



# PROGRAM CAPSULE HANDLING PROCEDURES

5 June 1969

## I. PURPOSE

The purpose of this directive is to establish the policies, responsibilities and procedures for the safe and expeditious handling of recovered Program capsules.

### II. GENERAL

- 1. Extreme caution will be exercised by all personnel concerned in contact with the capsule to prevent damage to the capsule and its contents. The experiments contained in the capsule and the associated instrumentation can be disastrously damaged if the capsule is subjected to jars, shocks, denting or extreme changes in temperature and/or pressure.
- 2. Close contact with the capsule will be absolutely restricted to those individuals required for proper capsule handling.
- 3. Photography of recovery operations will be restricted to that official photography required for <u>engineering purposes only</u>. Unofficial photography is expressly forbidden. Photography of the recovered capsule aboard the recovery aircraft or ship will not be tolerated.

### III. RESPONSIBILITIES

- 1. The Commander, Air Force Satellite Control Facility, LAAFS, Los Angeles, California, is responsible for the recovery of the Program recovery capsules. The Commander, AFSCF, will relinquish capsule responsibilities to the appropriately appointed courier.
- 2. In those cases in which the capsule makes a water impact the Commander or Team Leader of the first element of the recovery force retrieving the capsule will assume complete responsibility for capsule handling, safeguarding, and transportation until the point at which the designated representative of the AFSCF or courier can first assume physical custody of the capsule, e.g., (if retrieval is made by para-rescue team, para-rescue team leader will be in complete control of the capsule until delivered to one of the individuals specified above. This includes time spent aboard recovery vessels.)

Declassified and Heleased by the N in C

In Accordance with E. O. 12958

NOV 26 1997

SECRET

# SECRET

### IV. HANDLING PROCEDURES

### 1. Air Recovery

- a. As soon as the capsule is aboard the recovery aircraft, it will immediately be placed inside the mylar bag provided for that purpose. The capsule parachute will be removed from the recovery capsule by disconnecting the four nuts and bolts at the parachute attachment points. The entire parachute plus the lower riser's temperature sensors will be shipped to Department 65-81, Lockheed Missiles & Space Co., Building 104, Sunnyvale, California.
- b. A model 615 recording thermometer will be placed in the cannister with the capsule in accordance with the following instructions. Items one through ten will be performed prior to take-off on recovery day.
- (1) Remove retaining ring by squeezing the two ends of the ring between the finger and thumb so that the ring may be withdrawn.
- (2) Turn the thermometer over so that the cover glass with the bimetal spiral assembly will drop out into the hand. (Caution: DO NOT DROP).
- (3) Unscrew the chart retaining nut by turning the nut in a counter clockwise direction with the fingers.
- (4) Turn the thermometer over so that the paper chart and metal chart support will drop out in the hand.
- (5) Insert the key into the matching winding stud exposed on the clock surface and wind the clock (clockwise direction) to the mechanical stop. The clock is provided with a stop to prevent "over winding".
- (6) Remove the key and place metal support disc on center threaded stud. Over this, place unmarked type 615.47 FE paper chart with graph side out.
- (7) Replace retaining nut with knurled side up and tighten finger tight.
- (8) At this point a reference mark is to be scribed on the recording chart using a pen, pencil, or sharp object, as the chart is self marking.

- (9) Replace glass with bimetal spiral assembly.
- (10) Replace the cover retaining ring.
- (11) At the time of air snatch remove the cover retaining ring and rotate the glass cover by hand until the stylus point is aligned with the scribed reference mark on the chart. Replace cover retaining ring.
- (12) Immediately after capsule is placed in shipping can place the recording thermometer into either of the large wells in the bright orange capsule cover.
  - (13) Tie the black security cover in place.

The covered capsule will then be promptly placed into the cannister and locked. If the antennas on the capsule interfere with the closing of the cannister cover, they may be bent as necessary to enable storage. The teflon antenna tips must be returned with the capsule if possible.

## 2. Water Recovery

a. Immediately following the recovery of a capsule from the water, the parachute will be detached and stored separately. The capsule parachute will be removed from the recovery capsule by disconnecting the four nuts and bolts at the parachute attachment points. The entire parachute plus the lower riser's temperature sensors will be shipped to Department 65-81, Lockheed Missiles & Space Co., Building 104, Sunnyvale, California. The capsule will then promptly be placed in the mylar bag provided for that purpose and the bag secured.

### V. PHOTOGRAPHY AND PHOTO HANDLING PROCEDURES

- 1. The remotely controlled cameras mounted on the recovery gear are the source of the primary photographic records required for engineering purposes. These cameras will operate until the capsule is inside the aircraft or out of the field of view of the cameras.
- 2. Photographers aboard the recovery aircraft will continue taking photographs with hand held cameras until the capsule is on board.
- 3. All exposed film from the above sources will be delivered undeveloped with the capsule to the courier for transportation.