical symptoms of shock
- Feelings of horror or outrage - particularly towards other people in the incident

Remember some of these reactions are by nature, likely to be irrational. You may feel anger and outrage against the person who has been killed or badly injured even though you know full well that these feeling are not logical.

The best personal indicator of how you are adapting to a traumatic event is your own "gut" feeling, balanced by the impressions of those around you who know you well. It is important to recognise that we all react to these situations differently - there is no right or wrong way to react - and it is vital that we all respect these differences amongst our fellow jumpers.

(3)Signs of Difficulty in adapting to a Traumatic Event

Generally the usual reactions mentioned above tend to start to lose their "bite" about two weeks after the event. Some will fluctuate according to other stress factors that are happening at the same time in your life. If any of these signs or symptoms persist after four weeks then they need to be addressed - and the help of a professional trauma counsellor may be required. Some signs of not coping well include:

- Persistent illness or susceptibility to minor ailments
- Increase in the intake of alcohol, tobacco or other drugs (both legal and illicit)
- Changes in nature of relationships with family and friends (particularly in the manner of being seen by others as "over-protective" or constantly over reacting emotionally
- Continued difficulty in completing routine tasks
- Changes in physical appearances, including a loss in personal pride in appearance
- Behaviour that is unusual, bizarre or completely out of character.

(4) Signs of Successfully Adapting to a Traumatic Event

- Being able to remember and forget the incident at will. This is an indication that the event no longer dominates your thought processes and you are regaining full control of the situation
- Being able to talk about the event and your reactions with people that you trust
- Returning to normal activities (including going back to the drop zone) without an over-riding sense of apprehension or dread that you will witness a similar event
- Accepting that the incident has had, and will continue to have, both positive and negative influences on you
- Accepting and dealing with mental flashbacks of the event

(5) Features that Assist in Dealing with a Traumatic Event

- Having a partner, family or friends, who are aware of the details of the event and are therefore able to listen and spend time with you when required. Wherever possible try to have someone stay with you for a few hours (at least) and if necessary a few days
- Talking about the event:
  (i) Soon after it occurs (HOURS NOT DAYS)
  (ii) With someone you trust
  (iii) Or with others present at the incident
- Returning with a minimal delay to your normal course of work and to the environment or specific location that the event occurred. It may not be feasible, practical or even wise to return to the exact same scene, but considerable benefit may still be available by visiting another drop zone.
- Try to keep up a reasonable level of activity - fight against boredom. An inactive mind is far more susceptible to unwanted flashbacks and memory replays.
- Undertake physical activity where possible
- Seek a good counsellor if you sense that you are not coping well
- Eat well balanced and regular meals, even if you don't particularly feel like it
- Reinforce the attitude that the unpleasant feelings and sensations that you are experiencing are normal and form a part of the natural healing process of dealing with the traumatic incident

(6) Hints for Family and Friends

- Listen carefully to what is being said (as well as what is NOT being said)
- Spend time with the traumatised person
- Offer your assistance and a listening ear - even if you have not been directly asked for help
- Reassure them that they are safe
- Assist with every day tasks such as cooking, cleaning and child minding. Remember, a person suffering cognitive symptoms may encounter a great deal of additional stress when they experience difficulty in performing even the most routine of tasks.
- Give them some private time and space
- Don't take their anger or other shows of emotion personally
- Don't try to placate them with such comments as "you're lucky that it wasn't worse - it could have been <u>you</u> that bounced" Traumatised persons are unlikely to be consoled by such comments. Instead, it is far better to tell them that you are sorry such an event has occurred and you genuinely wish to both understand and assist them through this difficult time.

Conclusion

If any of the symptoms described above are severe, or if they last more than four weeks, then it is likely that professional counselling is needed. Sometimes people can become "stuck" with an emotional reaction to a traumatic event. If you feel that you or anyone you know is suffering painful emotional reactions or not coping with the effects of the traumatic event, then please contact one of the services listed on the following page.

A peer support network has been established by the Victorian Parachute Council Inc. as a service to all jumpers in the Victorian region. Also, initial consultations with trained trauma counsellors will be provided to you free of charge. Other ongoing counselling services are available at minimal cost. Details are obtainable through the VPC representatives listed overleaf.

In some cases an immediate de-brief may be of benefit. A separate information sheet detailing advantages and strategies of this type is contained in the Post Incident Resource Kit provided by the VPC at every Victorian drop zone.

Information sheet prepared by:
Neil R. Cheney E1118
B.A. (Soc.Sci) and A/Dip C.J. Welfare Admin.

VICTORIAN PARACHUTE COUNCIL Inc

CONTACT TELEPHONE NUMBERS

The following VPC delegates are authorised to arrange immediate trauma counselling through the National Trauma Clinic or other agencies. Professional counsellors are available on a 24 hour basis anywhere in the Victorian region.

Terry Smith	Home	03 9558 0960
	Business	03 9558 3889
	Mobile	0418 382 470
	Dropzone	059 412 028 (Pakenham)
Neil Cheney	Business	03 9392 3254
	Mobile	015 568 935
	Dropzone	052 861 312 (Meredith)
Kevin Marshall	Home	03 9787 6989
	Mobile	018 997 096
	Dropzone	059 412 028 (Pakenham)

ADDITIONAL SUPPORT SERVICES

CRISIS LINE	03 9329 0300	(24 Hours)
LIFE LINE	03 9662 1000	(24 Hours)
"	131114	(24 Hours)
GRIEF LINE	03 9596 7799	(12 noon to 12 midnight)

Each of these numbers provide a confidential counselling and referral service. Members may contact any of these numbers and receive additional documentation, referrals or other immediate crisis assistance. Support material from each of these services is also available at every Victorian drop zone.

For further information see your Chief Instructor or DZSO.

December 1996

Appendix "B"

Victorian State Emergency Services
Road Trauma Card

A Service Provided by: OUTER EASTERN COMMUNITY ROAD SAFETY COUNCIL

Lifeline 131114 Crisis Line 03.9329.0300
NUMBERS ATTENDED 24 HOURS

SWINBURNE ROAD ACCIDENT
TRAUMA COUNSELLING
03.9214.8653

CFA

ROAD TRAUMA SUPPORT TEAM
014.003.099 (MOBILE)

SES

Whenever we go through traumatic events we experience reactions to these events that help us to deal with the stress. These reactions can be mild or strong and are sometimes confusing. Be assured though that they are quite NORMAL and will lessen over time. If you need to talk about these reactions feel free to ring any of the numbers on the back of this card.

(Enlarged - Actual size is that of a standard business card)

Critical Incident Stress Syndrome 3

Search and Rescue Society of British Columbia

CONDUCTING A MINI DEBRIEFING

As a result of the interest shown in his three-part series (in EHS Mirror) on C.I.S., Toby Snelgrove added this article on C.I.S. debriefing. -Editor, SARNEWS

Critical incident stress is the emotional, behavioural and physiological reaction to an emergency worker when confronted with acute trauma.

Specifically, when there is unexpected mission failure, excessive human suffering or unusual sights or sounds (eg. grotesque victims), or when there is a threat to the life of the worker, emergency personnel can experience a traumatic stress response. Critical incident stress (C.I.S.) has the potential to affect one's ability to function either at the scene of an incident or later.

The most effective way to minimize the negative effect of C.I.S. is through a C.I.S. debriefing facilitated by a trained mental health professional.

However, there may be times when there is no professional debriefer available or when the incident is of a minor nature and unit chiefs or managers may wish to provide some form of debriefing service. In these situations you may wish to conduct a **"MINI DEBRIEFING"**

If you find yourself in situation where you feel a mini-debriefing is necessary, here are some guidelines to consider.

1. Not everyone can conduct mini-debriefings.

Those best suited have good interpersonal skills, know from experience that C.I.S. is real and a normal reaction to acute trauma, are comfortable with the expression of emotion in themselves and others and are trusted by those they plan to assist. Knowledge of crisis intervention, grief and loss is a definite plus.

2. You must be seen as an ally to the crew you plan to debrief.

Sometimes even the warmest supervisor cannot lead a debriefing due to the attitude some may have towards management or an existing climate between groups and management. It is recommended that debriefers be at the peer level. If there is no one else, simply put your cards on the table right away. Inform the group (or individual, if that is the case) that your role here is as a supportive friend, not as a boss. If you feel your position would get in the way of a debriefing, get someone else to lead the process.

3. Make the rules clear. This is to be a debriefing, not a critique.

The purpose of the session is to share your feelings about a difficult call, not to criticize others. Also make sure participants agree that the proceedings will be confidential.

4. Pick a time and a place that is comfortable and where there will be no interruptions.

The debriefing should be a continuous process with no one else wandering in and out.

5. Do not assume how participants are feeling.

Explain why you have initiated the debriefing and your knowledge about C.I.S. Then simply invite participants to individually respond to how the call has impacted them. Listen and watch for signs of emotional vulnerability. If there is none, fine, you have done your job. If there is, let it flow and the group will establish its own emotional level. Remember, the expression of extreme emotion is a healthy, normal process that emergency workers have learned to suppress.

6. Don't force the group process, but do get each individual to contribute at least once.

One suggestion is to follow the traditional debriefing steps and have participants discuss what they actually said and heard at the scene. If individuals have been traumatized, it normally shows through their tone of voice. When this happens, let them express themselves. Affirm that what they are experiencing is normal given the circumstances.

7. STOP CRITICISM OF OTHERS.

A critique can come later, but if individuals start complaining about others behaviour, stop it by saying something like: "Bob, we will be doing a critique later this week. The purpose of this session is to share our feelings about the call. Tell us how you felt during the call when things started going wrong." Being criticized by others before you are debriefed can be more traumatic than the incident itself.

8. Do not permit tough, insensitive comments or any gallows humor.

This will quickly put an end to the expression of personal feelings.

9. Watch for the non-participant especially the one who is visibly shaken.

Touch base with him/her later in private to make sure he/she is not simply reluctant to talk in a group setting.

10. If the mini-debriefing becomes emotional, do not stop until all the grief and pain is out.

You may go through the entire group without any expression of feelings and finally the last person shares some emotional pain. Make sure you allow time to go around the group again allowing others to do the same.

11. End the session with some form of "Where do we go from here?" question.

After an emotional session there is a need for a transition. Talking about action plans gives time for individuals to internalize what has happened and get ready to return home or to work.

12. Finally, after the session is over, you should contact a trained debriefer and debrief yourself.

Doing this will release any pent-up stress and build your confidence about further debriefings.

Remember, the worst thing you can do when others have experienced C.I.S.,is to criticize them before they are emotionally debriefed. The second worst thing you can do is not to facilitate some form of psychological debriefing.

If you ever find yourself in a situation where the emergency workers around you may be in emotional pain, I urge you to take action. If it means doing your first mini-debriefing, "go for it". Remember, all you can be is yourself and all you can do is your best. If your colleagues know you are sincere in your intentions, they will support you in what you are attempting to do.

Toby Snelgrove, M.Ed. Stress Consultant

E-mail: sarbc@sarbc.org
Last Updated: Tuesday, October 24, 1995
by Mike Doyle (mdoyle@sarbc.org)

PARACHUTE FATALITY SUMMARY

1975 - 1995

Year	Number of fatal accidents	APF Membership	Fatalities per 1000 jumpers
1975	1	1300 approx.	0.77
1976	2	1500 approx.	1.33
1977	2	1733	1.15
1978	4	2340	1.71
1979	2	2800 approx.	0.71
1980	4	3277	1.22
1981	1	3497	0.29
1982	7	4435	1.58
1983	3	5255	0.57
1984	3	5836	0.51
1985	6	7072	0.85
1986	5	8391	0.60
1987	5	7006	0.71
1988	3	6266	0.48
1989	2	7281	0.27
1990	3	7084	0.42
1991	2	9063	0.22
1992	4	15,846#	0.25
1993	4	25,431#	0.15
1994	2	27,626#	0.07
1995	3	38,982#	0.07

- Need recalculating. However a reasonable estimate

(Figures as supplied by APF - November 1996)

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Other References

Videos

"CISD - Techniques of Debriefing" American Safety Video Publishers 1991. This video is hosted by Dr Jeffrey T. Mitchell and has an excellent re-enactment of a CISD which is then talked through the various stages in the video.

"Critical Incident Stress" University of Maryland. This video focuses on the emotional and cognitive effects of CIS on emergency workers.

(Both videos are available for free loan from the Australian Emergency Management Institute Information and Research Centre, Macedon, Victoria 3441)

Internet Sites

http://www.sarbc.org/sarbc/sarbcinf	Home Page of the SARBC
http://www.gladstone.uoregon.edu/~dvb/trauma.htm	David Baldwin's Trauma Page
http://www.long-beach.va.gov/ptsd/stress.htm	Trauma Stress Home Page
http://www.psy.uq.edu.au/PTSD/trauma	University of Qld Trauma Page
http://www.mindspring.com/~ptg/ptg.html	The Post Traumatic Gazette
http://www.istss.com/	International SocietyTraumatic Stress Studies On-Line
http://rdz.stjohns.edu/trauma/	Index trauma-related articles
http://www.dartmouth.edu/dms/ptsd/	National Center for PTSD
http://play.psych.mun.ca/-dhart/trauma_net/	Canadian Traumatic Stress Network

The Internet information "superhighway" contains literally thousands of linked sites and avenues of information relating to both CISD and PTSD. Most home pages contain a variety of links for further surfing and the above references are but a small sample of what is available.