



DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
WASHINGTON, D.C. 20380

IN ONLY REFER TO

JAS:DMO:gir

5830

31 MAR 1980

THIRD ENDORSEMENT on Col  
5830 of 9 Nov 1979

Invest Rpt 4/JAP/geb

From: Commandant of the Marine Corps  
To: Judge Advocate General of the Navy

Subj: Investigation to inquire into the circumstances surrounding  
the rupture of a rubber fuel bladder which occurred at  
Camp Fuji, Japan on 19 October 1979, resulting in a fire  
which caused injuries to U.S. Armed Forces personnel and  
Japanese nationals and the destruction of U.S. property

1. Forwarded.

BY direction



Bnd 1661-50

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UNITED STATES MARINE CORPS  
HEADQUARTERS, MARINE CORPS BASES, PACIFIC  
CAMP H. M. SMITH, HI 96861

IN REPLY REFER TO:  
17/CJK/jda  
5830  
21 MAR 1980

SECOND ENDORSEMENT on Col - Invest Rpt  
4/JAP/geb 5830 of 9 Nov 1979

From: Commander  
To: Judge Advocate General of the Navy  
Via: Commandant of the Marine Corps (Code JA)

Subj: Investigation to inquire into all aspects and circumstances connected with the rupture of a rubber fuel bladder which occurred at Camp Fuji, Japan, on 19 October 1979, resulting in a fire which caused injuries to U.S. Armed Forces personnel and Japanese nationals and the destruction of U.S. property

Encl: (27) CG MCB CAMP BUTLER JA 030153Z JAN 80  
(28) CG MCB CAMP BUTLER JA 112315Z FEB 80  
(29) Statement of Mr.  
(30) Statement of Major USMC  
(31) Statement of 1stLt USMC  
(32) Statement of Lieutenant  
MC, USNR  
(33) Statement of Major USMC  
(34) CG 3d MarDiv ltr 7/REP/slm 1650 of 16 Feb 1980  
(35) CG 3d MarDiv ltr 7/REP/slm 1650 of 22 Feb 1980  
(36) CMC WASHINGTON DC 290925Z FEB 80  
(37) Graphic of Location Map of Camp Fuji  
(38) Graphic of Camp Fuji and the Fuji Maneuver Area

1. Enclosure (27) contains a set of questions which arose from the initial review of the underlying report. Enclosure (28) contains the responses to said questions, and enclosures (29) through (33) are statements which constitute the basis for enclosure (28).

2. Enclosure (34) is a recommendation for a Meritorious Unit Commendation for the Navy Regional Medical Center, Yokosuka, Japan. Enclosure (35) is a recommendation for a Meritorious Unit Commendation for the Navy Regional Medical Center, Yokota, Japan. Enclosure (36) is evidence that a

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Meritorious Unit Commendation has been awarded to the Institute of Surgical Research, Brooke Army Hospital, San Antonio, Texas and to the Inspector-Instructor Staff of the 4th Reconnaissance Battalion, U.S. Marine Corps Reserve, San Antonio, Texas.

3. Enclosures (37) and (38) depict the general and specific area where the subject incident occurred.

4. The findings of fact, opinions and recommendations herein, as expanded in enclosure (28), and as modified below, are approved.

5. Camp Fuji is located on a 309-acre parcel of land located about 60 miles west-southwest of Tokyo on the eastern slope of Mount Fuji in Central Honshu, the largest island of Japan. It is operated as a field training facility and has been utilized by the operating forces of the Marine Corps in the western Pacific area since the early 1950's. The area at Camp Fuji available for field training includes the abutting 36,000-acre Fuji Maneuver Area, which is jointly used with the Japanese Self-Defense Forces. Camp Fuji consists of a base camp for approximately 170 permanently assigned personnel, an expeditionary-type airstrip, and a 1300-man expeditionary camp for billeting of units when they are not actually in the field on training operations. The subject incident occurred in this expeditionary part of the camp. Enclosure (37) depicts the general location of Camp Fuji, and enclosure (38) depicts the general lay-out of the camp itself.

6. The fuel system which was involved in the subject incident is one of several tactical bulk fuel systems in use by United States armed forces. This particular system is commonly referred to as an Amphibious Assault Fuel System (AAFS). It is made up of self-contained components, including collapsible 20,000 gallon rubberized fabric tanks and 600 gallon per minute trailer mounted pumps such as those involved in the subject incident. These components can be

hooked together with quick disconnect fittings to receive, store, transfer, and dispense liquid fuels. The design concept of the system meets the numerous operational, requirements of the landing force by permitting maximum flexibility in assembling layouts. U.S. Marine Corps Technical Manual TM-3835-15/1 prescribes the installation, operation and maintenance procedures and standards for this bulk fuel system. The principles governing site selection for the installation of the system have been attached as enclosure (9) hereto.

7. The report of investigation establishes that the bulk fuel system was properly installed in the instant case. In the initial review of this report, it was noted that Mr. in enclosure (12), had expressed some reservations about the location of the collapsible tanks prior to the subject incident. Upon further inquiry, however, Mr. Satoh advises in enclosure (29) that his initial reservations had been eliminated by an earth moving project which had been completed in August, 1979, and plans for additional work which has been scheduled for 1980.

8. Enclosures (24) and (25) were appended to the original report herein to establish the fact that the Amphibious Assault Fuel System installation had never been cited for any fire-related deficiencies during fire prevention inspections. Other deficiencies noted in these enclosures, however, gave rise in the initial review to concern that these other deficiencies might have had some relevance to the incident on 19 October 1979. It is apparent from enclosure (28) and the statements upon which that enclosure is based, however, that the fire in the subject incident was in the nature of a flash fire that instantly spread throughout the camp, and that the other discrepancies noted in enclosures (24) and (25) did not have any relevance to the resulting injuries and damage. And it is also apparent that the measures taken to combat the fire and protect the Marines who were involved in this tragic incident were truly noteworthy in all respects. The initiatives and selfless actions on the part of the medical personnel set forth in enclosures (34) through (36) were truly in the highest tradition of the armed services of this nation.

9. The suspension of the use of the amphibious assault fuel system at Camp Fuji which is imposed in paragraph 6 of the First Endorsement hereto is hereby terminated. Modern military forces necessarily must develop the capability of handling bulk fuel supplies in expeditionary situations. This requires training in the installation, operation and maintenance of systems for handling same. The suggestion in enclosure (28) that the fuel system could be operated with water is expressly disapproved as being in direct violation of Marine Corps policy. Combat readiness involves individual training, small unit training and integrated field exercises in which all elements of a command function together as a team. While other areas may be available for working on individual and small unit training in the handling of bulk fuel, under current operating conditions in the Western Pacific area, Camp Fuji may be the only place available for a commander to accomplish the necessary final integrated training. Therefore, it is neither necessary nor wise arbitrarily to prohibit the use of the amphibious assault fuel system at Camp Fuji. Furthermore, it is entirely conceivable that a commander will have to operate in an area such as that at Camp Fuji. Utilization of the fuel system at Camp Fuji could therefore greatly enhance the training of a particular unit. However, in selecting a site for the installation of the AAPS, in addition to the other factors listed in enclosure (9) hereto, the commander must also consider the following factor:

In unusual situations where the proposed site is on a uniform slope and/or in the vicinity of drainage structures, consideration must be given to the down-slope/stream risks, particularly a waterborne fire hazard to personnel and equipment, of a catastrophic failure of the fuel storage facilities.

10. It is recommended that the foregoing factor be added to paragraph 1-4b of TM-3835-15/1.

Copy to:  
CG CamBut  
CG III MAF (less enclosures 1-26 and 29-38)  
CG 3d MarDiv (less enclosures 1-26 and 29-38)  
CG 3d FSSG

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UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP SMEDLEY D. BUTLER, OXINAWA  
APO SEATTLE, WASHINGTON 98772

IN REPLY REFER TO:  
17:RLM:nw  
5830

30 NOV 1979

MEMORANDUM ENDORSEMENT on Col Invest Rpt  
4/JAP/geb 5830 or 9Nov79

From: Commanding General  
To: Commanding General, 3d Force Service Support Group  
(Attn: SJA)

Subj: Investigation to Inquire into all aspects and circumstances connected with the rupture of a rubber fuel bladder which occurred at Camp Fuji, Japan, on 19 October 1979, resulting in a fire which caused injuries to U. S. Armed Forces personnel and Japanese nationals and the destruction of U. S. property.

1. In accordance with Recommendation 5 a copy of the subject investigation is forwarded for information.

by direction

Copy to:  
Navy JAG  
CMC (Code JA)  
FMFPAC  
File

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UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP SMEDLEY D. BUTLER, OKINAWA  
FPO SEATTLE, WASHINGTON 98773

IN REPLY REFER TO:  
17:RLM:jcb  
5820  
24 Nov 1979

FIRST ENDORSEMENT on Col <sup>Be</sup> Invest Rpt 4/JAF/geb  
5830 of 9Nov79

From: Commanding General  
To: Judge Advocate General, Navy Department, Washington,  
D.C. 20370

Via: (1) Commanding General, Fleet Marine Force, Pacific  
(2) Commandant of the Marine Corps (JA)

Subj: Investigation to inquire into all aspects and cir-  
cumstances connected with the rupture of a rubber  
fuel bladder which occurred at Camp Fuji, Japan,  
on 19 October 1979, resulting in a fire which caused  
injuries to U. S. Armed Forces personnel and Japanese  
nationals and the destruction of U. S. property

1. The subject investigation has been reviewed and found to be in substantial compliance with references (a) and (b). The findings of fact, opinions, and recommendations are approved.
2. The record of investigation is forwarded in accordance with section 0211 of reference (a).
3. In accordance with Recommendation 2, the Marine Corps Base, Camp S. D. Butler, Base Property Office is directed to drop all garrison property destroyed in the fire from property records and to ensure that all the appropriate records reflect the adjustment.
4. In accordance with Recommendation 3, the Marine Corps Base, Camp S. D. Butler, Comptroller, is directed to drop the 15 buildings destroyed in the fire from the real property inventory and to ensure that all appropriate records reflect the adjustment.
5. The Facilities Maintenance Officer is directed to take appropriate action in accordance with Recommendation 4.
6. It is the opinion of the undersigned that, because of potential act-of-God dangers, bulk fuel farm operations with the amphibious assault fuel systems (AAFS) be suspended indefinitely at Camp Fuji training area. Alternate means of providing fuel necessary for FMF units deploying to Camp Fuji are available. Other training and exercise sites exist in the Western Pacific to satisfy the contingency mission training requirement of AAFS operations by III Marine



Amphibious Force. The Commanding Generals, III Marine Amphibious Force, Third Marine Division, First Marine Aircraft Wing, and Third Force Service Support Group concur in this opinion.

7. Copies of the subject investigation are being forwarded under separate endorsement to the Commanding Generals of the 3d Marine Division and 3d Force Service Support Group for information and assistance as recommended in Recommendation 5.

8. In accordance with Recommendation 6, a copy of the subject investigation will be retained by the Claims Section, Office of the Staff Judge Advocate, Marine Corps Base, Camp S. D. Butler.

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UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP SMEDLEY D. BUTLER, OKINAWA  
FPO SEATTLE, WASHINGTON 98773

IN REPLY REFER TO:  
4/JAP/geb  
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9 Nov 1979

From: Colonel , USMC;  
Captain USMC

To: Commanding General, Marine Corps Base, Camp S. D. Butler

Subj: Investigation to inquire into all aspects and circumstances connected with the rupture of a rubber fuel bladder which occurred at Camp Fuji, Japan, on 19 October 1979, resulting in a fire which caused injuries to U.S. Armed Forces personnel and Japanese nationals and the destruction of U.S. property

Ref: (a) JAGMAN  
(b) MARCORSUPMAN

Encl: (1) CG, MCB, Camp S. D. Butler ltr 17/LKO'D/ljw 5830 of 23 Oct 1979  
(2) Statement of Colonel , USMC  
(3) Statement of Major , USMC  
(4) Statement of First Lieutenant USMC  
(5) Statement of Staff Sergeant USMC  
(6) Statement of Corporal USMC  
(7) Statement of Lance Corporal USMC  
(8) 3d PSSG, GruBul 3000 of 5 Mar 1979  
(9) Excerpt from TM-3835-15/1, Installation, Operation and Maintenance, Amphibious Assault Fuel System (AAFS) and Tactical Airfield Fuel Dispensing System (TAFDS)  
(10) Observations of the Investigating Officers with Blueprint of Training Camp Area  
(11) Statement of Lance Corporal , USMC, with pictures of fuel farm taken in September 1979  
(12) Statement of Mr.  
(13) Camp Fuji msg 211430Z Oct 79  
(14) COMMARCORBASESPAC msg 240526Z Oct 79  
(15) Statement of Corporal USMC  
(16) Statement of Private First Class USMC  
(17) Statement of Sergeant USMC  
(18) Picture from front page of Pacific Stars and Stripes, 22 October 1979, edition  
(19) Statement of Major , USMC  
(20) Statement of Mr.  
(21) CG, MCB, Camp Butler msg 230755Z Oct 79

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- (22) Statement of Second Lieutenant USMCR
- (23) Statement of Lieutenant Colonel USMC
- (24) Fire Evaluation Report by Fire Chief, Camp S. D. Butler, dtd 12 Sep 79
- (25) NAF Atsugi Fire Inspection and Action Report dtd 3 Oct 79
- (26) Photographs taken by Sergeant , USMC on 20 Oct 79 (See separate binder)

#### Preliminary Statements

1. In compliance with enclosure (1), and in accordance with references (a) and (b), an informal investigation was conducted into all aspects and circumstances connected with the rupture of a rubber fuel bladder which occurred at Camp Fuji, Japan, on 19 October 1979.

2. We began our investigation by traveling to Camp Fuji and physically inspecting the site of the incident and interviewing personnel of the BLT, LSU, and Base Camp. All persons interviewed were cooperative and forthright in their views. We encountered no significant difficulties in the conduct of the investigation. Of particular assistance were the pre-investigative interviews conducted by Major Executive Officer, Range Company, Marine Corps Base, Camp S. D. Butler. His thorough work prior to our arrival on site on 24 October 1979 enabled us to proceed in an orderly and time-saving manner in the conduct of the investigation. His efforts are commendable.

3. Paragraph 0207d of reference (a) provides that whenever more than one activity is involved in an incident requiring investigation, a single investigation should be conducted, if practicable. We did not inquire into the loss of personal property of BLT 2/4 or LSU 3/9 personnel. We also did not make any findings regarding injuries to BLT or LSU personnel or make any line of duty-misconduct determinations with respect to them as we were specifically directed not to do so by enclosure (1). We feel, however, that our investigation should be made available to the BLT and LSU for use in the adjudication of personnel claims and in making line of duty/ misconduct determinations.

4. The information regarding foreign claims discussed in Findings of Fact 72, 73 and 74 was obtained from the Head, Foreign Claims Branch, Office of the Staff Judge Advocate, Marine Corps Base, Camp S. D. Butler.

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5. The photographs contained in enclosure (26) were taken by Sergeant \_\_\_\_\_, USMC, of the BLT 2/4 S-3 Office. They were taken on the morning of 20 October 1979, before any major recovery efforts had begun.

Findings of Fact

1. Colonel \_\_\_\_\_, USMC, was Commanding Officer, Range Company, and Camp Commander, Camp Fuji, Marine Corps Base, Camp S. D. Butler on 19 October. (Enclosure (2))
2. Major \_\_\_\_\_, USMC, was the Commanding Officer of LSU 3/9 at Camp Fuji on 19 October 1979. (Enclosure (3))
3. First Lieutenant \_\_\_\_\_, USMC was the Platoon Commander of the LSU 3/9 Landing Support Platoon. Among his responsibilities were the building and maintenance of the fuel farm at Camp Fuji. (Enclosure (4))
4. Staff Sergeant \_\_\_\_\_, USMC, was Section Leader of the Beach Operations and helicopter Support Operations of LSU 3/9 at Camp Fuji. (Enclosure (5))
5. Corporal \_\_\_\_\_, USMC, was NCOIC of the fuel farm at Camp Fuji when it was built in July 1979 and remained so until 9 October 1979. (Enclosure (6))
6. Lance Corporal \_\_\_\_\_, USMC, was NCOIC of the fuel farm at Camp Fuji on 19 October 1979. (Enclosure (7))
7. The formation of LSU Foxtrot was approved by the Commanding General, 3d Force Service Support Group, on 5 March 1979, by Group Bulletin 3000. (Enclosure (8))
8. 3d FSSG, Group Bulletin 3000, dated 5 March 1979, provided to the LSU commander the following bulk fuel resources:
  - a. A 17 man engineer section including 7 bulk fuel personnel.
  - b. Equipment
    - (1) Six 20,000 gallon fuel bladders
    - (2) Three 600 GPM pumps
    - (3) Fifteen 4' X 25' suction hoses
    - (4) Twenty 4' X 50' discharge hoses
    - (5) Two filter separators
    - (6) Two fuel monitors

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- (7) Two dispensing manifolds
- (8) Six 2" X 50' dischargers
- (9) Six nozzles

See highlighted portions of enclosure (8).

9. The fuel farm was in place when Colonel            arrived at Camp Fuji. (Enclosure (2))
10. It was the policy of Colonel            Camp Commander of Camp Fuji, not to interfere insofar as was possible, with the training of the BLTs at Camp Fuji. (Enclosure (2))
11. Major            felt it was his responsibility to exercise the bulk fuel capacity within the LSU and to train the bulk fuel personnel. (Enclosure (3))
12. The Commanding Officer of LSU 3/9 selected the site of the fuel farm. (Enclosures (3), (4), and (6))
13. The Commanding Officer and bulk fuel personnel of LSU 3/9 were aware that the type of soil at Camp Fuji could present an erosion problem. (Enclosures (3) and (6))
14. The fuel farm satisfied the requirements of TM-3835-15/1 concerning site selection as noted on pages 1-34 and 1-35 of that manual. (Enclosures (3), (6), (9), and (10))
15. The main berm of the fuel farm was at least 350 feet from the nearest quonset hut used as a barracks. (Tab A of enclosure (10))
16. The main berm was about 440 yards long, 10 feet high, and 15 feet thick, and ran generally north-south. (Enclosures (10), (11), and (12))
17. The main berm was built in 1973 by the Government of Japan. (Enclosure (12))
18. Construction on the fuel farm began on about 3 July 1979, and was completed by about 12 July 1979. (Enclosures (3) and (12))
19. Small berms were built around each individual fuel bladder in accordance with standard procedures. (Enclosures (4) and (11))
20. The berms around each bladder were designed to hold at least 15,000 gallons. (Enclosures (4), (6), and (7))

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21. The pumps to operate the fuel farm were located on top of the main berm. (Enclosures (6) and (7))
22. A few inches of the main berm were removed to provide a steady base for the pumps. (Enclosures (6) and (7))
23. The following specifications regarding the 600 gpm pump are relevant:
  - a. height: 72 inches
  - b. length: 152 inches
  - c. width: 72 inches
  - d. weight: 3230 pounds
- (Personal knowledge of the investigating officer.)
24. It was the policy of the LSU commander to keep each bladder no more than one-half full. (Enclosures (3) and (4))
25. The volcanic soil at Camp Fuji provided good drainage. (Enclosures (3), (6), and (7))
26. In mid-September 1979, the Camp Commander directed that the north end of the berm be extended to conceal a burn pit. (Enclosures (2) and (3))
27. Prior to 19 October 1979, there had never been any significant problems with water in the fuel farm. (Enclosures (3) and (7))
28. Previous heavy rains and Typhoon Owen (on about 1 Oct 79) caused no significant damage to the fuel farm and did not interrupt its operations. (Enclosures (2), (4), (6), and (7))
29. On 19 October 1979, there were three bladders in place at the fuel farm, one containing JP-5, one containing diesel fuel, and one containing MOGAS. (Enclosures (3), (4), (7), and (10))
30. At 0830, 19 October 1979, Tropical Storm Condition One was set in the Camp Fuji area. (Enclosure (13))
31. At 1045, 19 October 1979, Tropical Storm Condition One Caution was set, and disaster control centers were activated. (Enclosure (13))
32. The average monthly rainfall for October in the Camp Fuji area is 10.62 inches. (Enclosure (2))

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33. The actual rainfall in the area of Camp Fuji on 19 October 1979, exceeded ten inches. (Enclosure (2))
34. The peak period of rainfall for 19 October 1979, in the Camp Fuji area was between 1300 and 1400; rain in excess of three inches fell during that timeframe. (Enclosure (2))
35. The typhoon that hit mainland Japan on 19 October 1979 was the most devastating typhoon to hit that area in ten years. (Enclosure (14))
36. At 1200 on 19 October 1979, the LSU posted a guard at the fuel farm. (Enclosures (7), (15), and (16))
37. The heavy rains caused water to build up inside the berms around the fuel bladders. (Enclosures (7) and (16))
38. At 1215, 19 October 1979, Tropical Storm Condition One Emergency was set at Camp Fuji. (Enclosure (13))
39. Tropical Storm Condition One Emergency indicates that actual wind gusts of 50 knots or greater are being experienced and that all outside activities are prohibited. (Personal knowledge of the investigating officers.)
40. During Tropical Storm Condition One Emergency, the winds were blowing from the south at from 50 to 60 knots. (Enclosures (2) and (5))
41. At 1245, 19 October 1979, the Camp Commander secured all but essential functions and directed that all troops remain in their quonset huts for protection; Camp Fuji was experiencing exceedingly heavy, driving rain. (Enclosure (13))
42. At 1230 the sentry at the fuel farm was secured from his post by the Corporal of the Guard at the direction of the LSU commander because of the severe weather and in accordance with the SOP for Tropical Storm Condition One Emergency; he was directed to remain in the Conex box (adjacent to the main berm) where he would be picked up by the Corporal of the Guard. (Enclosures (3), (15), and (16))
43. Between 1245 and 1300, the fuel farm sentry was picked up by the Corporal of the Guard. (Enclosure (15))
44. The last physical check of the main berm prior to the rupture of the bladder was made at about 1300. (Enclosure (5))
45. At about 1300, the main berm was intact and the pumps were still on top of the main berm. (Enclosure (5))



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46. Indicative of the water/soil run-off through the training camp on 19 October 1979, was the mud build-up around the western ends of the huts in the training camp area. (Enclosures (5) and (26))
47. The water/soil run-off caused the culverts and drainage ditches in the training camp to fill with soil. (Enclosures (17) and (26))
48. The break in the main berm was 15 to 20 feet wide and at least six feet high. (Enclosures (3), (10), (18), and (26))
49. The break occurred at a point at the southern edge of the MOGAS pit. (Enclosures (10) and (26))
50. The pumps that had been on top of the main berm fell into the break in the berm. (Enclosures (3), (4), (5), and (26))
51. The fuel bladder passed almost completely through the break in the main berm and wrapped around one of the pumps. (Enclosures (3), (4), (15), and (26))
52. There was a horizontal tear in the bladder approximately five feet long in the lower left corner of the bladder as it was viewed from the road. (Enclosures (3) and (10))
53. Approximately 5500 gallons of MOGAS spilled from the ruptured fuel bladder calculated as follows:
  - a. At 1500, 18 October 1979, there were 5933 gallons of MOGAS in the bladder.
  - b. Although fuel dispensing records were destroyed in the fire, it was estimated that approximately 250 gallons of MOGAS were dispensed between 1500, 18 October 1979, and 1200, 19 October 1979.
  - c. Approximately 150 gallons of MOGAS were recovered from the gas-water-mud combination remaining in the bladder. (Enclosure (3))
54. A bladder filled with 5,500 gallons of gasoline weighs about 32,000 pounds. (Personal knowledge of the investigating officers.)
55. The following specifications regarding the ruptured fuel bladder are relevant:



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- a. Capacity: 20,000 gallons
- b. Manufacturer: Goodyear Tire and Rubber Company
- c. Date of Manufacturer: July 1969
- d. Serial Number: F-4449
- e. Length (filled): 25'8"
- f. Width (filled): 22'3"
- g. Height (filled): 5'9"

(Personal knowledge of the investigating officers and enclosure (26))

56. The heavy rains and water build-up caused the JP-5 bladder to shift. (Enclosure (26))

57. Within seconds before the fire, several Marines either smelled fuel fumes or observed fuel in the run-off water. (Enclosures (3), (4), (5), and (17))

58. At 1340, 19 October 1979, the fire began in the Weapons Company, BLT 2/4, area. (Enclosures (4) and (17))

59. The first building to catch fire was either D-215 or D-216. (Enclosures (5) and (17))

60. After the initial fire started in building D-215/216, it spread simultaneously in westerly, easterly, and northerly directions. (Enclosures (4), (5), and (17))

61. The laundry building T-109 was the last building to catch fire. (Enclosure (2))

62. At 1730, 19 October 1979, the fires were brought under control. (Enclosure (13))

63. As a result of the fire, 51 Marines received injuries that required their eventual movement from the Camp Fuji area as follows:

- a. Three evacuated to NRMC, Camp Kuwae, Okinawa;
- b. Forty-two evacuated to USAF Hospital, Yokota Air Force Base, Japan;
- c. Six sent to TAD as outpatients to NRMC, Yokosuka, Japan. (Enclosure (19))

64. None of the injured Marines were members of Marine Corps Base, Camp S. D. Butler. (Personal knowledge of the investigating officer.)

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65. Thirteen of the casualties had been billeted in building D-214, thirteen in building D-215, and seventeen in building D-220. (Enclosure (19))

66. The east exit of building D-220 and the west exit of building D-316 were believed to be locked. (Enclosure (19))

67. There was a heavy mud build-up around the west exit of building D-220. (Enclosure (26))

68. Three Japanese national civilians were injured as a result of the fire, two of whom received slight burns not requiring hospitalization or evacuation. (Enclosure (19))

69. Mrs. received burns to the side of her face and is still hospitalized undergoing treatment. (Enclosure (19))

70. Mrs. was an employee of the company that had the contract for the laundry concession at Camp Fuji. (Enclosures (19) and (20))

71. The Camp Fuji exchange is operated under the cognizance of the Navy Exchange at Yokosuka. (Enclosures (19) and (20))

72. As Mrs. is an employee of an exchange concessionaire, she would normally be covered under the concessionaire's Workmen's Compensation, that he is required to carry on his employees, and any claim by her would be submitted under the insurance contract whether or not there is negligence on the part of the United States government, and whether or not there is negligence on her part. (Personal knowledge of the investigating officers.)

73. If for some reason Mrs. is: (1) not covered by Workmen's Compensation, (2) chooses not to submit a claim under Workmen's Compensation or, (3) if it is determined that her injury was incurred not within the scope of her employment, she is entitled to submit a claim under the Foreign Claims Act in which case the following procedure would apply:

- a. under the terms of the Status of Forces Agreement with Japan, she would submit her claim directly to the Government of Japan;
- b. the claim will be investigated by the Government of Japan;
- c. the Government of Japan will notify the Navy Claims Office in Yokosuka who will negotiate with the Government of Japan regarding causation, liability, and quantum of damages, if any;

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- d. the Navy Claims Office in Yokosuka will submit a report to the adjudicating authority, Fifth Air Force;
- e. under DOD Directive 5518.8 series, the Air Force has the single-service responsibility for adjudicating Foreign Claims in Japan (see also paragraph 2024a(3) of reference (a)).
- f. claims in excess of \$25,000.00 would be adjudicated by the Secretary of the Air Force;
- g. under the provisions of the Status of Forces Agreement, the Government of Japan would pay 25% of the claim, and the United States government would pay 75%;
- h. liability is based on Japanese law;
- i. there must be negligence on the part of the United States before she could recover under the Foreign Claims Act;
- j. if it is determined that her injuries were incurred as the result of her own negligence, she is not entitled to recover under the Foreign Claims Act.

(Personal knowledge of the investigating officers.)

74. If a claim is filed under Workmen's Compensation, the insurer may file a subrogation claim under the Foreign Claims Act as discussed in Finding of Fact 73. (Personal knowledge of the investigating officers. See also recommendation 6 regarding foreign claims.)

75. There was damage to Camp Fuji real property totalling approximately \$569,000 as follows:

- |   |           |
|---|-----------|
| a. Fourteen quonset huts destroyed<br>(Buildings D-205, D-207, D-210,<br>D-211, D-212, D-214, D-215,<br>D-216, D-219, D-220, D-308,<br>D-316, D-326, D-337) | \$424,000 |
| b. Laundry building destroyed<br>(Building T-109)   | \$ 20,000 |
| c. Surface drainage damage  | \$ 45,000 |
| d. Retaining wall damage  | \$ 50,000 |
| e. Miscellaneous damage to various<br>buildings and utilities   | \$ 30,000 |

(Enclosures (19), (21), and (26))

76. Camp Fuji garrison property loss as a result of the fire was \$72,514.35; not included in this amount is \$11,024.27 of 782 gear issued to BLT members after the fire without Individual Memorandum Record cards. (Enclosure (22))

77. During the period 18-19 September 1979, the fuel farm berms at Camp Fuji were inspected for the specific purpose of looking for evidence of erosion or deterioration by Lieutenant

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Colonel \_\_\_\_\_, Facilities Maintenance Officer,  
Marine Corps Base, Camp S. D. Butler, and Lieutenant Commander  
\_\_\_\_\_, USN, Public Works Officer, Marine Corps Base,  
Camp S. D. Butler. (Enclosure (23))

78. It was the opinion of both LtCol \_\_\_\_\_ and LCDR \_\_\_\_\_  
that the berms were in satisfactory condition and would be  
able to contain fuel in the event of a fuel leak. (Enclosure  
(23))

79. On 29 and 30 August 1979, a fire protection evaluation of  
Camp Fuji was performed by \_\_\_\_\_, Fire Chief, Camp  
S. D. Butler. (Enclosure (24))

80. The formal report of Chief \_\_\_\_\_ indicated no fire  
hazards or discrepancies in the fuel farm area. (Enclosure  
(24))

81. On 3 October 1979, a fire inspection of Camp Fuji was  
conducted by Mr. \_\_\_\_\_, Fire Inspector, NAP, Atsugi, Japan.  
(Enclosure (25))

82. The formal report of Mr. \_\_\_\_\_ indicated no fire hazards  
or discrepancies in the fuel farm area. (Enclosure (25))

#### Opinions

1. The probable cause of the breach in the main berm was  
a combination of the following factors that existed at  
Camp Fuji between the hours of 1300 and 1400, 19 October 1979:

- a. Abnormally excessive rainfall;
- b. Typhoon Tip, the most severe typhoon to hit mainland  
Japan in ten years;
- c. Characteristics of the volcanic soil;
- d. Drainage run-off far exceeding that which would  
normally be expected;
- e. The combination of vertical pressure caused by the  
weight of the pumps and the horizontal pressure  
caused by the water drainage on the main berm.

2. The probable cause of the initial fire which occurred  
at Camp Fuji on 19 October 1979 was a combination of the  
following factors:

- a. The rupture of the MORGAS fuel bladder in the area  
of the breach in the main berm;
- b. The run-off of MORGAS from the ruptured fuel bladder  
through the training camp area;

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- c. The ignition of the MOGAS in the vicinity of Buildings D-215 and D-216 from an undetermined source.
3. The probable cause of all injuries received was the fire in the training camp area.
4. The probable cause of all damage to Marine Corps Base, Camp S. D. Butler real and garrison property was the combination of the fire in the training camp area and the heavy run-off of water and soil as a result of Typhoon Tip.
5. No person or persons is responsible for the fire that occurred at Camp Fuji on 19 October 1979; it was an act of God.
6. No explosion as characterized by paragraph 0904 of reference (a) occurred.
7. None of the real or garrison property destroyed as a result of the fire is considered economically repairable.
8. Under the circumstances that existed at the time, the issuing of 782 gear without requiring the recipient to complete an Individual Memorandum Receipt card is considered judicious and in the best interests of the Marine Corps.
9. No Japanese national employee has a claim against the United States as a result of injuries incurred in the fire as there was no negligence on the part of the United States Government.
10. That the extension of the north end of the main berm did not materially contribute to the circumstances which caused the main berm to be breached.

#### Recommendations

1. No administrative or disciplinary action should be taken against any member of the United States Marine Corps as a result of this investigation.
2. All Marine Corps Base garrison property either destroyed or issued without Individual Memorandum Receipts should be dropped from appropriate property records.
3. The fifteen buildings destroyed as a result of the fire should be dropped from the real property inventory.

