

DNA1.950210.025

HEADQUARTERS
TASK GROUP 3.1
JOINT TASK FORCE THREE
APO 187

ACG/jrv

2 April 1951

SDF - 903

SUBJECT: Radiological Flight Commitments, ATU 3.4.4

TO: Commander, Task Group 3.4
APO 187, c/o Postmaster
San Francisco, California
ATTN: A-3

1. Attached hereto are schedules of the presently known requirements of the 7.0 Program to be fulfilled by the Air Task Weather Reconnaissance Unit 3.4.4, operating from Kwajalein. Inclosure #1 contains a consolidated listing of the aircraft required for each test and the equipment to be aboard each particular aircraft. Inclosure #2 contains a detailed narrative of the requirements of each mission associated with the first shot. While it is anticipated that the requirements as prescribed for the first shot will apply to subsequent shots in a generally similar fashion, it is believed that minor variations will be introduced as a result of the findings from the first shot. For this reason, narrative descriptions of the type flights to be flown for subsequent shots will be provided at a later date as appropriate.

2. It will be noted that personnel will not accompany each mission, but will accompany only one or two of the scheduled flights per test. Further, it will be noted that the type equipment employed on each mission is not standard for all tests.

3. This outline of requirements as set forth in the attached inclosures is presented to Air Task Group 3.4, for coordination and official dissemination to ATU 3.4.4.

J. W. C. Graves
ALVIN C. GRAVES
Commander, TG 3.1

Incls:
1 - A/C & Equip List
2 - Narr Mission Reqmts

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D-3, TG 3.1 - Copy 13
Sequence - Copy 14

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WITH INCLOSURES
Declassified WITH DELETIONS BY DNA,
Chief, ISTS & AF (11 MSS/MS15L)
Memo dated 30 Jun. 1995
Date: 2/2/95

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Ltr TG 3.1, Subj: Radiological Flight Commitments, ATU 3.4.4, dated 2 April 1951.

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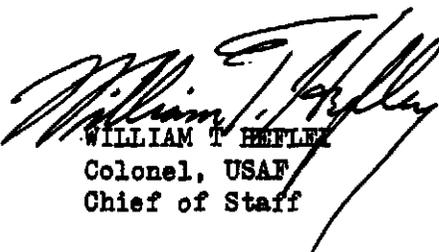
Headquarters, Task Group 3.4, APO 187, c/o Postmaster, San Francisco, California, 6 April 1951

TO: Commanding Officer, Task Unit 3.4.4, FPO 824, c/o Postmaster, San Francisco, California

Forwarded for your information and compliance.

BY COMMAND OF MAJOR GENERAL LEE:

Incls:
n/c


WILLIAM T. HEFFLEY
Colonel, USAF
Chief of Staff

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CONSOLIDATION OF AIRCRAFT AND EQUIPMENT REQUIREMENTS - A T U 3.4.4

<u>MISSION NUMBER</u>	<u>ON TRACK TIME</u>	<u>PEERS ABOARD</u>	<u>EQUIPMENT REQUIREMENTS</u>			
			<u>FILTER</u>	<u>B/21</u>	<u>B/31</u>	<u>B/Z</u>
<u>FIRST SHOT</u>						
1	H plus 0 hrs	None proposed	X			
2	H plus 12 hrs (f or - max 4 hrs)		X	X	X	X
3	H plus 12 hrs (f or - max 4 hrs)	None proposed	X			
4	H plus 24 hours	None proposed	X	X	X	
5	H plus 24 hours	None proposed	X			
Standby	Ready at H plus 8 hours	None proposed	X	X	X	
Standby	Ready at H plus 5 hrs	None proposed	X			
<u>SECOND SHOT</u>						
1	H plus 0 hrs		X	X		X
2	H plus 12 hrs (f or - max 4 hrs)	None proposed	X	X	X	
3	H plus 12 hrs (f or - max 4 hrs)	None proposed	X			
4	H plus 24 hrs	None proposed	X	X*	X	X*
5	H plus 24 hours	None proposed	X			
Standby	Ready at H plus 8 hrs	None proposed	X	X	X	
Standby	Ready at H minus 5 hrs	None proposed	X			

* Equipment must be transferred from H plus 0 hrs flight aircraft.

Incl # 1

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<u>MISSION NUMBER</u>	<u>ON TRACK TIME</u>	<u>PERS ABOARD</u>	<u>EQUIPMENT REQUIREMENTS</u>			
			<u>FILTERS B/21</u>	<u>B/31</u>	<u>B/35</u>	
<u>THIRD SHOT</u>						
1	H plus 0 hrs		X			
2	H plus 12 hrs (/ or - max 4 hrs)	None proposed	X	X	X	
3	H plus 12 hrs (/ or - max 4 hrs)	None proposed	X			
4	H plus 24 hrs		X	X	X	X
5	H plus 24 hrs	None proposed	X			
Standby	Ready at H plus 8 hrs	None proposed	X	X	X	
Standby	Ready at H minus 5 hrs	None proposed	X			

FOURTH SHOT

Same as for THIRD SHOT, above.

~~SECRET~~RADIOLOGICAL FLIGHT REQUIREMENTSAIR TASK UNIT 3.4.4FIRST SHOTMISSION NUMBER ONE

Purpose of flight: Collection of fall-out particles underneath atomic cloud fall-out area by means of filter collection.

On Track Time: Aircraft will be on prescribed track at H plus 0 hours. This is Jane 5 mission as prescribed in ATG Operation Plan.

Duration of Flight: The desired duration of on track flying is twelve hours, This mission will be aborted upon notification by the Radiological Officer that the crew has received the maximum tolerance dosage of 700 mr. This mission may therefore run as short as three hours of track time.

Type Special Equipment Carried: This aircraft will be equipped only with filter box. Left-side filter will be inserted at 2000' immediately after take-off and will not be removed until reaching 2000' just prior to landing. The first right side filter will be inserted at 2000' just after take-off. The right filter will be changed every ten minutes thereafter until reaching 2000' on letting down for landing.

Track and Altitudes: Entire track will be flown at 5000'. Orbit pattern is described in TG 3.4 Operations Plan. The aircraft will shift the position of pattern so as to remain in the fall-out curtain at all times.

Personnel to be Aboard: None proposed.

MISSION NUMBER TWO:

Purpose of Flight: To collect filter samples; Air Conductivity measurements; and atmospheric gas samples.

On Track Time: Estimated time on track from Kwajalein is H plus 12 hours. However, this flight may be delayed or advanced a maximum of four (4) hours depending on the movement of the atomic cloud as indicated by air-radex plots. Exact take-off time will therefor be prescribed by representative.

Duration of Flight: Twelve hours subject to recall by radiological monitor crewmember.

Type Special Equipment to be Carried: This aircraft will have Filter-box, B/21, B/31, and B/35 equipment aboard.

Incl # 2

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Radiological Flight Requirements (Cont'd)

Track and Altitudes: This is a North-South track out of Kwajalein. The north heading leg will proceed outbound at 10,000' to a maximum distance of 17°N latitude. This point may be shortened by control personnel if deemed suitable. Upon reaching the northern limit of the track, the aircraft will proceed on a spiral climb at an optional rate of climb to 30,000' and return on a heading of due south, through Kwajalein, to a southern point of 7°N latitude. A spiral descent will then be made to 10,000' and the pattern repeated over again, continuing for the duration of the flight. The only deviation to the fixed-track-altitude pattern during the course of this flight is as follows: On the first 30,000' leg, the B/31 type J-5 oxygen bottles will be filled with atomic cloud gas samples, by diverting the track long enough to permit such an operation. Approximately 90-120 minutes are required to fill the bottles. The cloud will be detected by either air-radex, B/21, B/35 air monitoring instruments of any suitable combination thereof. Samples are desired from the center of the cloud if feasible, operationally speaking, and it is desired that the aircraft remain in the cloud for the period of bottle-filling. After the bottles are filled, the aircraft may proceed on course at 30,000'. It is desired that the bottles be disconnected from the central system as soon after filling as is deemed feasible. Filters will be changed as prescribed for mission #1; i.e., left filter permanent; right filter every ten minutes. representative will provide data sheets for B/31 operator at briefing.

Personnel to be Aboard:

Remarks: In the event that this mission is aborted for mechanical reasons, the aircraft commander will immediately advise Kwajalein so that the stand-by aircraft may be alerted. In advising the Kwajalein personnel of the abort, the aircraft commander will include the statement, "BOTTLES FILLED" or "BOTTLES NOT FILLED" to signify whether or not the gas samples have been collected by means of the B/31 equipment. This information will be used by AFOAT-1 control personnel to determine whether or not to dispatch the standby aircraft and crew.

MISSION NUMBER THREE

Purpose of Flight: Filter collection

On Track Time: Aircraft will be on track at H plus 12 hours. However this track time may be advanced or retarded up to a maximum of four hours depending upon the estimated location of the atomic cloud as determined by air-radex plotting methods. Exact take-off time will therefor be prescribed by representative.

Duration of Flight: Twelve hours, subject to recall by radiological monitor.

Type of Special Equipment Carried: Filter box only required for this flight.

Track and Altitudes: This is a North-South track out of Kwajalein. Northbound altitude is 5000' to 17°N, or as determined by control; spiral ascent to

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~~SECRET~~Radiological Flight Requirements (Cont'd)

20,000' at optional rate of climb. Proceed south at 20,000' to Kwajalein, thence to 7°N, repeat pattern, accomplishing spiral descent at 7°N to 10,000'.

Personnel to be Aboard: None proposed.

MISSION NUMBER FOUR

Purpose of Flight: To collect filter samples, air conductivity measurements, and atmospheric gas samples.

On Track Time: H plus 24 hours

Duration of Flight: Twelve hours

Type Special Equipment Carried: Filter Box; B/21 and B/31 equipment

Track and Altitudes: Procedure for this flight is identical to that proscribed for mission number two.

Personnel to be Aboard: None proposed.

MISSION NUMBER FIVE:

Purpose of Flight: To collect filter samples.

On Track Time: H plus 24 hours.

Duration of Flight: Twelve hours.

Type Special Equipment to be Carried: Filter box.

Track and Altitudes: Procedure is identical to that proscribed for Mission Number three.

Personnel to be Aboard: None proposed.

STANDBY AIRCRAFT AND CREW: (For replacement of B/31 Equipped Aircraft)

Purpose: To provide standby aircraft for those missions involving use of B/31 equipment.

On Track Time: To be ready any time after H plus 8 hours.

Duration of required flight: Approximately twelve hours.

Type Special Equipment to be Carried: This aircraft will have B/21, B/31, and filter box equipment.

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Radiological Flight Requirements (Cont'd)

Track and Altitudes: As briefed by representative.

Personnel to be aboard: None proposed.

STANDBY AIRCRAFT AND CREW: (For replacement of Filter box equipped aircraft)

Purpose: To provide standby aircraft for those missions involving use of filter box only.

On Track Time: To be ready at H minus 5 hours.

Duration of required flight: Approximately 12 hours.

Type Special Equipment to be Carried: Filter box only.

Track and Altitudes: As briefed by representative.

Personnel to be Aboard: None proposed.

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