I built at Lincoln Laboratory is shown above. The LES-I was antennas required a stabilized orientation of the satellite. However, last year. Transmitting at frequencies around 8000 megacycles per efficiency as conventional transmitters, are considered potentially the present they do not have as high a power output or as high an seconds. A solid propellant rockets supplying 1400 pounds of thrust for 15 an eccentric orbit (appogee 10,000 miles; perigee 1,500 miles) by hurled into orbit Friday, February 11, via the USAF Titan IIIA. exceeds my actual cash outlay I’ll distribute every cent that ex- a general waste. The whole stu- This is outrageous, besides being a goodie, here’s one for voters a goodie, here’s one for ... issues clearly speak for men who think the sight of my unlovely HACKLASHERS. I've participated in random activities around the 'Tute, if you think that matters, details of which are on my petitions. If you think the sight of my unwavy pens will send any light on the campaign, you'll find that there. Some of the Hacklash principles have been set forth in "The Tool," the origin of the Hacklash move- ment, which has been distributed to dorms and other places. You'll find more details in later issues, and in House newspapers, so I won't bore you with them here. Since I've already offered the voters the primary purpose of the campaign. The UAP is en- titled to five hundred dollars cash, and to free residence, a total val- ue of nearly one thousand dollars. This is outrageous, besides being a general waste. The whole student government isn't worth more than a tenth of that. If I'm elected, I'll distribute every cent that ex- erts my actual cash outlay (Please turn to Page 2)

LES-I fails to separate Satellite misses orbital By Jeff Reese

Lincoln Lab’s LES-I, a 400-pound solid state satellite, was hurled into orbit Friday, February 1, via the USAF Titan IIIA. Although designed to be ejected from the inert 1070 pound pay- load, the solid state LES-IIA Experimental Satellite (LES-I) failed to separate and remains in a 1500 mile circular orbit. Originally the LES-I was to be in orbit 240 rpm and placed in an eccentric orbit (apogee 10,000 miles; perigee 1,500 miles) by several solid rocket boosters supplying 1400 pounds of thrust for 15. Novel ideas imbodied in the LES-I included: 1) an all-solid-state, transponder transmitter 2) an earth-based analog transponder system 3) the capability to test new devices and techniques; rather than to achieve maximum communication capability and reliability, use communication satellites. Magnetic propellant for spin-axis orientation control Principle Experiments The reliable all-solid-state transmitters, despite the fact that at the present they do not have as high a power output or as high an efficiency as conventional transmitters, have become competitive as seen by the rapid rate of improvement within the last year. Transmitting at frequencies around 8000 megacycles per second, the 'Tute, the "School," the LES-I has an output of 61 watts. Limited radio power necessitates an efficient, deflected radio beam. In order to test the efficiency of the transmitters, a directional transmitting antenna required a stabilized orientation of the satellite. However, (Please turn to Page 2)

The Tech

Vol. 85, No. 2 Cambridge, Massachusetts, Wednesday, February 17, 1965 Five Cents

UAP job explained Samuels briefs candidates

Bill Samuels ’65, UAP, gave a briefing session for candidates for that office Monday in Lath- field Room

Present were Bill Byrn ’66, Tom Jones ’66, Hank Perritt ’66, Bill Samuels ’65, and Tom Jones ’66. Samuels discussed the problems of the current workload and the potential of the position. He also introduced the new Executive Committee, which has been elected for the year of 1965. The UAP, says Samuels, has very interesting jobs, but his "verbal influence" for instilling action can be consid- erable. He acts as "Chief of Pro- tocol," sitting in on meetings, and must be able to pick up an idea quickly and offer his judg- ment. To student government, he represents both executive and potential powers, and a ten- dency to move things along. (Please turn to Page 6)

GSS, Young Demos acquire ASA status

The Gilbert and Sullivan Society and the MIT Young Democrats were granted permanent membership in the Association of Student Activities of the Activities Council meeting Thursday. The Gilbert and Sullivan Society was granted permanent status for its "musical" nature, while the MIT Young Democrats were granted permanent status for their non-partisan, non-political nature. (Please turn to Page 2)

Finalization of the present reorganization will be necessary. Decisions, such as the membership on the re- organization, dissolution, and cre- ation of subcommittees, the con- figuration of the Executive Commit- tee, and a variety of other matters will either be left to the new Institute Committee, or if de- termined by the present commit- tee, will have to be ironed out in the months to come. The UAP's role in these changes will be of paramount importance. The second vital topic concerns the future of the Student Center cc more accurately, in overviews role in the Student Center. The current Student Center form is a MIT student body cannot be completely, or predictably, altered, but its significance can be seen in Press' statement: "... (That) Student Center is an icon judgment the most important single unaccom- plishment of the last year." (Please turn to Page 2)

Five in race for Undergrad Association President

Ervin Strauss

Growing from HACKLASH to its record, my name is Ervin Strauss (Ptitz,Pierre to Hacklashers). I've participated in random activities around the 'Tute, if you think that matters, details of which are on my petitions. If you think the sight of my unwavy pens will send any light on the campaign, you'll find that there. Some of the Hacklash principles have been set forth in "The Tool," the origin of the Hacklash move- ment, which has been distributed to dorms and other places. You'll find more details in later issues, and in House newspapers, so I won't bore you with them here. Since I've already offered the voters the primary purpose of the campaign. The UAP is en- titled to five hundred dollars cash, and to free residence, a total val- ue of nearly one thousand dollars. This is outrageous, besides being a general waste. The whole student government isn't worth more than a tenth of that. If I'm elected, I'll distribute every cent that ex- erts my actual cash outlay (Please turn to Page 2)