

JOINT MESSAGE FORM

SPACE BELOW RESERVED FOR COMMENTS

CONFIDENTIAL

PRECEDENCE	TYPE MSG (Check)			ACCOUNTING SYMBOL	ORIG. OR REFERS TO	CLASSIFICATION OF REFERENCE
ACTION PRIORITY	BOOK	MULTI	SINGLE			
INFO			X	AF		

FROM: **COMDR, AFMMD (HARDC) LOS ANGELES, CALIFORNIA**

SPECIAL INSTRUCTIONS

TO: **DIRECTOR
ARPA
WASHINGTON, DC**

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

INFO: **COFS, HQ USAF, WASHINGTON, DC**
COMDR, ARDC, ANDREWS AFB, MARYLAND

~~SECRET~~ FROM WDW-3-18-59 FOR MR. ROY JOHNSON INFO COFS FOR AFCCM GEN MCCORKLE; AFCCM-A LT COL SINEK; AFDAT GEN BOUSHEY; ARDC COL WORTSMAN AS PER AGREEMENT BETWEEN GENERAL SCHRIEVER AND MR. GODELL, THE FOLLOWING FINAL COMMENTS ON DISCOVERER I ARE SUBMITTED FOR YOUR INFORMATION. REDUCTION AND EXAMINATION OF DATA ACQUIRED FROM THE FIRST SUCCESSFUL LAUNCH OF DISCOVERER HAVE NOW BEEN ACCOMPLISHED TO A DEGREE WHICH PERMITS MORE PRECISE STATEMENTS TO BE MADE CONCERNING THE INFORMATION GAINED. FROM TELEMETERED INSTRUMENTATION READINGS, FROM VISUAL TRACKING AND FROM VERLORT RADAR PLOTS, THE MOST PROBABLE ORBITAL DETERMINATION IS AS FOLLOWS: PERIGEE 112 STATUTE MILES, APOGEE 595 STATUTE MILES, ECCENTRICITY .0556, PERIOD 95.9 MINUTES, LIFETIME 28 DAYS, INJECTION VELOCITY 25,900 FEET PER SECOND. AS

DATE	TIME
18	
MONTH	YEAR
MAR	59

WRITER	SYMBOL	SIGNATURE	
	WDW	<i>B. A. Schriever</i>	
	TYPED NAME AND TITLE (Signature, if required)	TYPED (or stamped) NAME AND TITLE	
	Ma.j Zelenka, WSAF/dl	B. A. SCHRIEVER Major General, USAF	
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SECURITY CLASSIFICATION			
SECRET			

FROM

COMDR AFEMD (HQARDC) LOS ANGELES, CALIFORNIA

SEVERE TEST OF THE EXTENT TO WHICH THE DATA SUPPORT THE CONCLUSION THAT SUCCESSFUL ORBIT WAS ACHIEVED, THE TRACKING DATA HAVE BEEN PAIRED TO A THREE-SIGMA LOWER TOLERANCE. EVEN UNDER THESE CONDITIONS AN ORBITAL LIFETIME OF FIVE DAYS WOULD HAVE BEEN OBTAINED. THE CONCLUSION OF SUCCESSFUL ORBIT IS FURTHER BORNE OUT BY A DETAILED EXAMINATION OF EQUIPMENT FUNCTIONING BASED UPON TELEMETRIED MEASUREMENTS OF EXCELLENT QUALITY. THE PERFORMANCE OF THE PROPULSION SYSTEM WAS NORMAL, DOUBLY VERIFIED BY THE TRACKING DATA. THE INTERNAL POWER SYSTEM AND SUBSYSTEM A EQUIPMENT PERFORMED NORMALLY. ALL COMMUNICATIONS EQUIPMENT FUNCTIONED PROPERLY TO THE LIMIT OF TELEMETRY RECEIVED. THE GUIDANCE AND CONTROL SYSTEM EXHIBITED RESPONSE CHARACTERISTICS WHICH WERE IN COMPLETE ACCORD WITH ACHIEVING THE MOST PROBABLE TRAJECTORY MENTIONED ABOVE AND THEREFORE CASTS DOUBT UPON THE VALIDITY OF ADOPTING THE EXTREME CASE. FROM 28 FEB THROUGH 4 MAR 24 INTERCEPTS AT 232.4 MC WERE OBTAINED WHICH WERE IDENTIFIED AS COMING FROM THE ACQUISITION BEACON ABOARD THE DISCOVERER. THE FACT THAT NO SUCH TRANSMISSIONS HAVE BEEN HEARD SINCE 4 MAR WOULD TEND TO DISCOUNT THE VIEW THAT THE SIGNALS WERE SPURIOUS. IT WAS OUR BEST JUDGEMENT THEN AND SO REMAINS TODAY THAT THESE INTERCEPTS CONFIRM THE ORBITAL INJECTION INFORMATION AND CONFIRM THAT THE DISCOVERER WAS ON ORBIT. LMSD AND AFEMD WILL CONTINUE TO STUDY THE COLLECTED DATA FOR FUTURE ENGINEERING DESIGN PURPOSES. AS PER YOUR TWX DEP 956460 AND CONVERSATIONS BETWEEN GEN SCHRIEVER AND MR. GODELL THIS IS OUR FINAL MESSAGE ON THIS MATTER.

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SYMBOL

WDEW

CLASSIFICATION

SECRET

INITIALS

RZ

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