The phantom skipper and a

By Alex Hendry and Brian McKenzie

A MYSTERIOUS British seaman was involved in the disappearance of 200 tons of uranium ore-enough to make 60 atom bombs-it was alleged yesterday. He was named as Peter Barrow, eaptain of the ship that carried the potentially deadly cargo.

that carried the potential
But Barrow is apparently
a man without a past...
no record of him exists at
the Cardiff registry that
lists all British seamen.
Nor was anyone of that
name ever a member of the
two British organisations for
Merchant Navy officers.
The phantom skipper is
only one link in a baffling
chain of events
Details of the complex
business deals behind the
uranium shipment were diselosed yesterday by a former
Common Market nuclear
security chiefs who also
revealed Barrow's involvement.
The cargo vanished between
November 17 and December 2.
1968. Despite police and C.I.A.
investigations it still has not
been traced.
Common Market sources

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Missing ore 'enough for

60 A-bombs?

have claimed it ended up in Israel—but Israeli authorities strongly deny this.

The ore was bought by a West German firm, put in falsely labelled barrels and laaded on to a Liberian-registered freighter, the Scheerberg A, at Antwerp.

Its destination was a company in Milan. But it never arrived.

The Italian company turned out to be a "front," the ex-security chief Professor Enrico Jacchia said in Rome yesterday.

The Common Market and the International Atomic Energy Agency had been powerless to investigate the case properly, said Professor Jacchia.

Spy couple sought

BONN: Police were seeking a couple yesterday as a secretary from West German Chancellor Schmidt's offices was arrested for spying.

there must be at least one nine-letter word in the list. No plurals; no foreign words; no proper names. TODAY'S TARGET; 34 words, very good; 51 words, very good; 51 words, very good; 51 words, verettent, Solution on Monday. YESTERDAY'S SOLUTION; Calf caul celt cleat cleft cline cult culter cutte fault felt flat flea FLUCTUATE flue flute fuel lacé late leaf leat left luce lute taetful tale tale teal.

ANTHONY TUCKER on the disappearance of nuclear material

Loss horizons

MAYBE WE should feel queasy about the disappearance in 1967 of 200 tons of yellowcake (concentrated crude uranium oxide) but before assuming it was diverted to obscure terrorism we should at least ask what they could do with it.

Unless they possessed a nuclear reactor and a plutonium separation plant or, even more exotic for terroreven more exotic for terrorists, a uranium enrichment plant, the best they might do is paint their wagons or poison the water supply. The point is, and this seems somehow to have slipped out of sight in the excitement, that it is a long and difficult way from yellowcake to a credible weapon. weapon.

That does not mean that the Ioss is not a serious indictment of Euratom's security procedures at the time, or that nuclear materials should not be subject to security measures of the highest stringency. But we need to keep the issue in perspective. Any technically organised nation wanting uranium for illicit purposes could extract it from sea-That does not mean that uranium for illicit purposes could extract it from sea-water on from the very lean orcs which abound in most parts of the world but which are so far below the commercial horizon that people forget they exist. The Free Wales Army, given the motive and a secret milling and concentrate plant might at this secret milling and concentrate plant, might at this moment be building up a uranium stock from the incredibly lean ores of North Wales.

True, it might be cheaper to make a deal with a fly-by-night import-export organisanight import-export organisa-tion than to extract your own uranium but the motive for either must spring from the ability to do something with it. And the most obvious thing to do with yellowcake, if you have a nasty future in mind, is to convert it into mind, is to convert it into uranium dioxide (the form used for nuclear fuels) and put it through a reactor on a suitably short time-base cycle.

Given a plutonium extrac-tion plant, even on the pilot scale likely to exist in every country possessing research or power reactors, a small but adequate yield of weapons-grade plutonium would flow into the operators' coffers.

Before anyone leaps to the conclusion that Traws-fynnyd nuclear power station has fallen into the hands of the Free Wales Army it

needs to be said very firmly that we are talking about dif-ficult processes involving ficult processes involving high technology and not the sort of thing even your most sophisticated and well-heeled terrorist group would attempt. The hijacking of materials from the top end of the nuclear process is a very different matter and that is where the security measures may well need to improve.

But the difficulties inherent a doing something nasty ith yellowcake can tell us in doing something nasty with yellowcake can tell us something about those who diverted it. It tells us that in 1967 they had a reactor and enough know-how to fabricate transium dioxide rods and uranium dioxide rods and extract plutonium.

There was, of course, India, but India was by then producing her own yellowcake and ing her own yellowcake and had everything she needed for a weapons programme. There were the beginnings of nuclear programmes in Egypt, Iran and Pakistan, and both Brazil and South Africa were moving rapidly in that direction. But both Brazil and South Africa were moving rapidly in that direction. South Africa can produce their own yellowcake from commercially acceptable ores, while Egypt, Iran and Pakistan at that time had research facilities too small to conceal a plutonium pro plutonium proconceal gramme.

That, as guessed, lea as you leaves I probably guessed, leaves Israel and may help to explain the surge of rumours about Israel's nuclear potential back in the early 1970s, although these were discounted at the time because they did not match the likely output from other research reactors.

That may or may not reduce the queasiness: one of the problematical things about yellowcake is that it is a very stable kind of sub-stance and you can leave it around in drums for years while your programme while your catches up.

Suppose it is out there somewhere—not in Israel—but in Iraq or one of the new African states just waiting for the right time. The answer, sadly, is that any country willing and able to provide the nuclear establishments needed to make use of it could find a route to weapons without the fortuitous presence of supplies of yellowcake. It might make things easier but its absence would not pose an insuperable barrier, for the nuclear suppliers' club does not own the earth. Suppose it is out there

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