2. **SIDEWINDER Missile.** -- As an example of inter-service cooperation on guided missiles, Navy cites the exceptional results (32 kills out of 37 firings) in recent Air Force tests of Navy's SIDEWINDER air-to-air missile. Navy is developing an improved version, also adaptable to several Air Force planes, for use by Mach 2 aircraft. Its two alternate guidance heads provide an advanced infrared type or an all-weather radar version. [Redacted] while retaining the economy of the present weapon (under $6,000 per unit). (S)

3. **Chaff Missile.** -- In response to an Air Force requirement for a "capture" countermeasure to divert the beam of a tracking radar away from an attacking bomber, a very small, relatively simple chaff missile is now being produced in test quantities. The missile will be projected away from the aircraft flight path upon receipt of a warning that the bomber is being tracked, and it will dispense chaff units in flight so as to distract the radar beam in both elevation and azimuth. Tests will begin late this summer. (S)

4. **ATLAS.** -- The first flight test of a Series B ATLAS Missile (with 2 booster and one sustainer engines) was initiated at 1336 EDT July 19, from Cape Canaveral, to accomplish separation of a nose cone data capsule. The ignition of vernier, booster, and sustainer engines was normal as was the missile lift-off. Immediately after lift-off, the missile began to oscillate in yaw and then in pitch. At about 43 seconds flight time and 16,000
feet, oscillation had increased to an amplitude which caused missile breakup and an explosion. The nose cone separated from the missile. Nose cone telemetry and the trajectory control system functioned as planned. Initial indications are that the autopilot received no signal output from the yaw rate gyro circuit. Analysis is continuing to determine the cause. (S)