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IN 8E 10853

TOR: 242116Z MAR 66 RA

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IDEALIST LOGS MAINT

SUBJECT: SUMMARY REPORT ART 342 ACCIDENT

1. NARRATIVE: ART 342 WAS LAUNCHED 25 FEB FOR A PRACTICE AIR REFUELING MISSION. NINE HOOK-UPS WERE ACCOMPLISHED AT 35M IN SMOOTH AIR. AT NO TIME DID THE ARTICLE ENTER AIRCRAFT TURBULENCE. UPON COMPLETION OF THE LAST HOOK-UP (ALL DRY) A BREAK AWAY WAS INSTITUTED. THE ART DROPPED BACK AND MOVED TO THE RIGHT OF THE TANKER IAW TAC DOCTRINE. ART THEN ACCELERATED AND TOOK UP A POSITION ON LINE WITH THE TANKER COCKPIT, TO THE RIGHT AND SLIGHTLY, HIGHER. AIRSPEED AT THIS TIME WAS BETWEEN 210 AND 220 KTS IAS. FUEL LOAD WAS PRIMARILY IN AUX TANKS AND SUMP. AFTER ABOUT A MINUTE A CLIMB WAS INITIATED FOLLOWED BY A RIGHT TURN. AT THIS POINT THE LEFT WING FAILED AT THE ROOT AND THE AIRCRAFT DISINTEGRATED. THE PILOT SUCCESSFULLY EJECTED.

2. FINDINGS: THE INVESTIGATION DISCLOSED INADVERTENT OVER STRESS OF THE AIRCRAFT PRIMARY STRUCTURE IN A ROLLING PULL-UP MANEUVER.

3. COMMENT:

A. IT IS NOTE WORTHY THAT THE PILOT STATED "G" FORCES INVOLVED IN THE TERMINAL MANEUVER WERE SIGNIFICANTLY LESS THAN THOSE NORMALLY ENCOUNTERED AT TAKE-OFF. THIS IS UNDERSTANDABLE WHERE CONTROL FORCES

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ARE SMOOTHLY APPLIED AND SERVES TO UNDERLINE THE EASE WITH WHICH DESTRUCTIVE FORCES CAN BE APPLIED.

B. THE AIRSPEED WAS WELL WITHIN THE LIMITS OF THE AIRCRAFT STRENGTH DIAGRAM. THIS IS TRUE BUT COGNIZANCE MUST BE TAKEN OF THE FACT THAT THE PUBLISHED STRENGTH DIAGRAMS (5-3 THRU 5-6) ASSUME SYMETRICAL LOADING OF THE AIRCRAFT. A ROLLING PULL-UP MANEUVER RESULTS IN AS SYMETRICAL LOADING WHICH MAY REDUCE THE STRENGTH ENVELOPE BY AS MUCH AS 33 PERCENT. (THIS IS AN APPROXIMATE FIGURE TO BE FURTHER REFINED BY [redacted].

25X1A 4. ACTION BEING TAKEN:

A. ALL PILOTS WILL RECEIVE ADDITIONAL INSTRUCTION REGARDING FLIGHT/STRENGTH PARAMETERS IN MANEUVERS WITH PARTIAL FUEL LOADS.

25X1A B. [redacted] WILL PROVIDE MORE DEFINITIZED FLIGHT HANDBOOK INFO REGARDING STRUCTURAL LIMITS WHILE MANEUVERING PLUS APPROPRIATE CAUTIONARY ENTRIES.

END OF MESSAGE