

The Executive Director for
Operations,
U.S. Nuclear Regulatory Commission,
Washington, D.C. 20555



PAMELA BLOCKEY-OBRIEN
D23 Golden Valley, Douglasville, GA 30134 USA

Oct. 23rd. 1994

RE: requests for lissense withdrawal, shutdown, removal of radioactive materials, cleanup of site and surrounding area and sewer lines at the Neely Nuclear Research Reactor and support facilities located at the Georgia Institute of Technology, Atlanta, Georgia, on the Georgia Tech campus and, in addition, the revocation of all lissenses to dump or discharge radioactive wastes to the sewers and waters of the US/Oceans of the world, and revocation of ALARA.

Dear Director,

I wish to file two (2) requests under Section 2.206 of 10 CFR Ch.1 (1-1-93 Edition).

1. The Nuclear Research Reactor (as well as the other "sub-critical" reactor there) should have its lissense revoked and be shutdown forever. All radioactive materials and contamination should be removed offsite to an existing, government (and industry) created "National Sacrifice area such as Savannah River Nuclear Site, SC, and Oak Ridge, TN site. Those areas are already so highly contaminated that some cleanup is occurring there and the Tech reactor and contamination from it and its operations could become part of those cleanups. Better at those sites, than having the reactor(s) and what goes with it (e.g. the approx. 400,000 Curies of Cobalt-60) in the middle of a city of over 2 million people, on a university campus with thousands of students nearby, plus, with the Olympics coming in particular, the possibility of terrorism by some deranged group, or individual - remember Munich?

Many of the reasons it should be shutdown are listed in the attached letter to Mr. Doug Boles of the Atlanta Committee for the Olympic Games, so, I will try not to repeat those. NRC's Mr. Dimiranda and Mr. Yrak have a copy of that letter too.)
In addition to what is in the attached letter I wish to add, and stress the following:

- a) Detailed maps show that a water flume comes out of the ground directly next to and west of the reactor. This water must be destabilizing the reactor and the ground in some way. The ground under the pool where the cobalt sits, or under the reactor, could be sinking, no one knows.
- b) Radiation levels in soil and vegetation climb markedly in GA EPD documents to the west of the reactor, and also to the east (in particular to the northeast it appears students may be kicking around radioactive soil on their playing fields.
- c) there is no record I can find of air monitoring ever having been done, which is terrible.
- d) when it has rained heavily for a while, water backs up all the sewer/drainage lines, blows lids off manhole covers that were welded shut - up to ~~feet~~ feet is the distance they're thrown - fills the reactor parking lot with deep water and

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creates "puff-ups" on campus of the ground, plus small sinkholes, and flooding of lower parking decks some blocks from the reactor. Tesh's own study said sewer lines on campus were "inviting collapse". Part of the reason is that the Orme St. trunk line was built in 1892. Due to its age and problems created by lines elsewhere in Atlanta, according to published reports (e.g. Sat. June 26th 1993 Atlanta Journal and Constitution titled: "1992 study warned of cave ins - sewer under Tesh inadequate, city was told.") the result during heavy rains, is "high pressure flows which create "jet-like leaks through the defective mortar joints and cracks" the study said. The powerful leaks erode soil from around the sewer, and "over long periods of time, a significant and continuous void is created around the sewer, inviting the cave in of the earth overburden, and in some cases the sewer itself" according to the report/AJC article. The sewer line called the Orme St. trunk is about $2\frac{1}{2}$ blocks, or a bit less from the reactor, but feedlines to that trunk line back up due to the problems and those lines are next to the reactor etc. The drainage in the reactor area isn't good anyway. As noted in the attached letter, a sinkhole appeared next to the reactor years ago that was filled in. A witness to that is still very much alive.

e.) Radioactive contaminants have been "routinely" (EPD) dumped to the sewer from the Tesh reactor's wastewater holding tank. Contamination of sewer lines around the nation due to such dumping is a matter of grave concern, as NRC knows. Radioactive contamination cannot be rendered harmless, it has a cumulative effect (see attached letter). Each time the sewers back up and flood ground around the reactor which is already contaminated, through lines which must be contaminated due to the routine dumping, the contamination must be spreading and affecting perhaps other groundwater and of course the grass, topsoil, parking lots, pavements upon which people walk.

During the Olympics, the approx. one million visitors will use an extra 30 million to 50 million gallons of water a day (30 gallons equals, three toilet flushes, a shower, and a handwashing for one person. It does not include laundry, dishwashing etc.) will hit Atlanta's collapsing sewer system. Add two days of rain and disaster looms.

f.) If the reactor and all that goes with it is destabilized further somehow - by another sinkhole, earthquake, or God forbid, terrorist attack during the Olympics, it could not only break apart, but so could the pool holding the cobalt-60 and the entire mess could drain into groundwater/down sewers/into the runoff ditch and the cobalt would be doing it's thing simultaneously, regular waterlines would rupture, contamination would be spread further, contaminated water would go down street drains, the whole liquid mess would ultimately hit the Chattahoochee river (ending in the Gulf of Mexico, where this radioactive pollution will join the 61,331,169 pounds of chemicals which are dumped yearly to the Gulf via the Mississippi River by industry, all legally allowed by EPA, who like NRC are meant to be protecting the public....) and that would all be for starters. If this happened at any time it would be a disaster. If it happened during the Olympics the chaos would be even worse - you could kiss Atlanta goodbye from the relative safety of your Washington office. None of this would endear the US government and the NRC to the nation and the world to put it mildly.

g.) Dr. Karam told me on the phone, that if a crack caused the

water to drain out (i.e. of the pool containing the cobalt-60) he would pour cement in the hole. Does NRC allow cement mixers to be kept inside reactor areas with mixed cement at the ready so dead people could try resurrecting themselves to pour the stuff down cracks?

h.) the reactor is in an earthquake zone (as is every other nuclear reactor, nuclear facility, nuclear power plant in the southeast - the Savannah River Nuclear Facility with it's 300 square miles of contamination and its bunch of reactors has reactors sitting astride faults and its near Charleston which is overdue for an earthquake). According to the most updated reports, an active earthquake zone has been identified in East Tennessee (watch out for all those nuclear power plants and Oak Ridge National labs you better get moving on that too) that may hint of larger quakes to come and they would affect parts of Alabama and Georgia too. In case you don't know, the largest earthquake in US history since the arrival of European colonizers was on the east coast area, at New Madrid, it was felt from New Orleans to Boston and caused the Mississippi and Ohio rivers to flow backwards temporarily. Rocks underlying Eastern states transmit shock waves more efficiently causing damage over wider areas. the 1886 earthquake that devastated Charleston toppled chimneys in Atlanta, and shook wooden buildings west of Atlanta almost to the Alabama line in west/northwest Georgia. In March of 1994 there was a 2.5 quake in Dade County, northwest Georgia. A major fault line, the Brevard, runs basically along the Chattahoochee River, which in geological terms is not far from Tech's reactor. At most a couple of miles.

i) There is absolutely no reason whatsoever to keep the reactor open/going. Dr. Karam admitted to me by phone that the "activation analysis" can be done in other places. Things like irradiating gemstones (done in the past) or food irradiation (current, e.g. given was Vidalia onions - food irradiation may be a way to get rid of left over nuclear crud, but it is unsafe, dangerous and changes the structure of the food) are outrageous.

j) Please note conflict of interest section in attached letter re:

EPD, NRC and Tech's reactor. Ga EPD has a mobile radiation lab it can use for emergencies and test results from tests they take can be done elsewhere and should have independent corroboration by NRC.

k) Security by many accounts is extremely lax. Anyone can, (and has) wander around in there. A pathetic bit of fence surrounds it.

l) There is U-235 (which can be made into a bomb) and plutonium in there of course. Let me remind you, plutonium was named after the ancient God of Hell and Lord of the Underworld in mythology for good reason.

In the case of accident, or terrorist attack (a one foot cement wall separates the cobalt from the outside more or less) evacuation of the campus and downtown Atlanta (never to return of course) would be impossible now, let alone during the Olympics.

1) Karam says that DOE funds other universities so they in turn can do research at the Tech reactor (DOE is interested in the results). I really don't care - that's a non-issue. The DOE and its contractors have already so contaminated most of what was once "America the Beautiful" that a vast portion of the nation's health woes can be laid

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directly at their feet , the misery they have caused by their antics would require at least two sets of encyclopaedias to detail, frankly they can go fly a kite ,**AFTER** serving jail terms **AFTER** cleaning up the mess they have created. The other universities and companies who have used the reactor should also pay for a portion of the entire cleanup both on campus and of the sewers.

m) It has also been brought to my attention, that Dr. Karam has put in for a twenty year liscense renewal/extension to NRC, to Mr. Mendonca **Senior Project Manager Non-Power Reactors**. It better be a cold day in hell before that dump gets another liscense. It should be shut down forever and everything cleaned up, no matter what the cost to those who own it, started the thing up, or ever used it.

As the Nuclear Regulatory Commission, under its old name of the Atomic Energy Commission, was responsible for helping the Tech reactor program get underway years ago in an indirect manner, i.e. via its Power Reactor Demonstration Program, which one member of the Joint Committee on Atomic Energy later described as an attempt "to force feed atomic development" with tax dollars, according to Daniel Ford of the Union of Concerned Scientists, which helped attract companies like Georgia Power and Duquesne Light Co etc. get into the nuclear business and helped the entire program that started at Tech with Georgia Powers involvement etc. , the least NRC can do, is to shut the wretched thing down now, as in a sense, NRC/AEC is morally also responsible, morally "guilty" if you will.

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The second request is, that NRC withdraw all liscense sections nationwide, whether commercial, research, hospital or industry that involve discharging or dumping ANY quantity of radioactive contaminated ANYTHING (e.g. water, other liquid) to the sewers or waters of the United States, that meaning any pond, creek, lake (such as Oconee dumping to Lake Hartwell) stream, runoff ditch, wetland, swamp, river (such as Plant Hatch, Ga. to the Altamaha River) or the ocean. Also no state, county or municipality etc. should be allowed to get round such a ruling. There is no safe level of radiation, period. It's also cumulative. Such discharging/dumping is contaminating the waters on which all life depends. It cannot be removed from water, no amount of dilution changes the fact that the water is radioactive. It is there essentially forever, and affecting the public health and that of fish and wildlife. What would normally be discharged/dumped in such a manner should be taken to a liscensed radioactive waste site for monitored, above-ground, storage, until the genius the world has waited for since the dawn of the atomic age appears, who can figure out how to render radioactive waste harmless.

In the case of short lived isotopes in nuclear medicine, where patient blood and excreta contains isotopes that take up to a month to decay blood can be placed in special, isolated storage areas onsite in shielded containers , each container could be flushed when decay is complete. Patients whose excreta is contaminated, could defecate into special biodegradeable, wax coated heavy paper bags which could be placed in the toilet with the edges folded over the toilet seat (in the same way paper toilet seat covers work) . These bags could be stored in special containers at hospitals (or at home) and taken weekly or monthly to medical waste facilities once decayed. Any medical/human/lab waste from nuclear medicine which takes more than a month to decay, should go to a liscensed site. There is no excuse

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not to do this. NRC's new sewage dumping guidelines are totally inadequate. The liscence to do it must be stopped. Besides the request to stop liscensing/withdraw liscences for dumping to water goes the request to withdraw all liscences to all nuclear facilities such as power plants, which operate under "ALARA", (In case you can't remember what "ALARA" means, it's in the attached letter.) with regard to releases of radioactive contaminants to air, no matter how minute the amount. The NRC, EPA and IAEA and ICRP well know that there is no such thing as a "safe" level of ionizing radiation. It is not my fault you all gave the world's public (including its medical profession) the impression that there was;-or that you all "led them down the garden path" so to speak on the issue. It's yours. IT's about time they were told the truth. Only that way can the scope of the problem of radioactive contamination (globally) be trully assessed. People can then step forward with solutions. It would certainly jolt the medical community (and the public) out of it's complacent textbook responses to illness, if the NRC and EPA had the guts to put even one example of the truth out in the public eye, such as the fact that there are over 40,000 potentially radioactively contaminated sites nationwide (many hitting the groundwater) ; or who informs who, each time a radioactive cloud passes overhead - the public isn't told. Revoking "ALARA" liscences and those dealing with discharges to water are important. NOT to stop such discharges would be totally irresponsible, and constitute malfeasance.

Countless people, not only myself, and other organizations, are as concerned as I am about the Tech reactor and the sewer/air discharges. NRC must act to protect the public and the environment and NRC has no right whatsoever to keep saying that there are "acceptable" levels of radiation. Acceptable to whom? Industry? Certainly not to most people worldwide once they know the reality. Obviously all the foregoing must also apply to any US companies or their subsidiaries/affiliates abroad who have constructed or are constructing nuclear plants of any type. I also request that the NRC modify every liscense issued so that all transporters of radioactive materials (by any means) and builders of nuclear power plants, must put, in two foot high letters, on anything they build or transport the words "DANGER- RADIOACTIVE" and in slightly smaller letters "there is no safe level of radiation, any exposure can affect health." NRC must also prohibit the transportation of radioactive material via the mail.

These are all very basic, common sense things I request, with ample back-up data. I look forward to your reply. I can provide extra data if you need it, but NRC is well aware of most of it anyway.

Sincerely,

Pamela Blockey-O'Brien.

Pamela Blockey-O'Brien (Member, I.F.O.R.)

*Copy of letter to Doug Boles,
Atlanta Olympic Committee attached.*

copy

The Executive Assistant to the President of
The Atlanta Olympic Committee,
Mr. Doug Boles,
Atlanta Committee for the Olympic Games,
250 Williams St., Suite 6000,
P.O. Box 1996,
Atlanta, Ga. 30301-1996



PAMELA BLOCKEY-OBRIEN
D23 Golden Valley, Douglasville, GA 30134 USA

SENT SEPT. 12th 1994
CERTIFIED MAIL

RE: The deadly nuclear reactor on the campus of the Georgia Institute of Technology near the proposed location for the Olympic Village. Techwood Homes, City Hall, the State Capitol, CNN, busy Peachtree St., Piedmont Park, Morris Brown University and the Omni are all within an approx. two mile radius of the reactor.

Dear Mr. Boles,

I write concerning the above reactor.

Whereas Georgia Tech's so-called Neely Nuclear Research Center and Reactor is in a heavily populated area -

Whereas the nuclear research center/reactor also contains facilities for preparation and storage of radioactive materials, including "hot cells" for handling high-level materials and a storage area for radioactive materials -

Whereas there are approx. 400,000 CURIES OF COBALT-60 in the pool and hot cell together, as well as approx. 6,000 CURIES of CESIUM-137 stashed under the floor of a building about a block away -

Whereas the reactor contents, other radioactive materials, and the aforementioned c-137 and cobalt-60 are deadly (for comparison: at Three Mile Island no one could enter due to an average 30,000 roentgens per hour being reported by instruments inside - according to scientists 400,000 curies of cobalt-60 UNSHIELDED ALL AT ONCE would result in 480 MILLION roentgen per hour) -

Whereas the potential for ACCIDENT or TERRORISM exists at such facilities worldwide -

Whereas the reactor was not built to even the current, lousy safety standards for reactors; Whereas the facility is in an earthquake zone and there have been tremors a few hundred miles to the south and less than that to the north of the facility in recent years -

Whereas, contrary to reactor head Dr. Karam's assertion ("Alternatives," January 1994) that the facility is "on solid rock", documents of the Georgia Geologic Survey show that the formation on which Georgia Tech is located, includes among its wording "slabby" (viscous "plagioclastic" (i.e. tending to break along oblique lines) and is called (no joke) the WAHOO CREEK FORMATION

Whereas according to Dr. Karam the cement floor on which the reactor sits (it started up in 1964) is checked daily because he looks at it - in other words there may be problems the naked eye can't see -

Whereas Dorgia EPD (Radiation Division) has/had contractual arrangements with both the Nuclear Regulatory Commission (NRC) for radiation oversight, and with Georgia Tech as it uses their facilities in part while it is monitoring the Tech reactor and site, raising the question of conflict of interest -

Whereas, for some strange reason, air monitoring for radiation does not seem to have been performed by Georgia EPD on the Tech reactor according to EPD's Environmental Radiation Surveillance Reports, nor have tests been performed in those reports for certain other contaminants -

Whereas dumping of radioactively contaminated water (including Strontium-90) has routinely been done to city sewers from whose wastewater systems it cannot be removed-

Whereas such effluents can be AVERAGED out over a year -

Whereas in other cities where sewer dumping of radioactive waste has also occurred extensive contamination to lines and wastewater treatment plants (particularly of Cobalt-60) which could endanger personnel, besides streams/river systems and ultimately the ocean, has already been confirmed (examples: Oak Ridge TN and Columbus, OH) which will cost millions

to clean up -

Whereas a major sewer line, called the Orme St. Line, built in 1892, collapsed in one section in a giant sinkhole, which sucked cars and people to their death in June of 1993, and

Whereas said Orme St. Line also passes under the campus of Georgia Tech not far from the reactor, and across the campus there have been major problems related to this line over the years on the campus, and

Whereas, according to an eyewitness, a sinkhole occurred right next to the reactor building many years ago, which was filled in with sand and dirt and such, and Whereas the abovementioned 1993 sinkhole occurred only a few blocks from this area, and Whereas according to officials there are tie lines to the Orme St. Line on one of the roads next to the reactor, and

Whereas Dr. Karam, in conversation with me, did agree with me that the area floods (in particular after heavy rain) and although he insisted he believed the reactor to be safe, in response to my maintaining that there was a possibility that the reactor could be destabilized and that the radioactive Cobalt etc. could then go down a sinkhole, Dr. Karam said that the only problem would not concern the reactor but "would be if the heavily shielded cobalt sources went down the sewer", but he maintained they "could be retrieved". I reminded him that considering what had happened to both cars and people sucked down the sewer sinkhole in a rainstorm, that could not be done -

Whereas a reactor safety officer told me that if the reactor "went down a sinkhole it would break apart". And

Whereas said reactor safety officer told me a major, campuswide evacuation plan has never been tested -

Whereas Georgia Tech's own study of the sewer lines on campus done by B & E Jackson in 1992 warned the line was "inviting collapse" (however this company had not investigated the probability of a sinkhole occurring at the reactor, as from what the company told me they had not been told of the reactor) which the city was told about. Nothing was done -

Whereas, on campus, soil and vegetation tests done by EPD show radioactive contamination Whereas nuclear facilities operate under "ALARA", which stands for "As Low As Reasonably Achievable" which means keeping the releases (of radioactive substances) as low as you can reasonably achieve with the economics you want to spend on it and available equipment etc., because it is impossible not to have releases and, according to scientists, the only way you can avoid deaths from the radiation is to have no releases at all. (i.e. zero releases.) Called "planned deaths" by Dr. John Gofman, (a former Medical Director and Assistant Director of Lawrence Livermore Laboratory and discoverer of fissionability of Uranium-233 and author of approx. 150 scientific articles, including on the medical effects of ionizing radiation), and

Whereas in Georgia EPD's own documents they have to admit to contamination due to radioactive crud on campus (although they are very good in their reports in blaming everything they possibly can, without appearing too ridiculous, on other sources, such as: cesium-137 in grass near Georgia Power's Plant Hatch in middle Georgia - which has cracking noted on 4 weld joints on its core shroud, and which in the past dumped accidentally thousands of gallons of contaminated water to the Altamaha River - as being attributable to "a form of grass having an affinity for cesium" in EPD's efforts to explain away cesium-137 showing up in milk from cows who ate grass in the area of Plant Hatch) and as radiation has a cumulative effect this poses risks to the population and the environment as a whole,

Whereas any excuses concerning effects of "background radiation" influencing such, should be viewed with disdain considering a) unless pre-faced with the words "naturally occurring", as the words "background radiation" can include recent fallout over Atlanta from Chernobyl, or even what the Tech Reactor emits, b) whereas "naturally occurring background radiation" means precisely that, and is about 40mrem per year with a global average of approx. 125mrem per year (in some unique geological areas it is higher) -

Whereas I have been trying to get the situation concerning Georgia Tech's reactor and the fact that such a facility should not be located in such a highly populated area addressed since the early 1980's

Whereas, in the past, Tech dismissed my concerns, on TV, by saying the sewer dumping was only low-level radiation, as if that meant a hill of beans, because "low-level" is purely a term that misleads the public into thinking it is not dangerous when in fact "low-level" as a term has nothing to do with toxicity, and

Whereas, worldwide, governments and their minions, international and local agencies and the like, with some rare exceptions, have saturated the public and press with fake "safe levels" (when there are none), tortured "risk assessments", disgraceful "standards", concerning effects of radiation, (in the words of the world famous radiologist R.M. Sievert: "There is no known tolerance level for radiation.") and the global "limits", "estimates" and the like are a result of nuclear-military-industry "double-speak", and weighing of economics, meaning greed, against human health and the environment, with greed always winning, as huge sums are to be made at all stages of the nuclear cycle from mining uranium to reactors and bomb making and waste clean-up attempts -

Whereas I have begged and pleaded for years for the reactor to be shutdown and the whole mess cleaned up and taken out of the highly populated area

Whereas the worry of what could happen to an entire city, the students on the campus, radioactive contaminants in the water supply, the possibility of catastrophic contamination and death due to terrorism or accident, the possible pollution to the Chattoahoochee River down to West Point Lake and even to Apalachicola on the Gulf in Florida, and now worry over the fact, that, where the poor are sitting ducks at present in case of accident - near Georgia State University- and at Georgia Tech, OLYMPIC VISITORS AND ATHLETES WILL BE HOUSED to make matters even worse, is upsetting me greatly, and

Whereas, I asked the Olympic Committee in Atlanta in the person of yourself to get involved and do something about this problem, and

Whereas you told me by phone a few weeks ago that "WE, AS THE OLYMPIC COMMITTEE DON'T SHARE YOUR CONCERNS" and that you believed it was O.K. and that "I DON'T THINK WE AS THE OLYMPIC COMMITTEE SHOULD GET INVOLVED" - even after I told you some of what was there and about the sinkhole - and just told me to "CONTINUE PURSUIT OF YOUR CONCERNS" and you re-stated you would not get involved, and when I said "at least I tried" you said "Well you did - good luck" and

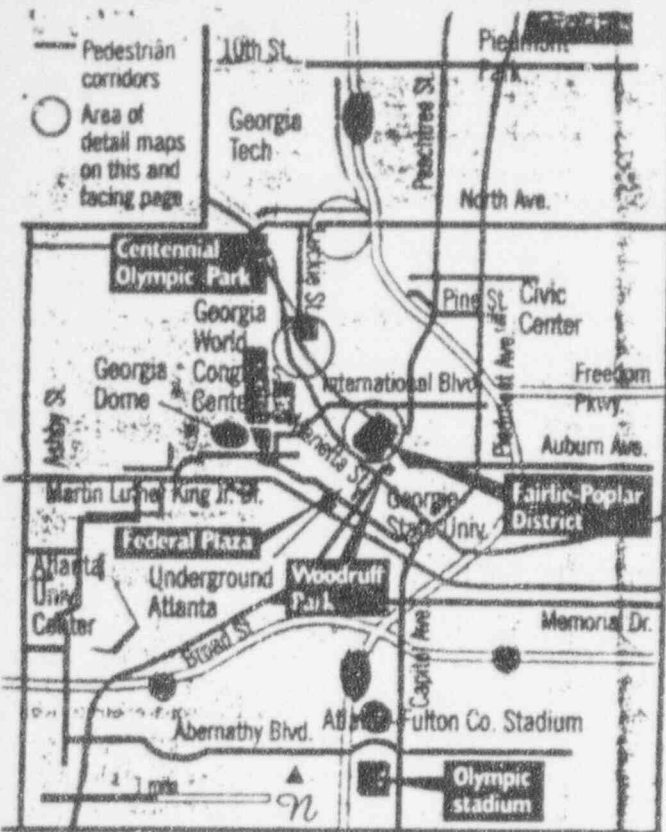
Whereas I believe it should be a grave concern, not only to "We, the Olympic Committee" (to borrow your words) but to everyone, I now THEREFORE WISH TO STATE BEFORE GOD AND THE WORLD, THAT IF THERE IS A PROBLEM, ACCIDENT OR ANY EVENT CONCERNING THE REACTOR AT TECH AND ALL THAT GOES WITH IT, WHICH RESULTS IN ILLNESS, INJURY, DEATH, CONTAMINATION TO PERSONS OR ANY OTHER LIVING BEINGS, I MAY CHARGE YOU AND THE ATLANTA OLYMPIC COMMITTEE AS WELL AS STATE AND FEDERAL AGENCIES AND THOSE IN CHARGE OF THE REACTOR AND GEORGIA TECH ON WHOSE CAMPUS IT SITS, WITH NEGLIGENCE AND MALFEASANCE, and you can be sure that any relatives of the injured, dead, dying or contaminated will do likewise.

One last note, "....I have kept the faith" (II Timothy, 4:7)

Sincerely,

Pamela Blockey-O'Brien

Pamela Blockey-O'Brien. (Member, International Fellowship of Reconciliation.)



Part of the challenge is to keep rowing as the Olympic

Between now and 1996 more than \$2 billion worth of construction projects are scheduled to be completed in metro Atlanta. The list includes:

Olympic Village

For: Housing athletic teams, coaches.

GEORGIA TECH PORTION

Size: 325-acre campus total.
Housing capacity during Games: 10,800.
Where: Georgia Tech.
Projected finish: September 1995.

GEORGIA STATE UNIVERSITY PORTION

Size: 8 acres.
Housing capacity during Games: 4,000.
Where: North Avenue and Techwood Drive.
Includes: New apartments with carpet, baths, kitchens and cable TV.
Construction start: April 1994.
Projected finish: March 1996.
Cost: \$169 million.
Funding: \$47 million from ACOG, \$122 million in state bonds.



INTERNATIONAL BOULEVARD

Cost: \$6.6 million.
Funding: Federal and bond funds.
Projected start: January 1995.
Projected finish: January 1996.
Dedicated roads.

