

# Patrolling the EEZ

By SE Ndjaba

The Namibian exclusive economic zone (EEZ) encompasses an area of roughly 580 000 square kilometres. Pursuant to the United Nations Convention on the Law of the Sea, Namibia has the right to determine total allowable catches, introduce laws for the conservation and management of the fish stocks and enforce such laws within the EEZ.

To effectively police this vast area, the Directorate Operations in the Ministry of Fisheries and Marine Resources, patrols the coast constantly with vehicles, vessels and aircraft. The Directorate has three patrol vessels, namely the *Tobias Hainyeko*, the *Oryx* and the *Battle of Cuito Cuanavale*, and two aircraft, the *Sea Eagle*, a twin-engine, fixed wing aircraft and the *Hosea Kutako*, a helicopter. The patrol vessels operate mainly from Walvis Bay, whereas the aircraft operate from the airstrip at Arandis, 60 km east of Swakopmund.

An Operations Centre at Walvis Bay, under the supervision of a control fisheries inspector who reports to the Directorate, directs all sea and air patrols. These are monitored by sophisticated radio and satellite technology.

## Sea patrols

Due to vigorous control, illegal fishing vessels have disappeared from Namibian waters. The main activity of the patrol vessels now is to physically inspect fishing vessels at sea to ensure that they follow the rules and regulations. The mere presence of a patrol vessel tends to make everybody more conscious of the rules.

The two bigger vessels, the *Oryx* and the *Tobias Hainyeko* undertake patrols lasting 14 to 16 days with four to five days in port in between patrols. The *Battle of Cuito Cuanavale* does four to five day patrols with three days in

port on a normal schedule. The combined distance sailed by the three fishing vessels in 1995 is equal to the distance of circumnavigating the world at the equator more than five times. However, starting in 1995, major breakdowns of mainly the *Oryx* and the *Cuito Cuanavale* hampered patrol activities and resulted in a decline in patrol activities.

In 1996 the *Oryx* sailed 95 days only, compared to 119 in 1995, covering a distance of about 14 216 nautical miles, which is 6 481 nautical miles less than in 1995. It was out of service for 227 days, compared to 179 days in 1995 and was in the dock for 43 days compared to 37 days in 1995, mainly due to leaks in several cabins.

The *Battle of Cuito Cuanavale* spent 68 days at sea, covering a combined distance of 10 720 nautical miles, in comparison to 58 days and 10 722 nautical miles in 1995. It had 212 breakdown days and spent 85 days at the synchrolift, compared to 181 breakdown days in 1995. At the beginning of the year, the vessel had a recurring problem in the starboard propeller system, which was repaired by a service engineer from Norway. Then the outboard engine halted operations. This problem has been solved and the vessel is back in full operation.

The *Tobias Hainyeko* in 1996 spent 222 days at sea, compared to 182 in 1995 and covered a distance of 33 862 nautical miles, compared to the 81 143 nautical miles in 1995. In 1996 it experienced breakdowns on 47 days, compared to 80 days in 1995. Two new radar systems were installed and the scanner to one of the radars was moved to the top of the mast to increase the plotting range from 22 to 30 nautical miles.

The captain on board a patrol vessel is in charge of navigation, safety, discipline and all other matters vested in him by maritime legislation. Fisheries surveillance and inspections are the responsibilities of embarked fisheries

### SUMMARY OF PATROL VESSEL ACTIVITIES, 1993 TO 1996

Year	1993	1994	1995	1996
Days at sea	430	449	359	385
Distance covered in nautical miles	65 000	73 644	112 563	58 800
Fishing vessel inspections	320	370	273	484
Fishing vessel observations	1 100	1 100	1 173	1 024

### PATROL VESSEL INSPECTIONS, 1993 TO 1996

Year	1993	1994	1995	1996
Number of inspections	320	370	273	484
Summons issued	283	335	207	160
Total amount of summons (N\$)	99 300	10 000	62 700	n/a
Amount paid	68 050	88 000	55 000	141 284
Summons withdrawn	10	3	1	0
Warnings issued	99	19	28	118

**THE AIR PATROL ACTIVITIES FROM 1993 AND 1996**

Aircraft	Year	Distance in nautical miles	Hours	Missions	Observations
Helicopter	1993	22 500	n/a	36	180
	1994	24 993	219	52	235
	1995	28 623	244	45	903
	1996	6 740	61,8	12	37
Fixed-wing	1994	58 908	237	71	771
	1995	86 281	524	92	1 077
	1996	101 930	589,7	98	1 886
Chartered aircraft	1993	n/a	n/a	9	80
	1994	n/a	11	2	38

inspectors, who in accordance with the Sea Fisheries Act have wide-ranging authority. Without proper cooperation between the captain and the fisheries inspector a patrol will not be effective.

A patrol starts with a briefing of the captain and the fisheries inspector by the control fisheries inspector before departure. The latter indicates areas of activity and interest that need closer surveillance. During the patrol the vessel forwards daily reports to the Operation Centre and remains in close contact with the Operations Centre. Upon return from a patrol, the captain and the fisheries inspector present a complete debriefing report to the control fisheries inspector and recount matters of special interest.

A properly performed inspection of a fishing vessel at sea takes between four to six hours as the fisheries inspector inspects the vessel virtually from top to bottom. He will inspect all documentation on board, all fishing gear in use and the catch in the carrying holds, all the time looking for irregularities. On completion he will issue a summons for each irregularity found.

The most common breaches of regulations are:

- failure to have a copy of the fishing license;
- failure to update the daily catch log book;
- failure to have a copy of the Sea Fisheries Act;
- failure to have drawings of the fish carrying holds;
- illegal fishing gear, mesh width, round straps, codends, etc.

Some of the above may appear to be minor offenses, but breaches invariably lead to the issuing of warnings or fines, and in exceptional cases to the arrest of the vessel.

### **Air patrols**

The air patrols, with a fisheries inspector onboard, follow the same pattern as the sea patrols with briefings and debriefings by the control fisheries inspector. While on patrol, pilots are in constant radio contact with the Operations Centre as a safety measure and for surveillance purposes. Pilots also have contact with patrol boats in the area they fly over.

In 1996 the fixed-wing aircraft undertook 98 missions with a combined distance of 101 930 nautical miles, compared to 92 missions over a distance of 88 281 nautical miles in 1995. The aircraft was flown a total of 589,7 hours in 1996, a

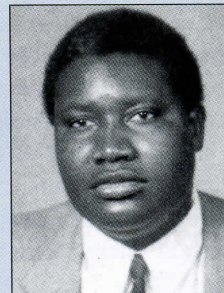
marked increase from the 366,7 hours in 1995. Of the 1996 flight hours, 45,4 hours were for training pilots, 57,8 hours for transportation and 11,6 hours for link/technical flights.

The fisheries patrol helicopter did not participate fully in patrol operations in 1996 due to major breakdowns and prolonged maintenance. It flew only 61,8 hours compared to 244 hours in 1995. In 1996 it undertook only 12 missions over a combined distance of 6 740 nautical miles, compared to the 45 missions over a distance of 28 623 in 1995. These flights included flights for training inspectors, transport and search and rescue at sea.

With the advancements in satellite technology and commercial satellite stations being able to photograph "a wart on a captain's nose", it would be worthwhile to acquire commercial satellite services, and get better results for a fraction of the cost of operating air patrols. This will, however, not replace sea patrols.

### **Coastal patrol activities**

The Fisheries Inspectorate of the Ministry also undertakes coastal patrols from Swakopmund and Lüderitz. In 1996, 234 inspection trips, including 21 hotel inspections, were undertaken over a combined distance of 62 152 km. During these missions a total of 213 kg of fish were confiscated and donated to the Kindergarten of the Evangelical Lutheran Church at Usakos.



*The author: Mr SE Ndjaba is director of Operations in the Ministry of Fisheries and Marine Resources. He holds a M.Sc. in Maritime Administration. He lectures on National Fisheries Laws on the SADC Fisheries Planning and Management Course, hosted at the University of Namibia.*