

Samora Machel's last flight

'Fake racist beacon downed plane'

Aviation Reporter
NEW strong theories on how the South Africans may have brought down President Samora Machel's aircraft last week are beginning to emerge and none of them support suggestions that the Tupolev 134 two-engined jet was actually shot down.

Aviation experts, basing their theories on their knowledge of such sophisticated aircraft as the Mozambican presidential aircraft and the fact that the pilots had flown the route several times before, have concluded that the pilots were lured from their destination by a powerful portable beacon placed on the South African side of the border.

An analysis of the flight, 52 minutes of which was over Zimbabwean territory, has shown that it was a perfectly normal one.

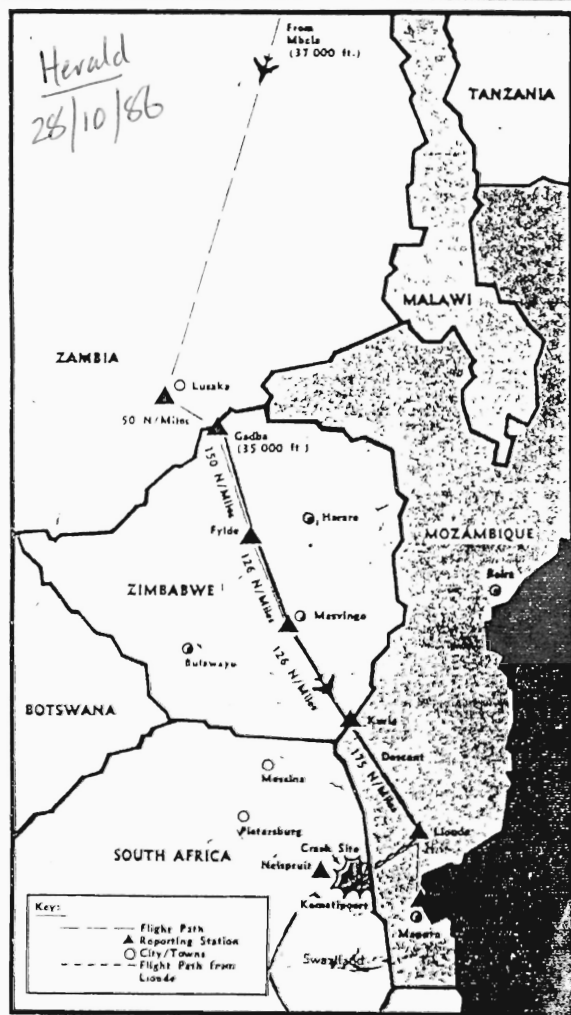
A correspondent of The Herald who obtained details of the flight has written that the presidential flight, having apparently been cleared by the Zimbabwean controllers to fly direct from Mbala to overhauled Lusaka at 37 000 feet, crossed into Zimbabwe at 1053 local time.

As the pilot did so over the border reporting point just south of Chirundu named Gadaba, Zimbabwean controllers asked him to reduce altitude to 35 000 feet and report again next over Fyde, which he did.

His next normal reporting point was Mavungo and finally Kuria, the reporting point at the aerial border between Zimbabwe and Mozambique.

The aircraft continued on a south-bound track to the Limpopo reporting point over the Mozambique town of Lioede. From here the flight had a more 82 nautical miles to go, no more than 10 minutes, at drastically reduced power in a descent into Maputo.

Survivors of the crash have said that the pilot had told them to fasten their seat belts ready for landing. This is perfectly normal as the aircraft



was approaching Maputo.

But that last 82 nautical miles was never completed. Instead of the aircraft making a 40 degree turn to the right to a heading of 215 degrees, the pilot appears to have made an almost 80 degree right turn towards Komatipoort.

The South Africans have suggested that the pilot might have turned to home into the Nelspruit beacon in South Africa, which also transmits the same morse code as the Maputo beacon (MA). But the suggestion is shot down by the explanation that Maputo beacon transmits on 310 kHz and Nelspruit on 350 kHz.

However, the aircraft

crew went into the normal approach-to-land exercise, descending to the minimum levels of 3 000 ft and then 1 600 ft when the aircraft crashed into the 2 000 feet hills.

The aviation experts have explained that the aircraft should have at least four beacon receivers and radio compasses, two each for the pilot and the co-pilot.

But there would be only one magnetic compass. If the weather was as bad as the South Africans say it was, the compass might be useless as it is susceptible to lightning and electrical storms. In this case the pilot would be entirely reliant on his VHF beacon re-

ceivers (the VOR).

The South Africans, by placing a portable VOR on their side of the border, more powerful than Maputo's would easily lure the aircraft off its course.

Since the compass would be unreliable the pilots would do what every pilot is taught in basic training — 'believe your instruments'.

'Everything that the pilot appears to have done from the little information of the crash that we have, was perfectly normal for a flight into Maputo,' one Air Zimbabwe pilot told The Herald yesterday. 'Only it was done in the wrong

place, which suggests that his approach was into a rogue beacon."

Our correspondent, who has done research into the crash, reports about the anonymous call to a news agency in Johannesburg from a man who said that he was an officer in the South African Air Force and spoke about a decoy beacon having been placed near the Mozambican border on Sunday to lure the aircraft off its final short flight.

The correspondent writes that the South Africans also have the capability to use a technique developed by the British in the Second World War called "bending the beam".

This technique is disclosed in the book *Most Secret War* by Professor R. V. Jones, one of Churchill's top wartime scientists.

"The Germans had developed a navigational radar method called Knickelbein Beam, literally meaning 'crooked leg'. The beam guided their bombers to Britain," our correspondent writes.

"If the bombers veered off course additional dots or dashes, depending upon whether the error was to port or starboard, showed on their navigational equipment.

"Churchill's boffins developed a method of putting up a false beam:

This lured the German pilots off course causing many of them to drop their bombs early believing they were over the target."

The correspondent says that confused and confusing statements coming from South Africa support suggestions that although the boers publicly claim to have had nothing to do with the crash they certainly were responsible.

He concludes that either the British system, the Nelspruit beacon or a decoy beacon were used in luring President Machel's plane.

He also posed the question why the South African radar, which is known to have tracked the off-course aircraft, was never used to warn the aircraft of the dangerous situation it was flying into, or simply to tell the pilot that he was flying into the South African airspace.

The South Africans are known to monitor the area thoroughly and last year forced down a Zimbabwean air force transport aircraft flying to Swaziland just inside the Mozambican territory.

South Africa is sure that the international investigators will not find anything to suggest the aircraft was shot down.

But the fact that it took them some nine hours to inform Mozambique of the crash and the disinformation about the flight engineer being said to be the pilot point to serious South African involvement.