



C.D.A.A. Newsletter
GUIDELINES

No: 71 - MARCH 2000



CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

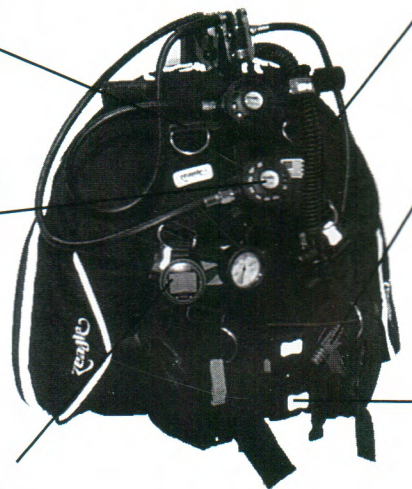
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Editorial

There have been lots of changes in Office Bearers positions in the past few months. Welcome to the new ones and many thanks to the out-going ones. Please be patient when contacting and dealing with our new Office Bearers – these are really tough jobs at times, especially the Records Officer position – one which I held myself for a period of about two years. I honestly don't know how Linda Claridge (with Gary's help) did it for so long.

If anyone thinks Guidelines looks "a bit thin" this issue – ***IT IS!*** So please have a think about sharing that funny story or exciting trip.

Glenn O'Connell
Editor

ARTICLES FOR GUIDELINES

Members wishing to submit articles for inclusion in guidelines can do so in the following manner:

- Send articles & photos via post to:
The Editor, Glenn O'Connell,
P.O. Box 290, North Adelaide, S.A. 5006.
- Email to glenn@vds.net.au
- Any files for inclusion should be saved in "TEXT" or "ASCII" format. Hardcopy should also be provided wherever possible.

ADVERTISING RATES

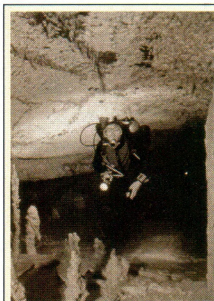
FOR SPACE - APPLY TO THE EDITOR

"Guidelines" magazine is circulated to over 1200 members and retail outlets.

Back Page	2 colour	\$350.00
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Inside Back Page	Black & White	\$300.00
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Half Page	Black & White	\$150.00
Quarter Page	Black & White	\$100.00

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Photo by
Peter Rogers

CAVE DIVERS ASSOCIATION OF AUSTRALIA

P.O. BOX 290, NORTH ADELAIDE,
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GUIDELINES is a newsletter of the Cave Divers Association of Australia. All articles for the following issue are to be sent to the Editor, Glenn O'Connell, P.O. Box 290, North Adelaide, S.A. 5006. All articles and submissions shall automatically constitute an expressed warranty by the contributor that the material is original. We assume no responsibility for unsolicited material. Articles and information may be reproduced without prior permission provided reprints are accredited to the authors and GUIDELINES. Private advertising for caving and diving equipment may be advertised free at the discretion of the Editor. Opinions expressed in GUIDELINES are those of the individual authors and are not necessarily those of the C.D.A.A.

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If you know who you want to write to, please address your letter to the relevant director.

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GENERAL INFORMATION

For those interested don't forget OZTech will be held in Melbourne this year on the 8th and 9th July at the Melbourne Exhibition Centre. Some of those present will include Jarrod Jablonski, WKPP Training Director, Olivier Isler, Swiss Cave diving pioneer and explorer, Tom Mount the CEO of IANTD, Numo Gomes, Lamar Hires, Chris Parrett, author of the ABYSS planning software and the list goes on. The event is sponsored by a number of organisations including IANDT, TDI, DIVA, Dive Rite/Aqua Tech, Poseidon, Abysmal Diving and Dive Log. There will be both formal and informal presentations as well as equipment workshops, industry updates and sessions on every aspect of Tech diving imaginable. For those who went to Sydney last year, this year promises to be even better including door prizes. We'll publish more information in the next Guidelines, otherwise try any of this list.

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GST

Just like kids pyjamas the CDAA, we are led to believe, will not be exempt. So what does this mean? Well after July 1 everything goes up 10%. That also means that any subs paid now for time after that date will attract the tax. Instructors who have renewed that membership already will be fine until they renew again in December. Products likewise after July 1 will also increase 10%, as best we can ascertain.

Also with regard to payments please DO NOT SEND CASH THROUGH THE MAIL. Some people still do it. We can not accept responsibility for missing monies sent to us in this way. I am amazed that some of you are still that trusting.

INSTRUCTOR INSURANCE

If you are a guide or Instructor and currently do not have or can not get Insurance please contact Paul Axton (Standards Director) or Chris Edwards (Publications and Records). Please see contact details inside front cover.

NATIONAL DIRECTORS REPORT

As most of you would be aware there weren't any nominations for the position of National Director. At the AGM a show of interest was asked for and I was the only person who nominated. Afterwards, others expressed interest and eventually after three months (as the Constitution allows) I was appointed to the vacant position. Beforehand I was delighted to see Paul Axton appointed to the position of Standards Director. I believe a new face and a new outlook is good for the growth of the CDAA.

I would like to thank the previous National Director, Steve Sturgeon for the good work he did in his time. Carlo Virgili resigned in August last year and the position was filled by our Treasurer, Andrew Seifried.

The financials were a delight to read and clearly showed the strong financial position of the Association. The previous Standards Director Glen Harrison completed his term in a very turbulent year that taxed many of the office holders. Previous terms that Glen has served as an office bearer with the Association bear testimony to his commitment to the CDAA.

It would be remiss of me not to mention the dedication of Gary Barclay who served as Site Director and still continues as the Manager of Research and Mapping. Steve Arnell has inherited the

position that has been left in excellent condition.

1999 saw Linda Claridge pass on the responsibility of Records Officer to Lorraine Hardman. Linda must be the longest serving office bearer in the CDAA's history. Linda and Gary's work was acclaimed by many at the AGM and the Association presented Linda with an award.

Chris Edwards was elected unopposed at the AGM and continues to look after Publications, Records and Products.

To the other Office Bearers that soldier on I would like to thank them and hope that we can continue to work together. Look at our CDAA Directory and you will see the people that we all owe so much to - Noel Dillon, Deb Williams, Glenn O'Connell, Phil Argy, Jim Ferry and our Public Officer Kevin Burrowes.

So we begin a new century, it's easy to have dreams, it's harder to have goals and the CDAA's history shows that a lot of plans just go out the window. I would like to make some changes. These changes will require some deep thought by the members to see them through. I will call on you to vote on some of my (I would like to think OUR) ideas. The membership fee structure needs a complete review. We are in a different era than any time before in the history of the

CDAA, GST is coming, access fees, user pays and returns on investment...these are the cries of the providers. The days of the takers are over, today it's put up or shut up! I am proposing a complete change of fee structure that will be based on "user pays" Joining fees and renewal fees at the entry level will not change, but as higher certification is obtained, therefore providing access to more sites, the fee will slightly increase. I intend to propose that there will be NO levy placed on members that wish to dive a particular site. Your fees will cover privately owned sites once you reach the rating. It's simple, it will work and it can change up or down with the current situation. The acceptance of Nitrox was the first major change the Association had seen, at first restricted in its use, now an approved method to dive in our sites. Tri-mix and re-breathers are just around the corner. With three Directors we achieved the acceptance of Nitrox when I was last on the board. With five Directors we can achieve Tri-mix and re-breathers and if we have limits at the start all the better. Teaching Standards are going to be

looked at, and changes made where they are necessary in the programs, so that we adapt to new technology and methods. A better system of handling Standards violations so that it is equally just to all will be presented The Constitution has a few areas that are open to too much interpretation, the appointment of Directors and other areas will be looked at very closely. The CDAA has a very impressive record, not always public but other activities must grind their collective teeth when they hear of our safety record. Communication is the WORD.

We will be looking at setting up a web site manned and operated by the CDAA where information can be downloaded, where permits and applications can be sought and a line of communication can be set up with Directors, Instructors and other members.

With the help of the other Directors I will achieve these goals, and with your support we will grow and re-shape the CDAA into a mighty Association ready to face the new Century.

HELLS HOLE

For those of you who have never dived this site, why not give it a go. Thanks to the hard work of SA Forest Ranger, Trevor Wynniat, the track is now accessible via a boom gate. Yes that means you can drive your vehicle almost to the edge. Yes you can use your winch or a snatch block and use the trust car as an uphaul. For those who have done the climb and vowed never again, why not rethink. Please remember Permits are required and can be obtained from SA Forests via email wynniat.trevor@saugov.sa.gov.au

COUNTRY FIRES REGULATIONS ON THE USE OF PETROL DRIVEN COMPRESSORS DURING THE FIRE SEASON

When applying for diving permits throughout the Fire Season from November to April, divers will need to state if they intend using a petrol driven compressor or generator.

Conditions are as follows:

- The space around and above is clear of flammable material to a distance of atleast four metres;
- A responsible person is in attendance at all times;
- A shovel or rake and portable water spray in good working order are at hand;
- Any exhaust is fitted with a spark arrester in good working order.

EMAIL LISTS, WEB SITES AND THE LIKE

As most of you would be aware the CDAA list is no more but there is another list that some have both subscribed and subsequently unsubscribed from. It's at cdaa@topica.com

There are plenty of other information type lists around one of which is: AustTech@ssiaust.com

As is the case with most lists to subscribe is usually easy. For example with the above simply send a blank message to AustTech-subscribe@ssiaust.com

Although both these lists will at times discuss CDAA matters, neither are official CDAA lists and do not necessarily reflect the views of the Directorate.

The Directorate is however currently investigating upgrading the site which was kindly established by Dean Niclasen. We are contemplating an official site with News, contracts, indemnities on line ordering of products, maps etc.

If any member has specific views about content they would like to see please email Chris Edwards via cedwards@teksupport.net.au

A SHORT HISTORY OF THE ANCIENT MAYANS

By Kerri Watson

One of my favourite places on God's beautiful earth is Mexico, particularly Akumal. I have had the opportunity to visit Mexico five times in the last eight years. It was on my first visit with my father back in January of 1991 that I was introduced to the Mayan Indians.

I was raised in a very sheltered environment. I never experienced or witnessed poverty so my first trip to Mexico with Dad was a considerable culture shock for me. We stayed in a primitive village called Xcalat in an area called Chinchorra at the very tip of the Yucatan peninsula. The local inhabitants there were descendants of the ancient Mayan Indians. They were a very simple group of people living by very simple means yet they were some of the happiest and content families I have ever met. They lived in grass huts called *pallapas* with dirt floors. They caught their breakfast, lunch and dinner and worked for a meager salary. The nearest telephone was three hours away. After spending a week with them I learned a valuable lesson that all of the material things I enjoyed back in the States were of little importance on the grander scale of life.

I never forgot Xcarat and think of that little village often. Since then, I have married and learned to cave dive. My husband Pat and I try to visit Akumal, Mexico once or twice a year to enjoy the beautiful cenotes found there. The natives there are also descendants of the Mayan Indians and

again, a very friendly and simple group of people.

On our first trip to Akumal, we took a day off from cave diving to visit Tulum, an ancient Mayan city which archeologists have uncovered and researched. Walking around the city was incredible and fascinating. Tour guides offered detailed information about the ancient Mayans as we went from structure to structure. For instance, the city of Tulum was the home of city officials and priests. The common people lived scattered about the area and commuted in for ceremonies, trade, and other business affairs. Although bare stone now, the buildings were brightly painted and sculpted to pay tribute to their gods as well as record history.

I had a great time that day at the ruins but didn't think about Mayan history again until last summer. As a secondary education major in Biology and History, I had a chance to earn a history credit by doing an independent study based on Latin America. My professor told me I could pick any subject I wanted. I chose to do the Mayan Indians and spent many hours pouring over books and researching the subject to turn in one final paper. I earned my credit and learned a great deal about the prosperous tribe of Indians whose collapse is still a mystery. I decided to share with you some of the interesting facts I learned so that if you have a chance to visit Akumal for cave diving, your off day at Tulum could be a little more interesting.

The Mayans are believed to be descendants of a nomadic group who crossed into the Western Hemisphere from the east via a land or ice bridge where today's Alaska and Russia are in close proximity. The nomads moved south surviving on hunting and gathering. The peoples continued to move south and settled both along the Caribbean coast and the Pacific coast. Coastal areas proved to be more plentiful for tribesmen with a climate that could sustain resources year round. Ruins found indicate the villages became more sophisticated and organized. Unique human figurines have been found with a somewhat grotesque structure but still symbols of strength and virility. The eyes and mouth are shaped oval or round and protrude from the face. The limbs are crudely molded with digits represented by lines drawn in the clay. Three-legged pots with a face molded on the ends of each leg are also found often at sites.

Eventually these villages progressed and grew into organized civilizations. Sophisticated and beautiful pottery emerged consisting of thin-walled, reckless jars and deep bowls decorated with simple geometric shapes and lines. Pottery became more sophisticated later with the rocker-stamping (carried out by "walking" the edge of a shell in zigzags across the wet clay). True cooking vessels also made their first appearance.

One of these organized civilizations is known as the ancient Olmec. They rose to great power centuries before the Mayans. Olmec ruins are represented by gigantic basalt sculptures with an art style ranging from snarling jaguars to weeping human infants. The Olmec's huge sculptures, artwork and massive architecture insinuate a powerful civilization with enormous material resources and manpower. It is also

believed that the Olmec were the inventors of the Long Count calendar as well as an established writing style which the Mayans would expand upon later.

Cities grew more and more complex and a division of states resulted with standing armies and even police forces. The Maya began to develop in the lowland area of Central America (the Peten-Yucatan peninsula area). It is a harsh land with only about 70 to 90 inches of rainfall a year with severe droughts occurring and few freshwater supplies. The ancient Mayans did find water through *cenotes*; areas where the limestone has collapsed to reveal underground rivers. They also constructed complex canal systems and reservoirs. Soil was scarce considering the land is mostly comprised of limestone which made farming difficult. Raised fields or cleared plots of land, called *milpas*, were used to plant crops. The *milpas'* soil, however, lasted only about two years forcing a farmer to move to a new plot of cleared land. This type of farming, referred to as *swidden agriculture*, was one of the first methods used by the Maya for agriculture.

Mayan villages were supported through specialized gatherings, cultivation of food crops and trade. A long-distance trade route developed by the Olmec and controlled later by the Mayans provided critical resources such as cacao, jade, and obsidian from the adjacent highlands. Populations became more condensed along the trade routes resulting in complex societies under the leadership of *chiefdoms*. Around these chiefs grew the first ceremonial and market centers along with an elite class possessing both religious and economic status. Their power depended on the cooperation for surrounding villages as well as control over the trade routes.

The elite class also began to produce priests responsible for supernatural affairs which helped to decide when to plant and when to harvest crops. In return for their assistance, the priests were paid by the farmers in food and labor. But as the population grew and inhabitants began to spread out, new methods for farming to replace the inefficient swidden agriculture were investigated.

The growth of areas from population increases and the search for fresh soil brought many chiefs into competition with one another. They also fought for dominance over local trade routes but the most important long-distance trade route continued to be the old Olmec, Pacific coast route. This route was severed by an eruption of the volcano Ilopango. The eruption contributed to the decline of the Pacific coast centers, and ultimately, stimulated cultural development in the southern and central lowlands which marks the Classic period of the Mayan Indians.

The Classic Mayan culture lasted from around 250 A.D. to 900 A.D. The central and southern lowlands mark the distinctive boundaries of the Mayan civilization as we know it. The historical understanding of the Mayans was obtained from archeological research focused mainly on the southern lowlands. The significance of the Classic time period is the emergence of two different interpretations. The first idea is that the Mayan Indians were indigenous without any solid influence from outside areas. Evidence of this theory can be found at Tikal, where a steady progression of population growth and an elaboration of architecture and other materials were found. However, another idea holds that Mayan civilization developed through an interaction between indigenous growth and outside influence. This idea is supported by

the sites Holmul, Barton Ramie and Nohmul in the eastern lowlands. These sites have records of rapid population increase, new stone tools such as bark beaters, and the appearance of ceramics of different decoration and four supports instead of the usual three.

There is another site, however, called El Mirador which was discovered in 1926, that raises even more questions concerning the Mayan Indians. It predates the Classic Maya time period by 500 years yet exhibits Classic Maya style and architecture. Literally buried under jungle and soil, El Mirador can be found 360 kilometers north of today's Guatemala City. If there were one site I had to choose to visit it would be El Mirador. Probably the most impressive structure at El Mirador is *el tigre*, a pyramid that stands 18 stories high and covers a base of three football fields, which is an accomplishment of even the Classic Maya. It was thought to be a small mountain when seen from a helicopter but continuous archeological excavation determined otherwise. For reasons still unknown, El Mirador's ascendancy ended as the Classic Maya period began and a new Mayan center, Tikal, emerged to dominate the lowlands.

The Mayans themselves relied heavily on the marketplace for acquiring both staples and exotic foods. Deer, rabbit and monkeys were hunted and trapped for food. Blowguns with clay pellets were used to hunt birds and monkeys. Domesticated animals were not a prime source of food but both fish and shellfish provided a steady diet for Mayans along the coastal regions. Inland Mayans caught freshwater fish. Wild plants were also gathered and used for both consumption and medicinal purposes.

The minimal settlement feature was the residential unit built upon a low earthen or rubble platform with deceased family members buried underneath. The walls were stone with a thatched roof. Hearths were present as well as workshop areas where chipped-stone tools were found. Two or more of these residential units was considered a *cluster*. One of the structures within the cluster was usually larger and more elaborate probably reserved for the patriarch of the family. Beyond the residential units, structures were built for a specific purpose such as temples, platforms, causeways, ball courts and palaces. These kinds of structures within a settlement are referred to as *centers*. They were areas for public gatherings, ceremonies, ball games and markets. Some centers denoted an obvious separation for public access and restricted areas. Different sizes among centers indicate that some Maya centers exerted a political dominance over others. Military raids or even open warfare were probably used to dominate the satellite centers.

The state system society consisted of a hierarchy of social classes ruled by a highly centralized government. The power of the state government was limited to well-defined boundaries but enjoyed political power and authority derived from economic, social and religious sanctions. The ruler, or king, claimed his position as a kind of divine right and delegated a measure of power to higher officials with certain defined responsibilities. Some positions of authority were rotated among the male occupants who would work at the center for a predetermined period of time then return home to their homes and fields. Some cities relied on a twoclass system where the peasants supported the ruling class with food supplies as well as labor to

build the magnificent pyramids and temples characteristic to the Mayan culture. Yet the most successful system was the multiclass system with a ruling class, commoners and an emerging middle class with specific skills and trade. The life cycle and behaviour of each individual in ancient times were set by customs and governed by religious beliefs. The Mayans incorporated a somewhat zodiac of gods where the date of a person's birth established the individual's temperament and destiny. The ritual obligations of each individual were determined by the 260 day sacred almanac.

Children were a blessing for the ancient Maya as well as their modern descendants. Women who desired to have children induced pregnancy (or the prospect of it) by placing an image of Ix Chel, the goddess of childbirth, under her bed. Depressed foreheads were considered a mark of beauty so the heads of babies were bound between a pair of flat boards, one at the back of the head and the other against the forehead. The boards remained for several days but the impression was permanent. This practice was universal among the ancient Maya, especially in the upper class.

Until the age of three or four, children were raised exclusively by their mothers. When a boy was about four or five, a white bead was fastened to the top of his head. For girls of the same age, a string was tied around her waist with a single red shell. These images signified virginity. It was dishonourable to remove these symbols before the puberty ceremony which consisted of a detailed ritual conducted by the priest in the child's home. The white bead or red shell was removed symbolizing the child to be of marriageable age. After the ceremony, a great celebration and feast followed with gifts for the family.

After the puberty ceremony, young women were taught to be modest. Whenever they met a man they turned their backs to him and stepped aside, allowing him to pass. When providing a man a drink, the women lowered their eyes. The women spent time with their mothers learning how to make tortillas. The women were the housekeepers, cooks, weavers, and spinners. They raised fowl and went to market to buy and sell articles they produced. If need be, they assisted the men in the fields for sowing and cultivating.

Young, unmarried men of the community lived in a house set apart for them. They painted themselves black until they married. They worked with their fathers learning the family trade and provided a significant amount of labor for the family.

The age a Mayan married depended on the region in which he lived. A man might marry as young as 12 to 14 or as old as 20.

The average was about 17-18 years for men and 14-15 for women. The father in the family selected the wife for his son through the employment of a matchmaker (*ah atanzahob*). When a suitable wife had been selected, a dowry was discussed and the wedding ceremony scheduled. Divorce was common and easily obtained by simple repudiation of a spouse. Men could leave their wives for trifle reasons and remarry. Wives could also leave their husbands and take another, but the first time they got married was by a priest.

The principal garment of the Mayan man was the loincloth, called *ex* in Mayan. It was a band of cotton, five fingers wide, and long enough to wrap the waist several times and pass between the legs. The loincloths were decorated with embroidery and feathers. The men also wore a *mastil* (made of woven manta) between their legs

to cover and protect the genitals. The men sometimes wore a *pati*, a large cotton cloth knotted around the shoulders and elaborately decorated. Sandals of untanned deer hide were worn to protect the feet. They wore their hair long except for one bare spot burned on the top of their heads. Warriors painted themselves black and red while prisoners were painted in stripes of black and white. The priests were painted blue. Tattoos were also made by first painting the part with color then delicately cutting in the paintings. The pain was extreme and the wounds festered but those without tattoos were made fun of by the other tribal men.

Women's dress varied depending on climate and social status but they were modest in that they wore a skirt from the waist down and a woven manta to cover their breasts. In some areas the women even wore embroidered petticoats. They wore their hair long and took great care of it. They also wore tattoos but only from the waist up, excluding the breasts.

When a man became ill, he summoned a *shaman*, a sort of medicine man. The Maya area had many medicinal herbs and plants used by the shaman; some remedies with merit, others based on superstition. For example, the remedy for a toothache was to take the bill of a woodpecker and bleed the gums a little with it; if a man, thirteen times; if a woman, nine times. In addition, a piece of a tree that was struck by lightning was grated with a fish-skin and wrapped in cotton-wool and applied to the tooth.

The Maya had a great fear of death and grieved loved ones for long periods of time. A dead body was wrapped in a shroud and the mouth filled with ground *maize* (corn) along with one or more jadeite beads. The

beads provided them with money for food in the other life. The common people were buried under the floors or behind their houses which were then usually abandoned. Into the grave were thrown idols of clay, wood, or stone, and objects indicating the profession or trade of the deceased. The bodies of the ruling class were burned with their ashes placed in great urns and temples built over them. But cremation was only practiced later in Mayan history as remains of rulers have been found in excavations of temples and pyramids built in the early Classic period.

The world of the ancient Maya was governed by a cosmological order which imbued all things, animate or inanimate, with an unseen power. This invisible power was amorphous in the case of the "spirits" inhabiting rocks, trees, or animal like (zoomorphic) or human like (anthropomorphic) forms. This fusion of the observable and unobservable is best expressed by the Maya concept of *cuxolalob*, the knowledge of that which is both rational and supernatural.

The Mayans were dominated by a priesthood who carried out complex and elaborate rituals connected with the worship of a great number of gods and goddesses. The priests were the magicians and soothsayers who understood the complicated calendar hieroglyphics. Because of this, the priests were able to designate lucky and unlucky days for fishing, hunting, agricultural operations, marriage ceremonies, and every other conceivable human activity.

Yet religious practices were not confined totally to the priests. Commoners had a scant knowledge of their religion which allowed them familiarity to the appropriate prayers for certain important occasions,

particularly those associated with agriculture. Every type of labor or trade had its own god where offerings of food, flowers, beads, clay images and other objects up to the sacrifice of humans. The rulers of Mayan centers would also perform sacrifices of their own blood, called *bloodletting*, with records of blood drawn from areas such as the ears and penis. Women of the elite class are also recorded to have drawn blood from their tongues. The blood obtained from the bloodletting was literally sprinkled over the idols. The act of bloodletting signified a ruler's linkage to the supernatural therefore establishing his divine right as a ruler.

Ceremonies were accompanied by the burning of incense as well as fasting and abstinence. To break one's fast before the ceremony was considered a great sin. Another religious observance was dancing. There were many kinds varying with the different ceremonies, but social dancing was entirely unknown. Each sex had its own dances, and only rarely did men and women dance together. There were many ceremonies for individual and group needs, but a similarity of pattern ran through all of them such as fasting and abstinence, symbolic of spiritual purification, and priestly divinations always determined the auspicious day for the rite.

The Mayans excelled not only in culture for their time but in art and architecture. Methods to build the pyramids, temples and palaces occurred with the discovery that burnt limestone fragments mixed with water produced an extremely durable plaster. They also realized the structural value of a concrete like fill made of limestone rubble and marl. With their knowledge of structural components, the Mayans were able to build the magnificent structures that we can still enjoy today.

One incredible architectural feat for the Mayans is witnessed at the great pyramid of the Chichen Itza ruins. Constructed around 300 A.D., it is a structure of near-perfect symmetry. On each of its four sides, ninety-one steps lead to the crowning temple of Kukulcan, a serpent god. Four times a year the pyramid heralds the advent of seasonal change by a play of light across its surface. At precisely 3:52 pm, as the sun is setting in the west, isosceles triangles of light form down the staircase. These move down the facade with the stealth of an undulating snake. The final triangle, fusing with the serpent's head at the pyramid's base, completes the reptile image. As the sun continues its descent, the snake's head is projected in shadow across the ground. The illusion is that of some divine serpent dropping from the heavens, then moving out among the people. No other culture has obtained such representation through architecture.

The Mayan also developed a sophisticated irrigation system to provide water year round. The building of reservoirs and massive, complicated canal systems took the labor of thousands and helped develop the concepts of community and central authority. The canals that resulted were used for transportation via canoes carved from a single piece of hardwood.

The Mayans did not stop with architecture and irrigation. They also developed a unique numbering system based on the number 20 and used three symbols: the dot, the bar, and the symbol zero. Through these three symbols, the Mayan Indians incorporated a numbering system which they applied to everything from farming to astronomy.

In reference to astronomy, the Mayans discovered incredible patterns of Venus and

Mars. They associated Venus with the number eight. Venus's orbital repeats itself every eight years. Mars retraces itself every 32 years which is divisible by eight. One of the Mayan calendars, the *Tzolkin*, makes use of a 260-day interval (almost exactly onethird of Mars's synodic period). In addition, the Maya assigned a single "Lord of the Night" to each date. There were nine lords in all, and their assignments cycled in a fixed sequence. The combination of 260-day and 9-day cycles repeats every 2,340 days. Five such periods is just 12 days longer than exactly 32 years (Mars's synodic period). The Maya also attached significance to a period of 819 days but its importance is yet to be discovered. Many historians do not agree that it was the Mayans who discovered the patterns of Venus and Mars but the Olmec who established the Long Count calendar, the basis for the Mayan calendar. Nevertheless, no one can argue the fact that the Mayan carried the Long Count to its highest degree of refinement.

Regardless of how the Mayan culture obtained its knowledge or originated, one mystery remains - its collapse. Several ideas have emerged to explain their demise resulting in another debated issue of these mysterious people. Ideas include political chaos, overpopulation, disease, insect plagues, peasant revolts against the ruling class, civil wars, and/or climate changes. David Hodell of the University of Florida believes the Mayan suffered a 200 year drought which set off a chain of disasters. The onset of this drought period resulted in crop failure, which resulted in famine, which made the Indians susceptible to disease. There would also be more competition for food which would explain the records of increased warfare between the various Mayan city-states. Scientific

evidence to support the drought theory for Mayan collapse has been found at the bottom of Lake Chichancanab in the northern Yucatan Peninsula of Mexico. Shells provide a record of the water chemistry in which they are formed therefore the ratio of oxygen-18 and oxygen-16 show a severe drought around 800 A.D., the time marked by the beginning of Mayan collapse.

Another idea to support Mayan collapse is deforestation from the Mayan's massive building program. According to Richard Hansen from UCLA, the elaborate architecture required large amounts of lime stucco, which was produced by subjecting limestone to intense heat. Because as many as 20 trees were burned to create one pile of lime one meter high, whole forests were cleared for this purpose. This led to soil erosion that filled the seasonal swamps where the Maya got peat to fertilize their crops, possibly impairing their food supply. Although archeologists tend to believe that multiple factors contributed to the Mayan decline, Hansen's theory is seen as a valuable contribution.

Another valuable discovery was made in the spring of 1991. An archeologist working in northern Guatemala discovered in a massive pyramid the 1,200 year old tomb of a Mayan king referred to as Ruler 2. The glyphs and texts found near the tomb chronicled a series of alliances and marriages through which Ruler 2 annexed the territory of neighboring Mayan city-states from A.D. 698 to 726. This pattern of expansion was continued with increasingly bloody means by Ruler 2's successors. By 760, relations between cities had degenerated into a deadly cycle of attack, conquest, and retaliation that some believe tore Mayan civilization apart.

Close examination of Mayan culture, religion, and society as well as its art and architecture contribute to the ideas to explain their origin and collapse. Hopefully, the ongoing task of deciphering Mayan hieroglyphics may one day unravel the mystery surrounding the Mayan civilization. Several theories have already been adjusted according to records that archeologists and historians can now read. Yet it is still the idea of balance that proves itself among Mayan theory and debate. Civilizations have come and gone in the history of the world with each one marked by a combination of reasons for their origin and later demise. Why the Mayans should be any different is a question that many continue to seek. The answer lies only within the walls of their ruins.

I hope my humble account of Mayan history will help you enjoy and understand more of what you see when visiting some of the Mayan ruins scattered throughout Mexico. The cave diving is truly awesome but the time spent looking at ruins is enjoyable as well. Of course, the ruins also provide ample souvenir shops but the hiring of a personal tour guide is well worth the cost. If you have any questions or comments concerning the information I provided, please feel free to e-mail me at pkwatson@alltel.net. Thank you.

Source: 'Underwater Speleology',
Volume 27, No. 1.

- Hells Hole** Contact ForestrySA by phone, fax or e-mail to arrange permit.
(e-mail preferred option)
- Pines** Collect Permit from Carter Holt Harvey Mill Gatehouse, Jubilee Highway Mount Gambier, adjacent to Forestry Office.
- Mud Hole** No diving on days of Total Fire Ban. Forest Work bans may be imposed by ForestrySA on extreme fire danger days, which exclude the public from entering the forest.
If in doubt, check with Ranger Trevor Wynniat, although signs are generally erected at diving sites on such days to indicate bans. Permits will only be issued between 8:00am and 4:30pm Monday - Friday.
Phone: (08) 8724 2876 Fax: (08) 8724 2885
or e-mail: wynniat.trevor@saugov.sa.gov.au
Hells Hole gate key available from Lady Nelson Visitor Centre.
- Iddlebidy (L250)** Iddlebidy open 1st and 3rd weekends of every month.
Nettle Bed open every weekend.
Maximum of 4 divers per dive per day, one dive per day for each site.
- Iddlebidy (L250)** Only Penetration Divers.
No diving on days of Total Fire Ban. Forest Work Bans may be imposed by ForestrySA on extreme fire danger days, which exclude the public from entering the forest.
If in doubt, check with the Ranger Trevor Wynniat, although signs are generally erected at diving sites on such days to indicate such bans.
Permits will only be issued between 8:00am and 4:30pm Monday - Friday.
Phone: (08) 8724 2876 or Fax: (08) 8724 2885
or e-mail: wynniat.trevor@saugov.sa.gov.au
Site keys from Lady Nelson Visitor Centre.

For those of you who don't have ready email access but may be interested in helping in a DPV survey, the following appeared recently:-

Hello. My name is Eva Pustelnikova and I am a student at Northwood University in West Palm Beach, Florida, U.S. I am working on a research project on the use of diver propulsion vehicles (DPV's)/scooters. Among examining the use of this equipment by individuals for recreational purposes, I am also researching its use in underwater construction as well as other commercial enterprises.

I am writing to you to ask if you would please answer a few questions about your use of diver propulsion vehicles while cave diving.

1. How long have you been scuba diving?

- a) under 4 years
- b) 5-10 years
- c) 11-15 years
- d) 16-20 years
- e) over 20 years

2. About how long have you been cave diving?

- a) under 4 years
- b) 5-10 years
- c) 11-15 years
- d) 16-20 years
- e) over 20 years

3. Have you ever used a diver propulsion vehicle/ scooter while cave diving?

- a) YES
- b) NO

If YES, how effective was the DPV/scooter in facilitating movement in the cave?

- a) NOT AT ALL effective
- b) MODERATELY effective
- c) VERY effective

4. Do you own a DPV/ scooter unit?

- a) YES
- b) NO

If YES,

a) Which brand do you own?

.....

.....

.....

b) What made you choose the unit that you did (product's features/functions, price, brand name, etc.)?

.....

.....

.....

.....

If NO, would you ever consider buying a unit?

- a) YES
- b) NO

If you would like to help Eva out please either email her direct:-
eva_pustelnikova@hotmail.com

or forward your responses
c/- Chris Edwards at PO Box 290,
North Adelaide, SA 5006.

CAVERS MAILING LIST

Fellow cavers,

We are presently in the process of reinstating the Quintana Roo Speleological Survey's position as a project of the National Speleological Society. In the meantime, we have been updating the data files of the known caves in Quintana Roo.

After all available data was compared, we are pleased to announce that the longest, surveyed underwater cave in the world is now Ox Bel Ha at 43.88 miles/70.65 kilometers. According to Bob Gulden's long cave list, this makes Ox Bel Ha the 18th longest cave in the world.

This is an incredible achievement considering that the initial exploratory dives by Sam Meacham and Bil Phillips began in January of 1998 (dry cavers should consider the difficulty of surveying imposed by the underwater environment).

The latest data for the longest caves in Quintana Roo are as follows:

Cave System	Length	Depth	Reported by	Date
1. Ox Bel Ha	70 650 m	-33 m	Sam Meacham	1/00
2. Nohoch Nah Chich	60 985m*	-72m	Dan Lins	1/00
3. Sistema Dos Ojos	55 322m*	-101m	Jim Coke	1/00

*Some of the lengths indicated here are shorter than previously published, this is due to survey and data entry errors that previously extended the length of the caves. These data errors have been identified and resolved to generate the lengths presented.

Happy caving and cartographically yours,

The Directors of the Quintana Roo Speleological Survey,
Hazel Barton, Jim Coke, Dan Lins, Gary Walten.

We would like to thank Larry Fish for his help in producing a conversion program that has allowed much of the QR survey data to be converted to a usable form in Compass.

UP COMING COURSES

PENETRATION

Yes once again the Easter Penetration Course is on. Dates as follows:-

Friday 21st April - Monday 24th April inclusive. Cost \$650.00. For further information please contact the course co-ordinator Greg Bulling.

Greg Bulling
8 Durbridge Court, St Agnes
SOUTH AUSTRALIA 5097

Ph: 08 82654978(ah) 0409 095 927(mobile) email: gbulling@dove.mtx.net.au

CAVERN/SINKHOLE

March 6th-19th April 3rd-16th July 3rd-16th Sept 18th-1st

CAVE

March 13th-19th July 10th-16th September 25th-1st

For further information please call Warrick McDonald 0408 374 112 or
email Warrick via info@abocan.com.au

SHAFT DATES

March 4th and 5th April 1st and 2nd May 13th and 14th June 10th and 11th

Access arrangements remain unchanged.

Please contact Linda Claridge 03 5565 8793 Or Fax 03 5565 8118
PO Box 15, KOROIT, Victoria. 3282. garinda@tpgi.com.au

Cenotes of the Riviera Maya



Pictorial By: Steve Gerrard



THE CENOTES OF THE RIVIERA MAYA

Hi! My name is Steve Gerrard. For the past three years I have been working on my book that will thoroughly explain the superb snorkeling, cavern and cave diving of the Riviera Maya. This is on Mexico's Yucatan peninsula located between the marina resort of Puerto Aventuras going south beyond the village of Tulum. This book serves as a detailed guide of the cenotes and what to expect. It also contributes as an excellent educational tool for all visitors from around the world. Information such as:

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- ✧ THE RIVIERA MAYA
- ✧ ENVIRONMENT
- ✧ SNORKLING
- ✧ CENOTE DIVING
- ✧ CAVE DIVING
- ✧ ACCIDENT ANALYSIS
- ✧ RISKS
- ✧ TECHNIQUES
- ✧ EXPLORATION
- ✧ HOW TO PLAN & PACK FOR YOUR TRIP
- ✧ CAVERN & CAVE DIVING TRAINING AGENCIES
- ✧ APPENDIX

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For more Information: 104164.1441@compuserve.com
www.cenotes.com/gerrard

TANK CAVE DIVING SCHEDULE 2000

JANUARY 2000	DATE	FEBRUARY 2000	DATE
Saturday	15th	Saturday	12th
Sunday	16th	Sunday	13th
Saturday	29th	Saturday	26th
Sunday	30th	Sunday	27th
MARCH 2000	DATE	APRIL 2000	DATE
Saturday	11th	Saturday	8th
Sunday	12th	Sunday	9th
Monday (Labour Day VIC)	13th	Friday (Good Friday)	21st
Saturday	25th	Saturday	22nd
Sunday	26th	Sunday	23rd
		Monday (Easter Monday)	24th
		Tuesday (ANZAC Day)	25th
MAY 2000	DATE	JUNE 2000	DATE
Saturday	13th	Saturday	10th
Sunday	14th	Sunday	11th
Monday (Adelaide Cup)	15th	Monday (Queen's Birthday)	12th
Saturday	27th	Saturday	24th
Sunday	28th	Sunday	25th
JULY 2000	DATE	AUGUST 2000	DATE
Saturday	8th	Saturday	5th
Sunday	9th	Sunday	6th
Saturday	22nd	Saturday	19th
Sunday	23rd	Sunday	20th
SEPTEMBER 2000	DATE	OCTOBER 2000	DATE
Saturday	2nd	Sunday	1st
Sunday	3rd	Monday (Labour Day SA)	2nd
Saturday	16th	(Queen's Birthday WA)	
Sunday	17th	Saturday	14th
Sunday		Sunday	15th
Saturday	30th	Saturday	28th
		Sunday	29th
NOVEMBER 2000	DATE	DECEMBER 2000	DATE
Saturday	11th	Saturday	9th
Sunday	12th	Sunday	10th
Saturday	25th	Saturday	23rd
Sunday	26th	Sunday	24th

TRADING POST

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NOTICE • NOTICE • NOTICE • NOTICE

MEMBERSHIP FEE DEADLINE

Section 13(3) 13(4) of the Constitution (as amended) September 1997, requires that membership fees are due 1st July of any membership year. Any member who has not paid by 1st September is deemed to be unfinancial. A \$50 late fee as specified in Schedule 2 of the regulations is payable in addition to membership fee in order to regain membership.

Remember that in order to nominate a Director, second a nomination or vote in the postal ballot, you must be a financial member of the Association (Section 9(2), 9(6), S13 (1) Constitution).

ANY MEMBERSHIP RENEWALS THAT ARE RECEIVED BY THE TREASURER AFTER CLOSE OF BUSINESS **WEDNESDAY 1ST SEPTEMBER 1999** WILL ATTRACT A LATE FEE. **THERE WILL BE NO EXCEPTIONS.**

If you have not already renewed. DO IT NOW!

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ARTICLES FOR GUIDELINES

**IF SIGHTED PLEASE SEND IMMEDIATELY,
TOGETHER WITH ANY PICTURES TO:**

**The Editor, Glenn O'Connell
P.O. Box 290, North Adelaide, S.A. 5006.**

REWARD

An even better Guidelines for everyone.

CDAA SITE ACCESS

Remember: Access is a privilege, not a right. Please be considerate of landowners wishes.

CN = CAVERN S = SINKHOLE C = CAVE P = PENETRATION

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER - SOUTH AUSTRALIA			
Ewens Ponds	Nil	DENR P.O. Box 1046 Mt Gambier 5290 (08) 8735 1177	Groups of 6 or more, phone/mail to Dept. of Environment & Natural Resources (DENR). Smaller groups, no need. Indemnity form to be completed.
Horse & Cart Tea Tree	CN CN	Peter Cunningham PO Box 643, Mt Gambier 5290	By phone or mail, 1 week prior. Ph: (08) 8738 4003.
Little Blue	S	Port MacDonnell	Little Blue - permission not required - must carry card.
Allendale	C	Port MacDonnell	Obtain key from Mt. Gambier Tourist Information Centre.
Gouldens 2 Sisters Fossil	CN CN C	DENR P.O. Box 1046 Mt Gambier 5290 Ph: (08) 8735 1177	General Diving: Divers to contact DENR and notify of date and site to be dived. Divers must have the correct CDAA diving endorsement for the site. The onus of proof of CDAA status is on the diver and is provided by presentation of CDAA membership card or DENR checking the membership list supplied by CDAA. If there are problems with the diver not being a current financial member DENR will not be chasing the records officer to sort out the problem. This will be the responsibility of the diver. The diver must have signed an indemnity with DENR before access is permitted. Training: The Instructor is to notify DENR of the date the sites are needed and to forward signed indemnities from each student and their temporary card number. membership number.
Ela Elap One Tree	S S	Mr. Peter Norman Private Bag 67, Mt Gambier 5290	By phone or drop in before diving. Ph: (08) 8738 5287
Swim Through	C	Valerie Earl PO Allendale 5291	Currently CLOSED pending new access arrangements.
Piccaninnie Ponds	S	DENR P.O. Box 1046, Mt Gambier 5290	Permit holders by phone. Be aware of delicate vegetation. Indemnity form to be completed. Ph: (08) 8735 1177 Faxed copies of cards no longer accepted when booking.
Hells Hole Pines Mud Hole	S P/C C	ForestrySA PO Box 162 Mt Gambier 5290	Contact ForestrySA by mail, phone or fax to arrange permit. Collect permit from Regional Office, Jubilee Hwy., Mount Gambier. No diving on total fire ban days. Forest Work Bans may be applied by PISA Forestry if forest fire danger is expected to reach extreme. Such bans also exclude the public from entering the forest. If in doubt, please check with Trevor Wynniat, although signs are generally erected at diving sites on such days to indicate such bans. Permits will ONLY be issued Mon-Fri between 8.30am-4.30pm. Ph: (08) 8724 2876 Please use this number for all bookings and enquiries etc. Fax: (08) 8724 2885 Email: wynniat.trevor@saugov.sa.gov.au. Written confirmation required.
Kilsby's	S	Landowner leased to S.A. Police No Visitors	Restricted access conditions apply - refer Guidelines Issue 54. Twin tanks, maximum of 40 metres depth. Write to: 40 School Road, St. Andrews 3761. Email: mpain@hipex.com.au, 4 to 6 weeks prior to wanting to dive. Please enclose stamped self-addressed envelope (Do not contact landowner). Dec 4/5, Jan 1/2, Feb 5/6, Mar 4/5, Apr 1/2, May 6/7, Jun 3/4. 9am - 12pm & 1pm - 4pm. No animals permitted. No mid-week diving.
Shaft	S	Generally open one weekend a month L. Claridge P.O. Box 290 North Adelaide 5006	For access dates contact Linda Claridge. Also, see Special Access Bulletin in Guidelines issue 69. Nitrox as a diving mix is not allowed in the shaft. Deco mixes ATTACHED to a shot line are permissible. Divers applying to dive in the Shaft must have documented experience of a least 5 twin-tank dives.
Ten Eighty Bullock Hole Black Hole	S S S	Mr. Colin Traeger PO Box 12, Mt Gambier 5290 (087) 26 6215	Sundays only Mail Booking Form to Colin Traeger 2-6 weeks prior, stating names/qual. of all divers, and time slot. Please include stamped self addressed envelope. Closed October to November for shearing.

CDAA SITE ACCESS

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER - SOUTH AUSTRALIA (continued)			
Max's Hole	C		Phone or mail 1 week prior to dive. Ph: (08) 8726 8277 Currently closed pending access arrangements with new owner.
Hann's cave	P	P & A Lasslett	Groups of four divers only apply in writing to Site Director. Limited groups will be allowed access over the summer months. The site is very delicate and therefore only limited access is available. Divers applying will be notified as to further access details. Please include a stamped self addressed envelope.
Engelbrechts - East - West	C P	Mt Gambier Council	Obtain key from Mt Gambier Tourist Information Centre. Access agreement must be signed prior to diving. Key must be returned by 5pm Sunday, 2 divers must sign out keys, all divers must sign in advising which groups they are diving with.
Three Sisters	P	Millicent Council	Contact Linda Claridge. Access available for experienced Penetration divers only. Low profile or side mounted independent air systems required. Access agreement must be signed prior to diving. Please allow 4 weeks for indemnities to be processed.
Idlebiddy (5L250) Nettle-Bed (5L290)	P P	ForestrySA PO Box 162 Mt Gambier 5290	5L250 open 1st & 3rd weekend of every month. 5L290 open every weekend. Max. 4 divers per dive per day, 1 dive per day for each site. Only Penetration divers completed practical in-water cross-over. Bookings from Forestry Office - key from Lady Nelson. Contact ForestrySA by mail, phone or fax to arrange permit. Collect permit from Regional Office, Jubilee Hwy., Mt. Gambier. No diving on total fire ban days. Forest Work Bans may be applied by PISA Forestry if forest fire danger is expected to reach extreme. Such bans also exclude the public from entering the forest. If in doubt, please check with Trevor Wynniat or Forestry Office, although signs are generally erected at diving sites on such days to indicate such bans. Permits will ONLY be issued Mon-Fri between 8.30am-4.30pm. Ph: (08) 8724 2887. Please use this number for all bookings and enquiries etc. Fax: (08) 8724 2885 Email: wynniat.trevor@saugov.sa.gov.au. Written confirmation required.
McKay's Shaft	S		Contact Phil Argy at Mt. Gambier as access can be arranged.
Tank Cave	P	Mr. DY CER	Tank Cave Access Manager: Jim Ferry Ph: (08) 8381 1911 (7.00pm - 9.00pm SA time, week nights only). For access details see Special Bulletin No. 7 in Guidelines issue 69.
Baker's Cave	C		Please write to the Site Access Director to dive in Baker's Cave. Include stamped self-addressed envelope. Climbing equipment required.
NULLARBOR - WESTERN AUSTRALIA			
Cocklebidy Murra El Elevyn Tommy Grahams Weebubbie	C P/C C C		Apply in writing for permission to dive at least 4 weeks in advance of trip to: District Manager, C.A.L.M., PO Box 234, Esperance, W.A. 6450. Phone: (08) 9071 3733 Fax: (08) 9071 3657 Apply in writing with at least 4 weeks notice to: Graham Higgins, Dept. of Land Administration, PO Box 2222, Midland, W.A. 6056. Include in the application: • The dates of the intended visit(s) • Photocopies of CDAA certification cards for all of the party • A signed Indemnity Form for Weebubbie Cave (photocopy from original in Issue 61 of Guidelines). Please note that this arrangement is for Weebubbie only and access to other caves on the Nullarbor must follow existing access protocol. Also note that divers must supply their own ladders as the old ladder has been removed.
WELLINGTON CAVES - N.S.W.			
Limekiln (McCavity)	P/C		Both Penetration and Cave Level are being accepted for this cave depending on it's water level at the time. The cave has a restriction at the entrance which is underwater making it a Penetration Dive. During drought, the water level drops to form a small lake below the restriction allowing experienced Cave Divers access to this delicate cave.
Water (Anticline)	C		Affected by high CO ₂ levels during Summer/Autumn. Access arrangements are co-ordinated with an already commissioned research group. Contact Greg Ryan (02) 9743 4157 h, gregr@cs.usyd.edu.au
Rum Jungle Lake Berry Springs	S		No specific access arrangements.

TRADING POST

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Cave/tech diving light,
all marine anodised aluminium,
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8298 5952

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3 wings, backplate and harness sets good
condition \$350

2 x Cochran nemesis II Nitrox air integrated
2 mix computers \$800 each

2 x Cochran nemesis IIa Nitrox air
integrated 3 mix computers \$900 each

Stephen G Sturgeon 9527 7667

CDAA NOTICES

GUIDELINES DEADLINES

If you would like to contribute to
Guidelines, you should note the
following deadlines for
submission of materials:

Deadline	for publication
20th May	June
20th August	September

NOTICE FOR INSTRUCTORS

Procedure for ordering student packs:

1. Check you are insured & financial.
2. Send order & cheque or by phone/credit card.
3. Allow 14 days from when the order is received -
so allow plenty of time.
4. Student kits cannot be returned.
5. Instructors must be active.
6. Please do not pass my number on to dive shops -
you should deal with them not me.

• INSTRUCTOR RENEWALS •

Several instructors have not yet renewed their CDAA
ratings. Instructors must lodge their current insurance
details and renewal fee or packages will not be issued
and certifications rejected.

Instructor Renewals, PO Box 15, KOROIT 3282

Deb Williams
Instructor Materials Officer

ACTIVE CDAA INSTRUCTORS

Any Instructor wishing material contact - (03) 9543 3930 or email: deb@agents.com.au

STANDARDS DIRECTOR:

Glen Harrison

Telephone: 0407 608 609

(email) harrison.glen@sa.gov.au

INSTRUCTOR	CN	S	C	STATE	PHONE	INSTRUCTOR	CN	S	C	STATE	PHONE
NSW & ACT						WESTERN AUSTRALIA					
Nick Jones	.	.	.	ACT	015 851 313 m	Gary Bush	.	.	.	WA	0417 957 620 m
Peter Grills	.	.	.	NSW	(02) 4950 6262 (8am - 12 midday)	Marilyn Boydell	.	.	.	WA	(08) 9349 5646 h
Gary Norgard	.	.	.	NSW	(049) 68 4588 h	Steve Sturgeon	.	.	.	WA	(08) 9527 7667 h/w 0418 940 143 m
Andrew Robertson	.	.	.	NSW	(02) 9525 0995 h 0414 412 563 m	VICTORIA					
Des Walters	.	.	.	NSW	(060) 411 405 w	Stephen Arnel	.	.	.	VIC	(055) 26 5230 h
Liz Butler	.	.	.	NSW	0409 463 176	Gary Barclay	.	.	.	VIC	(03) 5565 8793 h
SOUTH AUSTRALIA						Jane Bowman	.	.	.	VIC	(03) 9579 2600 w
Greg Bulling	.	.	.	SA	014 477 430 m (08) 8265 4978 h	Stan Bugg	.	.	.	VIC	(03) 9379 8791 h
Paul Axton	.	.	.	SA	0419 346 442 m (03) 9782 1671	Linda Claridge	.	.	.	VIC	(03) 5565 8793 H
John Hanson	.	.	.	SA	(08) 8269 1083	Brian Cornell	.	.	.	VIC	(059) 85 2514 h
Max Marriot	.	.	.	SA	(08) 8447 3360 h	John Dalla - Zuanna	.	.	.	VIC	015 887 060 m
Richard Megaw	.	.	.	SA	(08) 8344 1733 h	Chris Edwards	.	.	.	VIC	0417 116 372 m
Richard McDonald	.	.	.	SA	(08) 8295 4140 h/w	Barry Heard	.	.	.	VIC	(056) 27 6474 h 019 401 469 m
						Ian Lewis	.	.	.	VIC	015 284 051 m
						Warrick McDonald	.	.	.	VIC	(03) 9579 2600 w
						Bob Wealthy	.	.	.	VIC	(056) 858 338 h
						Frank Zeigler	.	.	.	VIC	(055) 236 392

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Tom Mount, CEO of IANTD USA

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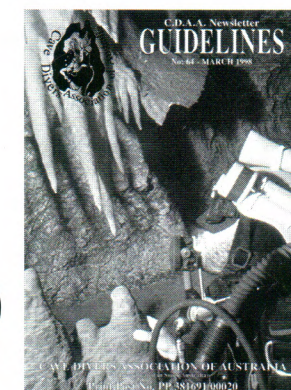
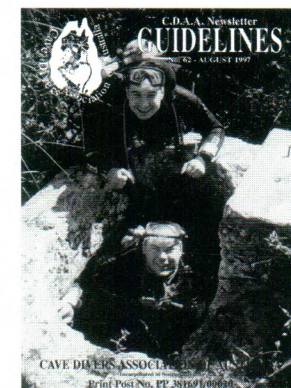
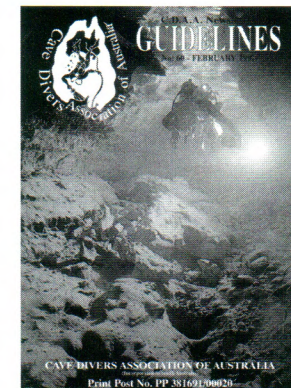
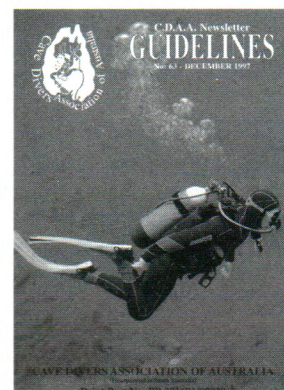
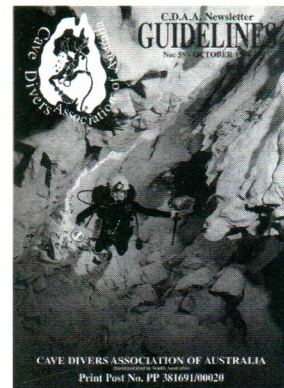
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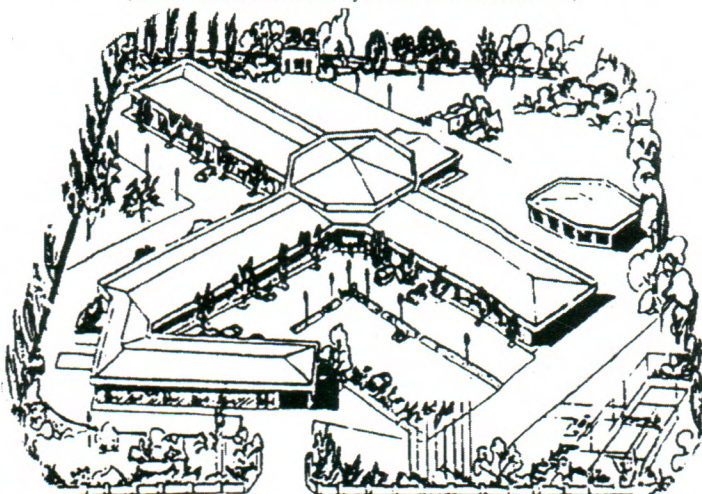
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