

ALDABRA RESEARCH STATION

JUNE/DECEMBER 2007 REPORT



UZICE SAMEDI

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INTRODUCTION

25 years ago since its declaration as a world heritage site on the 19th November 1982, by the UNESCO, Aldabra Research Station has been a National and International Centre for plants, animals, land birds and marine research program. Three decades prior to the early eighties, the largest Atoll in the world was under the management of the Royal Society and at that time was the place for some 200 Seychellois residences. During the 60's after an outrage crusade by foreign Scientific Organizations, plans for the construction of a military base was abandoned. It was the beginning of intense research into terrestrial and marine ecology of the atoll. Currently the site is very well preserved and managed by S.I.F at conserving its natural ecosystem as a strict Nature Reserve. The atoll is inhabited, except for the researchers and us the guardians taking great care of this magnificent 'World of Wonders'.



The main objective of the Atoll Research Station is long term monitoring program. Aldabra Station operates on a monthly research programming. The rangers, research officer with the help of the boatman, move around specific locations of the island each and every month, hence collecting and analyzing maximum data for research purposes. Each and every employees play significant roles in the daily smooth operation of the research station.

During the past months Research Station has encounter difficulties in some areas. The main difficulties are mostly associated with the aspects of the total remoteness and isolation of the atoll. The supply vessel conducted fewer trips to the Atoll compared to previous years resulting in shortage of certain commodities for the daily consumption. The management of the Atoll takes care of the daily administration and logistic support to and from the head office, the meteorological station, the workers and the community social welfares of all the staffs. This report is a compilation of all the work and other activities carried out during the seven months of my contract as the Acting Island Manager of the Atoll.

RESEARCH DEPARTMENT PERSONNEL;

Pierre Pistorius, (Research Officer). Head of the department and in control as supervisors of the rangers and their related work.

Aurelie Hermans, (Assistant Research Officer). The Assistant Research Officer works very close with all the other rangers but undertake guidance and supervision from the Research Officer.

Uzice Samedi, (Senior Ranger 12/01/07 -25/05/07). The senior ranger works very close and supervises all the other rangers but undertake guidance and supervision of the Research Officer and his assistant.

Devis Monthy, Alex Underwood, Catherina Onezia, Edwina Jean Baptiste, (Rangers). The ranger works under the guidance and supervisions of the Senior Ranger, Research Officer and the Assistant R.Officer

(Volunteer). Volunteer is normally attached to the research department but expected to attend to all the island work that needs to be done. Due to the high load of work in the research department, it is advisable for the volunteer to spend the maximum of their time in the research. However if there are additional work that would require assistance, he or she would be called upon to give a helping hand.

LOGISTIC DEPARTMENT PERSONNEL;

Uzice Samedi, (Acting Island Manager). The island manager is the person responsible for the Station in general comprising the daily logistical support and the Administration of the Station. Being the highest rank in the on the island all the workers works closely, under the supervision and in full corporation with the island manager.

Frances Taylor, IT and Computer maintenance: - Maintained and run service check with all the computer and internet systems used at the station. She also assists with computer tutorials to the staff members.

Bernard Marie, Station Boatman/Assistant Mechanic. The boatman operates the boats on all the trips within the Atoll and also to and from Aldabra/Assumption Island. He also ensures all the Station outboard engines are in good conditions at all times. The boatman takes directives and report to the Island Manager.

Daniel Esparon, Station Senior Mechanic: - The station mechanic currently works and attends to all the station mechanical works and services. These include the water, the electricity, the plumbing, boat engines and the generators. The mechanic also takes directives from the Island Manager.

Juan Cecile, Station Cook/Field Worker: - The cook falls directly under the supervision of the Island manager. He caters diner for all from Mondays to Fridays. In addition to that he also attends to all the station field work that may required to be carried out. He also attends to the vegetable garden after the daily field chores.

Lisette Eulentin, Station Domestic Worker: - The Domestic Worker keeps the research station in the highest hygienic condition at all times. She also does a number of other works such as, kitchen helper, waitress during the guests and visitors moments at the Station. She also attends to the daily shop keeping and stock issuing of the commodities to the staff members.

1. STAFF MOVEMENTS

Staff and personnel presently residing on the Atoll

- | | |
|---------------------|---------------------------------|
| 1. Uzice Samedi | Acting Admin & Logistic Manager |
| 2. Pierre Pistorius | Research Officer |
| 3. Aurelie Hermans | Assistant Research Officer |
| 4. Daniel Esparon | Senior Mechanic |
| 5. Juan Cecile | Cook / Field worker |
| 6. Devis Monthy | Ranger / Boatman |
| 7. Frances Taylor | |

8. Alex Underwood Ranger
9. Edwina Jean Baptiste Trainee Ranger
10. Bernile Rose

Staff on leave

1. Catherina Onezia Ranger
2. Lisette Eulentin Housekeeping / Domestic
3. Bernard Marie Boatman / Assistant Mechanic

During the past months the station has basically been operating with a maximum of 13 staff/workers including foreign contingent and at times to a minimum of nine staff. Over the past months there has not been any major disagreement or serious incidents. It has been my observation that when the workers arrived at the atoll after a rest from Mahé, they all seem to work to their best ability. After some time it is evident the difference in their productivity starts to decline and also a change of attitude towards others.

2. VISITING VESSEL (MAY- DEC 07)

Table 1 illustrates visiting vessel for the past months

DATE	NAME OF VESSEL	PAX	AREA VISITED	ACTIVITY	DURATION (DAYS)	TYPE OF VESSEL	GUIDE
27 th MAY 07	LADY GENEVIEVE	15 CREW MEMBERS	PICARD	CARRYING THE SUPPLIES	1	CARGO VESSEL WITH SAILS	N/A
08th JULY 07	S.Y.CARDINALA	7	MAIN CHANNEL, PICARD	TOURISM	4	SAILING VESSEL	A.U, A H
06 th OCT 07	NAUTILUX	2	PICARD	TOURISM	2	SAILING VESSEL	DM,AU
17 th OCT 07	INDIAN OCEAN EXPLORER	8	EAST CHANNEL, PICARD	TOURISM	2	MOTOR BOAT	AU

13 th NOV 07	PRASLIN WAVE	10	PICARD	CARRYING SUPPLIES	1	CARGO LANDING CRAFT	N/A
15 th NOV 07	ESCAPE	6	WEST CHANNEL, PICARD	TOURISM	2	SAILING VESSEL	DM,AU
16 th NOV 07	DISALAGRAPTUS	5 CREWS	WEST CHANNEL, PICARD	TOURISM	4	SAILING VESSEL	AU,CO
22 nd NOV 07	LADY ANJA	4	PICARD, SOUTH ISLAND	TOURISM	5	SAILING VESSEL	AU,CO
30 th NOV. 07	M/Y TRITON	10	PICARD, MAIN CHANNEL	TOURISM	2	MOTOR YACHT	AH, PP
30 th NOV 07	PRASLIN WAVE	10	PICARD	CARRYING SUPPLIES/ FUEL	1	CARGO LANDING CRAFT	N/A
29 TH DEC 07	MV ISLAND SKY	86	MAIN CHANNEL, PICARD	TOURISM	2	CRUISE SHIP	RANGERS




















VISITING SCIENTIST:-

Mr Jerker Tamelander of the IUCN organisation visited the atoll from the 21st Nov -26th November 07. He was doing a survey of Marine Alien Invasive Species at various locations through out the atoll reefs and specimen collection of coral reef biota for taxonomic analysis. Mr Tamelander was joined by Mr Carl Lundin for the survey, which was already at the atoll for the yearly Annual General Meeting.

VISITORS WHO ARRIVED ON ALDABRA FOR THE MONTH OF NOVEMBER 07:-

-  Carlos Vejarano (Board Member)
-  Victorin Laboudallon (Board Member)
-  Maurice Loustau- Lalanne (Chairman)
-  Frauke Fleischer Dogley (C.E.O)
-  Jeanette Larue (Board Member)

VISITORS CONT:

-  Christelle Jacques (Board Member)
-  Pat Matyot (Board Member)
-  Patrick Lablache (Board Member)
-  Elvina Payet (Board Member)
-  Frank Hoareau (Board Member)
-  Claude Pavard (Board Member)
-  Steven Blackmore (Board Member)
-  Lars Kristoferson (Board Member)
-  Carl Lundin (Board Member)
-  Lindsay Chong Seng (Board Member)
-  Doreen Loustau- Lalanne
-  Katy Beaver
-  Zoë Chong Seng
-  Christelle Scholastique
-  Pearl Valmont
-  Trevor Fox
-  Jacqueline Fox
-  Patrick Victor
-  Medina Laboudallon

VISITING PHOTOGRAPHERS:

A group of nine members of the WWF Foto Natura from the Netherlands comprising of photographers and filming crew arrived at the Atoll on the 26th of November 2007 and spent a total of nine days. Among the group there were also two Seychellois nationals helping them during the photographic activities including two helicopter pilots and an assistant. During the nine intensive working days the group went to different locations on various Islands of the atoll where photographic sessions were taking place on land and also at sea. The group departed the Station on the 05th December 07.

3. STATION INFRASTRUCTURE

Timber Log-Cabin Buildings

All of the recently built timber partition buildings (approximately ten years now) are still in good living condition. Most of those buildings are structurally safe and stable. Over a period of six months anti-termite treatment, all-weather protected varnish and wood preservatives have been used as an additional coating to the timbers, both internally and externally. However the Marley tiles laid in the terrace of some of those building have been removed, again due to the driving rain and sea spray during the North Westerly winds. A general routine check was carried out on all the station buildings on Saturday the 25th of August 2007.

And their current status has been concluded as follows.

The accommodation block and the Research block: -

The accommodation block comprising of six bedrooms all are still in a very high standard living condition. Situated closer to the ocean (almost on the edge of the champignon) these structure are the most severely affected with seawater (sulphate attack) spray especially during the 4.0 and above tides and North Westerly wind. The sub structure sustaining these infrastructures have been cracked open and are widening with the constant surge of the sea hitting against the coastal champignon where the building is positioned. Some of the steel doors of the buildings have started to show signs of rust due to the salt spray from the sea. Protection against adverse weather condition is therefore required in order to maintain the infrastructure for another ten years to come. Both of the buildings are in good condition and so are the services, except for the toilets which are still the main concern with all the houses. Being rarely occupied during the year, the accommodation block drainage and toilet system is always blocked when occupied by visitors. This creates embarrassing situation especially with the strong smell around the research Station. In the future it is advisable and recommended to replace all those toilets with better, simple, basic conventional type and quality toilet.

The Rangers block, Managers house/ Research officer's house: -

The semi-detached timber bed-sitters have been constructed and located in a better position with regards to erosion, away from the rising tides and the block is in a very good living condition. Both living quarters for the Manager and Research Officer are also in good condition except for the leakage at times with heavy down pours through the roofs air vents. The Research Officer's house currently occupied by Mr. Pierre Pistorius and family is still in a high standard living condition. No major maintenance work has been done to date, except for the removal of the tiles and varnishes the balcony. All the services are in good running order.

The Dinning room

Based on its position, the dining room/mess does not get affected that easily with the seawater, but at times with the strong winds either from the south- east or the north- west that drives the pouring rain onto the building and occasionally leaks through the roof vents. The dining/ TV room being the meeting point area of the station is still in intact and in very good condition. The Dining Area can easily accommodate up to 30 people. Maintenance work comprising of the ceiling, wall, floor polishing and varnishing was just recently completed. However the main entrance of the building is the worst area affected during the westerly winds. Driving wind and rain is always poured into the building from the front and insiders can easily get wet. As can be observed a lining protection has to be used to prevent the rainwater from getting inside the building and at times may not be that easy.



The kitchen

The Main kitchen which forms part of the same building, despite its small size is well positioned. However the cabinet benches need to be replaced due to wood rot and damage from leaking water pipes. The sea water plumbing system is constantly being block with sea shell particles. Two new exhaust fans need to be fitted to remove food odours with in the kitchen area. There are adequate utensils for guests at the Station presently.

The TV Room

The Recreational Area is also located in the same block is equipped with the DSTV which gets renewed every year and also there is a good collection of books, DVD's and Videos to keep the staff busy during their recreational activities. Despite their good living condition all of the timber buildings specified above will require a coat of anti-termite treatment in the months to come.

Staff Accommodation

The six single bedroom GCI Sheets staff houses require some immediate attention, maintenance and reparation, notably repainting the interior, floor varnishing and also work to be done mostly in the bathroom areas. Most of the shower tray has been rusted and needs to be replaced. Some of the roofs need thoroughly inspected due to the leaks appearing through the ceilings. Most of the portable fans that have been at those houses for quite a while need to be replaced. Some of the furniture should also be replaced.

The toilets and the safety tanks to those houses also need special attention and major reparation work. Some drainage pipes to the tanks and soak way pits have been replaced earlier last year. To my knowledge one of the reasons why the flow of the drains gets blocked very often is due to the difficulties of constructing normal concrete septic tanks, fibre glass tanks have been used instead. Some of those tanks might have been wrongly position and the drain pipes to the tank don't have a good angle of inclination for the drain to flow. Thus contributing to the continuous blockage and at times overflow of the septic tanks.

4. POWER HOUSE & GENERATORS

The Aldabra power house as can be seen in figure 4 is currently housing three existing VM SUN generators and a forth Deutz generator. The Deutz generator was brought to Aldabra in



2005 by the Aldabra foundation from D'Arros Island. All the reconnection work has been carried out successfully. The two 20-KVA VM generators and the 40-KVA VM generator are in operation according to their norm, on a rotational change-over shift after 72 hours run. As for the forth generator engine, the 40-KVA Deutz has been undergoing frequency and voltage test over the past weeks by the

senior mechanic. These tests were conducted at the request of the Electrical Engineer Mr Sam Gardner upon his visit to the atoll earlier in November, when he was trouble shooting and rewiring the power cable terminals for the forth generator. For the month of December as the Deutz generator has been most of the time on line there is also an increase of the daily fuel consumption. A total of 3.76 litres of fuel/per hour was consumed for the month of December compared to 3.33 litres/per hour for the month of November 07.

5. FUEL, OIL & GASES

Aldabra Research Station depends largely on fuel supplies to run the entire day to day program. The fuel consumption varies from months to months depending on the monitoring programs and other activities. Normally the visiting cruise ships start arriving at the Atoll by the end of October/beginning of November; the last visit is normally by the end of April, (during the calmer season). During this time of year, the Station consumes more fuel than the normal months. A lot of trips to Assumption Island are also conducted by the Station boatman during the Northwest monsoon. Both fuels that are diesel and unleaded fuel are transported in 200 litre drums from Mahe to the atoll by the supply boat.

The power generators have over the past seven months exclusively consumed approximately an average of 3.65 litres of fuel per hour, totaling about 87.85 litres of diesel fuel consumed each day. To facilitate things, all the outboard engines use only unleaded fuel. Being almost free from lead, the fuel reduces the high percentage of carbon monoxide into the atmosphere. The environment not only becomes less polluted but also more efficient for the engines.

Another safe type of fuel used at Aldabra is the cooking gas (Butane). All the houses, the main kitchen, the camps use the butane for cooking. As the norm the fuel is safely brought to the Atoll in 24kg, 9kg, and 12kg and 4.5kg cylinders. For the refrigeration and mechanical braising, R22 and the R124 are basically used. The waste oils, sump oils and dirty fuels are refilled into the empty drums. All the drums are then transported back to Mahe Island together with the other garbage and wastes for disposal.

Table 2 shows Aldabra Station Fuel & Oil consumption for the month of June / December 2007

	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Total Litres Used	Closing Stock Dec 07 (litres)
Diesel (ltrs)	3300	1700	3400	2400	2800	2400	2800	18800	13800
Gasoline (ltrs)	268	800	1000	1000	800	2800	2200	8868	10200
Yamalube Oil (ltrs)	6	12	20	18	12	28	12	108	316
SAE 40 Oil (ltrs)	10	10	35	20	30	30	20	155	130
Two Stroke oil (ltrs)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60

Gear oil (ltrs)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	71
Hydraulic oil H46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	35
Four Stroke oil	N/A	N/A	N/A	N/A	N/A	N/A	10	10	70

6. STATION BOATS

At present there are eight operational boats in use at Aldabra Research Station, including one Flying Inflatable Boat (FIB). In addition to that there are also six canoes (kayaks) which are used for minor shallow lagoon activities.

Bumboat: Being the principal work-force of the Research Station, the fully aluminum vessel is estimated to be over 35 years old and was commissioned by the Royal Society of London. The boat is having leakage problem that needs to be attended and also some of the reinforced Structure inside the boat is weakening and has to be maintained. She is fitted with a 115 Hp Yamaha engine (installed in 2003). There is also a steering console on the right-hand side. The auxiliary engine is a 25 Hp Yamaha outboard, which is normally carried onboard at all times. Bum boat has over the years been well maintained by the workmen and is still in reasonably good conditions.



Spinner: The 3 meter Australian-designed aluminum boat is always used as a back-up on all the field trips. At certain camps where the water is too shallow, Spinner is the alternative means of transportation. In the past the sole purpose of this tiny vessel was to transport rangers from Middle Camp/Passe Hoareau to Cinq Cases, and for use in likewise shallow parts of the lagoon.



She is presently powered by a 25 Hp Yamaha engine. The boat was very well maintained and can serve the Research Station for quite a number of years to go. As can be seen six people can easily fit in the boat on all the lagoon trips. Over the past five months, Spinner was permanently attached to the Goat Eradication Program for their only means of transportation to and from Cinq Cases via the bras areas. It was noted that the vessel needs attention within the structure as there is leakage problem.

Audubon: The 4.50 meter long aluminum dingy, also of an Australian design, and similar to that of Spinner. This boat is also kept as a back-up craft and has been on many occasions served the research Station on the lagoon trips with visitors especially in the very tiny location such as the inner bras areas in the lagoon. The boat is very well looked after and she is still in the very best condition. Its durability and also based on the type of materials, she will surely last a good number of years to come.



White-eye: It is a small heavy fiber-glass dory which is also kept as a back-up vessel. This little skiff is ideal for use in Bras M. Claremont and other very shallow parts of the lagoon, only with short shaft engines. For sometimes this small unique vessel has not been used for any activities. The boat is however kept in good

condition at all times.

The **Flying Inflatable Boat (FIB)** is a small inflatable dingy with an affixed ultra-light wing and a Rotex engine. The FIB arrived at the shores of Aldabra Research Station in 2002. With the unfavorable weather condition of Aldabra it is not easy to fly the zodiac all year round. The ultra-light wings and engine have been sent to Mahe for inspection.

Black-tip The 6 meter inflatable zodiac was commissioned in 2002. The boat with its two 85HP Yamaha Outboard Engines is also in use as a fast respond vessel during very calm weather. The vessel is also used principally for diving expeditions, as well as to ferry guests around the atoll. However due to very long exposure to the weather over the years the boat inflatable compartments can no longer stay inflated as it keeps losing the air pressure. As a precaution and safekeeping the boat has been put at La Gigi under the shed.















Alena Being a twin-hulled 22 feet catamaran-type craft and designated as a “fast rapid-response” vessel. This craft is replacing a similar vessel Tyomityo 2 and arrived at the station in early November 2007. During the North West monsoon, normally the weather is calm thus making it easy enough for transporting passengers or in evacuation of emergencies. There are great concerns however. The tide condition of Aldabra is far from predictable. Therefore you cannot be 100% assure of any crossing unless you can visually observed the weather condition. Also at times the weather may seem fine for an hour or so and the next minute you might experience something different. The boat is presently fitted with two 115 HP Suzuki four stroke engine, which enables the vessel to cruise up to 25 Knots, on average during the calm season the journey from Aldabra to Assumption can last only for 50 minutes the most. However the same journey during the rough sea condition can last for over three hours thus consuming almost three times more fuel than in the calm weather

Aldabra Flamant The 16 feet long pirogue-type fibreglass boat is known to be at the Station for quite a while. Its flat bottom and shallow draft make her ideal and most reliable for lagoon transportation. The boat is however structurally fractured but can still make occasional trips to shallow areas in the lagoon and inner bras areas.

Zegret Similar to the other fibreglass vessel only smaller by the length, the boat also served the rangers mostly with the lagoon and bras areas. It is still as new only two years in service.

7. STATION OUTBOARD ENGINES

Mostly all of the outboard engines are in good running conditions. The list of the engines used on each boat is shown below. Over the past eight months the station has had minor problems with the outboard engines.

-  **Y1 Yamaha 25 HP, Unleaded fuel, Used on Spinner (4 yrs old)**
-  **Y2 Yamaha 25 HP, Unleaded fuel, Used on Audubon (4 yrs old)**
-  **Y3 Yamaha 25 HP, Unleaded fuel, Used on Flamant (4 yrs old)**
-  **Y4 Yamaha 85 HP, Unleaded fuel, Used on Black Tip (5 yrs old needs to be reassemble, some spares still needed)**
-  **Y5 Yamaha 85 HP, Unleaded fuel, Used on Black Tip (4 yrs old)**
-  **Y6 Yamaha 25 HP, Unleaded fuel, Used on Zegret (4 yrs old)**
-  **Y7 Yamaha 115 HP, Two stroke, Unleaded fuel, Used on Bumboat (5 yrs old)**
-  **Y8 Yamaha 115 HP, Four stroke, Unleaded fuel yet to be installed (new)**
-  **Y9 Yamaha 115 HP, Four stroke, Unleaded fuel yet to be installed (new)**
-  **Y10 Yamaha 85 HP, Unleaded fuel, Used on Black Tip (new, recently installed)**
-  **S1 Suzuki 115 HP, Four stroke, Unleaded fuel, currently stationed on Alena**
-  **S2 Suzuki 115 HP, Four stroke, Unleaded fuel, currently stationed on Alena**

The engines are still being inspected before and after each trip. Even if there are no trips all the engines gets (serviced when required), checked and run on a regular basis almost every week and this will be the case as long as the station boats are in full operation. The Research Station is experiencing frequent mechanical problems associated with the two Suzuki 115HP engines currently installed onto the fast response vessel Alena. Last week the boat fuel tanks had to be emptied and cleaned due to dirty fuel and also presence of water in the tank.

8. COMMUNICATION SYSTEM

Despite isolated and very far from the rest of the islands in the Seychelles archipelago, Aldabra Atoll had been in total connection to the rest of the world promptly. All the communication systems are fixed and located in the Island Manager's main office. The equipment comprises of: -

Iridium Satellite phone

It is connected directly to an antenna and at times is used as a portable phone, only when the fast response vessel is dispatched to Assumption Island.

12Volt DC SSB Radio Transceiver

This radio is in full function and is in working condition although the mouth-piece needs minor attention. Due to the modern and more efficient means of communication, the SSB Radio is rarely used. However when the supply boat leaves Mahe Island carrying cargo to the Atoll, the SSB radio is switched on up until the supply boat arrives and departs from Aldabra. This is done in view of maintaining regular contacts with the supply boat thus knowing the exact date and time of arrival to the Atoll. It also enables the station to be in constant contact with the relay station at Bonne Espoire in Mahe.

12Volt DC VHF Unit/ Hand Held VHF Unit

There are 5 hand-held VHF units; these portable H/H radios are used on daily basis in and around the Research Station. Also each time there is a trip away from the Station one has to carry the radio to maintain regular contacts to and away from Picard. The 12 Volt long range VHF radio in the Manager's office is in good working order. Radios are taken with every vessel dispatching from the station and radio checks are performed prior to the vessel departure and arrival at the station in accordance with Station Operational Procedures. During dispatch radios are transported in either a water-proof Pelican boxes/ or dry bag to protect against damages.

The table 3 shows the list of radios currently at the station as of Dec 07

RADIO MODEL	QTY	REMARKS	STATUS
Standard Horizons HX207S	4	All in operation	Tested
Icom IC A5	2	F.I.B operations only	Tested
Icom ICM72	1	In operation	Tested
Standard Horizons HX350S	1	Not in operation (damage)	
12 volt West marine VHF600sc	2	Spare (mouth piece has been fixed)	Tested
12 volt Standard Horizons GX3000S	4	In operation	Tested
12 volt Furuno SSB transceiver FS-1503	1	In operation	Tested
12 volt SSB Receiver	1	At Cinq cases	Tested

The V-SAT communication system



THE V-SAT ANTENNA

Up until the end of December 2007 the Research Station has been using a more reliable, sophisticated, efficient and cheaper means of communication. The V-SAT telecommunication system was initiated and introduced to the shores of the atoll late in November 2005. It has been so far the most reliable means of communication to and from the rest of the world. During the past weeks the dish surrounding area has been cleared of excess overgrowth shrubs, hence having better telecommunication signals reception. Based on the communication system currently in place, the Iridium Satellite phone serve the station only as a back up, or in other emergency cases.

9. CAMP FACILITIES

The Research Station has been attempting monthly monitoring on the existing six camps, scattered around the Atoll. These camps are primarily for the task of Research and monitoring. The field huts have to be attended on a regular/monthly visit by the Research Officer and the rangers. One of the principal successes achieved with regards to the camps has been the establishment of sufficient water supplies to meet consumption needs for the entire year. This practice has been maintained all year round.

Middle Camp:

Situated at Passe Hoareau close to the proximity of the east channel is the most comfortable of all field huts. Its construction consists of a wooden hut, similar materials to the basic structure of the Research Station on Picard. One 3,000 Litres, fiberglass water tank is in-place since September 2003 with another one posted there during the mid year to assists with the GEP program. It has been easy enough to build the hut at the east channel due to the good access for carrying the materials. The difficult access way of other camps poses a threat in carrying construction materials to other location.

Cinq Cases:

The field hut was recently renovated earlier this year. It's very spacey and can easily accommodate around eight people even though there are only six bunkers. G.E.P crew was stationed for the past five months during their intensive goat eradication program. There is a 3,000 litre water tank capacity, a 500 litre tank and ten 200 litre drums presently stationed in the vicinity of the field hut. These rainwater containers will be replenished as soon as the rainy season starts.

Dunes Des Messes:

Situated behind the dunes, the field hut at Dunes des messes has experienced very strong winds through out the year. As the rainy season has just got started it's not going to be easy for the rangers at spending nights there. The hut needed complete renovation especially from the roof area.

Dune Jean Louis: The field hut at Dunes Jean Louis was renovated three years ago is still in a good state.

Anse Mais: Even though the camp has been re-opened during December 2006 the hut itself need to be attended as the roof leaks very badly. The idea of camping at West Grand Terre is to minimise the fuel cost of the day to day nesting green turtle track count on the beaches in the area. It also enables the rangers at better chances to observe and tagged the nesting turtles as well as sightings of vagrant birds.

Anse Malabar: The field hut situated close to the proximity of the sea and salt sprays can easily be seen at sea. It need immediate overhaul attention and to prevent it at turning into ruin.

Anse Cedres and Takamaka: The two field huts situated at Grande Terre had already turned into complete ruin. Most of these camps field huts have been in the past constructed with mangrove wood and corrugated iron sheets. The iron sheet is mostly affected by the salt spray from the sea through out the year. Some huts were built with aluminium sheets and surely can withstand the salinity through out the season.

10. FRESH WATER

Aldabra Atoll is estimated to be about 8-14 metres above the sea level there fore gives us an idea of how the “topographic survey contour” of the island is. It has no mountains, big trees or rivers therefore any other sources of collecting fresh water, other than the rain water. Based on the facts given fresh water is strictly for domestic purposes only but that exclude the use of fresh rain water into the drainage system. For every toilet, sea water is used instead. The concrete water tanks are very well protected and preserved although at times the strong N/Western winds drives salt spray from the sea to water tanks No 4 & 5. Some of the catchments need to be properly plastered as they are wearing out from the outside walls. It is the responsibility of the station mechanic to follow and be assured that the distribution of the water to all the houses, accommodations, main kitchen and to other department of the Station is up to date. It is also the duty of the mechanic to make sure the water system is working efficiently, thus reporting briefly on the water situation every week. At present the station has recorded an amount of 47.9 mm of rainfall for the month of December thus, there should not be any problem with regards to fresh water because the rainy season has just get started.

As mentioned earlier, all the drainage system uses sea water. The actual method of pumping both sea water and fresh water into the main storage tanks which is then filtered into the drainage system is a very economic method there fore allowing constant pressurized flow at all times and we are having absolutely not much problem with that system. However one of the main concerns is what will be the life span of a drainage piping system that operates with sea water including the sea water pump. The fittings for the sea water pumps needed to be replaced.

Desalination water plant

The Aldabra Research station has recently acquired a new water plant. The plant will be located close to the accommodation block between water tank No 4 and No 5. As soon as the required fittings are send to the station the plant will be installed, tested and commissioned. Desalination water will surely increase the station fresh water storage situation during the dry season and also at times when the station accommodates visitors. The table below shows the Research Station fresh water storage as from the end of December 2007.

Table 4 shows the station water storage capacities

DATE:	31-Dec-07			
TANK	READING	LITRES	CAPACITY	% Full
1	1.45	56898	57290	99.32
2	0.60	23981	54356	44.12
3	0.85	33415	52678	63.43
4	1.60	62842	58914	106.67
5	0.90	35316	56506	62.50
6	0.74	29118	55876	52.11
7	0.20	15000	106496	14.08
8	0.80	76431	189166	40.40
9	1.77	43719	43719	100.00
TOTAL		376719	675001	
Total Percentage Av.		56%		
No. of weeks stock		54.60		
No. of months stock		13.65		

11. METEOROLOGICAL EQUIPMENTS

Aldabra Research Station has an automatic weather station in place. As stated in previous reports the meteorological equipments are extremely important for the Research Station in acquiring data and also enabling forecasters at predicting weather forecast for the region. The automatic weather station has not been in operation since 2004. The details of the weather condition are recorded by the Island Manager every morning. All of the recorded information (based on Picard Island) is registered in the Research Officer's monthly report. At present, some of the equipment is not functioning properly and therefore not all the information could be recorded and reported accordingly. The Dry bulb and the Wet bulb thermometer seem to be working fine. The readings from the maximum and the minimum temperatures are now to satisfactory level.

The following are still not activated yet.

- a) THE WIND DIRECTION
- b) THE WIND MEAN
- c) THE WIND MAX

12. STATION SHOP

The food and souvenir shops are well equipped with most of the basic commodities that one may require over a period of two months. The shop especially, all the items are supplied by the Head Quarters and brought to the station via the supply boat Lady Genevieve or Praslin Wave. The items are periodically updated according to usage and demand on a monthly basis. The shops are also very well maintained being a pest-free environment, fully air-conditioned 24 hours, and sealed to the external environment.

Based on these facts most of the shops items brought to the Station remains in a very good condition for a very long period except at times for certain commodities that need to be discarded due to overdue of expiration dates.









Table 5 shows shop details for December 07

Accounts	G.E.P	Camps	Domestic	Discard	Cash Sales	Research
Amounts Rs	1510.37	1465.85	493.30	514.38	16872.65	28.00

13. AIR – CONDITION SYSTEM

Air-condition system is available in almost every office block and all the required location of the Research Station. There are a total of six air-conditioning units installed in the following areas

-  The shop
-  The TV Room and Recreational area.
-  Island Manager's office
-  Research Officer's Office
-  Rangers' office
-  The main Reference Library.

All the units are in very good working condition.

14. STATION REFUSE & SANITATION

The present refuse collection and control can be described as successful. Every staff member is respecting the station garbage disposal policy in place. All plastic, metals and glass are separating accordingly in empty fuel drums. The drums are later sent to Mahe on the supply vessel. Papers are burnt in empty drums at the back of the shop. Settlement beach clean ups are also integrated with in the rangers monthly monitoring schedule. Beaches close to field huts are also cleaned on a monthly basis during the rangers visit at the specific locations. The station management always emphasize at maintaining the present level of cleanliness and tidiness at all times.

15. CLINIC & MEDICINES

The infrastructure known as the clinic is situated next to the Island Manager's house. The structure itself is in a good state. A normal hospital bed and mattress is in place to support a patient during his days at the clinic.

During the past months an average of 13 staff members worked and live continuously on the Atoll, with no paramedics or in house nurse, it has become the responsibility of every one to make the most at taking care of any worker that may be feeling sick at any given time. It is recommended at all



times that a qualified paramedic or a ranger knowledgeable about administering first aid treatment to be on the atoll. In case of an emergency one can attend to serious injuries at any given time before a victim manage to reach Assumption Island, prior to medical evacuation. Such personnel will help save any victim or a patient's life in need for desperate medical attention.

Presently all the medicines are being stored in a metal cupboard inside the shop at a temperature of 18°C where there is a convenient flow of temperature at all times. It is also required that mostly all medicated component is to be stored under a temperature below 23°C (degrees Celsius).

There is also a small medical cabinet at the Manager's house and presently is well equipped with some basic medications and dressings for surface wounds/bruises and minor cuts that staff may encounter during their daily chores around the atoll.

16. RECOMMENDATION

One main aspect that should be considered by SIF management / Board members is how an individual in the event of a serious accident on the atoll will be able to reach Assumption during low tide. According to what has been observed over the years. Aldabra has a unique and very difficult terrain condition, also not to forget the unpredictable weather condition. As the Island Manager one feel very concern as well as responsible in the event of any accidents that may aroused on the atoll especially during the low tide. At present all the Station boats including the fast response are moored inside the reef, meaning one has access to the boats but during low tide the boat won't be able to be dispatch for the trip.

My personal suggestion/proposal is either to keep a boat outside the reef on the existing yellow mooring at all times. So in the event of an accident there will be a possibility for the victim to at least reach the boat to Assumption and later be transported to Mahé Island for further treatment. Also with very rough sea condition s at times during the South East Trade Winds and North Westerly winds, it will be still impossible for the existing fast response vessel to make the crossing to Assumption during rough seas. So it is highly recommended to make available better and larger rescue vessel that could make the journey safely back and forth in all weather condition at all times through out the year.

17. CONCLUSION

It is a very difficult and daunting task to write every single detail about the station operation during a whole year. Since May 2007, I have gained a great deal of insight into the operations of the station. In addition to that I have also acquired good practical knowledge in the day to day effective running of the atoll's Research station. A lot of my achievement over the past months has come from the experienced staff working for Seychelles Island Foundation over the years and also considering the amount of time I've spent altogether at the atoll. All the staffs have somehow contributed to the achievement and success of completing this year's work at the Research Station, all though I have experience difficulties with some aspects as Island Manager.

During the past months I have faced up with disrespect, insult directly, threats, dishonesty and at times general reluctance to work from certain staff members. The SIF management should in future recruit staff due to their devotion, commitment and love for the position they are taking up, rather than purely for their monthly salary.

The Aldabra Research Station has yet ended another year's work, with all the scheduled programs and the targets once again successfully completed. Despite the difficulties regardless with the tides and sea condition, almost every activity have been attended and completed to the right manner. Thanks to all the rangers who have again spend time up and down these difficult terrains reaching the camps to collect the required information and data for the progress of the Research Station. Thanks to the boatman who even during the worse adverse weather condition still managed to find their ways to the camps and safely transported the workers back to the Station. Thanks to the mechanic for the constant and efficient running of all the station services. The house keeper and the cook for taking good care of the visitors and making them feel at home with a good hot meal every night.

Furthermore all the work has been carried out accordingly and in relation to the rules and regulation of the Atoll and the Seychelles Island Foundation policy. However, there are still rooms for improvements. Better Corporation and a little more effort from a few particular individual the Research Station will operate smoothly, efficiently and more economically.

REFERENCES (For Guidance Purposes Only)

- 1. Island Manager's Previous Reports & Information Joseph Labonte**
- 2. Island Manager's Previous Reports & Information Michel Sophola**
- 3. Island Manager's Previous Reports & Information Guy Esparon**