

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY

February 24, 1976

Matt:

Martin Kaplan called me from the airport the other evening. We had a brief, but useful chat. Thanks for letting him know of my interest in talking to him.

Attached is a Soviet article which touches on recombinant DNA and the BWC.

Robert Mikulak

Attachment:

As stated.

Mikulak

FBI 54

ZHUKOV PRAVDA ARTICLE ON BIOLOGICAL WEAPONS BAN

LD201209 MOSCOW PRAVDA IN RUSSIAN 19 FEB 76 P 4 LD

(ARTICLE BY YU. ZHUKOV, MEMBER OF THE WPC PRESIDUM: "THERE MUST BE NO DELAYING")

(TEXT) DEVELOPING INCREASINGLY WIDELY THE WORLDWIDE CAMPAIGN ANNOUNCED IN STOCKHOLM LAST JUNE TO HALT THE ARMS RACE, THE PEACE SUPPORTERS MOVEMENT IS DEMANDING INCREASINGLY ACTIVELY AND INSISTENTLY THAT THE POLITICAL DETENTE WHICH HAS NOW BEEN ACHIEVED BE SUPPLEMENTED WITH EFFECTIVE MILITARY DETENTE.

AT THE RECENT WPC PRESIDUM BUREAU SESSION IN HELSINKI THERE WAS A USEFUL EXCHANGE OF OPINIONS ON THE DEVELOPMENT OF THIS NEW CAMPAIGN. THE REPRESENTATIVES OF THE SOCIALIST STATES AND THE COUNTRIES OF WEST EUROPE, ASIA AND AFRICA DESCRIBED HOW MASS WORK HAD BEEN ORGANIZED AROUND THE STOCKHOLM APPEAL, IN PARTICULAR, THE COLLECTING OF SIGNATURES ON THIS DOCUMENT. THE WPC DELEGATION WHICH VISITED THE UNITED STATES AT THE INVITATION OF THE PEACE-LOVING FORCES' ORGANIZATION REPORTED THAT IT HAD BEEN TO 15 STATES, WAS RECEIVED BY MANY PROMINENT POLITICIANS AND PUBLIC FIGURES AND MET WITH SUPPORT EVERYWHERE IN ORGANIZING THE STRUGGLE TO HALT THE ARMS RACE.

AT THE SAME TIME IT WAS STRESSED DURING THE DISCUSSION THAT TIME DOES NOT WAIT AND THAT IT IS NECESSARY TO ACTIVATE THE STRUGGLE TO DEVELOP THE CAMPAIGN SINCE ANY DELAY IN RESOLVING THE URGENT PROBLEMS OF ARMS LIMITATION AND SUBSEQUENTLY OF DISARMAMENT MAY BE FRAUGHT WITH HIGHLY DANGEROUS CONSEQUENCES.

THE PARTICIPANTS IN THE PEACE SUPPORTERS MOVEMENT RECALLED IN PARTICULAR THAT, BY ALLOCATING INCREASINGLY LARGE FUNDS TO THE ARMS RACE, THE COUNTRIES IN THE NATO MILITARY BLOC WERE THEREBY ENCOURAGING THE CORRESPONDING DEPARTMENTS, FIRMS AND THEIR SCIENTIFIC RESEARCH INSTITUTES TO MAKE MORE AND MORE QUESTS FOR INCREASINGLY PERNICIOUS MEANS OF ANNIHILATING PEOPLE.

WHAT IS MORE, THE MILITARY-INDUSTRIAL COMPLEXES IN THE CAPITALIST COUNTRIES, WHICH ARE FORGING AHEAD WITH THE DEVELOPMENT OF NEW TYPES OF WEAPONS IN THEIR SCIENTIFIC INSTITUTES DESIGNED SPECIALLY FOR THIS PURPOSE, ARE AT THE SAME TIME CONSTANTLY TAKING A LOOK AT WHAT IS BEING DONE IN LABORATORIES ENGAGED IN RESEARCH OF A PEACEFUL NATURE, MINDFUL OF THE FACT THAT MODERN SCIENCE AND TECHNOLOGY IN MANY COUNTRIES MAKE IT POSSIBLE, WITHOUT ANY DIFFICULTY, TO FIND A MILITARY APPLICATION FOR DISCOVERIES WHOSE AUTHORS OFTEN DO NOT THINK ABOUT THIS AT ALL.

THIS WAS RECALLED EXPRESSIVELY QUITE RECENTLY BY WESTERN MASS MEDIA, WHICH HAD TAKEN AN INTEREST IN WHAT APPEARED TO BE THE MOST PEACEFUL AND HIGHLY IMPORTANT SECTOR OF BIOCHEMISTRY FOR MANKIND --SO-CALLED GENETIC ENGINEERING, OFTEN CALLED "GENETIC SURGERY" IN THE WESTERN PRESS. AND QUITE ALARMING CIRCUMSTANCES WERE SUDDENLY REVEALED.

MANY READERS WILL IMMEDIATELY ASK WHAT SORT OF SCIENCE THIS IS, THIS GENETIC ENGINEERING.

STUDYING THE PROBLEMS OF HEREDITY, SCIENTISTS QUITE LONG AGO CAME TO THE CONCLUSION THAT ITS MECHANISM WAS BASED IN THE MOLECULAR CHAINS OF DNA PRESENT IN EACH ORGANISM. IT IS DNA WHICH PLAYS AN EXTREMELY IMPORTANT BIOLOGICAL ROLE BY PRESERVING AND PASSING ON HEREDITARY CHARACTERISTICS FROM ONE GENERATION TO ANOTHER--GENES--WHICH ARE MATERIALLY EMBODIED IN A CERTAIN ORDER IN NUCLEOTIDES--INCREDIBLY SMALL PARTICLES WHICH FORM THE DNA MOLECULES.

AND SO, THE RESEARCHERS ASKED THEMSELVES WHAT WOULD HAPPEN IF THEY SUCCEEDED IN FINDING A WAY OF REMOVING PART OF THE MOLECULAR CHAIN OF ONE LIVING BEING AND TRANSPLANTING IT INTO THE CELL OF ANOTHER? THEORETICALLY THE SCIENTISTS CAME TO THE CONCLUSION THAT SUCH A "GENE TRANSPLANT" WOULD OPEN UP LIMITLESS POSSIBILITIES IN THE SPHERE OF GENETICS.

LOOKING INTO THE FUTURE, THE ADHERENTS OF GENETIC ENGINEERING PAINT ALLURING PROSPECTS OF CREATING NEW STRAINS AND EVEN TYPES OF PLANTS, BREEDS OF ANIMALS AND THEN--WHO KNOWS?--ALSO IMPROVING THE PHYSICAL CHARACTERISTICS OF MAN AT SOME TIME. BUT HERE THEY AGREED THAT "GENE TRANSPLANTS," EVEN THE MOST PRIMITIVE ONES, WOULD BE SUCCESSFUL AT BEST ONLY ABOUT 100 YEARS FROM NOW.

HOWEVER, THE RAPID DEVELOPMENT OF MODERN SCIENCE CAN MAKE SUBSTANTIAL AMENDMENTS TO SUCH MODEST SUPPOSITIONS. RESEARCH IN THIS SPHERE IS DEVELOPING INCREASINGLY RAPIDLY AND FRUITFULLY. AND NOW DER STERN, WHICH IS PUBLISHED IN THE FRG, WRITES THAT SCIENTISTS HAVE SUCCEEDED IN FINDING "A STRANGE SUBSTANCE CALLED RESTRICTION ENZYME. IN A WAY WHICH IS STILL UNEXPLAINED, IT IS CAPABLE OF CUTTING UP INTO SMALL PIECES SEEMINGLY INDIVISIBLE MOLECULAR CHAINS OF DNA. LIKE A BIOCHEMICAL KNIFE, IT DIVIDES THE HEREDITARY SUBSTANCE INTO ITS GENE-CONTAINING PARTS." BUT THIS IS NOT YET ALL. SOON AN ENZYME WAS DISCOVERED CAPABLE OF DOING THE REVERSE: IT PROMOTES THE UNIFICATION INTO CHAINS OF INDIVIDUAL SECTIONS OF DNA.

THUS, GENETICISTS WHO EVEN YESTERDAY DID NOT EVEN DARE DREAM OF THIS HAVE ACQUIRED A MOST IMPORTANT INSTRUMENT FOR PERFORMING WHAT BEFORE THIS SEEMED TO BE UTOPIAN "GENETIC SURGERY" AND HAVE IMMEDIATELY BEGUN TO USE IT. TRUE, SUCH EXPERIMENTS ARE POSSIBLE ONLY AT THE LEVEL OF THE SIMPLEST LIVING ORGANISMS AT THE MOMENT--VIRUSES AND BACTERIA--BUT EVEN THEY ARE OF ENORMOUS SCIENTIFIC SIGNIFICANCE....

WHEN THEY BEGAN THEIR EXPERIMENTS IN THE SPHERE OF GENETIC ENGINEERING, SCIENTISTS CAME ACROSS PROCESSES WHICH DEEPLY ALARMED THEM. IT TURNED OUT THAT "ALIEN" GENES MARKEDLY CHANGE THE NATURE OF BACTERIA. AND THIS IS UNDERSTANDABLE: THEY BEGIN TO MANUFACTURE NEW PROTEINS WHICH DIFFER FROM THOSE WHICH WERE PRODUCED BY MICROBES WITH UNALTERED HEREDITY.

HERE IT TURNED OUT, AS THE AMERICAN MAGAZINE NEWSWEEK AND THE FRENCH PARIS-MATCH HAVE WRITTEN, THAT EVEN THE SIMPLEST, INOFFENSIVE BACILLI, LIKE INTESTINAL ONES FOR EXAMPLE, WHICH HAVE BEEN KNOWN TO BE VIRTUALLY HARMLESS SINCE TIME IMMEMORIAL AND WHICH LIVE INSIDE THE HUMAN ORGANISM, CAN TURN INTO FIERCE. PREDATORY BACTERIA WHICH SECRETE A FATAL POISON AND CAUSE INCURABLE DISEASES.

AND SO THIS FACT IMMEDIATELY EVOKED CLOSE INTEREST ON THE PART OF THOSE WHO ARE CARELESSLY SEEKING NEW METHODS FOR THE MASS DESTRUCTION

of those who are tirelessly seeking new methods for the mass destruction of people

AS IS KNOWN, A CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT,
PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN
WEAPONS AND ON THEIR DESTRUCTION WAS DRAWN UP AND OPENED FOR SIGNATURE
IN 1972. THIS CONVENTION HAS BEEN SIGNED BY 112 STATES AND RATIFIED
BY 55, INCLUDING THE USSR AND THE UNITED STATES. IT ENTERED INTO
FORCE 26 MARCH LAST YEAR.

(MORE)

20 FEB 1503Z WJ/CAJ

FBIS 55

ONLY ADD 54 (ZHUKOV ON BIOLOGICAL WEAPONS)

XXX MARCH LAST YEAR.

(TEXT) THIS CONVENTION PROVIDES FOR A COMMITMENT BY THE STATES WHO ARE PARTY TO IT NOT TO DEVELOP, PRODUCE, STOCKPILE OR OTHERWISE ACQUIRE OR RETAIN BIOLOGICAL AGENTS OR TOXINS OF TYPES AND IN QUANTITIES THAT HAVE NO JUSTIFICATION FOR PROPHYLACTIC, PROTECTIVE OR OTHER PEACEFUL PURPOSES. AT THE SAME TIME THE CONVENTION CONTAINS THE PROVISION THAT IT MUST BE IMPLEMENTED IN A MANNER DESIGNED TO AVOID HAMPERING THE ECONOMIC OR TECHNOLOGICAL DEVELOPMENT OF THE STATES PARTY TO THE CONVENTION OR INTERNATIONAL COOPERATION.

EVIDENTLY HAVING TAKEN ALL THIS INTO ACCOUNT, A COMMISSION HEADED BY THE SCIENTIST BERG, WHICH WAS SET UP BY THE U.S. NATIONAL ACADEMY OF SCIENCES SOON AFTER THE RATIFICATION OF THE CONVENTION, ANNOUNCED A MORATORIUM ON THE CARRYING OUT OF GENE "TRANSPLANT" EXPERIMENTS WHICH ARE FRAUGHT WITH SUCH DANGEROUS CONSEQUENCES. BUT AN INTERNATIONAL CONFERENCE OF SCIENTISTS WHICH GATHERED LAST FALL IN ASILOMAR NEAR SAN FRANCISCO CAME TO THE CONCLUSION THAT THE EXPERIMENTS STILL OUGHT TO BE CONTINUED INSOFAR AS THEY ARE OF TREMENDOUS SCIENTIFIC SIGNIFICANCE, AND RECOMMENDATIONS WERE DRAWN UP AT THE SAME TIME WHOSE IMPLEMENTATION WAS TO PREVENT TREATED BACTERIA FROM "ESCAPING" BEYOND THE CONFINES OF THE SCIENTIFIC LABORATORIES, WHICH WOULD ENTAIL CATASTROPHIC CONSEQUENCES AS THEY ARE CAPABLE OF MULTIPLYING WITH INCREDIBLE SPEED.

"GOD HELP US IF ONE SHOULD SLIP OUT," ULRICH (SHIPKA) (AS TRANSLITERATED), A SCIENTIFIC COMMENTATOR FROM THE FRG, WROTE RECENTLY. RECALLING THAT PLAGUE BACTERIA, WHICH WERE INTRODUCED ACCIDENTIALLY INTO EUROPE 600 YEARS AGO BY A CARAVAN OF GENOESE TRADERS, KILLED MORE THAN A QUARTER OF THE CONTINENT'S POPULATION AT THAT TIME, HE DECLARED THAT CERTAIN BACTERIA SUBJECTED TO GENE-TRANSPLANTS ACQUIRE PROPERTIES WHICH COULD CAUSE IMMEASURABLY MORE TERRIBLE CALAMITIES.

THIS IS WHY THE RECOMMENDATIONS DRAWN UP BY THE INTERNATIONAL CONFERENCE IN ASILOMAR BY NO MEANS REASSURE THOSE WHO REALIZE WHAT WOULD HAPPEN IF SOMEONE TRIED TO FIND A MILITARY APPLICATION FOR MICROBES "ARTIFICIALLY RECONSTRUCTED" WITH THE AID OF "GENETIC SURGERY," THEREBY IGNORING THE CONVENTION ON THE PROHIBITION OF BIOLOGICAL WEAPONS.

U.S. SENATOR EDWARD KENNEDY AND A NUMBER OF HIS COLLEAGUES, AS NEWSWEEK MAGAZINE WROTE 26 JANUARY, ARE DEMANDING A CHECK ON THE EFFECTIVENESS OF THE GUARANTEES THAT THE MEASURES RECOMMENDED BY THE AOFREMENTIONED CONFERENCE WILL AVERT THE POSSIBILITY OF DISASTROUS CONSEQUENCES FROM THIS RESEARCH.

SUCH MISGIVINGS ARE ALL THE MORE UNDERSTANDABLE IF ONE TAKES INTO CONSIDERATION THE FACT THAT THE SCIENTISTS' NEW DISCOVERIES HAVE ATTRACTED THE ATTENTION OF THOSE WHO ARE BY NO MEANS INTERESTED IN THE STRENGTHENING OF UNIVERSAL SECURITY.

THUS, IN THE OPINION OF LORD RITCHIE-CALDER, THE BRITISH ARMAMENTS SPECIALIST, A BACTERIUM CAPABLE OF WEAKENING AN ENEMY BY CAUSING A LETHAL EPIDEMIC IS FOR THE MILITARY "POSSIBLY FAR MORE ATTRACTIVE (1) THAN THE ATOM BOMB," AND "AS FAR AS THE NUMBER OF DEATHS IS CONCERNED, A BACTERIUM COULD BE FULLY COMPETITIVE WITH A NUCLEAR DEVICE"; MOREOVER, THE PRACTICAL LORD EMPHASIZES, "THE PRODUCTION OF THIS BACTERIUM WOULD BE CONSIDERABLY CHEAPER."

WHEN SUCH DEBATES BEGIN IN THE PRESS, THE PEACE-LOVING PUBLIC CANNOT AND MUST NOT REMAIN INDIFFERENT. IN DEVELOPING ON AN INCREASINGLY BROAD SCALE THE STRUGGLE FOR THE ENDING OF THE ARMS RACE, THE SUPPORTERS OF PEACE ADVOCATE: FIRST, THE PRECISE AND UNCONDITIONAL OBSERVANCE OF THE CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION--A DOCUMENT WHICH ALSO COVERS THE USE OF GENETIC ENGINEERING FOR MILITARY PURPOSES.

SECOND, THE PEACE SUPPORTERS RECALL HOW RIGHTLY AND OPPORTUNELY L.I. BREZHNEV, GENERAL SECRETARY OF THE CPSU CENTRAL COMMITTEE, STRESSED IN HIS 13 JUNE 1975 SPEECH TO VOTERS IN MOSCOW THE SERIOUS DANGER THAT WOULD BE INFLICTED UPON ALL MANKIND BY THE CREATION OF NEW TYPES OF WEAPONS EVEN MORE DEVASTATING THAN NUCLEAR WEAPONS. "THE REASON AND CONSCIENCE OF MANKIND," HE SAID AT THAT TIME, "DICTATE THE NEED TO PLACE AN INSUPERABLE OBSTACLE IN THE WAY OF THE EMERGENCE OF SUCH WEAPONS."

SOON AFTER, THE SOVIET GOVERNMENT SUBMITTED TO THE UNITED NATIONS AN APPROPRIATE DRAFT INTERNATIONAL AGREEMENT. THE DRAFT WAS COMPREHENSIVELY DISCUSSED, AND THE UN GENERAL ASSEMBLY DECLARED THAT IT DEEMED IT NECESSARY TO CONCLUDE AN INTERNATIONAL TREATY OR AGREEMENT ON EFFECTIVE MEASURES FOR PROHIBITING THE DEVELOPMENT AND PRODUCTION OF NEW TYPES OF WEAPONS OF MASS DESTRUCTION AND NEW SYSTEMS OF SUCH WEAPONS.

THE DISARMAMENT COMMITTEE, WHICH BEGAN ITS LATEST SESSION IN GENEVA THE DAY BEFORE YESTERDAY, IS, IN ACCORDANCE WITH THE RECOMMENDATION OF THE GENERAL ASSEMBLY, TO EMBARK ON DRAWING UP JUST SUCH AN INTERNATIONAL LEGAL DOCUMENT; AND THE APPROPRIATE POINT HAS BEEN INCLUDED ON THE AGENDA. IT IS INTENDED THAT A REPORT ON THE RESULTS ACHIEVED WILL BE SUBMITTED FOR EXAMINATION BY THE NEXT GENERAL ASSEMBLY SESSION.

ACTIVELY SUPPORTING THIS UN DECISION, THE MOVEMENT OF PEACE SUPPORTERS IS INSISTING FIRMLY AND RESOLUTELY ON THE CONCLUSION, WITHOUT DELAY, OF A TREATY ON THE PROHIBITION OF THE DEVELOPMENT AND PRODUCTION OF ANY NEW TYPES OF WEAPONS OF MASS DESTRUCTION WHATSOEVER.

THE VITAL INTERESTS OF ALL MANKIND DEMAND THIS. THERE CAN BE NO DELAYING IN THIS MATTER!

(ENDALL)

20 FEB 1528Z WJ/CAJ