TITLE: SPECULATIVE PAPER BY N. KARDASHEV AND A. SAKHAFUV ON CHARGED MASS IN SPACE AT CONFERENCE ON ORIGINS OF LIFE, ARMENIA, 6 TO 8 SEPTEMBER 1971; LOW SCIENTIFIC LEVEL OF OTHER SCVIET PAPERS #C+ DCCREFERENCE: 085EP71 INFCLOCATION: USSR INFCDATE: 7.1. CCSATI: CONFIDENTIAL CLASSIFIED BY-"SEE ORIG AGCY"

(b)(3) CLASS/DOWNGRADE: 7 (6)(3) CCNTROL MARKINGS: [ \_ 7(6)(3) 7\*\*\* (6)(3) \*\*\* CONFITANTIAL PAGE (6)(3) \*\*\* CONFIQ' NTIAL SEQUENCE NR: TEXT: -- J# / GRIGINAL REPORT 2 PAGES). AT THE CONFERENCE ON THE ORIGINS OF LIFE IN YEREVAN, ARMENIA, SSR, 6 TO 8 SEPTEMBER 1971, N.S. KARDASHEV, INSTITUTE FOR SPACE RESEARCH, MOSCOW, READ AN INTERESTING BUT HIGHLY SPECULATIVE PAPER HE FAC PREPARED ON GENERAL RELATIVITY AND POSSIBILITY OF A BODY COLLAPSING INTO A BLACK HOLE IN SPACE. HIS CO AUTHOR WAS THE INTERNATIONALLY FAMOUS THEORETICAL PHYSICIST, ANDREI D. SAKHAROV. KARDASHEV IS VERY MUCH LIKE HIS SUPERIOR AND FORMER TEACHER AT THE INSTITUTE, I.S. SHKLOVSKIY, IN HIS APPROACH TO SCIENTIFIC PROBLEMS. HE IS NOT AFRAID TO SPECULATE IN HIS EFFORT TO FIND A SOLUTION. THE KARDASHEV SAKHAROV PAPER CONCERMED THE AUTHORS'S STUDY OF WHAT HAPPENS WHEN A CHARGED MASS OR BODY COLLAPSES IN SPACE. ENTIRE, STUDY OF WHAT HAPPENS WHEN A CHARGED MASS OR BODY COLLAPSES IN SPACE.
KARDASHEV STATED THAT, IF IT WERE NOT CHARGED, THE MASS WOULD JUST
COLLAPSE PAST THE POINT OF GRAVITATIONAL SINGULARITY AND BE GONE
FOREVER. IN CTHER WORDS, THE MASS WOULD CLOSE IN ON ITSELF AND HAVE
NO MORE CONTACT WITH THE OUTSIDE WORLD. THE SOVIETS SPECULATED ON
WHAT WOULD HAPPEN IF THE MASS WERE CHARGED. THEY STATED THAT THEN
THE MASS WOULD BE ABLE TO BOUNCE. IT WOULD COLLAPSE BUT BOUNCE BACK THE MASS WOULD BE ABLE TO BOUNCE. IT WOULD COLLAPSE BUT BOUNCE BACK OUT. HOWEVER, THE MASS WILL COME BACK INTO A DIFFERENT PART OF SPACE TIME. AFTER HIS PRESENTATION, KARCASHEV TOLD A US ATTENDED THAT SAKHAROV WAS MOSTLY INTERESTED IN HIS CHARGED MASS PHENOMENON STUDY BECAUSE IT INDICATES THAT THE STRUCTURE OF SPACE MAY BE MUCH MORE \*\*\* CONFIGENTIAL [ ]\*\*\* (b) (3 PAGE

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COMPLICATED THAN IS PRESENTLY THOUGHT.

\*.\* KARDASHEV WAS INTERESTED IN THE STUDY FROM THE VIEWPCINT OF WHAT IMPLICATIONS IT HAS FOR ASTROPHYSICS, PROVIDED THE BASIC PHYSICS OF THE PHENOMENON IS CORRECT. THE US ATTENDED FELT THE AUTHORS! SPECULATION WAS A LITTLE FANTASTIC AND THEY HAD TAKEN OFF IN A RATHER WILD WAY. HOWEVER, HE BELIEVED THEIR PAPER WAS GROUNDED IN GOOD AND SOUND PHYSICS. THE US ATTENDEE CONSIDERS KARDASHEV TO BE VERY COMPETENT TECHNICALLY AND FURTHER TO BE VERY SELF POSSESSED. HE RECALLED AN INCIDENT IN THE SPRING OF 1971 WHEN KARDASHEV, L.I. MATVEYENKO AND HE VISITED ACADEMICIAN LEV ARTSIMOVICH, SECRETARY OF THE ACADEMY'S DEPARTMENT OF GENERAL PHYSICS AND ASTRONOMY . MATVEYENKO, INSTITUTE FOR COSMIC RESEARCH, IS A COMMUNIST PARTY MEMBER AND VERY EXPERT IN POLITICAL MATTERS. HE WAS ALMOST CRINGING IN ARTS IMOVICH'S PRESENCE WHEREAS KARCASHEY WAS COOL AND CONFIDENT IN HIS BUSINESS LIKE DISCUSSIONS WITH THE SENIOR ACADEMICIAN. IN GENERAL, THE SCIENTIFIC LEVEL OF MCST OF THE SOVIET PAPERS AT THIS CONFERENCE WAS NOT VERY HIGH. ONE LITTLE KNOWN SOVIET (SOURCE COULD NOT RECALL HIS NAME) GAVE A VERY NAIVE PAPER ON THE DETECTABILITY OF PLANETS. ANOTHER SOVIET, WHO WAS A MEMBER OF A COMMITTEE THE USSR HAS ESTABLISHED TO INVESTIGATE UNUSUAL PHENOMENA, IN OTHER WORDS, FLYING SAUCERS, GAVE A SERIOUS TALK WHICH WAS ACTUALLY VERY HUMORCUS.

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HIS APPROACH WAS, "WELL, OF COURSE, WE KNOW THERE ISN'T ANYTHING TO THIS ALLEGED PHENOMENON (FLYING SAUCERS), BUT ON THE OTHER HAND".
DURING HIS TALK SHKLOVSKIY AND CTHER SCVIETS JOKED AND LAUGHED AND CBVIOUSLY DID NOT TAKE THE SPEAKER'S REMARKS SERIOUSLY.

\*\* SHKLOVSKIY REMARKED LATER TO A US ATTENDED THAT THE "FLYING SAUCER COMMITTEE CONSISTS OF MANY POLITICIANS, THEORISTS, HISTORIANS AND SIMILAR TYPE PEOPLE. IT HAS LITTLE IF ANY SCIENTIFIC TALENT. SHKLOVSKIY GAVE A GENERAL, ENTERTAINING TALK ON SOME INTERESTING BUT UNIMPORTANT SUBJECT. VITALIY L. GINZBURG, ONE OF THE LEADING ASTRONOMERS IN THE USSR, ALSO GAVE A TALK ON THE BASIS OF PHYSICS THEORY, THAT IS, THE IDENTIFICATION AND COMPARISON OF FUNDAMENTAL ASSUMPTIONS IN PHYSICS. GINZBURG HAS A FIRST RATE MIND AND IS SOUNDER IN HIS PHYSICS KNOWLEDGE THAN SHKLOVSKIY. GINZBURG THINKS REALISTICALLY, WHICH WAS SHOWN ON HIS ANSWER TO A US ATTENDEE'S QUESTION ABOUT THE CONFERENCE. THE SOVIET WAS ASKED WHETHEP THE CONFERENCE WAS WORTHWHILE IN THAT IT WAS MOSTLY DEVOTED TO THEGRETICAL SUBJECTS, VERY REMOTE FROM TANGIBLE GOALS. GINZEURG SAID, "WELL, IF IT HELPS TO BUILD UP SUPPORT FOR THE SOVIET RESEARCHERS TO GET NEW ASTRONOMICAL EQUIPMENT, THEN CERTAINLY THE CONFERENCE MAKES SENSE". CONFERENCE MAKES SENSE".

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