1. EDUCATION IN ASTRONAUTICS AND SPACE BIOLOGY
2. PARTICIPATION IN MERCURY DEVELOPMENT PLAN
3. CONDITIONING FOR SPACE FLIGHT
4. TRAINING IN OPERATION OF MERCURY VEHICLE
5. FAMILIARIZATION WITH GROUND OPERATIONS
6. AVIATION FLIGHT TRAINING
# INTENSIVE EXAMINATIONS

<table>
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<tr>
<th>PHASE</th>
<th>TITLE</th>
<th>OBJECTIVE</th>
<th>TECHNIQUES</th>
<th>WHERE PERFORMED</th>
<th>TIME, DAYS</th>
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<td>CLINICAL EVALUATION</td>
<td>DETECT DEFECTS</td>
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<td>ROLE PLAYING ISOLATION</td>
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<td>REDUCED SIMULATION OF MISSION</td>
<td>CENTRIFUGE</td>
<td>AMAL AND ACEL</td>
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<td>HEAT CHAMBER</td>
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DETAILS OF CLINICAL EVALUATION

PSYCHIATRY

OPHTHALMOLOGY

OTOLARYNGOLOGY

CARDIOLOGY

GASTROENTEROLOGY

ANTHROPOLOGY

UROLOGY

GENERAL MEDICINE

RADIOLOGY

PATHOLOGY

NEUROLOGY

L-660
DETAILS OF LANGLEY FIELD EVALUATIONS

I. ACADEMIC PROGRAM
   LECTURES
   TOURS
   WRITTEN EXAMINATIONS
   OBSERVATIONAL TESTS

II. SOCIAL "STRESS" TESTS
   ORAL EXAMINATIONS
   EXTEMPORANEOUS SPEECHES
   MOCK PRESS INTERVIEWS
   ASSIGNMENT TO SPACE TASK GROUP DEPARTMENT
   SPACE TASK GROUP PARTY

III. FLIGHT TESTS
   WEIGHTLESS FLIGHT CHECK FLIGHT

IV. PSYCHOMOTOR TESTS
   REACTION CONTROLS TRAINER
   DYNAMIC SIMULATORS

V. ISOLATION
   CONFINEMENT IN SIMULATED CAPSULE
DETAILS OF HUMAN STRESS TESTS

STRESSORS
- ACCELERATION
- HEAT
- ALTITUDE
- CO₂
- NOISE AND VIBRATION
- EXERCISE

MEASUREMENTS
- BLOOD PRESSURE
- TEMPERATURE
- RESPIRATORY RATE
- PULSE RATE, EKG
- URINE
- HEMATOLOGY
- STEROIDS
- PERFORMANCE TESTS
TRAINING PROGRAM

I-APPROACH
A-GRADUAL BUILD UP
B-SECONDARY SELECTION
C-CONTRIBUTION TO R-AND-D EFFORT

II-AREA OF TRAINING
A-PHYSIOLOGICAL
B-ACADEMIC
C-GROUND SIMULATOR TRAINING
D-FLIGHT TRAINING

III-TRAINING STAGES
A-BASIC GROUND TRAINING
B-ADVANCED GROUND TRAINING
C-PRIMARY FLIGHT TRAINING
D-ADVANCED FLIGHT TRAINING

STARTING DATE
4/1/59
5/15/59
10/1/59
1/1/60
BASIC GROUND TRAINING

I - PHYSIOLOGICAL
   A - ACADEMIC
   B - PHYSICAL CONDITIONING
   C - BASIC PHYSIOLOGICAL STUDIES
   D - BASIC ALTITUDE TRAINING AND PRESSURE SUIT FITTING

II - ACADEMIC PROGRAM (BASIC SCIENCES):
   ASTRONOMY
   METEOROLOGY
   AERODYNAMICS
   ETC.
ADVANCED GROUND TRAINING

I - PHYSIOLOGICAL
   A - GROUND SIMULATION OF MISSION
      1. STATIC SIMULATION AT LANGLEY
      2. DYNAMIC SIMULATION AT AMAL
   B - IMPACT TESTS

II - OPERATIONAL TRAINING
   A - ACADEMIC PROGRAM
   B - GROUND SIMULATORS
      1. NAVIGATIONAL TRAINERS
      2. REACTION CONTROLS TRAINER
      3. DYNAMIC SIMULATION AT AMAL
   C - AIRBORNE TESTS
      1. WEIGHTLESSNESS
      2. BREAK-OFF PHENOMENA

L-665
FLIGHT TRAINING
TENTATIVE

PRIMARY

I. DROP TESTS
DROP FROM C-130 AT 40,000 FT

II. ESCAPE SYSTEM FLIGHTS
LAUNCH FROM PAD

III. BALLOON FLIGHTS
24 HRS AT 80,000 FT DROP FROM 80,000 FT

ADVANCED

I. SUB-ORBITAL FLIGHTS
SUPPORTING RESEARCH

I. RESEARCH ADMINISTRATION
   A. APPLIED RESEARCH
      1. SPACE TASK GROUP
      2. SUBCONTRACTOR
   B. BASIC RESEARCH
      STG WILL:
      1. MAKE RECOMMENDATIONS
         FOR SUPPORT
      2. OFFER SPACE ON A
         NON-INTERFERENCE BASIS

II. TYPES OF PROJECTS PROPOSED
    A. ENVIRONMENTAL MEASUREMENTS
    B. SIMULATION OF STRESSES
    C. IN-FLIGHT RESEARCH
    D. EQUIPMENT EVALUATION

III. AREAS OF RESEARCH
     A. ACCELERATION
     B. NOISE AND VIBRATION
     C. TEMPERATURE
     D. WEIGHTLESSNESS
     E. NAVIGATION AND ORIENTATION
     F. RADIATION