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From: Commander J M W Topp Royal Navy (Retired)

Diego Garcia  
5 March 2002

**The Commissioner,  
British Indian Ocean Territory.**

This letter is a report on my visit to BIOT from 18 February to 6 March and a brief for your next POL/MIL Talks in May.

2. Overall your islands are in good shape. On BRITOPS from 24 February to 1 March, which was superbly supported by the SS CAPE JACOB, I was able to visit Eagle and Middle Brother on the Chagos Bank, Boddam and Takamaka in the Salomons and Grande and Petite Soeur, Coin and Vache Marine in Peros Banhos. The islands were no different from last year or previous years so conservation is being achieved. Coral in the lagoons is recovering but the coral at Eagle Island shows no sign of recovery. We encountered 24 yachts, which is high for this time of year. Over the last 18 years of my experience the number of yachts has increased very considerably. They do nothing for conservation.

3. The rest of this report will deal with Diego Garcia. As the report is in the nature of a brief I will cover various subjects succinctly but in nearly all cases I can provide a much fuller account if you wish.

4. **Water.** Fresh water is well engineered and very well managed. There are no current problems. There was a fear that the USAF would create a water shortage but it has not materialised. Curiously the USAF appears to use half the amount of water a head compared with the USN. BRITREP was adamant that the dreaded ROWPUs were not to be used by the USAF and they are clearly surplus to needs. A second nano filtration plant to provide drinking water has just been installed which makes the use of a ROWPU even more unnecessary.

5. **Wastewater.** The two major sewage lagoons are called Air Ops and R-Site. In September it was appreciated that the increased loading of 2,500 in Tent City would overload the Air Ops lagoon. Various options were

considered, costed and one selected which involved the installation of surface aerators. These have now been installed and are working well.

**6. Solid Waste.** The disposal of solid waste has run into further problems since I reported last year that the incinerator had broken down beyond repair in January 2001. It took 5 months to replace this incinerator which shortened further the life expectancy of the landfill which had already been extended by raising the height to 18 feet above mean sea level. The [REDACTED] means that the landfill will reach capacity probably **this year.**

7. Various solutions are in hand including the installation of a second incinerator, raising the landfill to 24 feet, and procuring a grinder that will divert waste from open pit burning to the incinerator. These are interim measures until MILCON funding provides the Solid Waste Management Centre. This includes the construction of a new landfill, a solid waste segregation facility, a new incinerator, a recycling facility and a **composting** facility. MILCON requires Congressional approval and already the **composting** facility is being offered as a sacrificial lamb. Permit me at this point to include paragraph 21 from my last report:

21. Composting. 16 years ago I suggested we should compost the leaf litter expensively collected every day to keep the place tidy. A shredder arrived after my time as Britrep and was found years later rusted beyond repair. The current shredder has been awaiting repair for 6 months. [REDACTED] Topsoil is needed and composting is the best way to produce it from an island that is 99% sand. Recommend you press the USN.

8. Recommend that at the POL/MIL Talks you express unhappiness about the management of solid waste, press for more urgent installation of the new Solid Waste Management Centre than the probable 2007 and **insist on the composting facility.** (The USN will be happy to have the host nation make such representation to support their case). While you are about it you may wish to inquire about whether waste metal and glass are removed from island.

**9. USAF Oil Spill Recovery.** Recovery ceased on the South Apron with the USAF deployment in September 2001. [REDACTED]

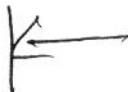
[REDACTED] for recovery. (Please see paragraph 13 of my last report). I can only repeat that **the longer the recovery the more the fuel enters the ground.** This current lack of recovery aggravates the problem. The oil has now been there for 11 years. I recommend you press for the more rapid although more expensive solution.

10. **Minor Oil Spills.** Oil spills of less than 100 gallons occur in Diego Garcia ashore or in the lagoon at the rate of at least once a week. The spills are usually quickly reported and cleaned up.

11. **Erosion.** I highlighted this subject in my last report and the USN has been very quick to follow up. Two USN engineers conducted a comprehensive study of shoreline erosion late August early September. 5 major (and some minor) problem sites were identified, analysed and an engineering solution determined. The site about which I had been most concerned namely that on the ocean side of the Fuel farm has already been partly repaired. Further work will be carried out in due course. 2 other sites are near by and also within the **4 mile stretch of ocean coastline** where in the 1970s the **reef flat was blasted** to obtain fill material.

12. My last report read:

10. One of the NRMP (Natural Resources Management Program Diego Garcia) listed items which has still to be addressed is the study of the 4 miles of ocean reef south of Simpson Point and along the airfield where reef flat rock was blasted to provide a base for construction. This should now be made a priority. The NRMP requirement is 'Conduct baseline survey of **dredged reef area** (\$16,200)' and 'If required, establish additional monitoring stations on reef (\$24,800)' and 'Continue monitoring/maintain stations (\$3,000 a year)'. See pages A-28 and B-3.

13. This project has since been addressed and submitted for assessment to PACDIV in Hawaii. The recommendation was to include this requirement in the NRMP update this year. The sums involved are small compared with the over \$1 million estimated for repair of the 5 sites. Recommend you press the USN to get on with this study. You may wish to point out that the engineering repairs are just that and akin to putting a plaster on what may be a major injury. The injury may be biophysical. Scientists have told me that the reef blasting is a real live experiment and are interested in the long term effect. This is worrying. Fortunately tides prevented the reef blasting from getting close to the reef edge. 

14. Erosion is now being recognised as a problem and a long term problem which it will be increasingly expensive to contain. Global warming aggravates the problem. Sea level is predicted to rise between 0.5 – 1cm a year. The measured sea level rise in the nearby Maldives of which Chagos is a continuation has been between 5.8 and 8.5 mm a year over the past few years. The Intergovernmental Panel on Climate Change predicts a likely

acceleration in sea level rise as time passes. Recommend the USN be invited to measure sea level rise in Diego Garcia.

15. I have been given an advance copy of a draft scientific paper and permission to quote. "Three years after most corals died in Chagos, mortality remains very high. Many shallow reef surfaces have 'dropped' 1.5m due to loss of dense coral thickets, coral erosion is substantial and there is much unconsolidated rubble. Juvenile corals are abundant, though most are found on eroding or unstable substrates. There is a 'race' between erosion and new growth. Sea surface temperature has risen. Many islands have been surveyed and most islands have a raised perimeter surrounding a central depression located near or even below sea level. Protecting the islands from erosion are (or were) three 'lines of defence': firstly the now absent seaward coral thickets; secondly the algal ridges at the seaward edge of the reef flats and, **thirdly, wide expanses of reef flat located near present** sea level, across which waves decay. Reduction in effectiveness of any of these will transfer wave energy inward to the shores and elevated rims of the islands. Consequences could include erosion or even breaching of island rims."

16. There will be other deleterious effects such as a reduction in fresh water lenses. It is possible that Chagos will become uninhabitable this century.

17. What is needed is scientific data. The USN has already produced a document "Vision 2016" when the current Agreement reaches its 50 year point. All parties to discussion in and of the future need the facts and the longer in time and better the data base the more valid are likely to be the predictions. The installation of a GIS is planned and together with existing GPS a survey of Diego Garcia with cross section profiles may show similar depressions to the other islands. Recommend we all work together to produce this data.

**18. Cats.** I spent an hour with the cat eradication lady [REDACTED] of the US Department of Agriculture Wildlife Services. She is dedicated to her task and has done and continues to do an excellent job. The number of cats remaining is probably in single figures and these cats will be the most difficult to eradicate. However the program (me) is on track and is expected to succeed. The contract ends in August. Recommend you congratulate the US on the success of the cat eradication program.

19. It is fascinating (to me at any rate) that the cat eradication program has so far also caught (and released) 6785 Coconut crabs, 6440 Land crabs, 4032 birds, 1112 chickens and 1176 toads. These figures are believed now to be unclassified.

20. **Rats.** The cat eradication program has also caught and killed 6578 rats. This is in addition of the number caught by DG21 in their rat control effort, which is considerable. It is hoped that the rat eradication program will start when the cat eradication program finishes. Recommend you ask the USN to confirm this at the Talks. ←

21. **Bird Aircraft Strike Hazard (BASH).** Egrets are the problem here and they are being shot and their eggs removed from nests. In 1985 there were probably less than 100 egrets. Numbers rose to nearly 2,500 in the late 1990s. Currently the number is probably about 1,000. This is a well managed program that should be allowed to continue. All the other land birds flourish in large numbers.

22. **Red Tailed Tropic Birds.** This is a success story. ██████████ ██████████ the DoD ██████████ Biologist in the Environmental Department found 2 nests in 1996 opposite the Beach House and behind the sports ground. He protected the site and has been rewarded with 6 nests in 1997 and two additional each year to the 2002 number of 16 nests, which I have seen with the birds on them. You may wish to lighten the Talks by congratulating the USN on this conservation achievement. }

23. **Lanner.** There have been sightings over the last two years of a hawk or falcon but no positive identification. One evening the Executive Officer NSF came to tell me he had that day sighted a pair of Lanners at Point Marianne. He is a sometime falconer so would know what he was saying. Next day he, Britrep, the Meteorological Officer and I saw the birds and took the first of what will be many pictures of increasing quality. I will send details and pictures to ██████████ the RSPB Research Officer for the Overseas Territories to confirm identification and that this is a new record. If all is so, it may be worth undertaking a small Public Relations joint UK/US release to put Diego Garcia in good light. }

24. **Snakes.** There are no snakes in the Chagos Archipelago. We have been aware of the Brown Tree Snake problem in Guam and ships have in the

past not been permitted to sail direct to Diego Garcia from Guam to avoid the introduction of this devastating species. I attended the 10<sup>th</sup> NRMP Meeting when this matter was discussed. Diego Garcia hosted its first Brown Tree Snake awareness training session on 12 April 2001. [REDACTED] is shortly to undergo a training course on the subject in Guam. It would be an environmental disaster of the first order if the Brown Tree Snake invaded Diego Garcia. Recommend you ask the USN to make every possible effort to keep the snake out. ←

25. Lagoon. Last year I suggested a pollution inventory of the lagoon. This year the Commodore agreed it is a good idea [REDACTED]

26. Monitoring of the lagoon would also be advisable. The current number of ships is at the maximum level planned and possible. It is in everyone's interest to keep the lagoon clean.

27. Fishing in the lagoon is a vexed matter. Everyone, including people who first came here in the early 1970s, tells me the fishing ain't what it used to be. Subjective opinions are insufficient to restrict this valuable and much enjoyed recreational activity. At the same time we need to ensure that people in the future will continue to enjoy fishing. In my 1993 and 1994 reports I recommended a proper scientific study to assess stocks and sustainable yield while bearing in mind that the Diego Garcia lagoon is the nursery for unknown numbers of fish in the ocean. Eventually MRAG won this job and have in the last 3 years gathered some figures. We need to press on with this study and produce some conclusions leading to action. }

28. My visit this year was planned on the basis of no support from NP 1002. In the event they have been helpful, pleasant and very friendly. All the Americans I met whether military or civilian have been likewise, giving me access to everyone and providing me with all the information I requested.

JM Topp

CONSERVATION AND  
ENVIRONMENT CONSULTANT