ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO. 00-071 95

[redacted] FEB 15 22 55 '56

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

COMDR WESTERN DEV DIV INGLEWOOD CALIF

DATE-TIME GROUP	SECURITY CLASSIFICATION
Z 15 0800	~~CONFIDENTIAL~~

PRECEDENCE FOR:	ACTION	INFORMATION
	Priority	

☐ BOOK MESSAGE ☐ ORIGINAL MESSAGE

CRYPTOPRECAUTION ☐ YES ☐ NO

REFERS TO MESSAGE

IDENTIFICATION

"AC—PARAPHRASING NOT REQUIRED EXCEPT PRIOR TO CATEGORY B ENCRYPTION. PHYSICALLY ... EXTERNAL REFERENCES BY DATE-TIME GROUP PRIOR TO DECLASSIFICATION. NO UNCLASSIFIED REFERENCE IF DATE-TIME GROUP IS QUOTED."

TO:

COMDR ARDC BALTIMORE MD

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

INFO:

FROM: WDTP-2-5-E FOR: MAJOR GENERAL JOHN SESSUMS

THE APPLICATION OF HIGH PERFORMANCE SOLID ROCKETS TO AF VEHICLES HAS BEEN LIMITED BY DEFICIENCIES APPARENT IN CURRENT SOLID ROCKET UNITS. POTENTIAL GAINS ATTAINABLE THROUGH APPLICATION OF IMPROVED SOLID ROCKETS ARE, HOWEVER, SIGNIFICANT. AS COMPARED TO LIQUIDS, THEY OFFER INSTANT TACTICAL AVAILABILITY, THE POSSIBILITY OF LONG PERIODS OF INERT STORAGE WITH NO MAINTENANCE, GREATLY REDUCED REQUIRE-MENTS WITH REGARD TO COMPLEXITY OF LAUNCHING BASE OPERATIONS, AND GREATLY SIMPLIFIED LOGISTIC NEEDS. SEVERAL SIGNIFICANT APPLICATIONS FOR SOLID ROCKETS IN FIELDS OF AF INTEREST EXIST, INCLUDING MAIN POWER PLANT FOR IRBM, BOOSTER FOR NUCLEAR ROCKET ORBITING SATELLITE, MAIN POWER PLANT OR BOOST FOR ICBM, AND BOOST ROCKET FOR LOW ALTITUDE NUCLEAR RECONNAISSANCE RAM JET. ALTHOUGH IN EACH OF THESE INSTANCES EMPLOYMENT OF A SOLID ROCKET OF AN ADVANCED TYPE INDICATES MANY POINTS OF SUPERIORITY OVER THE EQUIVALENT LIQUID, TIME SCALES INVOLVED IN THE DEVELOPMENT OF THESE UNITS ARE VERY MATERIALLY GREATER THAN THOSE REQUIRED FOR LIQUID ROCKET PROGRAMS. THIS CONDITION STEMS DIRECTLY FROM THE FACT THAT LITTLE FUNDAMENTAL WORK HAS BEEN PURSUED

WDT

SECURITY CLASSIFICATION CONFIDENTIAL

JOINT MESSAGEFORM

ROUTING

COMMUNICATIONS CENTER NO.

[redacted]

FEB 15 22 56 '56 00-07

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

COMDR WESTERN DEV DIV INGLEWOOD CALIF

DATE-TIME GROUP: 2 25 0600

SECURITY CLASSIFICATION: ~~CONFIDENTIAL~~

PRECEDENCE — ACTION: PRIORITY — INFORMATION:

"AC—PARAPHRASING NOT REQUIRED EXCEPT CATEGORY B ENCRYPTION. PHYSICALLY REMOVE ALL INTERNAL REFERENCES BY DATE-TIME GROUP PRIOR TO DECLASSIFICATION — NO UNCLASSIFIED REFERENCE IF DATE TIME IS QUOTED."

TO:

COMDR ARDC BALTIMORE MD

☒ BOOK ☐ ORIGINAL MESSAGE

☐ MULTIPLE ☐ ALL INTERNAL REF.

REFERS TO MESSAGE

IDENTIFICATION | CLASSIFICATION

INFO:

FROM: WDTP-2-5-E FOR: MAJOR GENERAL JOHN SESSUMS

IN THE FIELD OF SOLID ROCKET IMPROVEMENT FOR THE HIGH PERFORMANCE CATEGORY DURING THE LAST FIVE YEARS. VERY SIGNIFICANT GAINS CAN BE EXPECTED TO BE ACHIEVED WITH REGARD TO HARDWARE WEIGHT, GRAIN FABRICATION TECHNIQUES, INTERIOR BALLISTICS IMPROVEMENT, DEVELOPMENT OF THRUST VECTOR CONTROL AND SHUTOFF TECHNIQUES, AND IN SUPPORT AREAS SUCH AS INSULATING COATINGS, HIGH TEMPERATURE PLASTIC ADHESIVES AND IGNITION ADVANCES. THE NAVY PROGRAM IN THIS FIELD, HOWEVER, INVOLVES IMMEDIATE PROSECUTION OF A SPECIFIED POWER PLANT PROGRAM IGNORING THE LARGE POTENTIAL GAINS WHICH COULD RESULT FROM EVEN ONE YEAR OF BASIC DEVELOPMENT ACTIVITY. IT IS THEREFORE FELT THAT THE RESULTS OF THE NAVY PROGRAM WILL BE OF QUESTIONABLE UTILITY TO THE AF SINCE THEY MERELY INVOLVE A REHASH OF OLD TECHNIQUES WHICH HAVE BEEN REPEATEDLY EMPLOYED IN THE PAST TO PRODUCE ENGINES OF SUCH MEDIOCRE PERFORMANCE AS TO PRECLUDE THEIR USE IN AF PROGRAMS OF THE TYPE INDICATED ABOVE. IT IS THEREFORE RECOMMENDED THAT THE AF RETAIN ITS INDEPENDENT SOLID ROCKET PROGRAM AND PROSECUTE THIS AS VIGOROUSLY AS POSSIBLE TO MEET FUTURE MISSILE REQUIREMENTS AS THEY MATERIALIZE.

WDT

SECURITY CLASSIFICATION: ~~CONFIDENTIAL~~ PAGE 2 OF 2 PAGES

DRAFTER'S NAME (and signature, when required): E. N. HALL, LT. COL., USAF

RELEASING OFFICER'S SIGNATURE: SIGNED C. H. [illegible], JR. COLONEL, USAF

SYMBOL: WDTP | TELEPHONE: 1048 | OFFICIAL TITLE: DEP COMDR, TECH OPNS

DD FORM 173, 1 OCT 49 — REPLACES NME FORM 173, 1 MAY 48, WHICH MAY BE USED.

[redacted]

From Col Ode —

19 Feb 1956

WS 117L major objectives for first half of 1957

1. Preliminary operational concept
2. Definitize Lockheed contract
3. Establish test facilities needs and programming.
4. { Demonstration of air borne computer & in ~~bread board~~ experimental models — configuration.