

STOP THE APARTHEID BOMB!



Americans are mobilizing in increasing numbers against nuclear war. Ronald Reagan's cavalier talk of "limited nuclear war" and possible use of first-strike weapons has given the movement for a nuclear freeze and disarmament a new urgency and importance.

Despite record unemployment, Reagan is spending billions of tax dollars to build up our nuclear arsenal instead of creating jobs and funding needed social programs.

Reagan is not only stockpiling nuclear weapons here, he is also actively assisting other countries to develop their nuclear arsenals as well. One such country is the brutal white minority regime of South Africa to which Reagan has given economic and political support. That regime rules over its Black majority through **apartheid**—an institutional system of racism enforced by an oppressive police state.

Reagan's support for South Africa and his advocacy of more nuclear weapons are part of the same policy. It is a Cold War policy of military confrontation and intervention, and support for any regime which professes to be anti-communist, no matter how brutal its rule.

Reagan's nuclear collaboration with South Africa is a grave threat to the survival of this planet. It is a collaboration we must stop.

Cover graphic courtesy of British Anti-Apartheid Movement

US-South Africa Nuclear Alliance

On the night of September 22, 1979, a US Vela satellite detected an intense flash of light in the South Atlantic off the coast of South Africa. Many scientists and intelligence officials suspected a nuclear explosion. The CIA told select members of Congress it strongly suspected that South Africa and Israel were responsible and that a task force of South African warships had conducted secret exercises in the same area as the double flash. Yet, the Carter Administration refused to state categorically that it suspected South Africa of exploding a nuclear bomb.

Two years earlier, the Carter Administration had evidence South Africa was preparing a nuclear test. On August 6, 1977, the Soviet government told the White House that Pretoria was preparing to explode a nuclear device in the Kalahari Desert. US, British, French, and West German intelligence confirmed this finding. Pretoria was told not to explode the bomb. On August 23, however, President Carter told the press that he had "assurances" from Pretoria the structures in the Kalahari were not intended for a nuclear test.

Carter equivocated because these events starkly spotlighted something highly embarrassing to US and European governments: the apartheid bomb had become a reality. Three decades of Western assistance in building South Africa's nuclear program had mushroomed.

"We can ascribe our degree of advancement today in large measure to the training and assistance so willingly provided by the United States. . ."

— A.I. Roux, President of South African Atomic Energy Board, 1976

South Africa's acquisition of nuclear weapons capability is part of a larger picture of Western political, economic, technological, and military support for white minority rule. This support has strengthened the Pretoria regime as it has instituted increasingly sophisticated forms of repression and control over the Black majority population struggling for its liberation. The Apartheid Bomb marks a new era in Pretoria's military and political dominance in Africa.



South Africa has access to vast reserves of raw uranium, but that is not enough to produce a nuclear weapon. Pretoria has needed the West's advanced technology and materials as well to achieve its nuclear weapons potential. As a result, Pretoria can:

1. Use the *highly enriched uranium* (that is, raw uranium enriched so that it consists of about 90% or more of the isotope Uranium-235), supplied to it by the US until 1975 for the **SAFARI I** research reactor, to make an atom bomb. The same type of bomb was used to destroy Hiroshima in 1945.

2. Use *plutonium* which is a byproduct of both the **SAFARI I** research reactor and the **Koeberg** power reactor. When the reactor waste is reprocessed to remove other materials present, the plutonium can be used in an atom bomb (the same type of bomb which destroyed half of Nagasaki in 1945).

3. Enrich its own raw uranium to weapons grade in its **Valindaba** pilot enrichment plant to make an atom bomb. However, that plant is still in its beginning stages and thus cannot produce large amounts of bomb material.



Associated Press

President Reagan and South African Foreign Minister Pik Botha meet to discuss nuclear relations in May 1981.

History of Collaboration

Western nuclear collaboration with South Africa began in 1945 when Britain and the US were searching for a reliable supplier of raw uranium for their nuclear weapons programs. Pretoria was the ideal partner with its vast uranium reserves in South Africa and occupied Namibia, and a cheap labor force of miners under tight, state control. The US and Britain bought up all of South Africa's uranium and totally financed the development of its uranium mining and processing industries. Pretoria benefitted immensely from huge revenues and increased Western reliance on its natural resources, and used these advantages to further its own nuclear program.

Washington was happy to oblige Pretoria's desire for its own nuclear industry. In 1957, as part of Eisenhower's "Atoms for Peace" program, the US and South Africa signed an agreement whereby the US provided South Africa with technical nuclear training, its first research reactor, **SAFARI I**, and the highly enriched, weapons-grade uranium to fuel it. (**SAFARI I** was completed in 1965 and the US supplied South Africa weapons grade uranium for the reactor until 1975. With this assistance, South Africa was able to build its own research reactor, **SAFARI II**, by 1967. The two reactors are located at the Pelindaba facility north of Johannesburg. ('Pelindaba' is a Zulu expression meaning 'We don't talk about this any more.')

Pretoria continued to expand its nuclear program—including its ability to make nuclear weapons—by building the Valindaba pilot uranium enrichment plant with US and West German assistance in 1975. ('Valindaba' means 'We don't talk about this at all.')

Later that year, Pretoria announced its intention to build a large commercial enrichment facility with the hope of becoming a major enriched uranium exporter in the 1980s.

In 1976, work began near Cape Town on building South Africa's first commercial nuclear power reactor, Koeberg. Built by the French consortium, Framatome, Koeberg started up in 1984.

South Africa's Nuclear Weapons Capacity

The Western countries attempt to justify their collaboration as assistance to South Africa's nuclear energy program. South Africa designed that program to make it energy self-sufficient and able to resist an international oil boycott or other economic sanctions. Yet, "peaceful" nuclear power and nuclear weapons are just two sides of the same coin.

Nuclear reactor technology was originally designed to produce plutonium for nuclear weapons. As nuclear critic Amory Lovins has noted: "[N]uclear reactors are essentially bomb factories that produce electricity as a byproduct." When the Koeberg power reactor is running at full capacity, it will produce enough plutonium to produce an atom bomb every two weeks. Furthermore, the SAFARI I research reactor already runs on weapons-grade uranium. While these two reactors are under International Atomic Energy Agency (IAEA) safeguards, many experts have noted the laxness of IAEA oversight, making diversion of materials for nuclear weapons possible if a government so chooses. Furthermore, South Africa has refused to sign the Nuclear Non-Proliferation Treaty or to submit its enrichment plant to any safeguards. Pretoria has already indicated Valindaba can enrich uranium to weapons-grade. In this context, there can be no peaceful nuclear collaboration with South Africa.

Why the Bomb?

South Africa hopes to gain great political and military benefits by simply possessing nuclear weapons and developing an extensive nuclear industry. Pretoria realized early on that its survival could be prolonged if it could create a greater Western dependence on its raw uranium supply and other natural resources. In addition, by *threatening* use of the bomb, Pretoria could effectively block international efforts to impose sanctions on it for its racist policies. Its politics of

intimidation could also stonewall African support for the liberation struggle to eliminate apartheid.

South Africa has always seen itself on the frontline defending the West against communism, a view that most US administrations have shared. If Western assistance continues, South Africa could develop and use tactical nuclear weapons as part of its "total strategy" to retain power. Pretoria might use such weapons on a neighboring country hoping to destabilize it or to weaken the liberation movements struggling for freedom. Or Pretoria might use the bomb on South African territory if it felt its hold on power was on the verge of collapse. As one Johannesburg lawyer told the *New York Times* in 1977: "As far as the Afrikaners are concerned, a South Africa that is not governed by them is not worth preserving."

Reagan and the Apartheid Bomb

Despite this overwhelming threat to the survival of the world, the Reagan Administration has *increased* nuclear assistance to South Africa by allowing exports of computers and other high technology goods to Pretoria's nuclear program. It has also negotiated with South Africa for the resumption of enriched uranium supplies, cut off when Congress passed the Nuclear Non-Proliferation Act in 1978, and allowed Pretoria to acquire needed enriched uranium from Europe through two US brokering companies for its Koeberg

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What You Can Do

Only through coordinated political **action** can we hope to stop the Apartheid Bomb. Get involved in your local nuclear freeze group, church or synagogue, union, civil rights or anti-apartheid organization. Build coalitions in your community. Organize a local campaign to end US-South Africa nuclear collaboration. Become part of the national and international movement of people dedicated to majority rule and a nuclear-free planet.



Jerry Kowalski, A Guardian photo

• **Support HR 1133.** Sponsored by Rep. Charles Rangel (D-NY), HR 1133 (formerly HR 1020) would cut off all US nuclear exports to South Africa and prohibit the training of South Africans at US government nuclear facilities. *Organize a letter writing campaign to your representatives and senators urging them to co-sponsor the bill. Call for Congressional hearings on US-South Africa nuclear collaboration. Support other non-proliferation efforts in Congress. Form a delegation to meet with your representative when he/she is in your home district. We must use our combined efforts to support legislation which will stop US-South African nuclear collaboration!*

• **Target specific banks and corporations in your area which are providing nuclear assistance to South Africa.** You may find these same institutions are involved in redlining poor neighborhoods, laying off workers, engaging in anti-union activities, building reactors, or producing nuclear materials harmful to our health and safety. Organize a campaign to stop US nuclear investment, trade, or loans to South Africa.

• **Support HR 1135 and stop the importation of South African and Namibian uranium.** Sponsored by Rep. Rangel, HR 1135 would prohibit the importation of South African and Namibian uranium and coal. Transportation of uranium and other nuclear materials through our communities can be hazardous to our health. If South African or Namibian uranium is coming into your community or being transported through your town, organize local opposition.

• **Sponsor educational events about US-South Africa nuclear collaboration.** The American people are more aware of the threat of nuclear weapons than ever before. Yet, most Americans know nothing about the threat of the Apartheid Bomb. Link the issues of nuclear weapons stockpiling to US intervention in the Third World, the proliferation of nuclear weapons by repressive regimes, and US support for apartheid. Films, speakers and pamphlets are listed on page 6.

• **Keep informed.** Keep abreast of developments in Reagan's policy toward Southern Africa. Be prepared to mobilize opposition to specific nuclear exports as they are made known. For more information about political developments and how you can respond, contact the Washington Office on Africa. (See Resources box for Action Packet.)

US Companies are Crucial

Since the late 1940s, US companies have helped maintain white minority rule in South Africa through aid to strategic sectors of its economy. US loans have given South Africa crucial foreign exchange for making military-related purchases abroad. US advanced technology, especially computers, has helped white South Africa control its majority Black population. Oil provided by US companies has fueled its war machine.

US corporations have also provided South Africa with the technology, equipment, materials and scientific training needed to create the Apartheid Bomb.

Why do US corporations provide such direct support to a government known for its racial denial of basic human and democratic rights, and its high-risk potential for developing nuclear weapons? Why do they continue to violate UN Decree Number One (1974) which demands that corporations stop exploiting Namibian uranium and other natural resources until majority rule is attained?

A central reason for such collaboration is simple: profits! South Africa can afford to pay high prices for nuclear-related technology and offer high profits to US investors because of the low wages and minimal health and safety standards it provides its Black workers.

Under Apartheid, Black uranium workers:

- have virtually no job security; they are only allowed to contract for 11 months of work at a time and must reapply to work in the mines each year.
- are not allowed under "influx control" laws to live with their families near the mines, destroying family stability.
- earned in 1980 barely one-seventh the average salary of white miners, since almost all skilled mining jobs are still reserved for whites by law.
- cannot strike or "break" their work contract under the law; those that do risk jail, fines and being blacklisted or excluded from working in the mines.
- enjoy virtually no job or health benefits; an International Labor Organization report on Black miners detailed their lack of paid or sick days, frequent 6-day workweeks, and unbearable "prison-like conditions" of confinement, excessive heat, noise and dirt in which they were forced to work.



Those Black workers who mine uranium face unique health hazards working South African deep level and Namibian open pit mines. One Namibian uranium miner described his working conditions:

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Corporate Collaborators

Established mining of, prospected for, or imported SA and/or Namibian uranium: ALLIED CHEMICAL CO. (IL); AMERICAN METAL CLIMAX (CT); BECHTEL (CA); EXXON (NY); GULF OIL (PA); INTERPACE (NJ); ARTHUR K. MCKEE (OH); NEWMONT MINING (NY); SUPERIOR OIL (via FALCONBRIDGE) (TX); TEKTRONIX (OR); TERRADEX CORP. (CA); TEXAS NUCLEAR; UNION CARBIDE (NY); US BORAX & CHEMICAL CO. (via RIO TINTO ZINC) (CA); US STEEL (PA); UNITED TECHNOLOGIES (CT); UTAH MINING.

Constructed or provided technology/equipment/materials for SA KOEBERG nuclear power plants: BABCOCK & WILCOX (NY); COMBUSTION ENGINEERING (CT); EDLOW INTERNATIONAL (DC); GENERAL ELECTRIC (CT); SWUCO (MD); TRANSNUCLEAR (VA); WESTINGHOUSE (via FRAMATOME) (PA).

Constructed or provided technology/equipment/materials for SA Valindaba uranium enrichment plant: BOEING (WA); FEDERAL PRODUCTS (RI); FOXBORO INTERNATIONAL (MA); HONEYWELL (MN); IBM (NY); ITT (NY); LEEDS & NORTHRUP (PA); VARIAN (NJ).

Constructed or provided technology/equipment/materials for SA SAFARI I research reactor: ALLIS-CHALMERS (WI); BABCOCK & WILCOX (NY); GULF GENERAL ATOMIC (PA); US NUCLEAR INC. (TN); UNION CARBIDE (NY).

Exported nuclear byproducts to SA: BECKMAN INSTRUMENTS (CA); KERR-MCGEE (OK); PICKER INTERNATIONAL (OH); US STEEL (PA).

Provided equipment/technology utilizable in developing nuclear weapons: AUTOCLAVE ENGINEERS INC. (PA); CONTROL DATA (MN).

Financed SA nuclear energy/weapons program: CHASE MANHATTAN (NY); CITIBANK (NY); EUROPEAN-AMERICAN BANKING CORP. (NY); MARINE MIDLAND (NY); FIRST PENNSYLVANIA BANK. Many US banks have financed SA's Electricity and Supply Corporation (ESCOM) responsible for SA's nuclear power program.

Helped train SA nuclear scientists/technicians: ARGONNE LABORATORIES (IL); BROOKHAVEN NATIONAL LABORATORY (MA); MASSACHUSETTS INSTITUTE OF TECHNOLOGY; OAK RIDGE NATIONAL LABORATORY (TN); NEW YORK UNIVERSITY; RENO RESEARCH CENTER (NV); ROCHESTER UNIVERSITY (NY); UNIVERSITY OF ILLINOIS.

CHRONOLOGY

1945. Joint research program set up to recover SA uranium deposits to fuel US/UK nuclear weapons programs.

Nov. 23, 1950. SA Atomic Energy Board (AEB), US and Britain agree on joint large-scale uranium production.

July 8, 1957. SA and US sign 50-year Agreement on Nuclear Cooperation under "Atoms for Peace" program.

1958. US/SA team observes US secret nuclear weapons test off SA coast.

1961. AEB begins uranium enrichment research; SA purchases US Allis-Chalmers reactor (SAFARI I).

1965. International Atomic Energy Agency (IAEA), US and SA reach trilateral agreement to safeguard SAFARI I.

March 1965. SAFARI I becomes operative.

Aug. 1965. SA Prime Minister Verwoerd admits nuclear program has military uses.

1967. SA-built Pelindaba Zero (SAFARI II) starts up.

July 20, 1970. SA Prime Minister Vorster announces SA discovery of "unique" method of enriching uranium; Uranium Enrichment Corporation (UCOR) set up to build Valindaba pilot enrichment plant.

April 12, 1971. AEB President Roux says new enrichment process will enable SA to make its own nuclear weapons.

1973. US Foxboro Corp. computers installed in Valindaba.

1974. US and SA sign uranium enrichment contract.

Dec. 13, 1974. UN Decree Number One demands end to exploitation of Namibian uranium and other resources.

1975. Ford Administration holds up shipment of highly enriched uranium for SAFARI I.

1976. Largest single uranium mine in world, Rossing in Namibia, begins production.

Sept. 1976. Kissinger, Haig, Vorster meet secretly in Zurich, reportedly discuss nuclear/military cooperation.

Oct. 1976. GE tender to build KOEBERG reactors supported by Ford Administration but dropped after Congressional opposition; SA signs with French consortium FRAMATOME.

Feb. 1977. Information Minister Mulder, asked if SA had the bomb, states: "If we are attacked, no rules apply at all if it comes to a question of our existence. We will use all means at our disposal whatever they may be."

June 1977. OAU Council of Ministers calls on governments involved to terminate nuclear collaboration with SA; IAEA members expel SA from governing board.

June 1977. Carter Administration continues policy of no highly enriched uranium fuel for SAFARI I.

Aug. 6, 1977. USSR contacts US, Britain, France and West Germany with information on Kalahari nuclear test preparation, requests joint effort to stop test. Four powers concur that SA is preparing a nuclear blast (Carter later reports SA assurances not to use Kalahari site for tests).

Sept. 1977. US opposes banning nuclear exports to SA during UN arms embargo debate.

March 1978. Congress passes Nuclear Non-Proliferation Act (NNPA), tightening conditions for nuclear exports.

April 1978. A 1974 CIA document reveals SA "could advance with a nuclear weapons program if seriously threatened."

Sept. 1979. NNPA takes effect requiring full-scope safeguards as condition for enriched uranium exports.

Sept. 22, 1979. US Vela satellite records double flash of light (signature for nuclear explosion) in South Atlantic. Three days later, Prime Minister Botha says, "we have military weapons they do not know about."

Oct. 1979. September explosion publicly disclosed.

Dec. 5, 1979. SA barred from New Delhi IAEA conference.

Jan. 1, 1980. White House-appointed scientific panel states evidence of double flash inconclusive.

Jan. 1980. CIA reports secret SA warship exercises on night of Sept. 22 'flash' near explosion area.

April 29, 1981. SA announces it can enrich uranium to fuel SAFARI I.

May 1981. Foreign Minister Pik Botha visits Washington to discuss nuclear relations with Reagan Administration, presses for resumption of enriched uranium supplies.

Aug. 1981. SA team visits US nuclear facilities.

Oct. 1981. SA obtains necessary enriched uranium for KOEBERG from Swiss reactor via two US companies.

Oct. 1981. Nuclear team appointed by Reagan visits SA to negotiate resumption of fuel supplies.

March 26, 1982. Commerce Department approves export to SA of Control Data computer with nuclear weapons uses.

May 1982. Commerce Department proposes export of Helium-3 (when irradiated, can be used as component for atom bomb); announces export of 5 types of dual-use nuclear equipment to SA over past 2-year period.

Oct. 1982. Representative Charles Rangel (D-NY) introduces legislation (HR 1020, now HR 1133) to ban nuclear exports to South Africa.

Dec. 1982. Explosives placed by African National Congress damage Koeberg reactor.

Oct. 1983. US Department of Energy grants license for US companies to service Koeberg reactor.

US Companies are Crucial

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"Working in open air, under hot sun, in the uranium dust produced by grinding machines we are also exposed to the ever-present cyclonic wind which is blowing in this desert. Consequently our bodies are covered with dust and one can hardly recognize us. We are inhaling this uranium dust into our lungs and many of us have already suffered the effect . . . Our bodies are cracking and sore . . . There is no hospital, bathing, swimming . . . or privacy and we are not allowed to discuss matters of mutual interest."

These inhuman conditions forced on Black Namibians and South Africans have fueled growing Black protest. Black labor unions are playing an increasingly central role in the struggle for majority rule and greater social equity.

US Corporations are Endangering Our Security

US corporations have become more involved in South Africa's nuclear industry as greater unionization and stricter environmental laws have hit them at home. From the beginning, their involvement has been primarily a byproduct of the US nuclear weapons program and US strategic interests and it remains so.

The US nuclear industry and its overseas activities have reflected and shaped US strategic goals around the world since World War II. Those goals have placed concern about a nuclear holocaust and social injustice second—at home and abroad—to maintenance of US military dominance and unrestricted corporate access to "strategic" resources. A major reason for US cooperation in building the Apartheid Bomb is to ensure unrestricted access to South African and Namibian uranium and other strategic resources—regardless of the human costs to South Africa's Black majority or to US citizens.

US corporations have helped South Africa, with Namibia, become the third largest uranium producer in the world (possibly the second by 1985). They have given South Africa the know-how and materials to make nuclear weapons. They have enabled South Africa to deter international pressures for change and more effective support for the struggle for freedom inside South Africa. By undermining non-

proliferation efforts, our government and corporations have endangered our security while prolonging white minority rule and encouraging Pretoria's continued military occupation of Namibia. Can we afford to ignore this continued collaboration? ■

"Given South Africa's development of nuclear weapons and its intensifying armed expeditions and provocations against independent African states, there can be no denying that this racist regime is a threat to international peace and security."

— Oliver Tambo, President,
African National Congress, 1979

US-SA Nuclear Alliance

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reactor. This assistance is part of Reagan's "constructive engagement" policy, designed to befriend Pretoria and provide it with increased economic, political, and military aid. Reagan has increased this nuclear assistance at the expense of deteriorating relations with Black Africa, which has repeatedly condemned the cozy relationship between Washington and Pretoria. The administration is not naive about Pretoria's nuclear weapons capability and how these exports strengthen it: in October 1982, a State Department spokesman concurred that South Africa has, or is "very close" to having, the bomb, and that Pretoria wants US technology to assist it further. Just as the Reagan Administration spends billions of dollars increasing its nuclear arsenal at the expense of domestic social programs, so it openly supports the apartheid regime building its own nuclear arsenal at the expense of its Black majority, the African continent, and, perhaps, the whole world. ■

Resources

"Down the Yellowcake Road," a videotape produced for British TV on Namibian uranium mining and transport. 20 min. Available from *American Friends Service Committee*, 1501 Cherry St., Philadelphia, PA 19102, (215) 241-7165. \$15.

The Nuclear Axis. The Secret Collaboration between West Germany and South Africa. By Barbara Rogers and Zdenek Cervenka (New York Times Books, New York, 1978) 464 pp.

The Rossing File by Alun Roberts. Details uranium mining in Namibia and corporate involvement. (London, 1980), 68 pp. Available from the *Campaign Against the Namibian Uranium Contracts*, 53 Leverton Street, London NW5, England. \$2, plus postage.

South Africa: Another Loophole in Non-Proliferation Policy (1982), 11 pp. Available from the *Center for Development Policy*, 418 10th Street, SE, Washington, DC 20003, (202) 547-6406. Free.

South Africa's Nuclear Capability by Dan Smith. Produced by World Campaign Against Military and Nuclear Collaboration with South Africa (London, 1980), 32 pp. Available from the *American Committee on Africa*, 198 Broadway, New York, NY 10038, (212) 962-1210. \$2.50, plus postage.

"South Africa-The Nuclear File," a film by Peter Davis. Details US and West German nuclear collaboration with Pretoria. 54 min. (1979), 16 mm. Available from *Villon Films*, PO Box 14144, Seattle, WA 98144, (206) 325-8610, and *American Friends Service Committee*. \$25-\$75.

South Africa's Plan and Capability in the Nuclear Field. (New York, 1981), 40 pp. Produced by the UN Centre for Disarmament, United Nations, New York, NY 10017. \$5.

Stop the Apartheid Bomb Action Packet. Resources for organizers. Available from the Washington Office on Africa Educational Fund. \$2.50 each, plus postage.

Additional copies of this leaflet are available for: 25¢ ea. for 1-10;
15¢ ea. for 11-50; 10¢ ea. for over 50 copies.

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