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TRANSMITTING OF PROJECT 1.3, OPERATION UPSHOT-KNOTHOLE
Nevada Proving Ground, March - May 1953

Bendix Aviation Corporation

Pacific Division

NORTH HOLLYWOOD, CALIF.

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TELEMETERING OF PROJECT 1.3, OPERATION UPSHOT-KNOTHOLE

NEVADA PROVING GROUND, MARCH - MAY 1953

Contract No. AF 19(604)-605

PACIFIC DIVISION
Bendix Aviation Corporation
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TELEMETERING OF PROJECT 1.3, OPERATION UPSHOT-KNOTHOLE

NEVADA PROVING GROUND, MARCH - MAY 1953

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SECTION I

SUMMARY

Bendix Aviation Corporation, Pacific Division Development Laboratories participated in two of a series of atomic tests conducted at the Nevada Proving Grounds during April and May of 1953.

Thirty-four airborne telemetering canisters were modified for the test. Three trailers equipped with telemetering receiving stations and one general purpose trailer constituted the ground installations. The canisters and receiving stations used in the tests were fabricated by Bendix Pacific Division under a fromer contract with the Air Force Cambridge Research Center and were supplied for use on contract AF 19(604)-605 as Government Furnished Equipment.

During both the Upshot No. 4 test and the Knothole No. 1 test, canisters were deployed in predetermined array patterns from two B-29 aircraft to obtain measurements of free air shock wave overpressure from air blasts. Fourteen canisters comprised the Upshot No. 4 array and twenty canisters made up the Knothole No. 1 array.

Satisfactory telemetering signals and overpressure measurements were received from all canisters. In addition pressure altitude data were continuously recorded from all canisters from deployment to impact. The parachute time delay and opening system operated successfully on all canisters.

The canister control equipment, located in the after compartment of each B-29 aircraft, and the intervalometers used to time canister release from the aircraft operated properly on both tests.

The telemetering receiving stations operated without any noticeable malfunctioning.

The telemetering phase of operations Upshot No. 4 and Knothole No. 1 was considered successful since all objectives were apparently realized.

SECTION II

TEST PLANS

1. General

Under Contract No. AF 19(604)-605 with Air Force Cambridge Research Center, Project 1.3 originally was planned to consist of participation in one of a series of atomic tests, Knothole No. 1, which was scheduled for 1 March 1953 at Frenchman's Flat, Nevada Proving Grounds. The objective of the 1.3 Project was to obtain measurements of the direct and the reflected blast wave overpressures in free air at points of varying distance from the origin of an atomic explosion detonated above the surface of the earth.

During the latter part of December 1952, participation in an additional test, Upshot No. 4, was included in the Project 1.3 requirements. Test dates were later revised with the result that Upshot No. 4 was rescheduled for 6 April 1953 and Knothole No. 1 was rescheduled for 7 May 1953.

2. Airborne Telemetering Canisters

Fourteen telemetering canisters were to be deployed on Upshot No. 4 test in a horizontal array such that the canisters would be at various distances from the blast and approximately 15,000 feet above mean sea level at shock wave arrival time. The canisters were to be deployed from two B-29 aircraft, and were to be suspended within the blast field by means of parachutes. It was originally planned that fourteen canisters were also to be deployed on Knothole No. 1. However, early in February it was decided to deploy twenty canisters on Knothole No. 1 in two horizontal arrays of ten canisters each. Canisters in array positions one through ten were to be located at various distances from ground zero approximately 10,600 feet above mean sea level at blast wave arrival time, and canisters in array positions eleven through twenty were to be at approximately 8,100 feet above mean sea level.

Each B-29 aircraft was to carry seven canisters for deployment on Upshot No. 4 test, and each aircraft was to carry ten canisters for deployment on Knothole No. 1. The aircraft were to fly in close formation and canister deployment would be made from 20,000 feet above mean sea level on Upshot No. 4 and from 17,500 feet above MSL on Knothole No. 1. The two B-29 aircraft were to be based at Kirtland Air Force Base, Albuquerque, New Mexico, for the tests. Therefore, it was planned to perform the canister field checkout at that site.

Because of the limited time allowed at Bendix Pacific for preparing the canisters for the test and because of the limited number of usable canister components remaining from previous tests, it was not possible to provide spare instrumented canisters for the Upshot-Knothole tests.

The telemetered data from the airborne canisters were to be received and recorded by the receiving stations fabricated by Bendix Pacific Division for the Air Force under Contract No. AF 19(122)-459.

3. Telemetering Trailers

It was planned to reconvert the receiving stations in trailers No. 1 and 2 so that each trailer would receive eight RF channels each modulated with three subcarrier channels. (These two trailers were previously modified specifically for Operation Ivy so that each trailer would receive six RF channels, each modulated by four subcarrier channels.) In addition it was planned to use trailer No. 3 with its six receiving stations and trailer No. 4 with its photographic darkroom and maintenance space. The four PE-95K gasoline engine driven generator units were to be used as sources of power for the electronic equipment in the four trailers.

SECTION III

PREPARATION OF TELEMETERING EQUIPMENT

1. Airborne Telemetering Canisters

A total of thirty-five canisters which were originally fabricated under contract No. AF 19(122)-459 were reworked and re-instrumented for use in Upshot-Knothole tests. However, one canister was modified at the request of Cambridge Research Center to be used as a display device. As a result the number of telemetering canisters supplied for use in the tests was thirty-four.

Each of the thirty-four canisters was instrumented to obtain two measurements of blast wave overpressure and a measurement of pressure altitude. In addition to the three primary measurements above measurements were also to be obtained of canister deployment time referenced to detonation time and opening time of the suspension parachutes. Each canister contained a dual parachute system consisting of a six foot ribbon type drag chute and a special twenty-eight foot suspension chute, and a parachute release system. The drag chutes were to be opened following release of the canisters from the aircraft by means of static lines attached to the aircraft. The suspension chutes were to be deployed by motor driven timing switches in the canisters, which were preset for various times after release, so that the canisters would be in the desired positions at the expected arrival time of the blast wave. Tables I and II show the pertinent instrumentation data for the Upshot-Knothole canisters.

The thirty-four telemetering canisters, Bendix drawing Y17611, were assembled and instrumented at BAC/FDDL between 1 January 1953 and 1 March. TTP-9 and TTP-K17 pressure pickups with ranges designated by Air Force Cambridge Research Center, and Y11497 altimeters with ranges determined by the deployment altitude were calibrated and installed in the canisters. Blast switch ranges were established at 0.1 psi for all canisters except those having pressure pickup ranges of 0.4 psi, these canisters had blast switch ranges of 0.07 psi. Tables III and IV show the specific instrumentation data for all canisters used in Upshot-Knothole.

A new antenna was designed for the Upshot-Knothole canisters. This antenna was a modification of the antenna used on Ivy canisters. Figure 1 shows the completely assembled antenna. Because of a minor change in the physical dimensions of the tubing leading from the pressure probe, through the antenna to the pressure pickups it was necessary to re-establish the damping orifice sizes. This was accomplished by applying a shock pressure to the entire system and recording the response of the system through the portable receiving station. Orifices were selected for the various ranges of pressure pickups used to provide maximum damping of pickup ring with a minimum effect on pickup response. Table V shows the damping orifice size used for the various ranges of pressure pickups. After pickup installation was completed the canisters were given a complete electrical checkout, which included a check of the pressure measuring system. On 20 March 1953, the canisters and canister checkout test equipment, including the portable receiving stations, were shipped to Kirtland Air Force Base. Figure 2 shows a completely assembled canister.

TABLE I

PICKUP DATA - UPSHOT NO. 4 CANISTERS

Canister Ser. No.	Array Position	High Range Press. Pickup	Low Range Press. Pickup	Altimeter Range
4	1	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
15	2	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
20	3	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
36	4	± 2 psi	± 1 psi	12.5 - 29.9 in Hg
37	5	± 2 psi	± 1 psi	12.5 - 29.9 in Hg
50	6	± 1 psi	±.7 psi	12.5 - 29.9 in Hg
51	7	±.7 psi	±.4 psi	12.5 - 29.9 in Hg
52	8	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
53	9	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
55	10	± 5 psi	± 2 psi	12.5 - 29.9 in Hg
56	11	± 2 psi	± 1 psi	12.5 - 29.9 in Hg
57	12	± 2 psi	± 1 psi	12.5 - 29.9 in Hg
58	13	± 1 psi	±.7 psi	12.5 - 29.9 in Hg
59	14	±.7 psi	±.4 psi	12.5 - 29.9 in Hg

TABLE II

PICKUP DATA - KNOTHOLE NO. 1 CANISTERS

Canister Ser. No.	Array Position	High Range Press. Pickup	Low Range Press. Pickup	Altimeter Range
64	1	± 5 psi	± 2 psi	13.75 - 29.9 in Hg
61	2	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
65	3	± 5 psi	± 2 psi	13.75 - 29.9 in Hg
66	4	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
67	5	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
68	6	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
69	7	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
70	8	± 1 psi	±.7 psi	13.75 - 29.9 in Hg
73	9	± 1 psi	±.7 psi	13.75 - 29.9 in Hg
74	10	± 1 psi	±.7 psi	13.75 - 29.9 in Hg
77	11	± 5 psi	± 2 psi	13.75 - 29.9 in Hg
75	12	±10 psi	± 5 psi	13.75 - 29.9 in Hg
78	13	± 5 psi	± 2 psi	13.75 - 29.9 in Hg
79	14	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
80	15	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
84	16	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
85	17	± 2 psi	± 1 psi	13.75 - 29.9 in Hg
86	18	± 1 psi	±.7 psi	13.75 - 29.9 in Hg
87	19	± 1 psi	±.7 psi	13.75 - 29.9 in Hg
88	20	± 1 psi	±.7 psi	13.75 - 29.9 in Hg

TABLE III

PRESSURE PROBE ORIFICE DIAMETERS

High Range Press. Pickup	Low Range Press. Pickup	Pressure Probe Orifice Diameter
±10 psi	± 5 psi	.116
± 5 psi	± 2 psi	.062
± 2 psi	± 1 psi	.062
± 1 psi	±.7 psi	.062
±.7 psi	±.1 psi	.052

TABLE IV

UPSHOT NO. 4 - CANISTER BOMB BAY POSITIONS

A/C 035 - No. 1

Drop Time	Array Position	Canister Ser. No.	Rear Bomb Bay Position	Intervalometer Setting
H-129 secs.	1	4	Lower Right	D_1 = Ø (No. 1 Drop)
H-113 secs.	2	15	Lower Left	D_1 + 16 secs.
H-105 secs.	3	20	2nd Up Right	D_1 + 24 secs.
H -95 secs.	4	36	2nd Up Left	D_1 + 34 secs.
H -79 secs.	5	37	3rd Up Right	D_1 + 50 secs.
H -52 secs.	6	50	Lower Center	D_1 + 77 secs.
H +18 secs.	7	51	4th Up Right	D_1 +147 secs.

A/C 363 - No. 2

Drop Time	Array Position	Canister Ser. No.	Rear Bomb Bay Position	Intervalometer Setting
H-129 secs.	8	52	Lower Right	D_2 = Ø (No. 8 Drop)
H-113 secs.	9	53	Lower Left	D_2 + 16 secs.
H-105 secs.	10	55	2nd Up Right	D_2 + 24 secs.
H -95 secs.	11	56	2nd Up Left	D_2 + 34 secs.
H -79 secs.	12	57	3rd Up Right	D_2 + 50 secs.
H -52 secs.	13	58	Lower Center	D_2 + 77 secs.
H +18 secs.	14	59	4th Up Right	D_2 +147 secs.

TABLE V

KNOTHOLE NO. 1 - INSTRUMENTATION CHANGES

Original Instrumentation				Modified Instrumentation			
Can. Ser. No.	Array Position	High Range	Low Range	Can. Ser. No.	Array Position	High Range	Low Range
61	1	±10 psi	±5 psi	61	2	± 2 psi	±1 psi
64	2	± 5 psi	±2 psi	64	1	± 5 psi	±2 psi
75	11	±10 psi	±5 psi	75	12	±10 psi	±5 psi
77	12	± 5 psi	±2 psi	77	11	± 5 psi	±2 psi

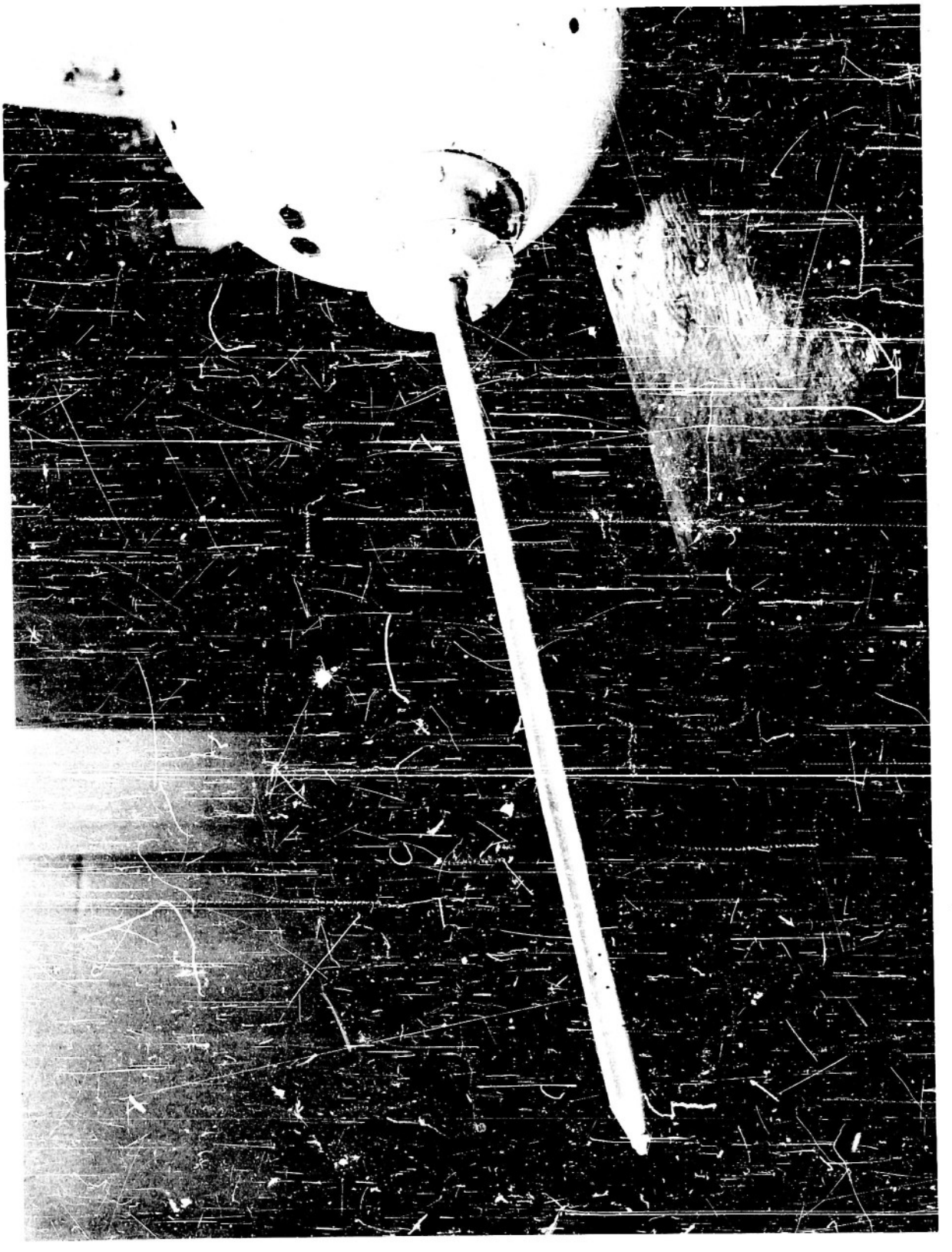


Figure 1 Assembled Antenna

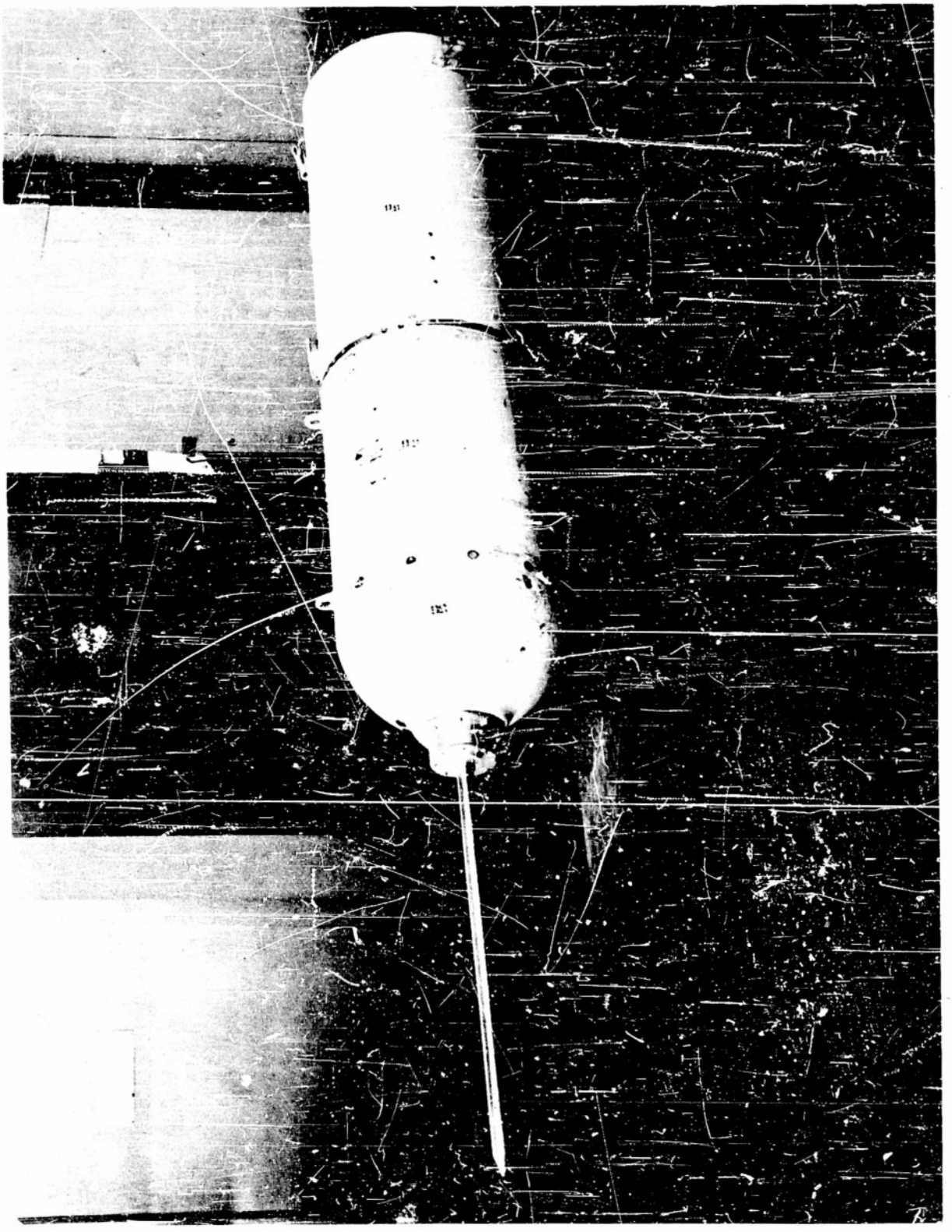


Figure 2 Assembled Canister

2. Telemetering Receiving Stations

The twenty-two telemetering receiving stations which were originally fabricated and installed in three type K-35 trailers under contract No. AF 19(122)-459 were given a complete overhaul in preparation for Upshot-Knothole. The stations in trailers No. 1 and No. 2 were reconverted from four subcarrier channel stations to three subcarrier channel stations. All receivers were realigned, all subcarrier discriminators were thoroughly serviced and modified to reduce 60 cps pickup, and all galvanometers were checked. Each station was given a complete operational check. New telemetering receiving antennas for the trailers were designed and fabricated. The new antennas were more rigid than the type formerly used and were constructed so that they could be easily disassembled and transported. Figure 3 shows an assembled antenna of the new design, and Figure 4 shows four disassembled antennas stored in a trailer.

Because the exterior finishes of trailers Nos. 1, 2 and 4, used on Operation Ivy, were badly weather beaten, the trailers were thoroughly cleaned , sandblasted and repainted.

The four gasoline engine driven generator units, PE-95K's, supplied as Government Furnished Equipment under the previous contract were given a complete mechanical and electrical overhaul in preparation for their use on Upshot-Knothole.

On 17 March 1953 one telemetering trailer and its associated power unit was pulled to the test site by the AF truck-tractor. On 20 March the remaining three trailers and power units were towed to the test site, one by the AF truck-tractor, the other two by rented tractors.

3. Intervalometers

Of the six intervalometers, which were designed and fabricated under contract No. AF 19(122)-459 to provide precision timing of canister release from the aircraft, four were serviced and reconditioned at [redacted] for use on Upshot-Knothole.

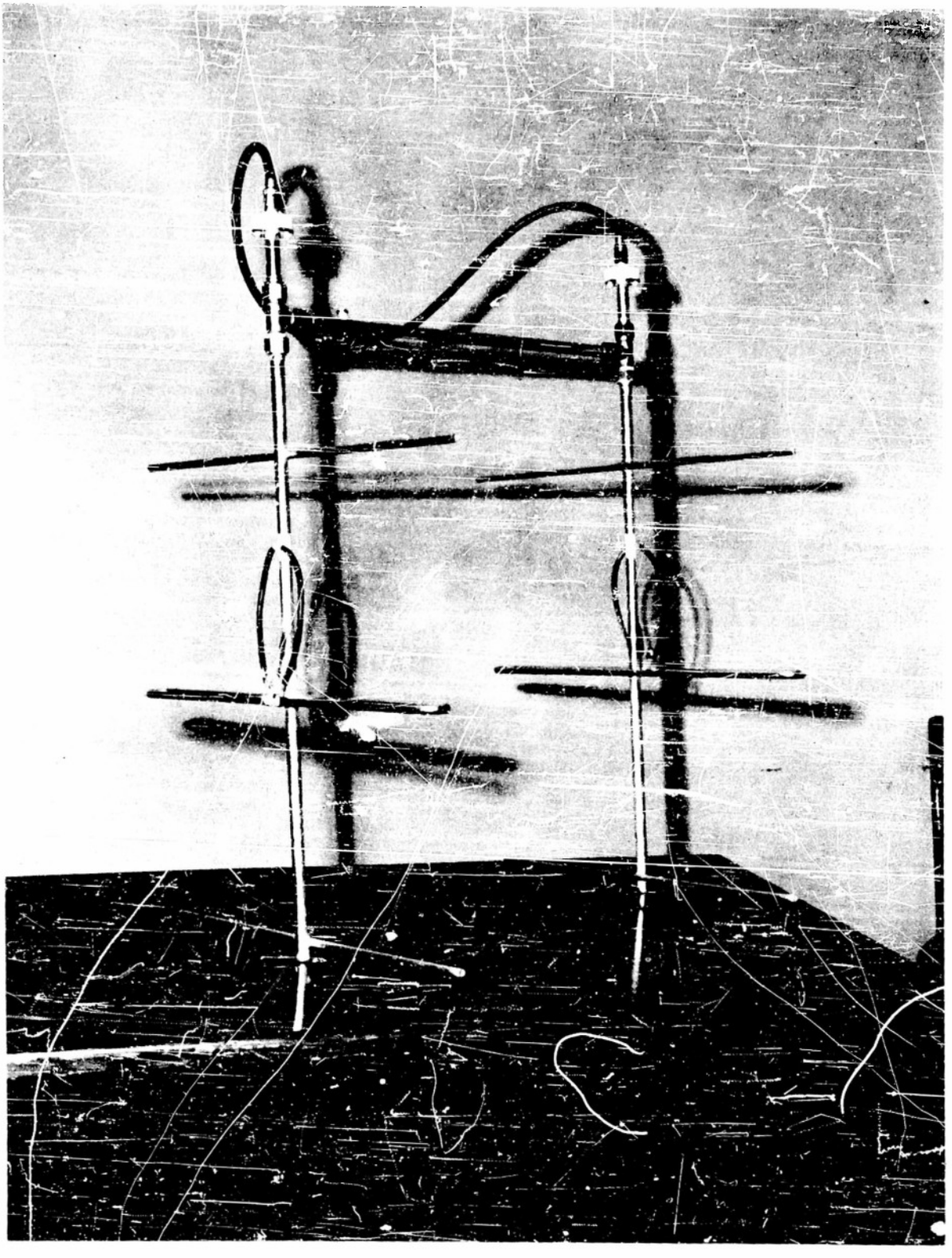


Figure 3 Assembled Antenna, New Design

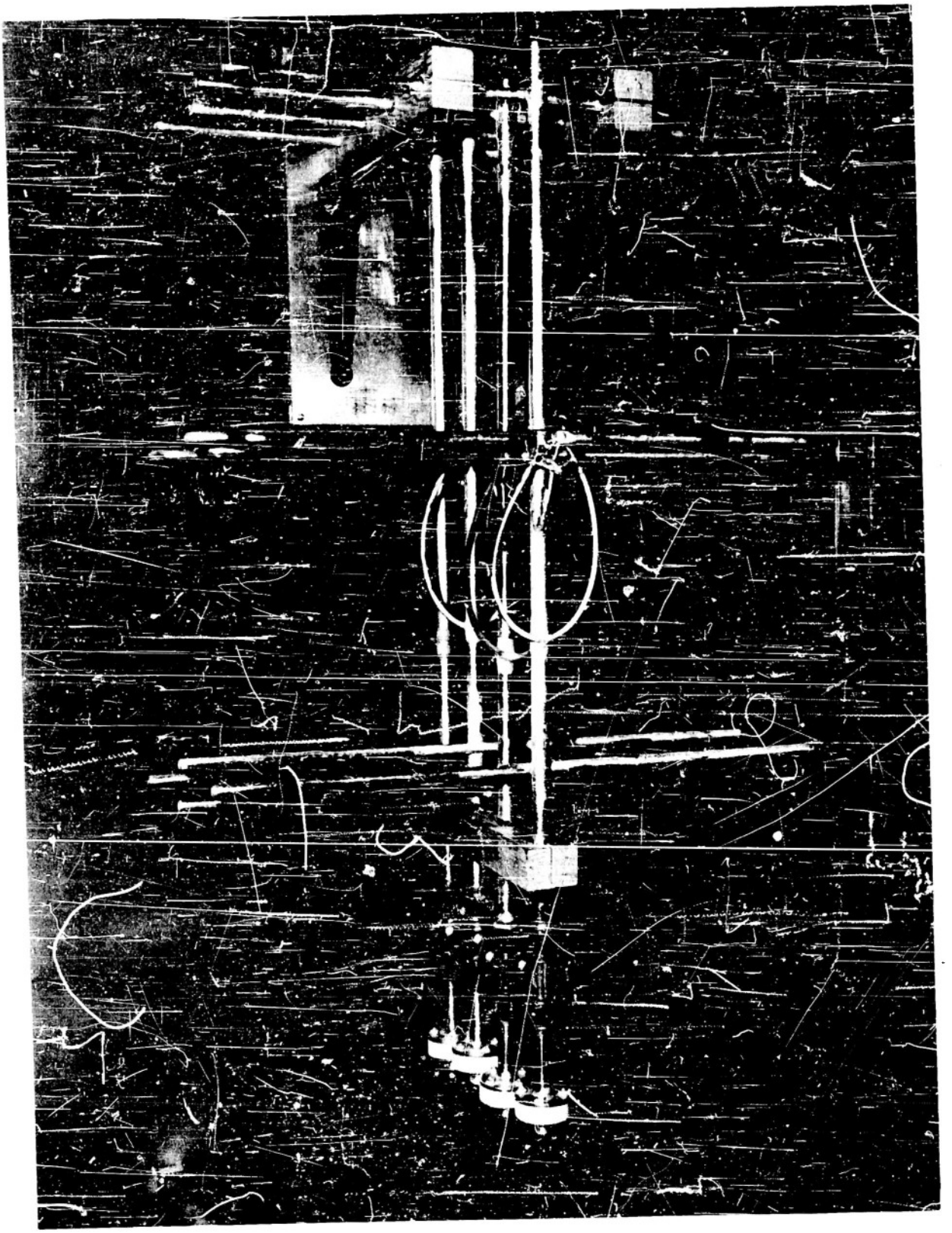


Figure 4 Disassembled Antenna

SECTION IV

TELEMETERING PARTICIPATION - UPSHOT NO. 4

1. Pre-Test Activities - Receiving Stations

On 21 March at the Nevada Proving Grounds work was begun to move the four receiving station trailers from Camp Mercury to the operational site at Yucca Flats. All four trailers were moved to the forward area and by 23 March all trailers were located at the Yucca Flat site and work was underway to prepare them for the test. Since the trailers were to be located at the site previously used during the Tumbler-Snapper tests, power from the base was available for pre-test checkout and operation of the equipment. By 27 March, all station checkouts were completed including antenna pattern checks and the receiving stations were ready for participation in a practice mission scheduled for 28 March.

2. Pre-Test Activities - Airborne Canisters

The thirty-four canisters and canister test equipment were delivered to Kirtland Air Force Base on 23 March 1953, and the equipment was taken to the work area. Although proper facilities had not yet been provided, canister check-out was begun on 24 March. All batteries were charged, checks were begun on the sequence timers, and the subcarrier oscillator frequencies and output voltages were checked and readjusted when necessary.

3. Practice Mission

A series of practice missions were scheduled prior to the dress rehearsal to afford experience for the SCR-584 radar crews in guiding the B-29 drop aircraft over the target area. It was decided that three telemetering canisters would be carried by the B-29's on the first practice mission scheduled for 28 March so that an overall performance check could be made of the telemetry. On 27 March three canisters, Serial Nos. 37, 51 and 56, were loaded into the aft bomb bay of aircraft 035 for participation in the practice mission. The receiving stations were manned on 28 March at 0330 hours in preparation for the practice mission. Good telemetering signals were received at all stations, and the records made indicated that both the airborne and ground equipment functioned properly. Upon return of aircraft 035 to Kirtland Air Force Base the canisters were removed from the bomb bay and taken to the work area where the batteries were removed and charged. Aircraft 863 arrived at Kirtland Air Force Base on 28 March 1953 with twenty-two parachute packs for the canisters.

4. Dress Rehearsal

The Upshot No. 4 dress rehearsal was scheduled for 3 April 1953. On 1 April the four intervalometers which had been reworked at Bendix arrived at Kirtland. On 2 April the four intervalometers were installed in the two aircraft by the Bendix engineer who had gone to Kirtland for that purpose. After installation, the four intervalometers and the aircraft canister release wiring

were thoroughly checked and found to be operating satisfactorily. Installation of parachutes in ten of the fourteen canisters to be deployed on Upshot No. 4 was completed. The chutes were not installed in the four canisters to be flown for the dress rehearsal to facilitate handling the canisters for the dress rehearsal. On the afternoon of 2 April canisters No. 37 and No. 56 were loaded into aft bomb bay positions 1 and 2 of aircraft 035, and canisters No. 50 and No. 51 were similarly loaded in aircraft 863. Because of the confusion which existed in the B-29's and at the telemetering receiving stations resulting from inadequate time checks, records were obtained from only two of the four canisters used in the test. However, at approximately H-10 minutes signals were received from all four canisters and were monitored visually and were reported to be satisfactory.

As a result of the dress rehearsal it was apparent that more reliable and understandable time warnings would be required on the test day.

At the completion of the dress rehearsal the canisters were removed from the aircraft bomb bays and returned to the work area. The batteries were removed from the four canisters and charged. Transmitter Serial No. B-19 was removed from canister No. 50 because of marginal operation and was replaced by No. B-24.

On 4 April and 5 April the parachutes were installed in the four canisters flown on the dress rehearsal. All canisters were given final telemetering checks and batteries were installed in preparation for Upshot No. 4 Test.

At the Nevada Proving Grounds final preparations were made in the receiving stations for the test. All the receiving and recording equipment was thoroughly checked for operational performance and reliability.

5. Upshot No. 4 Test

On the afternoon of 5 April at approximately H-18 hours, canister loading in aircraft 035 and 863 was begun. Seven canisters were loaded in the aft bomb bays of each of the two aircraft as shown by Table IV. The static lines were attached and inspected, lanyard switches were armed and inspected, and the RF output of each transmitter was checked on external power with an RF field strength meter. At approximately H-4 hours on 6 April the two B-29 aircraft were airborne enroute to the test site.

The telemetering receiving stations were manned by all personnel at H-5 hours in preparation for the test. Complete station checkout was performed prior to the drop to insure optimum performance, and all subcarrier discriminators were calibrated. Since only fourteen of the twenty-two receiving stations were required to receive and record the canister data, the remaining eight stations were utilized as "back-ups".

At H-107.3 seconds aircraft 035 deployed canister No. 4 in array position 1, and at H-109.73 seconds aircraft 863 deployed canister No. 52 in array position 8. Canister deployment was approximately 20 seconds late in relation to H time which was planned to occur at 0730 hours. H time actually occurred approximately 20 seconds early. Array position No. 7 canister was released before No. 6 due to an apparent malfunction of the aircraft release system.

Signals were received from all fourteen telemetering canisters at approximately H-8 minutes when they were turned on internal power while still in the aircraft bomb bays. Recording was initiated at all receiving stations at H-3 minutes and was continued until the RF signals were lost at impact. Although overpressure data were received from all fourteen canisters deployed, the pressure amplitudes were very low because of the drop time discrepancies between the canister deployment aircraft and the weapon drop aircraft. Pressure altitude data were continuously recorded from all fourteen canisters from a time prior to deployment to impact.

Processing of the telemetering records was begun immediately following reentry to the area at approximately 1300 hours on 6 April. Trailer No. 1 was secured and moved to the Frenchman's Flat site later the same day in preparation for participation in Knothole No. 1. By 10 April the primary set of records had been processed and all four telemetering trailers and power units had been moved to the site at Frenchman's Flat and checked out. All Bendix personnel returned to Burbank after this test.

SECTION V

TELEMETERING PARTICIPATION - KNOTHOLE NO. 1

1. Pre-Test Activities - Receiving Stations

By 28 April all receiving station personnel had returned to the Nevada Proving Grounds to complete preparations of the receiving stations for participation in Knothole No. 1.

2. Pre-Test Activities - Airborne Canisters

Bendix and Air Force personnel returned to Kirtland Air Force Base and began checkout work on the canisters on 27 April. Because the telemetered data from Upshot No. 4 showed the Mach stem to be located a greater distance from ground zero than was expected it was decided to modify the array pattern originally planned for use in the test. As a result of this modification, it was necessary to change the ranges of the pressure pickups in several of the Knothole No. 1 canisters.

The instrumentation changes were accomplished by utilising the spare pressure pickups which had been provided. Since the spares were depleted by this usage, pressure pickups having the same ranges as the spares that were used were removed from four canisters (Serial Nos. 4, 20, 52 and 55) which had been recovered from the Upshot No. 4 test. These units were returned to Bendix for a calibration check and were sent to Kirtland as spares. The sequence timers in the four canisters were also removed and sent to Kirtland Air Force Base to be used as additional spares.

Table V shows the canister instrumentation changes resulting from the array modification.

By 28 April the instrumentation changes had been accomplished and the sequence timers in all canisters were reset to accommodate the new array pattern. Four canisters, Serial Nos. 65, 68, 79, and 88, were checked out and loaded aboard aircraft 035 for a practice mission to be held on 30 April. Aircraft 863 did not participate in the practice mission because of a defective turbo unit.

3. Practice Mission

Aircraft 035 flew the practice mission on 30 April for the primary purpose of obtaining more experience for the air crews and [redacted]-584 radar guidance crews in positioning the aircraft for canister deployment. Telemetering participated for the purpose of obtaining an overall performance check of the system prior to the dress rehearsal which was scheduled for 4 May. The receiving stations were manned at 0500 hours for the practice mission.

Good signals were received and recorded from all four airborne telemetering canisters. Examination of the telemetering recordings showed that the receiving stations and the canisters functioned properly, and that the overall telemetering system was ready for the dress rehearsal.

4. Dress Rehearsal - Knothole No. 1

The overall program dress rehearsal for all participants in Knothole No. 1 test at Frenchman's Flat was held on 4 May as scheduled. It was planned to drop a high explosive charge to simulate the atomic explosion. The same four canisters, Serial Nos. 65, 68, 79, and 88, which were used on the practice mission were flown on the dress rehearsal. The receiving stations were manned at H-5 hours as scheduled, and the dress rehearsal proceeded according to the operational plan. Canisters were turned on in the two aircraft at H-8 minutes. The signals were received and recorded by the receiving stations from H-4 minutes until H+2 minutes. At approximately H+20 seconds the weapon aircraft called a "NO GO" due to weapon release difficulties. The weapon aircraft made two more runs over the target area in an attempt to release the HE bomb, but encountered the same release difficulties. Telemetering did not participate in the second and third runs.

After return of the two B-29 aircraft to Kirtland Air Force Base, the four canisters were removed from the aircraft and were prepared for the final test. The four intervalometers in the two aircraft were again checked for proper release sequence and timing accuracy after the dress rehearsal and were found to be operating satisfactorily. Parachute installation in the Knothole No. 1 canisters was completed on 4 May.

Examination of the telemeter recordings made during the dress rehearsal after they had been processed revealed that the receiving stations and canisters functioned properly indicating that the telemeter system was ready for the test.

As a result of the failure of the strike aircraft to release the weapon as scheduled on the dress rehearsal, an emergency plan was devised for canister release on the day of the actual test which was to be used if a "NO GO" was called by the strike aircraft prior to release of all the canisters. The plan was to stop canister deployment as soon as the "NO GO" was called. On the next pass over the target area the remaining canisters were to be deployed at equal time intervals from abeam of ground zero to 100 seconds west of ground zero. The telemetering receiving stations were to stop recording upon the "NO GO" signal, and were to re-initiate recording procedures at H-4 minutes preceding the re-established H hour. It was realized that should the strike aircraft call a "NO GO" after H-43 seconds telemeter data could not be obtained as all canisters would have been deployed and would have reached the ground before another pattern over the target area could be executed.

Following the dress rehearsal, final preparations were made on the twenty canisters at Kirtland Air Force Base and on the receiving stations at Frenchman's Flat for the Knothole test.

5. Knothole No. 1 Test

Knothole No. 1 was scheduled for 0830 hours PDT on 7 May 1953. However, because of inclement weather at the test site, the test was postponed 24 hours. Prior to the postponement, twenty canisters were loaded into the aft bomb bays of B-29 aircraft 035 and 863 at Kirtland Air Force Base. Table VI shows loading positions and other pertinent data. After the canisters were loaded in the bomb bays all static lines were attached, lanyard switches were armed and checked, and the RF output of each canister was given a final check. The canisters were left in the aircraft after the delay was announced and on 7 May the internal batteries of all canisters were placed on trickle charge. On the same day the RF outputs of all canisters were again checked and found to be satisfactory.

Aircraft 035 left Kirtland Air Force Base at 0400, and aircraft 863 left at 0450 for the test site on 8 May.

The receiving stations, located approximately seven miles south of GZ, were manned at approximately 0330 or H-5 hours. The operation proceeded according to plan and signals were received from the canisters in the aircraft bomb bays at approximately H-8 minutes. At H-149.31 seconds, aircraft 863 began canister deployment, and deployment of the first canister from aircraft 035 occurred at H-138.78 seconds. Array position No. 10 canister was deployed approximately 43 seconds late from aircraft 863. This canister was intentionally not deployed as the air crew thought a "NO GO" had been called by the weapon aircraft, and the bomb bay doors were closed in preparation for another run. However, as soon as the misunderstanding was corrected the bomb bay doors were re-opened and the canister was deployed at H+5 seconds. The receiving station recorders were started at H-4 minutes. Limiting signals were received from all 20 canisters from deployment to impact. Good overpressure data were received from each of the twenty canisters, and pressure altitude data were continuously recorded from all canisters from a time prior to deployment to impact.

Processing of the telemetering records was begun immediately following reentry to the area at approximately H+2 hours. Trailer No. 2 and three PE-95K power units were removed to Camp Mercury in preparation for the return to Bendix. By 10 May all personnel had returned to Bendix from both Kirtland Air Force Base and Mercury. All equipment, including the recovered canisters, was returned to Burbank by 18 May.

TABLE VI

KNOTHOLE NO. 1 - CANISTER BOMB BAY POSITIONS

A/C 035 - Lead - No. 1

Drop Time	Array Position	Canister Ser. No.	Rear Bomb Bay Position	Intervalometer Setting
H-161.0	11	77	Bottom Right	D_1 = ø (No. 11 Drop)
H-152.0	12	75	Bottom Left	D_1 = + 9 secs.
H-136.0	13	78	2nd Up Right	D_1 = + 25 secs.
H-118.0	14	79	2nd Up Left	D_1 = + 43 secs.
H-100.0	15	80	3rd Up Right	D_1 = + 61 secs.
H -81.6	16	84	Bottom Center	D_1 = + 79.4 secs.
H -72.0	17	85	4th Up Right	D_1 = + 89.0 secs.
H -64.4	18	86	Upper Center	D_1 = + 96.6 secs.
H -56.4	19	87	3rd Up Left	D_1 = +104.6 secs.
H -48.5	20	88	4th Up Left	D_1 = +112.5 secs.

A/C 863 - No. 2

Drop Time	Array Position	Canister Ser. No.	Rear Bomb Bay Position	Intervalometer Setting
H-143.0	1	64	Bottom Right	D_2 = ø (No. 1 Drop)
H-132.0	2	61	Bottom Left	D_2 = + 11 secs.
H-121.5	3	65	2nd Up Right	D_2 = + 21.5 secs.
H-106.0	4	66	2nd Up Left	D_2 = + 37 secs.
H -90.0	5	67	3rd Up Right	D_2 = + 53 secs.
H -74.0	6	68	Bottom Center	D_2 = + 69 secs.
H -67.0	7	69	4th Up Right	D_2 = + 76 secs.
H -59.0	8	70	Upper Center	D_2 = + 84 secs.
H -51.0	9	73	3rd Up Left	D_2 = + 92 secs.
H -43.0	10	74	4th Up Left	D_2 = +100 secs.

SECTION VI

RESULTS

1. Upshot No. 4

Overpressure measurments were received from all of the fourteen canisters deployed on Upshot No. 4. Pressure altitude data were recorded continuously from the fourteen canisters from a time prior to deployment until impact. Information obtained from the telemetered records using standard data reduction procedures is shown in Tables VII and VIII. Additional data of overpressure, altitude and signal strength will be found in the Appendices.

Deployment of the six foot drag chutes and the twenty-eight foot suspension chutes appeared to be normal in all cases.

All canisters were recovered with the exception of those of array positions 6 and 9. No major blast or thermal damage was apparent on the recovered units. Several of the twenty-eight foot chutes on recovered canisters showed a slight amount of thermal damage. None of the chutes were burned to the extent that performance was impaired, however.

Canisters in array positions 1 through 7, deployed from aircraft 035, were released an average of 21.6 seconds late in reference to detonation time. Those in array positions 8 through 14 were deployed by aircraft 863 an average of 19.17 seconds late. Table XI shows individual canister deployment times. Canisters in array positions 6 and 7 were deployed in reverse sequence. The cause for this was not determined as a series of checks on release sequence after the test revealed no malfunction of the intervalometer and aircraft release system. Because of late deployment all canisters were approximately 6500 feet beyond their desired positions, which resulted in measurements of lower amplitude overpressures than was expected. Table X shows the accuracies of the intervalometers used in canister deployment.

The overpressure measurements obtained by canister No. 50 in array position 6 were made while the canister was falling on the drag chute. As a result a differential pressure existed between the reference tank and ambient pressure at shockwave arrival time. Since the measured overpressure plus the existing differential pressure did not exceed the pickup ranges the measurement was still reliable.

A similar differential pressure existed at shock wave arrival time in canister 51, array position 7. This was apparently caused by a restricted delay line as the canister had been suspended on the large chute for a sufficient length of time for the reference chamber pressure to equalize. As in the case of array position 6 the summation of the differential pressure and overpressure did not exceed the ranges of the pickups. Table XI illustrates the accuracies of the overpressure measurements obtained.

TELEMETERED DATA FROM CANISTERS 1 THRU 14

PROGRAM 1.3 NEVADA PROVING GROUND

UPSHOT # 4 6 APRIL 1953

ARRAY POSITION	CANISTER SERIAL NO.	*DROP TIME	ALTITUDE AT DROP TIME	* SQUIB FIRE TIME	ALTITUDE AT SQUIB FIRE TIME	* REFERENCE CHAMBER ARMING TIME	ALTITUDE AT ARMING TIME	* REFERENCE CHAMBER SEALING TIME	ALTITUDE AT SEALING TIME	* TIME OF 1ST PRESSURE WAVE ARRIVAL	*ALTITUDE AT 1ST PRESSURE WAVE ARRIVAL	*TIME OF 2ND PRESSURE WAVE ARRIVAL	ALTITUDE AT 2ND PRESSURE WAVE ARRIVAL	*TIME OF LOSING SIGNAL	ALTITUDE AT LOSS OF SIGNAL	AVERAGE RATE OF DESCENT IN FEET/SECOND: DRAG CHUTE	AVERAGE RATE OF DESCENT IN FEET/SECOND: LARGE CHUTE	
1	4	-107.50	20,000	-99.22	19,450	+ 19.15	16,350	+19.98	16,350	+13.83	16,480	+19.96	16,350	+556	4,480	125.0	26.3	
2	15	- 91.16	20,000	- 79.96	18,000	+ 21.61	15,690	+23.63	15,620	+19.28	15,700	+23.61	15,620	+612	4,650	178.6	23.2	
3	20	- 85.43	20,000	- 70.28	18,040	+ 22.46	16,350	+24.62	16,400	+20.33	16,400	+24.60	16,280	+561	4,700	87.9	26.9	
4	36	- 79.58	20,000	- 57.27	18,250	+ 24.73	15,850	+27.61	15,800	+24.18	15,850	+27.59	15,800	+522	4,750	107.7	29.5	
5	37	- 57.44	20,000	- 40.19	18,050	+ 29.90	16,050	+31.22	16,050	+28.25	16,050	+31.19	16,050	+589	4,400	113.0	29.2	
6	50	+ 39.73	20,000	+ 62.11	16,750	**+106.70	15,680	NO SEAL		+58.06	17,950	+58.20	17,950	+589	4,300	145.3	24.1	
7	51	- 50.93	20,000	- 22.63	19,550	NO IND.		NO IND.		+36.11	18,000	+38.42	17,850	+UNKNOWN	4,550	54.6	26.4	
8	52	-109.73	20,000	-101.30	19,450	+17.80	16,280	+19.36	16,280	+12.90	16,350	+19.35	16,280	+566	4,650	65.2	27.1	
9	53	- 93.81	20,000	- 82.77	19,190	+ 17.75	16,600	+17.75	16,600	+17.56	16,600	+22.54	16,500	+599	5,000	73.4	25.8	
10	55	- 85.93	20,000	- 72.72	18,750	+ 20.14	16,300	+20.14	16,300	+20.07	16,300	+24.40	16,220	+586	4,750	94.6	26.4	
11	56	- 75.61	20,000	- 59.52	18,250	+ 22.02	15,900	+22.57	15,900	+22.53	15,900	+26.73	15,750	+607	4,400	108.8	28.6	
12	57	- 59.92	20,000	- 42.51	17,850	+ 26.74	15,950	+27.21	15,950	+27.19	15,950	+30.26	15,750	+580	4,050	123.5	27.3	
13	58	- 32.54	20,000	- 8.49	16,850	+ 37.37	15,300	NO SEAL		+35.72	15,450	+37.45	15,300	+524	4,500	130.9	31.7	
14	59	+ 36.78	20,000	+ 45.20	19,250	NO IND.		NO IND.		+55.96	18,790	+56.37	18,790	UNKNOWN	4,950	89.1	25.2	

* ALL TIMES IN SECONDS MEASURED FROM H-0 UNLESS OTHERWISE DESIGNATED
H-0 = DETONATION TIME OF BOMB

** TIMES ARE APPROXIMATE
ALL ALTITUDES MEASURED IN FEET ABOVE SEA LEVEL
RATE OF DESCENT VALUES ARE ONLY APPROXIMATE SINCE THEY ARE BASED ON ALTITUDES HAVING SOME RESOLUTION ERROR

REVISED 12 MAY 1953

TABLE VII Telemetered Data from Canister 1 through 14 - Upshot No. 4

TELEMETERED DATA FROM CANISTERS 1 THROUGH 14

PROGRAM 1.3 NEVADA PROVING GROUND

UPSHOT #4 6 APRIL 1953

ARRAY POSITION	CANISTER SERIAL NO.	* DROP TIME	* SQUIB FIRE TIME	SQUIB FIRE TIME FROM DROP	* ARMING TIME	ARMING TIME FROM DROP	* SEALING TIME	SEALING TIME FROM DROP	*1ST OVERPRESSURE ARRIVAL TIME	*2ND OVERPRESSURE ARRIVAL TIME	ΔT	1ST PEAK OVERPRESSURE IN PSI 10.5 KC	1ST PEAK OVERPRESSURE IN PSI 14.5 KC	1ST PEAK OVERPRESSURE IN PSI AVERAGE	2ND PEAK OVERPRESSURE IN PSI 10.5 KC	2ND PEAK OVERPRESSURE IN PSI 14.5 KC	2ND PEAK OVERPRESSURE IN PSI AVERAGE	DURATION OF 1ST POS. PORTION OF PRESS. WAVE	** LOSS OF R.F. SIGNAL
1	4	-107.30	-99.22	8.08	+ 19.15	126.45	+19.98	127.28	+13.83	+19.96	6.13	+.28	+.26	+.27	+.20	+.17	+.18	.85	+556
2	15	- 91.16	-79.96	11.20	+ 21.01	112.17	+23.63	114.79	+19.28	+23.61	4.33	+.20	+.20	+.20	+.20	+.18	+.19	.92	+612
3	20	- 83.48	-70.28	13.20	+ 22.46	105.94	+24.62	108.10	+20.33	+24.60	4.27	+.23	+.24	+.24	+.21	+.20	+.20	.89	+561
4	36	- 73.52	-57.27	16.25	+ 24.73	98.25	+27.61	101.13	+24.18	+27.59	3.41	+.17	+.20	+.19	+.15	+.18	+.17	.88	+522
5	37	- 57.44	-40.19	17.25	+ 29.90	87.34	+31.22	88.56	+28.25	+31.19	2.94	+.12	+.12	+.12	+.12	+.12	+.12	.99	+589
6	50	+ 39.75	+62.11	22.36	+106.70	66.95	NO SEAL		+58.06	+58.20	0.14	+.06	+.05	+.05	+.02	+.03	+.03		+589
7	51	- 30.93	-22.69	8.24	NO IND.		NO IND.		+36.11	+38.42	2.31	+.08	+.08	+.08	+.07	+.07	+.07		UNKNOWN
8	52	- 89.73	-101.30	8.43	+ 17.20	126.33	+19.36	129.09	+12.90	+19.35	6.45	+.30	+.31	+.31	+.20	+.21	+.21	.90	+566
9	53	- 93.81	-82.77	11.04	+17. 75	111.56	+17.75	111.56	+17.56	+22.54	4.89	+.24	+.23	+.23	+.17	+.17	+.17	1.03	+599
10	55	- 85.93	-72.72	13.21	+ 20.14	106.07	+20.14	106.07	+20.07	+24.40	4.33	+.17	+.19	+.18	+.15	+.15	+.15	1.00	+586
11	56	- 75.61	-59.52	16.09	+ 22.02	97.63	+22.57	98.18	+22.56	+26.33	3.77	+.14	+.16	+.15	+.12	+.14	+.13	1.23	+607
12	57	- 59.92	-42.51	17.41	+ 26.74	86.66	+27.21	87.13	+27.19	+30.26	3.07	+.13	+.12	+.12	+.12	+.11	+.11	1.06	+580
13	58	- 32.54	- 8.49	24.05	+ 37.37	69.91	NO SEAL		+35.72	+37.45	1.73	+.11	+.10	+.10	+.06	+.06	+.06	.83	+524
14	59	+ 36.78	+45.20	8.42	NO IND.		NO IND.		+55.96	+56.37	0.41	+.08	+.07	+.07	+.04	+.03	+.03		UNKNOWN

* ALL TIMES IN SECONDS MEASURED FROM H-0 UNLESS OTHERWISE DESIGNATED
H-0 = DETONATION TIME OF BOMB

** TIMES ARE APPROXIMATE

2ND PEAK OVERPRESSURE REFERENCED TO PRESSURE IMMEDIATELY PRIOR TO 2ND SHOCK ARRIVAL

REVISED 27 APRIL 1953

TABLE VIII Telemetered Data from Canister 1 through 14 - Upshot No. 4

SECRET
SECURITY INFORMATION

TABLE IX

CANISTER DEPLOYMENT - UPSHOT NO. 4

Array Position	Aircraft	Desired Deployment Time	Actual Deployment Time	Difference
1	035	H-129.0	H-107.30	21.7
2	035	H-113.0	H- 91.16	21.84
3	035	H-105.0	H- 83.48	21.52
4	035	H- 95.0	H- 73.52	21.48
5	035	H- 79.0	H- 57.44	21.56
6	035	H- 52.0	H+ 39.75	21.07*
7	035	H+ 18.0	H- 30.93	21.75**
				21.60 Average
8	863	H-129.0	H-109.73	19.27
9	863	H-113.0	H- 93.81	19.19
10	863	H-105.0	H- 85.93	19.07
11	863	H- 95.0	H- 75.61	19.39
12	863	H- 79.0	H- 59.92	19.08
13	863	H- 52.0	H- 32.54	19.46
14	863	H+ 18.0	H+ 36.78	18.78
				19.17 Average

All times are in seconds referenced to detonation time.
* Referenced to No. 7 deployment time.
** Referenced to No. 6 deployment time.

TABLE X-a

INTERVALOMETER ACCURACIES - UPSHOT NO. 4

A/C 035

Array Positions	Intervalometer Setting	Actual Deployment Time	Difference	% Error
1	$D_1 = 0$	$D_1 = 0$	-	-
2	$D_1 + 16$	$D_1 + 16.14$	.14	.87%
3	$D_1 + 24$	$D_1 + 23.82$	.18	.75%
4	$D_1 + 34$	$D_1 + 33.78$	.22	.65%
5	$D_1 + 50$	$D_1 + 49.86$	.14	.28%
6	$D_1 + 77$	$D_1 + 76.37$*	.63	.82%
7	$D_1 +147$	$D_1 +147.05$**	.05	.01%
				.56% Average

A/C 863

8	$D_2 = 0$	$D_2 = 0$	-	-
9	$D_2 + 16$	$D_2 + 15.92$	.08	.50%
10	$D_2 + 24$	$D_2 + 23.80$	.20	.83%
11	$D_2 + 34$	$D_2 + 34.12$	.12	.35%
12	$D_2 + 50$	$D_2 + 44.81$	.19	.38%
13	$D_2 + 77$	$D_2 + 77.19$	.19	.27%
14	$D_2 +147$	$D_2 +146.51$	.49	.33%
				.44% Average

All times in seconds referenced to $D_1 = 0$ and $D_2 = 0$.

* Referenced to No. 7 deployment time.

** Referenced to No. 6 deployment time.

TABLE X-b

SEQUENCE TIMER ACCURACIES - UPSHOT NO. 4

Array Position	Desired Small Chute Time	Actual Small Chute Time	Difference	% Error	Desired Arming Time	Actual Arming Time	Difference	% Error
1	8.0	8.08	.08	1%	126.8	126.45	-35	.28%
2	11.0	11.20	.20	1.81%	112.2	112.17	.03	.03%
3	13.0	13.20	.20	1.54%	106.0	105.94	.06	.06%
4	16.0	16.25	.25	1.56%	98.0	98.25	.25	.26%
5	17.0	17.25	.25	1.47%	86.2	87.34	1.14	1.32%
6	22.0	22.36	.36	1.63%	66.4	66.95	.55	.83%
7	8.0	8.24	.24	3.00%	18.0	**	-	-
8	8.0	8.43	.43	5.37%	126.8	126.93	.13	.01%
9	11.0	11.04	.04	.36%	112.2	111.56	.36	.32%
10	13.0	13.21	.21	1.62%	106.0	106.07	.07	.07%
11	16.0	16.09	.09	.56%	98.0	97.63	.37	.38%
12	17.0	17.41	.41	2.41%	86.2	86.66	.46	.53%
13	22.0	24.05	2.05	9.33%	66.4	69.91	3.51	5.29%
14	8.0	8.42	.42	5.25%	18.0	**	-	-
			Average -	2.63%			Average -	.782%

** All times in seconds.

TABLE XI

	First Overpressure					Second Overpressure			
Array Position	High Range Measurement	Low Range Measurement	Difference	Total Range Both Pickups	%* Error	High Range Measurement	Low Range Measurements	Difference	%* Error
1	.28	.26	.02	± 7 psi	.14%	.20	.17	.03	.21
2	.20	.20	.00	± 7 psi	.00%	.20	.18	.02	.14
3	.23	.24	.01	± 7 psi	.07%	.21	.20	.01	.07
4	.17	.20	.03	± 3 psi	.50%	.15	.18	.03	.50
5	.12	.12	.00	± 3 psi	.00%	.12	.12	.00	.00
6	.06	.05	.01	±1.7 psi	.29%	.02	.03	.01	.29
7	.08	.08	.00	±1.1 psi	.00%	.07	.07	.00	.00
8	.30	.31	.01	± 7 psi	.07%	.20	.21	.01	.07
9	.24	.23	.01	± 7 psi	.07%	.17	.17	.00	.00
10	.17	.18	.01	± 7 psi	.07%	.15	.15	.00	.00
11	.14	.16	.02	± 3 psi	.33%	.12	.14	.02	.33
12	.13	.12	.01	± 3 psi	.16%	.12	.11	.01	.17
13	.11	.10	.01	±1.7 psi	.29%	.06	.06	.00	.00
14	.08	.07	.01	±1.1 psi	.45%	.04	.03	.01	.45
				Average -	.17%			Average -	.16%

* These figures include the error through the entire telemetering system including data reduction.

Each canister was equipped with a pressure operated switch which was expected to seal the reference chamber at the time of shock wave arrival. (See Figure 5). The switches installed in the canisters having ±0.7 and ±0.4 psi pressure pickups were calibrated to close at 0.07 psi, all others were calibrated to close at a pressure of 0.1 psi. In order to prevent the reference chamber from being sealed prematurely due to air turbulence or the buildup of a pressure differential while descending on the drag chute, an arming switch which operated from the canister timer, was placed in series with the pressure-operated switch. (See Figure 6.)

The arming switch was adjusted so that it would close approximately 10 seconds prior to the expected arrival time of the shock wave at each canister. The pressure switches in canisters in array positions 1, 2, 3, 4, 5, 8, 9, 10, 11, and 12 closed upon arrival of the blast wave. The pressure switches did not close at arrival time in canisters in array positions 6 and 13. The telemetered records showed no indication of arming and reference chamber sealing in canisters in array positions 7 and 14. Closing of the pressure switches activated the sealing solenoid of the reference chamber and the holding relays kept the solenoid operated valves closed for the duration of the canister descent. There was no indication from the peak overpressure data received from the four canisters in which the reference chambers did not appear to seal that this had a detrimental effect on the data.

The altitude pickups in each canister were vented to the atmosphere and measured the ambient pressure altitude during descent. Temperature corrections were applied to the pressure altitude data in order to obtain density altitude. Atmospheric data for this purpose is shown in Figure 7.

The accuracies of the sequence timers which determined the length of time the canisters descended on the drag chute and release of the 28 foot drag chutes and arming of the reference chamber solenoid are shown in Table X.

Telemetering channel calibration curves and data for all canisters used in the Upshot No. 4 test are contained in Report No. DLM-26.

The telemetering receiving stations received and recorded 100% of the data from the canisters. Duplicate oscillographic recordings were made at each recording position.

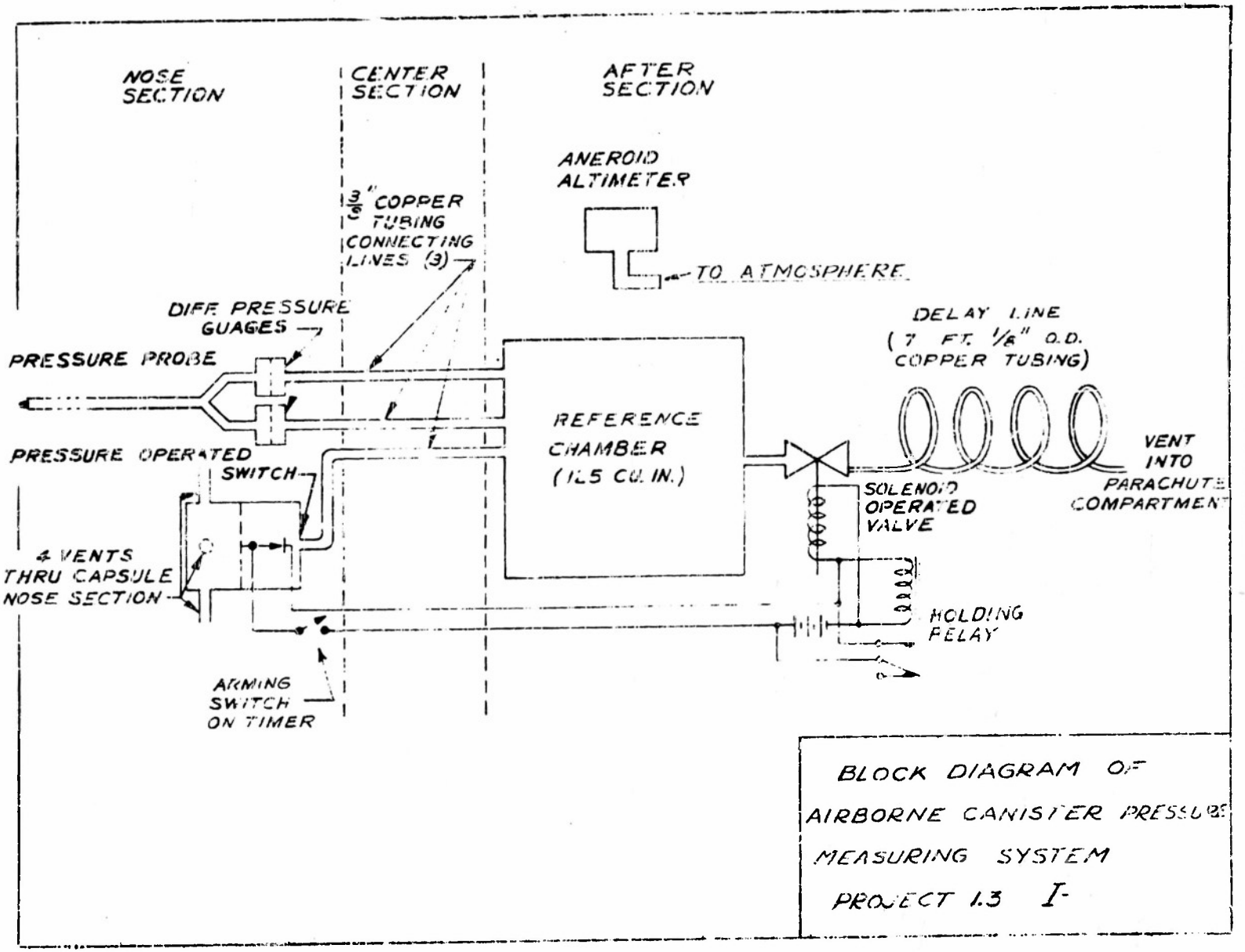


Figure 5 Airborne Canister Pressure Measuring System - Block Diagram

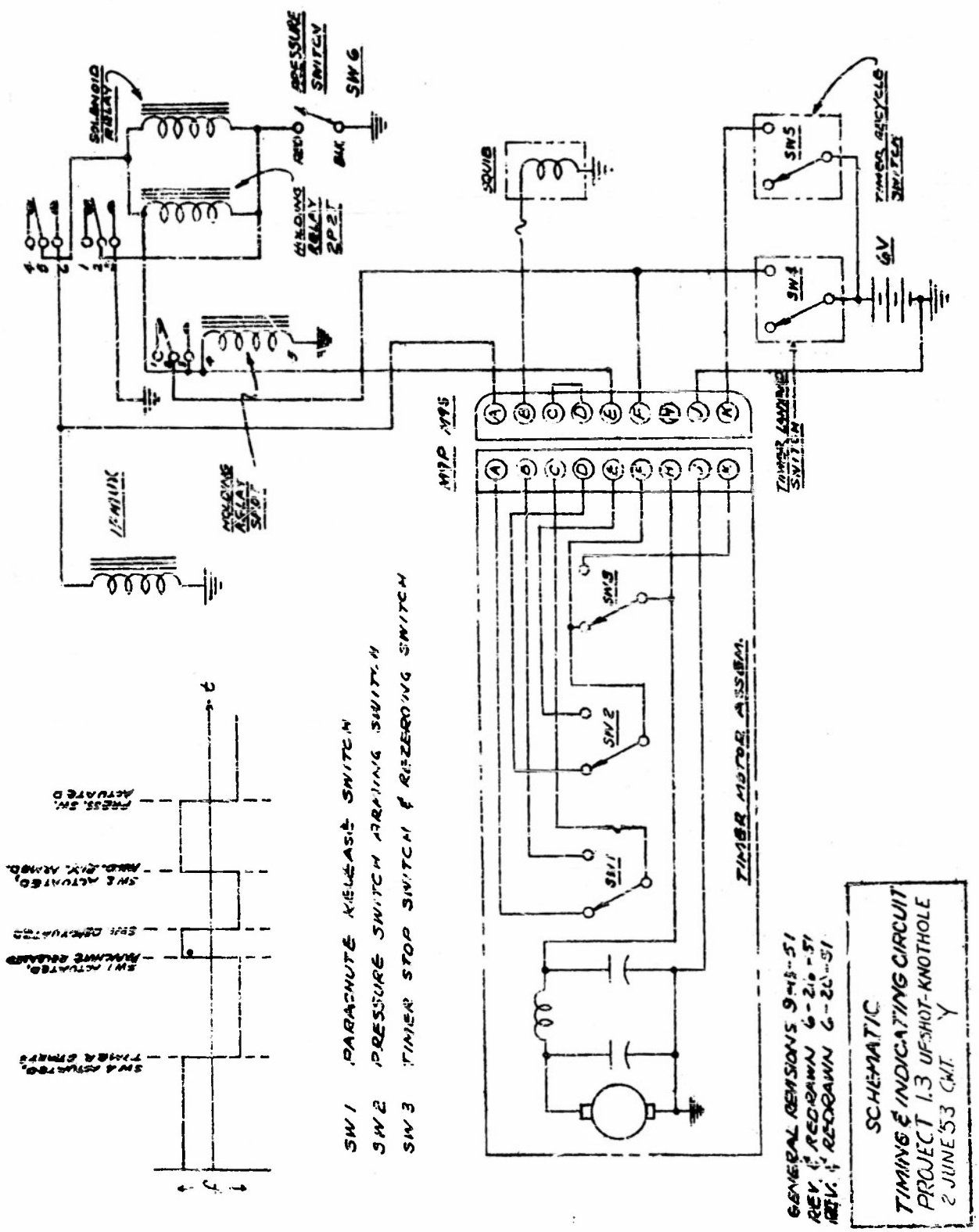


Figure 6 Timing and Indicating Circuit - Schematic

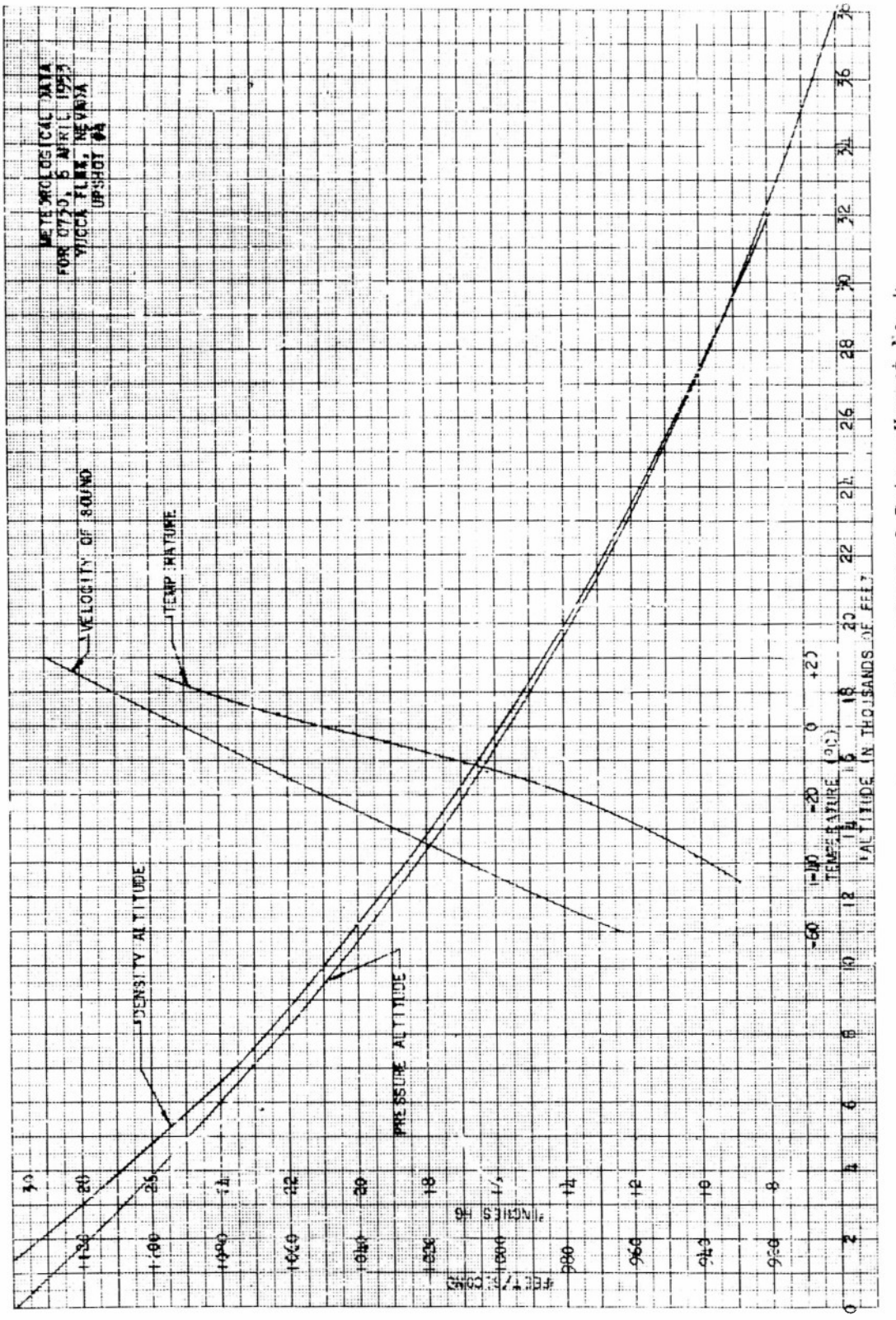


Figure 7 Meteorological Data - Upshot No. 4

2. Knothole No. 1

Overpressure measurements were received from all of the twenty canisters in the Knothole No. 1 array. Pressure altitude data were continuously recorded from the twenty canisters from a time prior to release from the aircraft to impact. Information obtained from the telemetered records using standard data reduction procedures is shown in Tables XII and XIII. Additional data of overpressure, altitude, and signal strength will be found in the Appendices.

Deployment of the drag chutes by the static lines and the suspension chutes by the timer and squibs appeared to be normal in all cases.

All canisters were recovered with the exception of Serial No. 76 in array position 10. None of the recovered canisters showed evidence of blast or thermal damage. Although several of the suspension chutes were damaged slightly by thermal radiation, they were not damaged sufficiently to impair performance.

Canisters in array positions 1 through 9 were deployed from aircraft 863 an average of 4.72 seconds late in reference to detonation time. The array position 10 canister was deployed 51.53 seconds late as explained previously. Aircraft 035 deployed canisters in array positions 11 through 20 an average of 11.85 seconds late in reference to detonation time. Individual canister deployment times are shown in Table XIV. The intervalometer in aircraft 035 was inadvertently started approximately 6 seconds late which accounts for the difference in deployment from the two aircraft which were flying wing. The accuracies of the intervalometers used to time canister release from the two aircraft are shown in Table XV.

The overpressure measurements obtained by canister No. 74 in array position 10 were made while the canister was descending on the six foot drag chute, because of the late release of the canister. As a result of the rapid rate of descent a differential pressure existed between the reference chamber and ambient pressure at shock wave arrival time.

Since the summation of the differential pressure and the measured overpressure did not exceed the calibrated ranges of the pressure pickups the measurement is valid. As many as four overpressure measurements were obtained by a single canister and as few as two. No attempt has been made by Bendix Pacific to interpret these data, and overpressure measurements have been listed in Table VII in the sequence in which they occurred.

Each canister was equipped with a pressure operated switch which was expected to seal the reference chamber at the time of shock wave arrival. (See Figure 5.) The pressure switches in all the Knothole No. 1 canisters were adjusted to close at a pressure 0.1 psi.

SECURITY INFORMATION

TELEMETERED DATA FROM CANISTERS 1 THROUGH 20
PROGRAM 1.3 NEVADA PROVING GROUND
KNOTHOLE #1 8 MAY 1953

ARRAY POSITION	CANISTER SERIAL NO.	*1ST OVERPRESSURE ARRIVAL TIME	*2ND OVERPRESSURE ARRIVAL TIME	ΔT	*3RD OVERPRESSURE ARRIVAL TIME	ΔT	*4TH OVERPRESSURE ARRIVAL TIME	ΔT	1ST PEAK OVERPRESSURE IN PSI 10.5 KC	1ST PEAK OVERPRESSURE IN PSI 14.5 KC	1ST PEAK OVERPRESSURE IN PSI AVERAGE	DURATION OF 1ST POSITIVE PRESSURE PHASE	2ND PEAK OVERPRESSURE IN PSI 10.5 KC	2ND PEAK OVERPRESSURE IN PSI 14.5 KC	2ND PEAK OVERPRESSURE IN PSI AVERAGE	DURATION OF 2ND POSITIVE PRESSURE PHASE	3RD PEAK OVERPRESSURE IN PSI 10.5 KC	3RD PEAK OVERPRESSURE IN PSI 14.5 KC	3RD PEAK OVERPRESSURE IN PSI AVERAGE	4TH PEAK OVERPRESSURE IN PSI 10.5 KC	4TH PEAK OVERPRESSURE IN PSI 14.5 KC	4TH PEAK OVERPRESSURE IN PSI AVERAGE
1	64	+ 6.04	+ 9.37	3.33					+1.05	+0.99	+1.02	1.06	+.70	+.71	+.70							
2	61	+ 8.00	+10.88	2.88	10.97	0.09	14.55	3.58	+ .74	+0.75	+0.74	1.13	+.61	..67	+.64		+.07	+.07	+.07	+.40	+.38	+.39	
3	65	+10.32	+12.72	2.40	13.39	0.67			+0.50	+0.52	+0.51	1.21	+.45	+.42	+.44		+.05	+.06	+.06	+			
4	66	+14.53	+16.20	1.67	17.79	1.59			+0.39	+0.33	+0.36	1.27	+.21	+.18	+.20		+.05	+.03	+.04				
5	67	+19.09	+20.17	1.08	22.57	2.40			+0.25	+0.25	+0.25		+.15	+.14	+.14		+.02	+.02	+.02				
6	68	+24.01	+24.61	0.60	27.61	5.00	28.79	1.18	+0.20	+0.19	+0.20		+.09	+.08	+.08		+.02	+.02	+.02	+.02	+.02	+.02	
7	69	+29.98	+33.91	3.93					+0.26	+0.25	+0.26	1.61	+.04	+.04	+.04		+						
8	70	+28.04	+28.38	0.34	31.76	3.38	32.69	0.93	+0.21	+0.20	+0.20		+.09	+.09	+.09		+.03	+.03	+.03	+.03	+.03	+.03	
9	73	+33.23	+33.33	0.10	37.03	4.30	37.75	0.72	+0. 4	+0.1	+0.14		+.07	+.07	+.07		+.02	+.02	+.02	+.02	+.02	+.02	
10	74	+47.39	+51.12	3.73					+0.13	+0.09	+0.11		+.01	+.02	+.02			+.01	+.01				
11	77	+ 5.34	+ 8.12	2.78	8.41	0.29			+1.30	+1.27	+1.28	0.88	+.88	+.93	+.90		+.14	+.10	+.12				
12	75	+ 7.13	+ 9.39	2.26	10.28	0.89			+0.90	+0.93	+0.92	1.07	+.55	+.64	+.60		+.10	+.11	+.10				
13	78	+10.60	+12.12	1.52	13.96	1.84	15.82	1.86	+0.60	+0.60	+0.60	1.18	+.35	+.33	+.34		+.08	+.07	+.08	+.02	+.02	+.02	
14	79	+15.51	+16.37	0.86	19.07	2.70	20.37	1.30	+0.33	+0.39	+0.36		+.17	+.18	+.18		+.06	+.04	+.05	-.01	+.03	+.02	
15	80	+23.65	+27.48	3.83	27.94	0.46			+0.37	+0.37	+0.37	1.52	+.05	+.06	+.06		+.01	+.02	+.02				
16	84	+25.25	+25.43	0.18	29.05	3.62	29.79	0.74	+0.20	+0.20	+0.20		+.08	+.08	+.08		+.04	+.03	+.04	+.01	+.02	+.02	
17	85	+27.73	+27.80	0.07	31.60	3.80	32.22	0.62	+0.20	+0.18	+0.19		+.08	+.08	+.08		+.04	+.04	+.04	+.02	+.03	+.02	
18	86	+29.76	+33.65	3.89	34.20	0.55			+0.24	+0.23	+0.24	1.75	+.04	+.03	+.04		+.02	+.02	+.02				
19	87	+31.33	+35.77	3.94	36.27	0.50			+0.22	+0.22	+0.22	1.67	+.03	+.03	+.03		+.02	+.02	+.02				
20	88	+33.93	+37.88	3.95	38.33	0.45			+0.20	+0.21	+0.20	1.57	+.03	+.02	+.02		+.02	+.02	+.02				

*ALL TIMES IN SECONDS MEASURED FROM H-0 UNLESS OTHERWISE DESIGNATED
H-0 = DETONATION TIME OF BOMB
** TIMES ARE APPROXIMATE

[DATA NOT INTERPRETED

SECRET

TABLE XII Telemetered Data from Canisters 1 through 20 -- Knothole No. 1

SECRET
SECURITY INFORMATION

TELEMETERED DATA FROM CANISTERS 1 THROUGH 20
PROGRAM 1.3 NEVADA PROVING GROUND
KNOTHOLE #1 8 MAY 1953

ARRAY POSITION	CANISTER SERIAL NO.	* DROP TIME	ALTITUDE AT DROP	* SQUIB FIRE TIME	ALTITUDE AT SQUIB FIRE	* REFERENCE CHAMBER ARMING TIME	ALTITUDE AT ARMING	*REFERENCE CHAMBER SEALING TIME	*TIME OF 1ST PRESSURE WAVE ARRIVAL	ALTITUDE AT 1ST PRESSURE WAVE ARRIVAL	*TIME OF 2ND PRESSURE WAVE ARRIVAL	*TIME OF 3RD PRESSURE WAVE ARRIVAL	*TIME OF 4TH PRESSURE WAVE ARRIVAL	*TIME OF LOSING R. F. SIGNAL	ALTITUDE AT LOSS OF SIGNAL	AVERAGE RATE OF DESCENT IN FEET/SECOND: DRAG CHUTE	AVERAGE RATE OF DESCENT IN FEET/SECOND: LARGE CHUTE
1	64	-138.78	17,650	-113.56	14,275	-0.33	11,250	+6.06	6.04	11,150	9.37			347.25	4000	133.8	26.6
2	61	-128.44	17,650	-100.54	14,075	+0.42	11,400	8.04	8.00	11,125	10.88	10.97	14.55	360.08	4400	128.1	26.5
3	65	**-116.92	17,650	- 87.77	13,575	+2.74	10,875	10.35	10.33	10,700	12.72	13.39		382.20	4100	139.8	29.8
4	66	-101.89	17,650	- 68.83	13,225	+7.16	10,825	14.55	14.53	10,700	16.20	17.79		359.27	4100	133.8	31.6
5	67	- 86.84	17,650	- 50.68	12,725	+10.36	11,300	¥ 10.38	19.09	10,875	20.17	22.57		362.24	4125	136.2	26.5
6	68	- 70.83	17,650	- 31.40	12,250	+14.47	10,875	¥ 14.49	24.01	10,650	24.61	27.61	28.79	393.18	4125	136.9	28.9
7	69	- 63.86	17,650	** - 24.05	8,700	+16.18	7,300	¥ 16.22	29.98	6,550	33.91			199.60	4050	224.8	39.8
8	70	- 55.78	17,650	- 14.63	11,600	+18.83	10,575	¥ 18.87	28.04	10,150	28.38	31.76	32.69	361.55	4000	147.0	33.4
9	73	- 38.74	17,650	+ 4.24	10,950	+30.61	10,350	32.25	33.23	10,250	33.33	37.02	37.73	340.00	3950	155.9	24.1
10	74	** + 8.53	17,650	+ 52.19	11,150	+70.11	10,500	DID NOT SEAL	47.39	11,925	51.12	51.70		420.60	5075	148.9	16.5
11	77	-149.32	17,650	-108.43	11,850	+5.60		6.07	5.94	8,825	8.12	8.41		257.23	4050	141.8	26.6
12	75	-139.71	17,650	- 96.58	11,200	+5.71	8,750	7.14	7.13	8,750	9.39	10.28		254.34	4050	149.5	25.6
13	78	-124.47	17,650	- 78.34	11,025	+7.07	8,600	10.61	10.60	8,450	12.12	13.96	15.82	287.10	4050	143.6	28.9
14	79	-106.29	17,650	- 57.20	10,425	+10.42	8,650	15.52	15.51	8,600	16.37	19.07	20.37	289.05	4200	147.2	25.1
15	80	**-89.00	17,650	- 34.64	7,825	+16.03	6,575	¥ 23.66	23.65	6,325	27.43	27.94		183.00	3900	180.7	25.7
16	84	- 69.04	17,650	- 12.75	9,175	+20.88	8,250	25.26	25.25	8,100	25.43	29.05	29.79	255.57	3925	150.6	28.3
17	85	- 60.20	17,650	- 2.04	9,050	+22.82	8,175	27.74	27.73	8,050	27.80	31.60	32.32	244.70	4250	147.9	33.6
18	86	- 52.46	17,650	+ 7.49	8,650	+26.50	8,100	29.77	29.76	7,875	33.65	34.20		262.20	4300	150.1	34.8
19	87	- 44.44	17,650	+ 15.54	8,750	DID NOT ARM		DID NOT SEAL	31.83	8,400	35.77	36.26		245.20	4200	148.4	19.8
20	88	- 36.41	17,650	+ 24.16	8,875	DID NOT ARM		DID NOT SEAL	33.93	8,350	37.83	38.37		256.04	4325	144.9	28.1

* ALL TIMES IN SECONDS MEASURED FROM H-0 UNLESS OTHERWISE DESIGNATED (H-0 = DETONATION TIME OF SHOT)
** TIMES ARE APPROXIMATE
¥ ARMING OFF BEFORE ARRIVAL TIME - NO INDICATION OF SEAL BY IFMUX
ALL ALTITUDES MEASURED IN FEET ABOVE SEA LEVEL. RATES OF DESCENT ARE APPROXIMATE SINCE THEY ARE BASED ON ALTITUDES HAVING SOME RESOLUTION ERR

TABLE XIII Telemetered Data from Canisters 1 through 20 - Knothole No. 1

SECRET
SECURITY INFORMATION

TABLE XIV

CANISTER DEPLOYMENT - KNOTHOLE NO. 1

Array Position	Aircraft	Desired Deployment Time	Actual Deployment Time	Difference	
1	863	H-143.0	H-138.78	4.22	
2	863	H-132.0	H-128.44	3.56	
3	863	H-121.5	H-116.92	4.58	
4	863	H-106.0	H-101.89	4.11	
5	863	H- 90.0	H- 86.84	3.16	
6	863	H- 74.0	H- 70.83	3.17	
7	863	H- 67.0	H- 63.86	3.14	
8	863	H- 59.0	H- 55.78	4.22	
9	863	H- 51.0	H- 38.74	12.26	
10	863	H- 43.0	H+ 8.53	51.53	
				4.72	Average**
11	035	H-161.0	H-149.32	11.68	
12	035	H-152.0	H-139.71	12.29	
13	035	H-136.0	H-124.47	11.53	
14	035	H-118.0	H-106.29	11.71	
15	035	H-100.0	H- 89.00	11.00	
16	035	H- 81.6	H- 69.04	12.56	
17	035	H- 72.0	H- 60.20	11.80	
18	035	H- 64.4	H- 52.46	11.94	
19	035	H- 56.4	H- 44.44	11.96	
20	035	H- 48.5	H- 36.41	12.09	

All times are in seconds referenced to detonation time.

** Not included in average.

TABLE XV

KNOTHOLE NO. 1

A/C 863

Array Position	Intervalometer Setting	Actual Deployment Time	Difference	% Error	
1	$D_1 = 0$	$D_1 = 0$	-	-	
2	$D_1 + 11.0$	$D_1 + 10.34$	.66	6.00%	
3	$D_1 + 21.5$	$D_1 + 21.82$	.32	1.50%	
4	$D_1 + 37.0$	$D_1 + 36.85$	.15	.41%	
5	$D_1 + 53.0$	$D_1 + 51.90$	1.10	2.10%	
6	$D_1 + 69.0$	$D_1 + 67.91$	1.09	1.58%	
7	$D_1 + 76.0$	$D_1 + 74.88$	1.12	1.47%	
8	$D_1 + 84.0$	$D_1 + 82.96$	1.04	1.24%	
9	$D_1 + 92.0$	$D_1 + 100.00$	8.00	8.70%	
10	$D_1 + 100.0$	$D_1 + 147.27$	47.27**	-	
				2.88%	Average

A/C 035

11	$D_2 = 0$	$D_2 = 0$	-	-	
12	$D_2 + 9.0$	$D_2 + 9.61$	.61	6.78%	
13	$D_2 + 25.0$	$D_2 + 24.85$	.15	.60%	
14	$D_2 + 43.0$	$D_2 + 43.03$	.03	.07%	
15	$D_2 + 61.0$	$D_2 + 60.32$	.68	1.11%	
16	$D_2 + 79.4$	$D_2 + 80.28$	.88	1.11%	
17	$D_2 + 89.0$	$D_2 + 89.12$	.12	.13%	
18	$D_2 + 96.6$	$D_2 + 96.86$	.26	.27%	
19	$D_2 + 104.6$	$D_2 + 104.88$	.28	.27%	
20	$D_2 + 112.5$	$D_2 + 112.91$	.41	.36%	
				1.1%	

All times in seconds referenced to $D_1 = 0$ and $D_2 = 0$.

** Not included in average error as error was human rather than electro-mechanical.

An arming switch controlled by the sequence timer in each canister was placed in series with the pressure switch to prevent premature sealing of the reference chamber. The arming switches were preset to close 10 seconds prior to the expected shock wave arrival time at each canister. After arming, a holding relay operated to maintain the sealing solenoid in an armed condition after the arming switch reverted to the open position. Arming of the reference chambers occurred as planned in all canisters except those of array positions 19 and 20. The reference chambers of canisters in array positions 1, 2, 3, 4, 9, 11, 12, 13, 14, 15, 16, 17, and 18 closed as indicated by the telemetering records. The reference chambers of canisters in array positions 5, 6, 7, 8, and 15 probably closed due to the holding relay although there was no definite indication on the telemetered records of this because the arming switch was off prior to arrival time. Array position 19 and 20 canisters did not arm and the reference chambers did not seal. The action of the delay lines through which the reference chambers were vented to ambient pressure allowed an overpressure measurement to be obtained, however, even though the reference chambers failed to seal at shock wave arrival time. Accuracies of the overpressure measurements obtained are shown in Table XVI.

The altitude pickups in each canister were vented to the atmosphere and measured the ambient pressure altitude during canister descent. Temperature corrections were applied to the pressure altitude data in order to obtain true altitude values. Atmospheric data for this purpose is shown in Figure 8.

Accuracies of the sequence timers in the canisters which determined the time of large chute deployment and arming of the reference chamber sealing solenoid are shown in Table XVII.

Telemetering channel calibration curves and data for all canisters used in the Knothole No. 1 test are contained in Report No. DLM-26.

The telemetered data was received and recorded by the twenty-two receiving stations. Two stations were utilized to provide "back up" recordings for array position 3 and 13. One hundred percent coverage was obtained by the equipment and operating personnel.

3. General

The two sets of overpressure measurements obtained from the thirty-four canisters deployed in the two tests compare very favorably with each other. The average error for the thirty-four pairs of first overpressure measurements was 0.23 percent, and for pairs of second overpressure measurements the average error was 0.18 percent. The greatest error between any pair of overpressure measurements was 1.18 percent.

The average error in the opening time of the twenty-eight foot suspension parachute as determined by the sequence timers was 2.16 percent. The average error in arming time was 1.27 percent.

The average intervalometer error in the two tests in timing canister release from the aircraft was 1.27 percent.

TABLE XVI

KNOTHOLE NO. 1 - PRESSURE MEASUREMENTS

	First Overpressure					Second Overpressure			
Array Position	High* Range Measurement	Low* Range Measurement	Difference	Total Range Both Pickups	%* Error	High* Range Measurement	Low* Range Measurement	Difference	%* Error
1	1.05	.99	.06	± 7	.43%	.70	.71	.01	.07%
2	.74	.75	.01	± 3	.17%	.61	.67	.06	1.00%
3	.50	.52	.02	± 7	.14%	.45	.42	.03	.21%
4	.39	.33	.06	± 3	1.00%	.21	.18	.03	.50%
5	.25	.25	.00	± 3	.00%	.15	.14	.01	.17%
6	.20	.19	.01	± 3	.17%	.09	.08	.01	.17%
7	.26	.25	.01	± 3	.17%	.04	.04	.00	.00%
8	.21	.20	.01	±1.7	.29%	.09	.09	.00	.00%
9	.14	.14	.00	±1.7	.00%	.07	.07	.00	.00%
10	.13	.09	.04	±1.7	1.18%	-	.02	-	-
11	1.30	1.27	.03	± 7	.21%	.88	.93	.05	.36%
12	.90	.93	.03	± 15	.10%	.55	.64	.09	.30%
13	.60	.60	.00	± 7	.00%	.35	.33	.02	.14%
14	.33	.39	.06	± 3	1.00%	.17	.18	.01	.17%
15	.37	.37	.00	± 3	.00%	.05	.06	.01	.17%
16	.20	.20	.00	± 3	.00%	.08	.08	.00	.00%
17	.20	.18	.02	± 3	.33%	.08	.08	.00	.00%
18	.24	.23	.01	±1.7	.29%	.04	.03	.01	.29%
19	.22	.22	.00	±1.7	.00%	.03	.03	.00	.00%
20	.20	.21	.01	±1.7	.29%	.03	.02	.01	.29%
					.28%	Average			.20% Average

* All pressures are in psi. These figures include the error through the entire telemetering system including data reduction.

TABLE XVII

SEQUENCE TIMER ACCURACIES - KNOTHOLE NO. 1

Array Position	Desired Small Chute Time	Actual Small Chute Time	Difference	% Error	Desired Arming Time	Actual Arming Time	Difference	% Error
1	25.0	25.22	.22	.88%	138.2	138.45	.25	.18%
2	27.9	27.90	.00	.00%	128.9	128.86	.04	.03%
3	30.0	29.15	.85	2.83%	120.6	119.66	.94	.78%
4	33.0	33.06	.06	.18%	109.0	109.05	.05	.04%
5	36.0	36.16	.16	.45%	97.0	97.20	.20	.21%
6	39.0	39.43	.43	1.19%	85.0	85.30	.30	.35%
7	40.0	39.81	.19	.48%	80.2	80.04	.16	.20%
8	41.0	41.15	.15	.37%	74.6	74.61	.01	.01%
9	43.0	41.98	1.02	2.37%	68.8	68.75	.05	.07%
10	44.0	43.66	.34	.77%	62.0	78.64	16.64	26.85%
11	40.0	40.89	.89	2.22%	155.1	154.92	.18	.12%
12	43.0	43.13	.13	.30%	145.4	145.42	.02	.01%
13	46.0	46.13	.13	.28%	131.3	131.51	.21	.16%
14	49.0	49.09	.09	.18%	116.8	116.71	.09	.08%
15	53.0	54.36	1.36	2.57%	103.7	105.03	1.33	1.28%
16	56.0	51.29	4.71	8.42%	89.9	89.92	.02	.02%
17	58.0	57.16	.84	1.45%	82.9	83.02	.12	.14%
18	59.0	59.95	.95	1.61%	78.0	78.96	.96	1.23%
19	60.0	59.98	.02	.03%	72.0	-	-	-
20	56.5	60.57	4.07	7.22%	66.5	-	-	-
			Average -	1.69%			Average-	1.76%

* All times are in seconds.

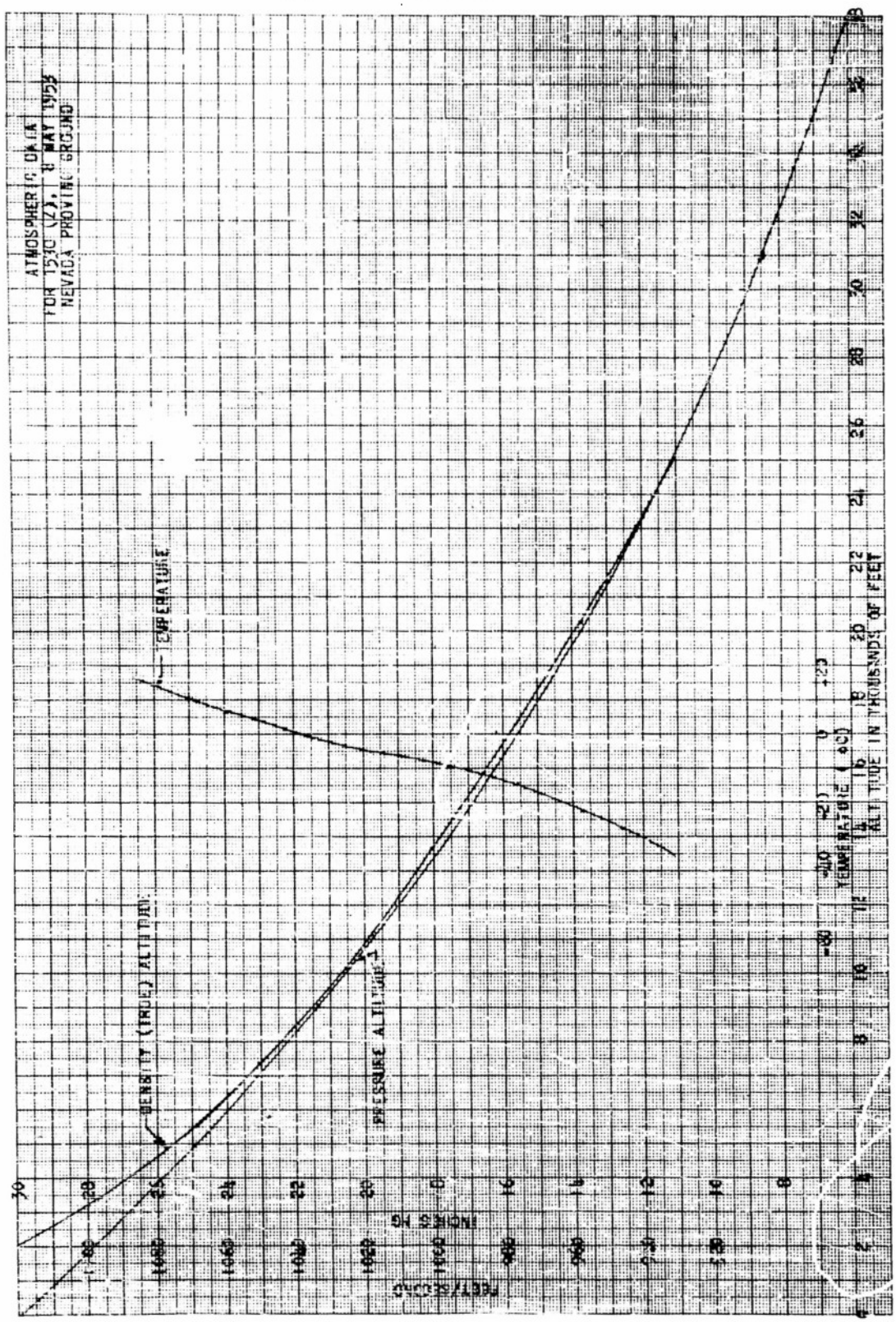


Figure 8 Atmospheric Data

APPENDIX I

OVERPRESSURE VS. TIME - UPSHOT NO. 4

Figure	Title
1	First Overpressure Wave, Array Position No. 1
2	Second Overpressure Wave, Array Position No. 1
3	First Overpressure Wave, Array Position No. 2
4	Second Overpressure Wave, Array Position No. 2
5	First Overpressure Wave, Array Position No. 3
6	Second Overpressure Wave, Array Position No. 3
7	First and Second Overpressure Wave, Array Position No. 4
8	First and Second Overpressure Wave, Array Position No. 5
9	First and Second Overpressure Wave, Array Position No. 6
10	First and Second Overpressure Wave, Array Position No. 7
11	First Overpressure Wave, Array Position No. 8
12	Second Overpressure Wave, Array Position No. 8
13	First Overpressure Wave, Array Position No. 9
14	Second Overpressure Wave, Array Position No. 9
15	First Overpressure Wave, Array Position No. 10
16	Second Overpressure Wave, Array Position No. 10
17	First and Second Overpressure Wave, Array Position No. 11
18	First and Second Overpressure Wave, Array Position No. 12
19	First and Second Overpressure Wave, Array Position No. 13
20	First and Second Overpressure Wave, Array Position No. 14

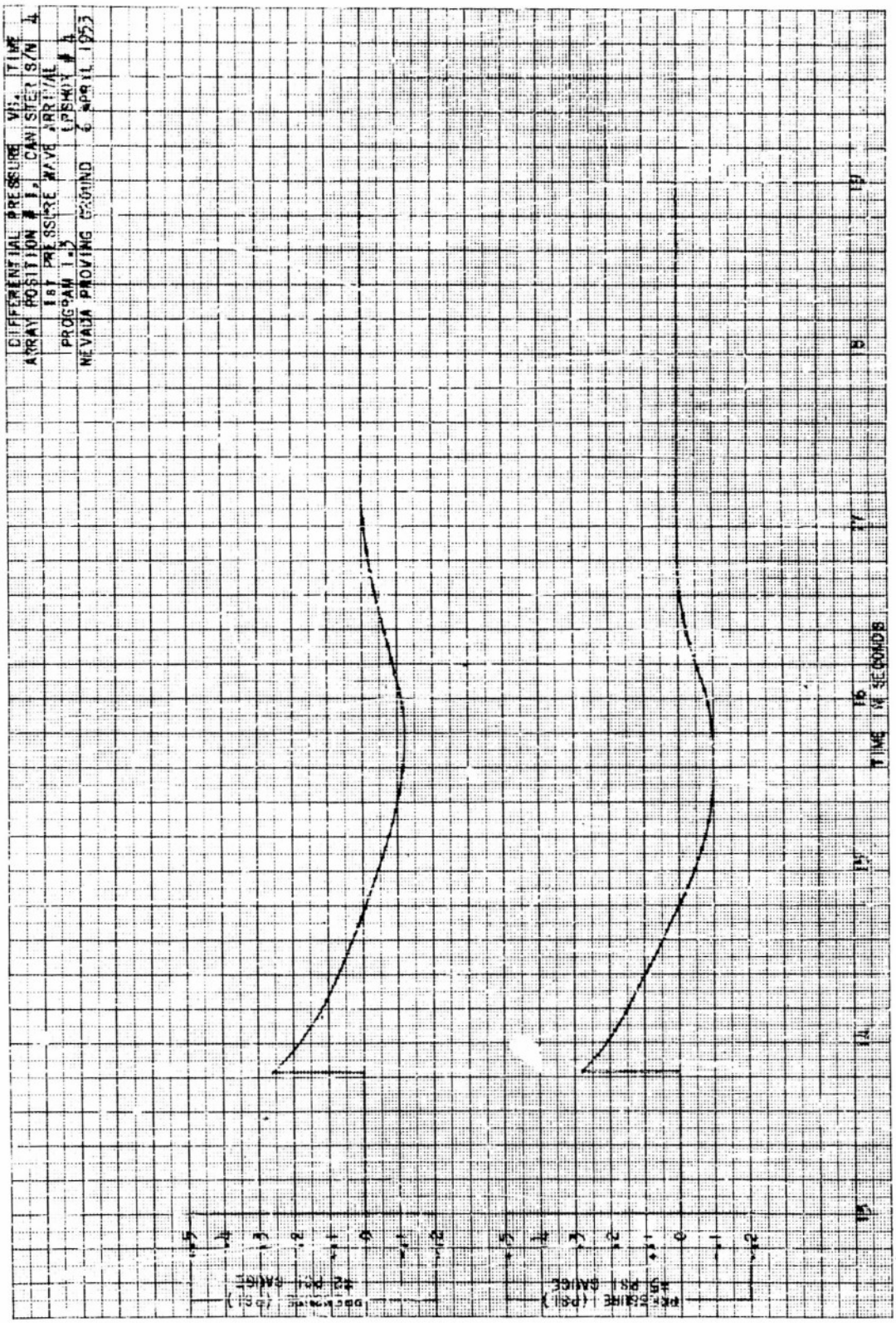

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION # 1, CANISTER S/N 1
1ST PRESSURE WAVE ARRIVAL
PROGRAM 1-2
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS

Figure 1

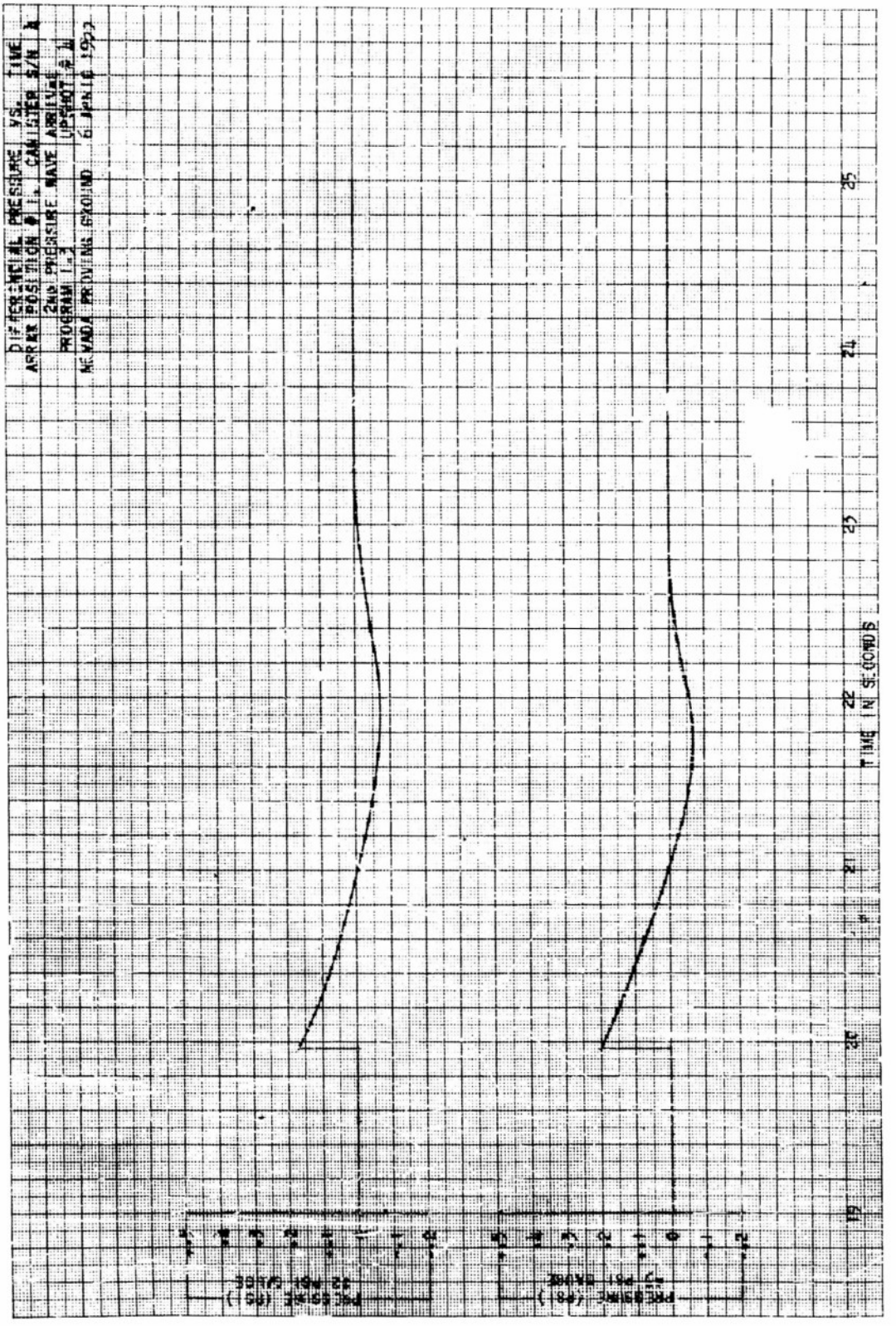

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION # 1a CANISTER S/N A
2ND PRESSURE WAVE ARRIVAL
PROGRAM 1-2
UPSHOT # 4
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS
21
22
23
24
25

Figure 2

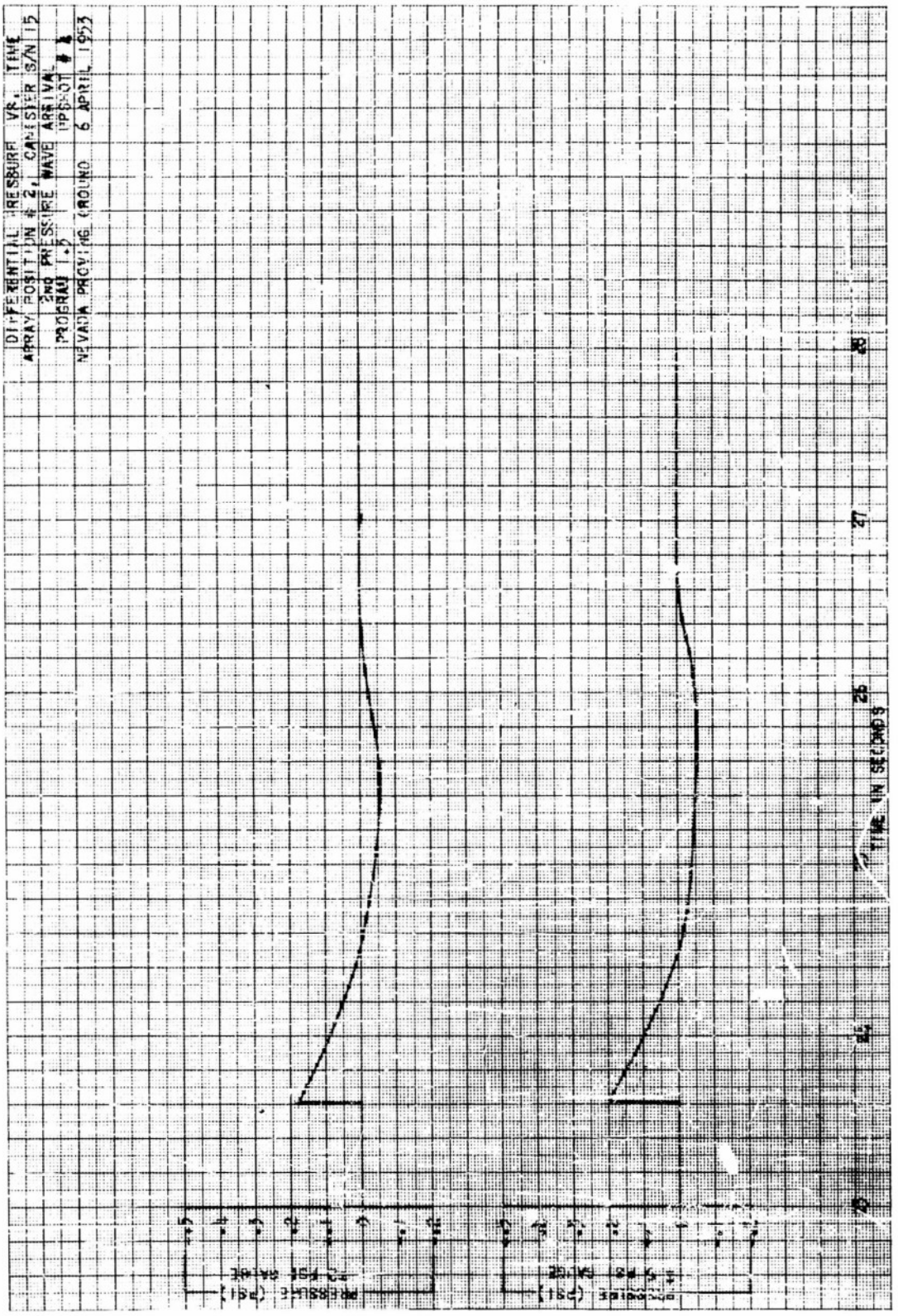

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION # 2, CANISTER S/N 15
2ND PRESSURE WAVE ARRIVAL
PROGRAM 1-5
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS
PRESSURE (PSI)

Figure 3

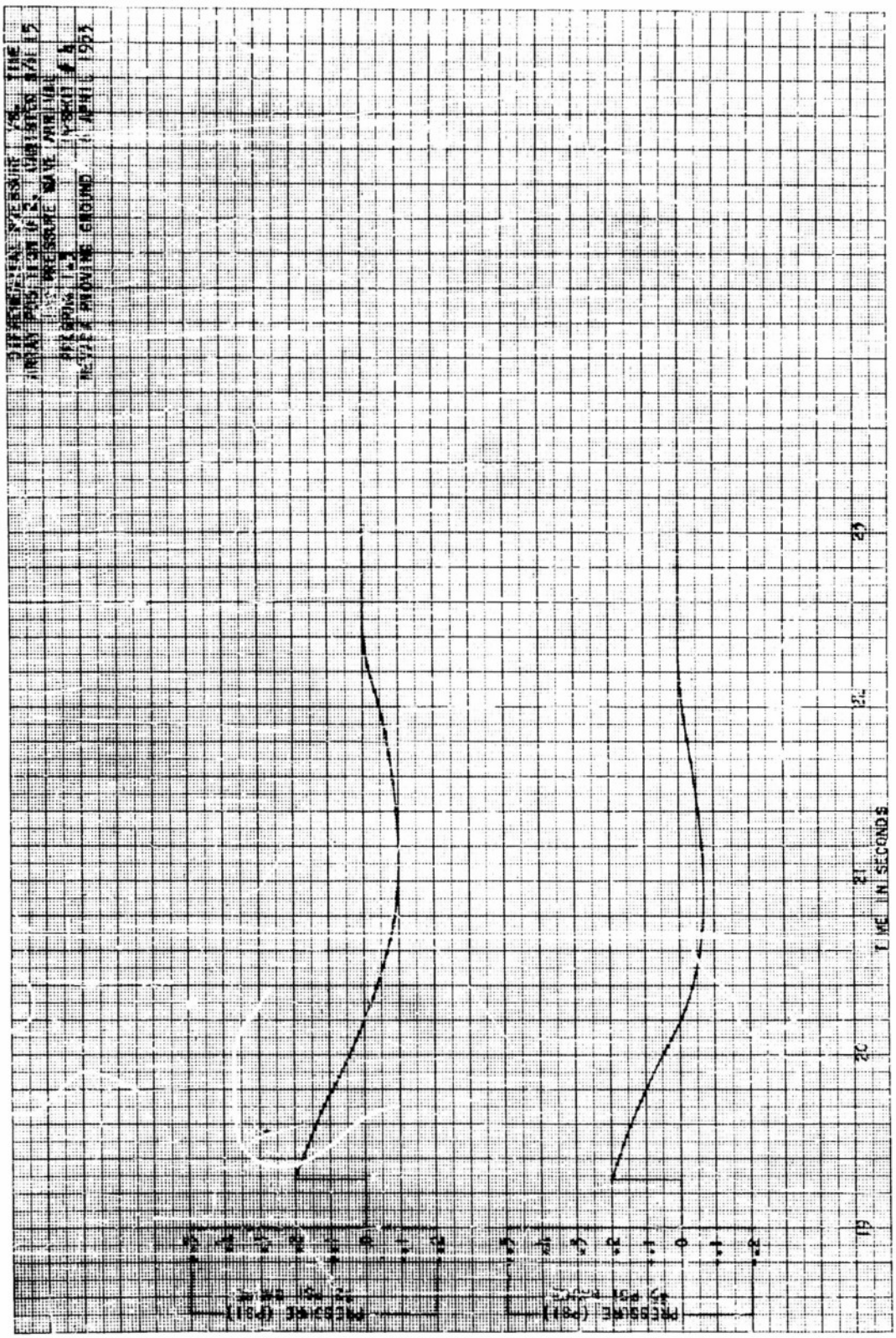


Figure 4

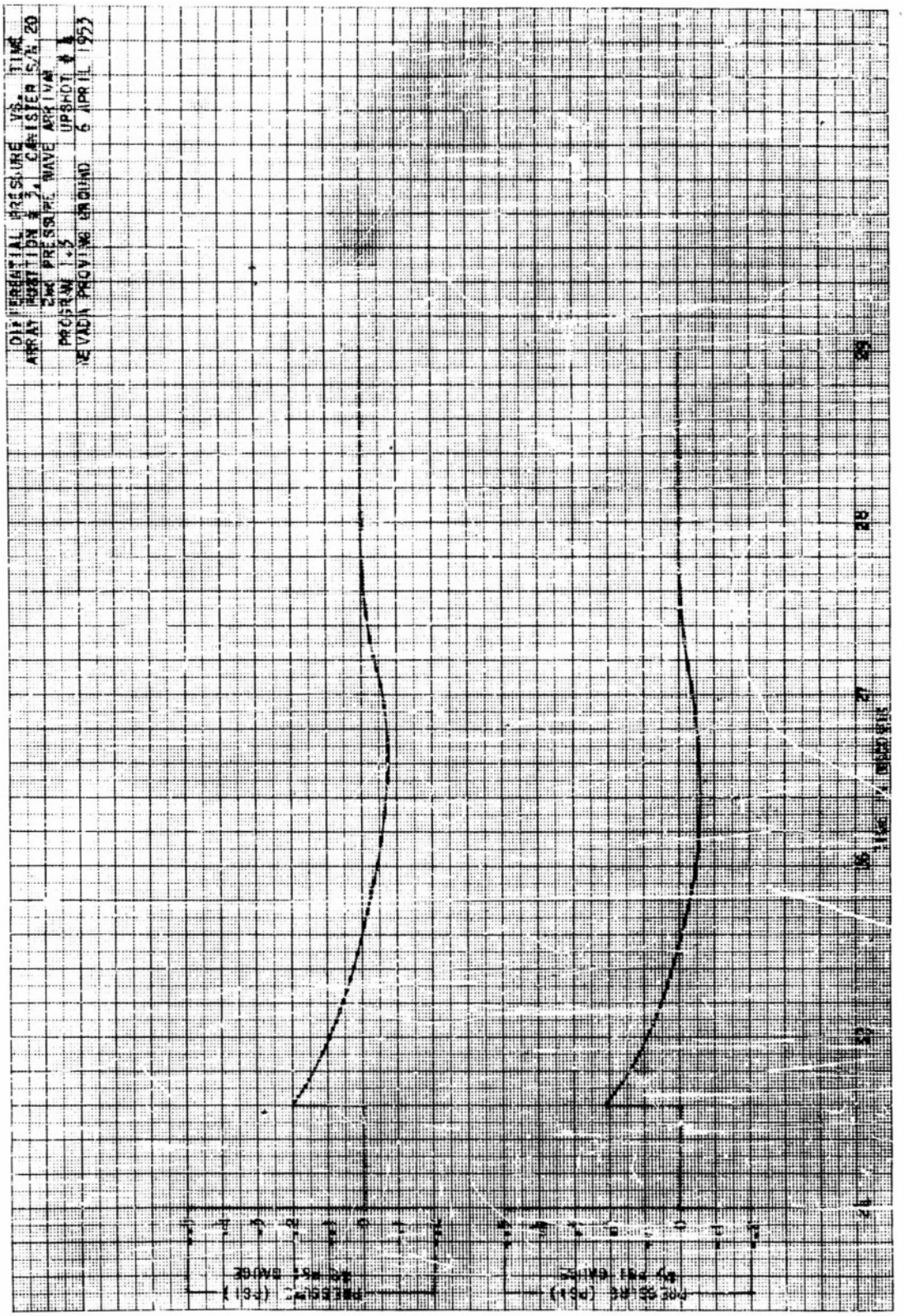

DIFFERENTIAL PRESSURE VS. TIME
ARRAY NO. 2 - 24 CAPACITOR S/N 20
2ND PRESSURE WAVE ARRIVAL
UPSHOT #1
PROGRAM 1-5
NEVADA PROVING GROUND 6 APRIL 1953

Figure 5

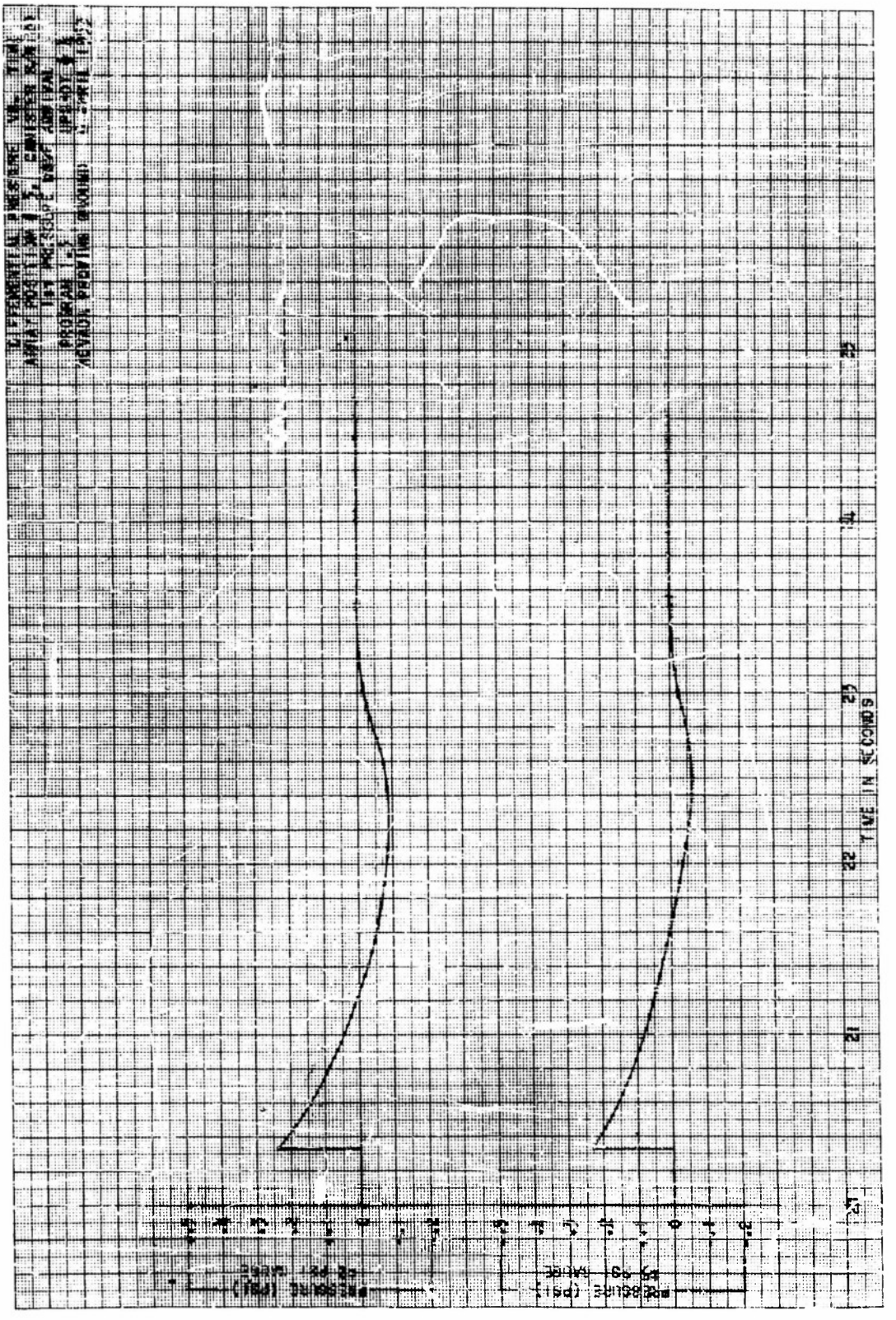


Figure 6

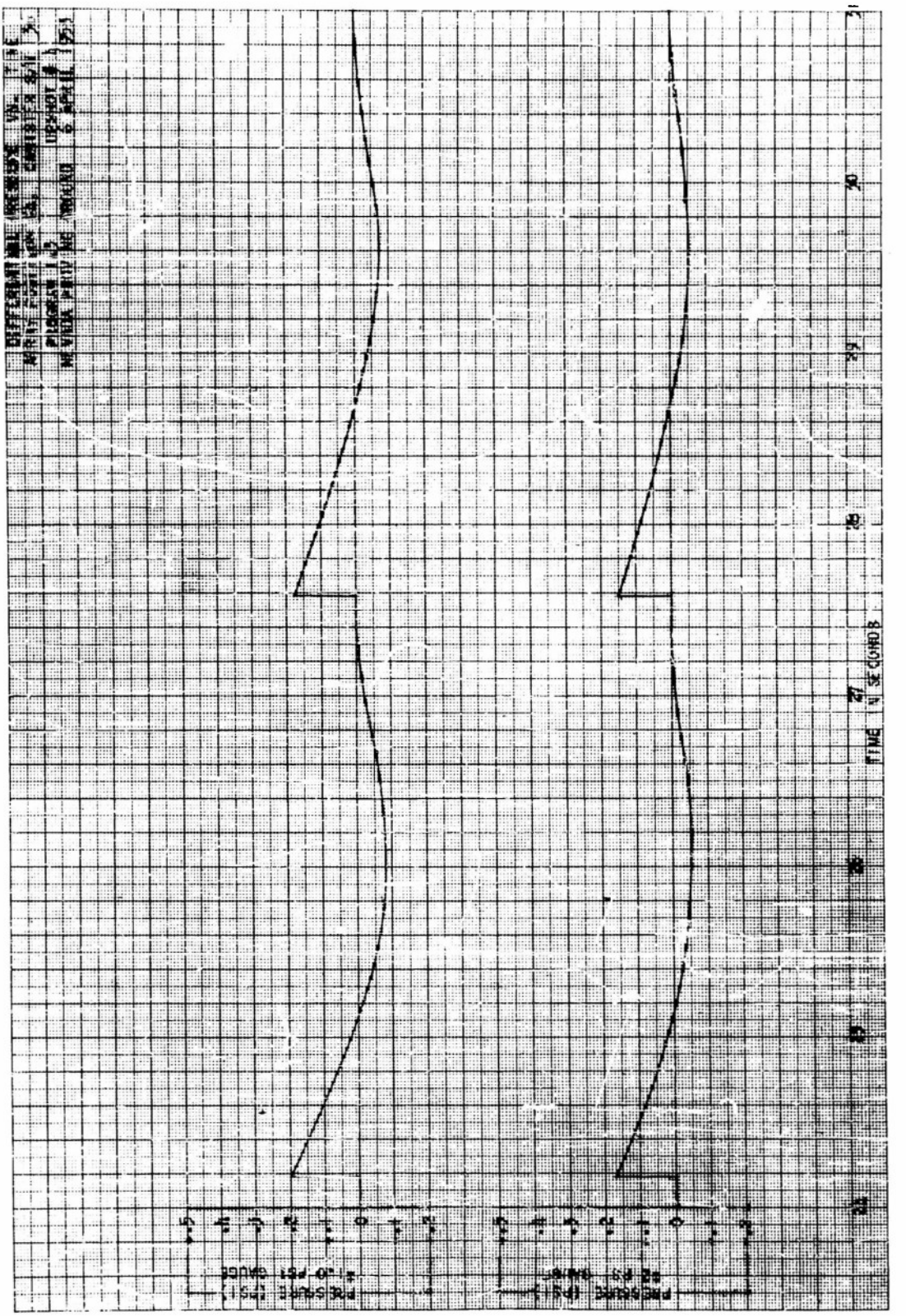


Figure 7

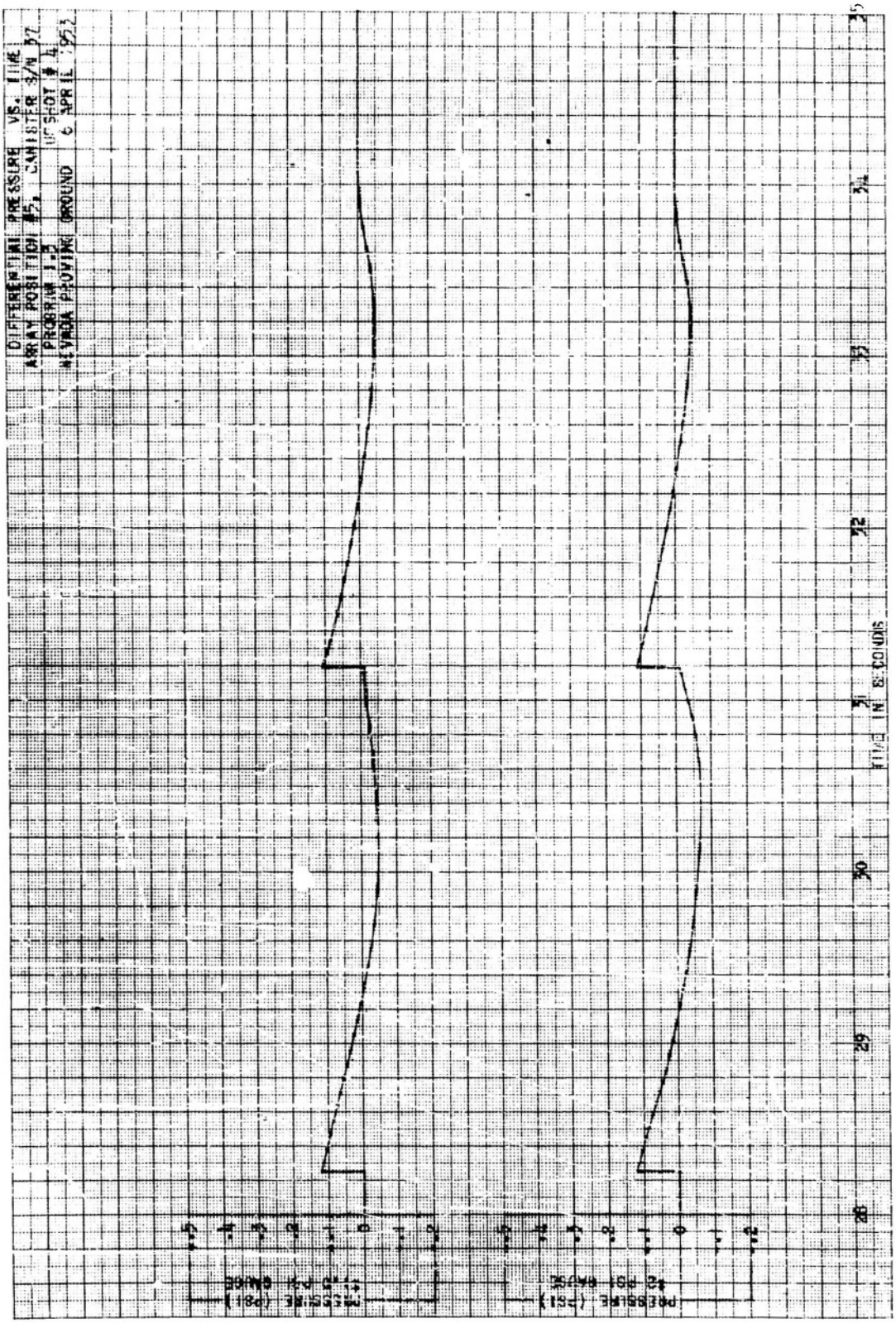

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #2, CANISTER 3/W 57
PROBE #4 UPSHOT # 4
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS
PRESSURE (PSI)

Figure 8

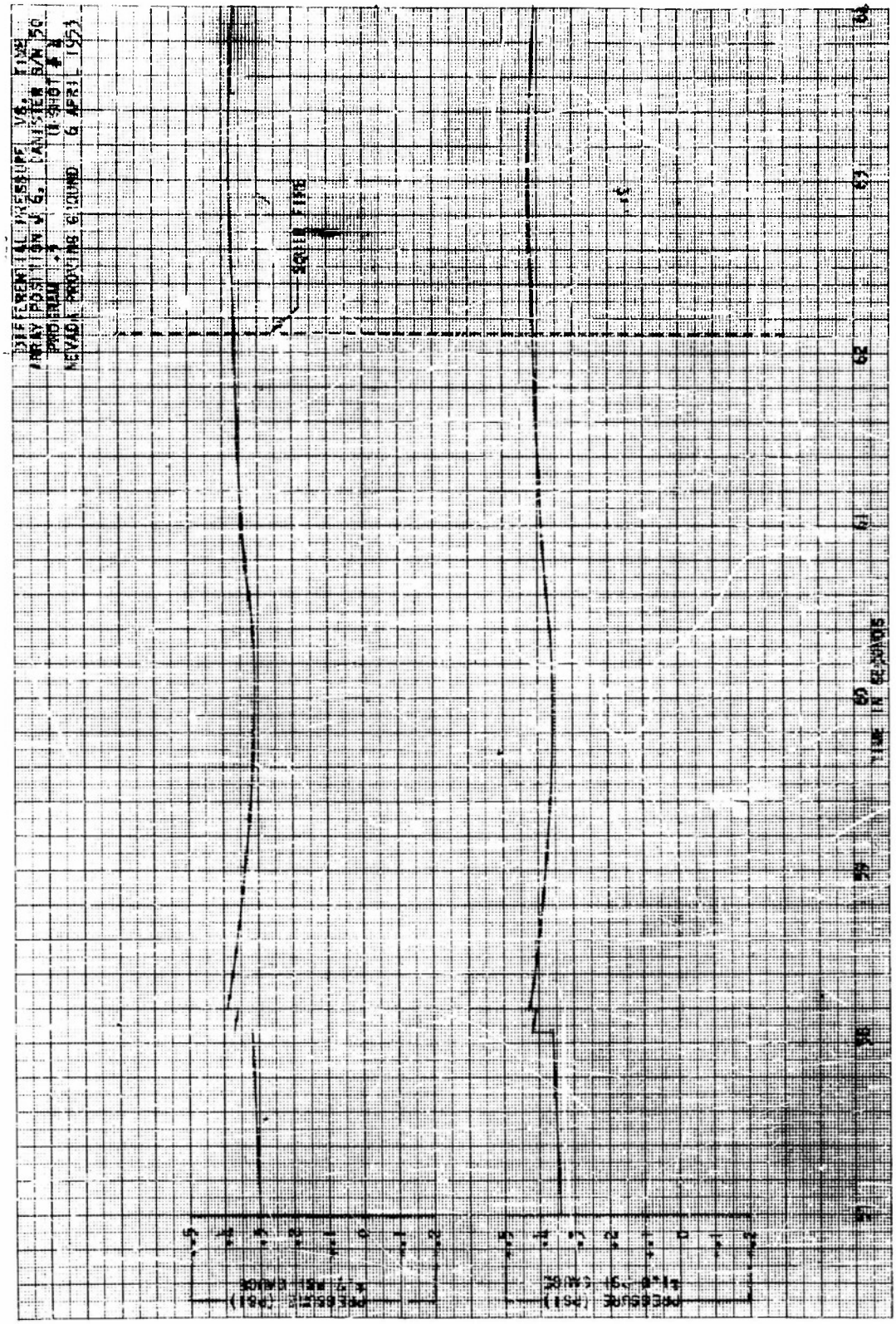

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION V 6, ANTENNA B/N 56
PROGRAM 3
NEVADA PROVING GROUND 6 APRIL 1953
(1 SHOT #4)
SCALE FIRE
TIME IN SECONDS

Figure 9

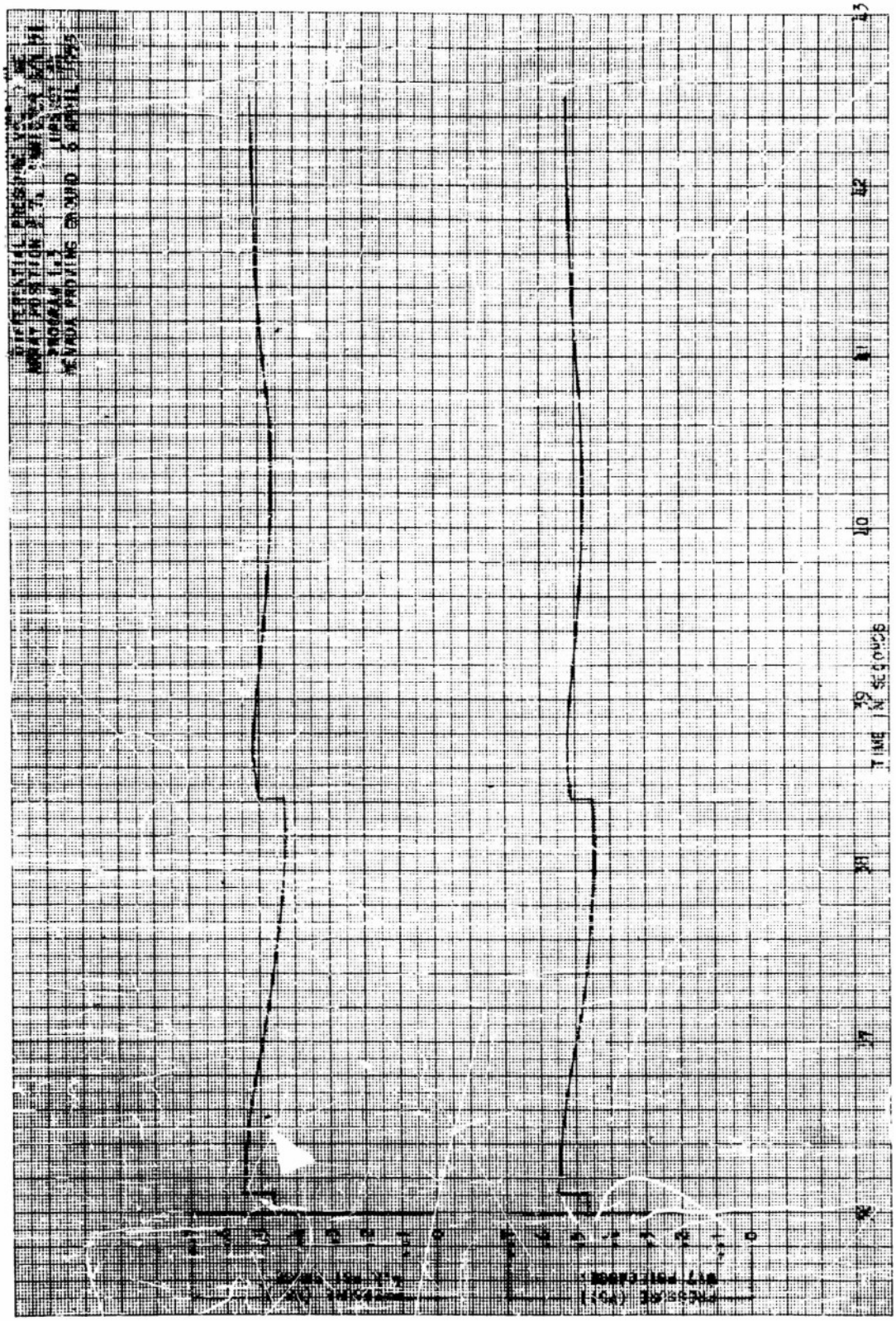


Figure 10

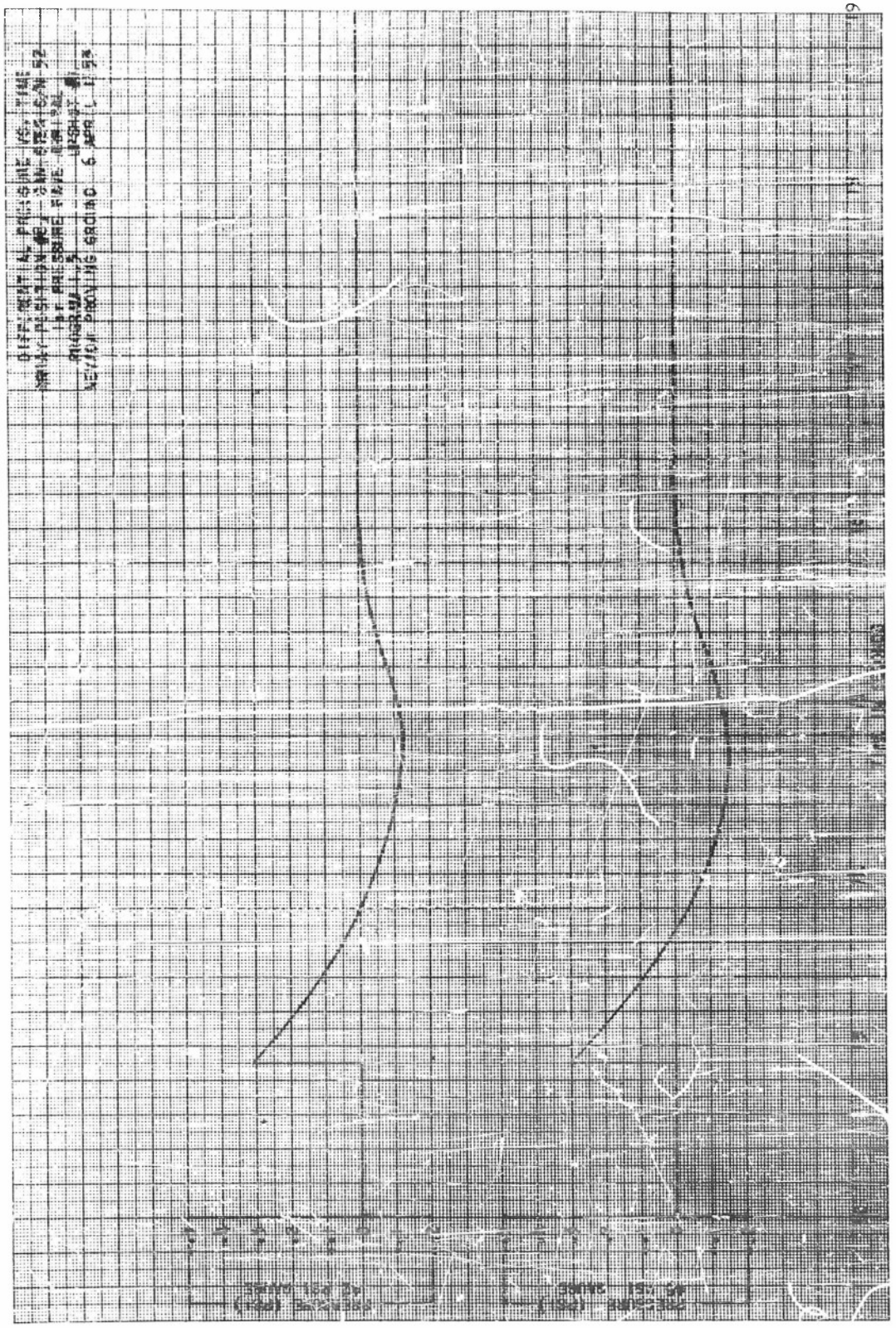


Figure 11

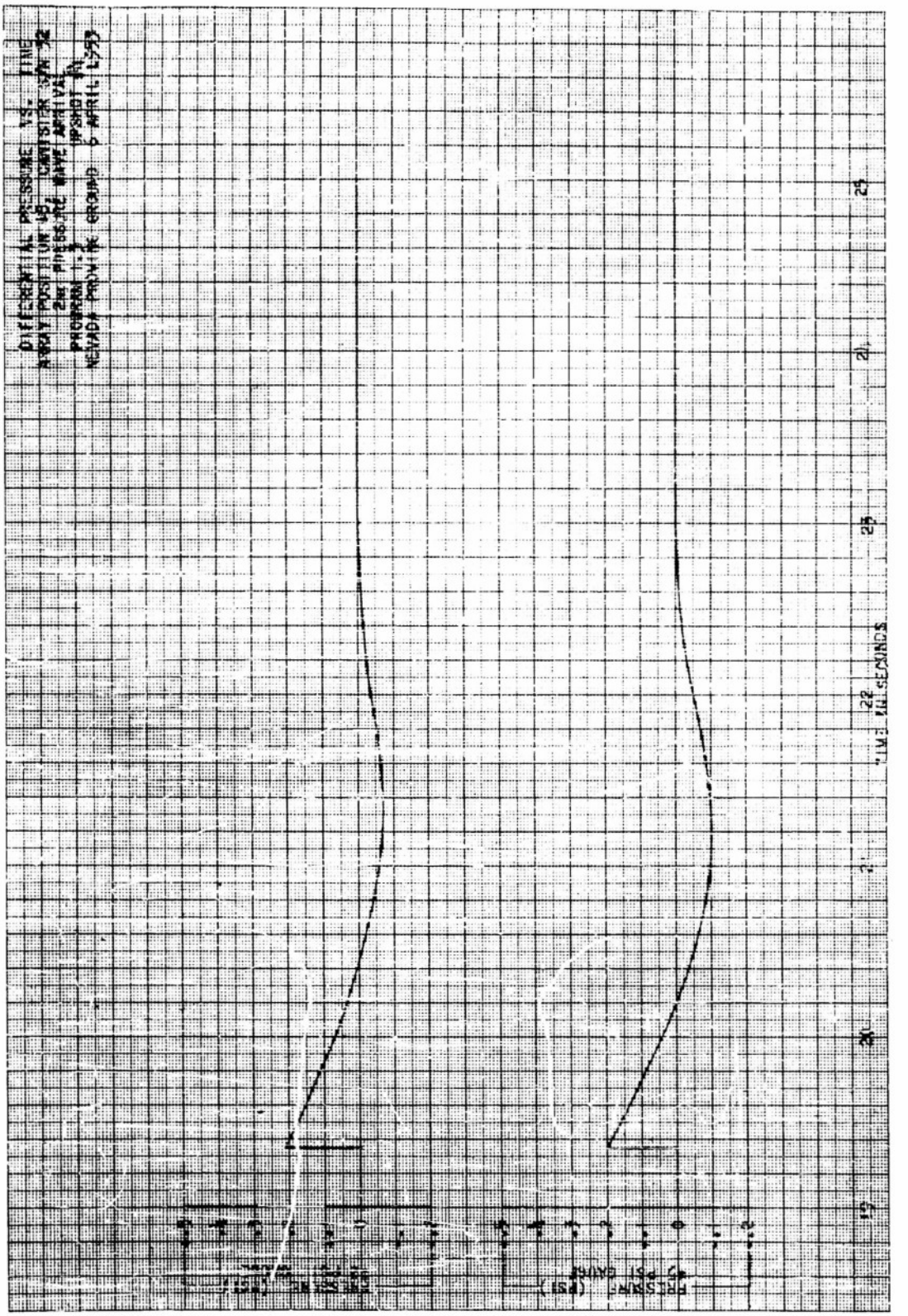


Figure 12

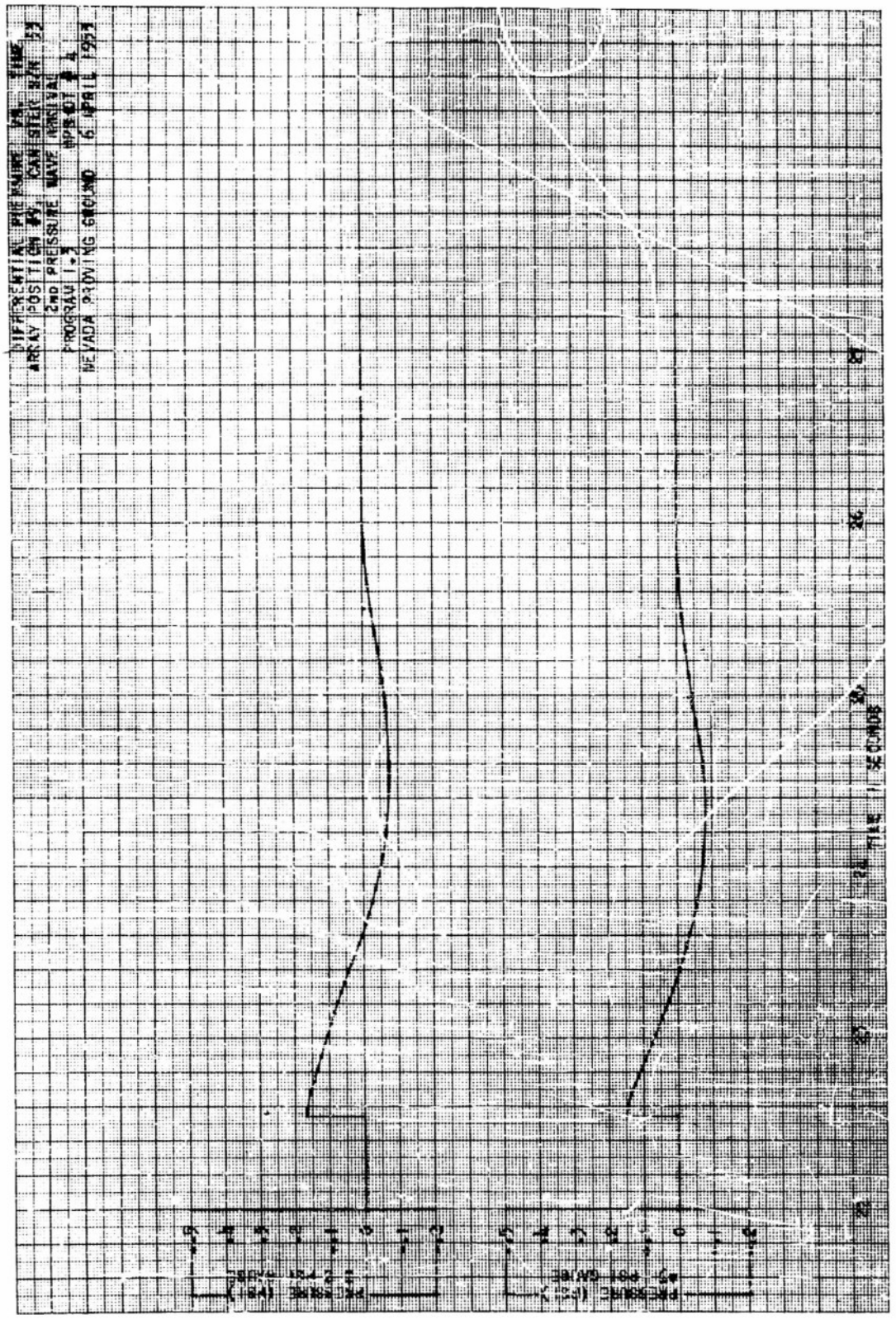

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #2 CAN SITE 2AW 53
2ND PRESSURE WAVE INCIDENT
PROGRAM I-2 SHOT # 4
NEVADA PROVING GROUND 6 APRIL 1953
PRESSURE (PSI)
TIME IN SECONDS

Figure 13

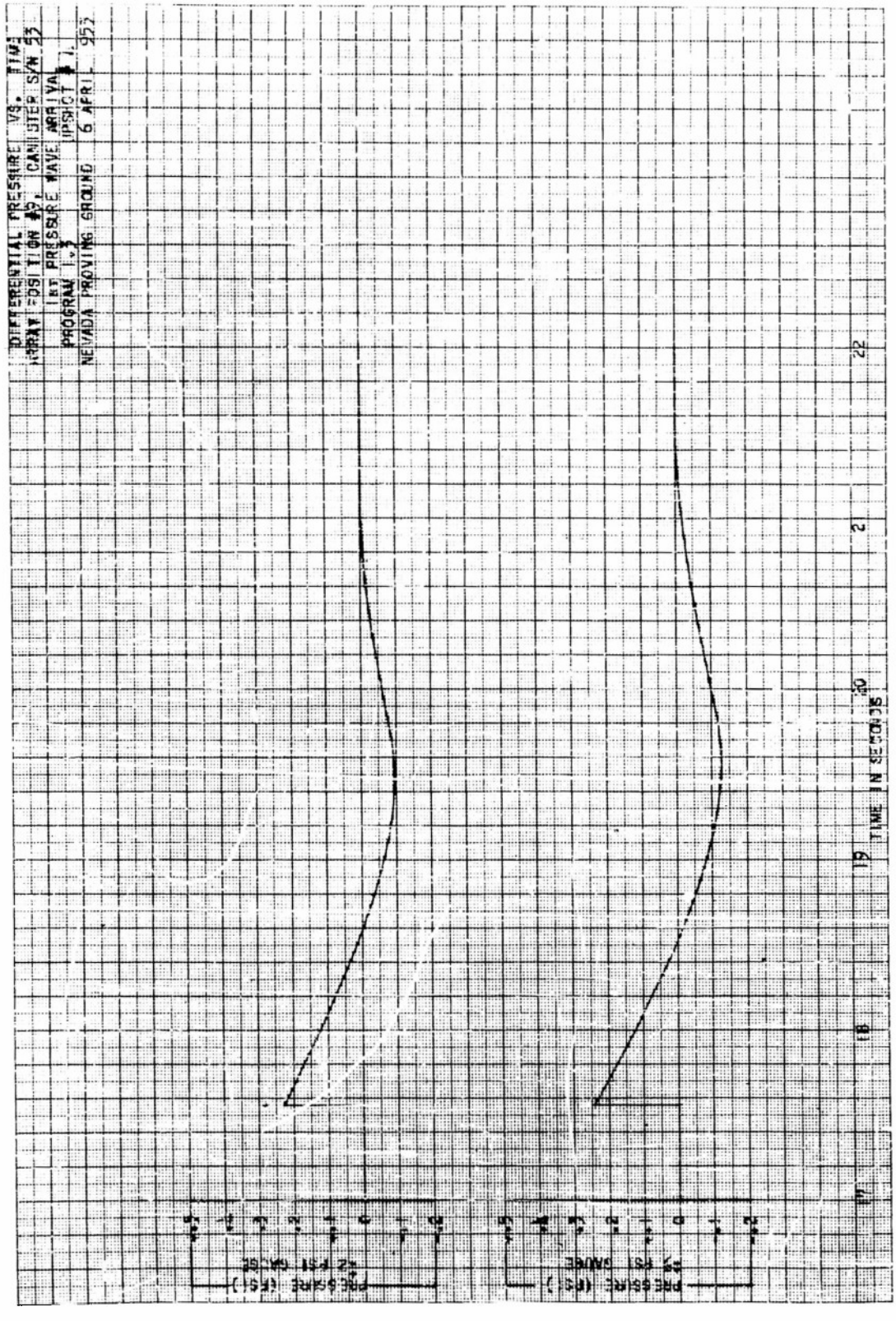

DIFFERENTIAL PRESSURE VS. TIME
GAUGE POSITION #5, CANISTER S/N 53
1ST PRESSURE WAVE ARRIVAL
PROGRAM 1-3
NEVADA PROVING GROUND 6 APRIL 1952
TIME IN SECONDS
PRESSURE (PSI)

Figure 14

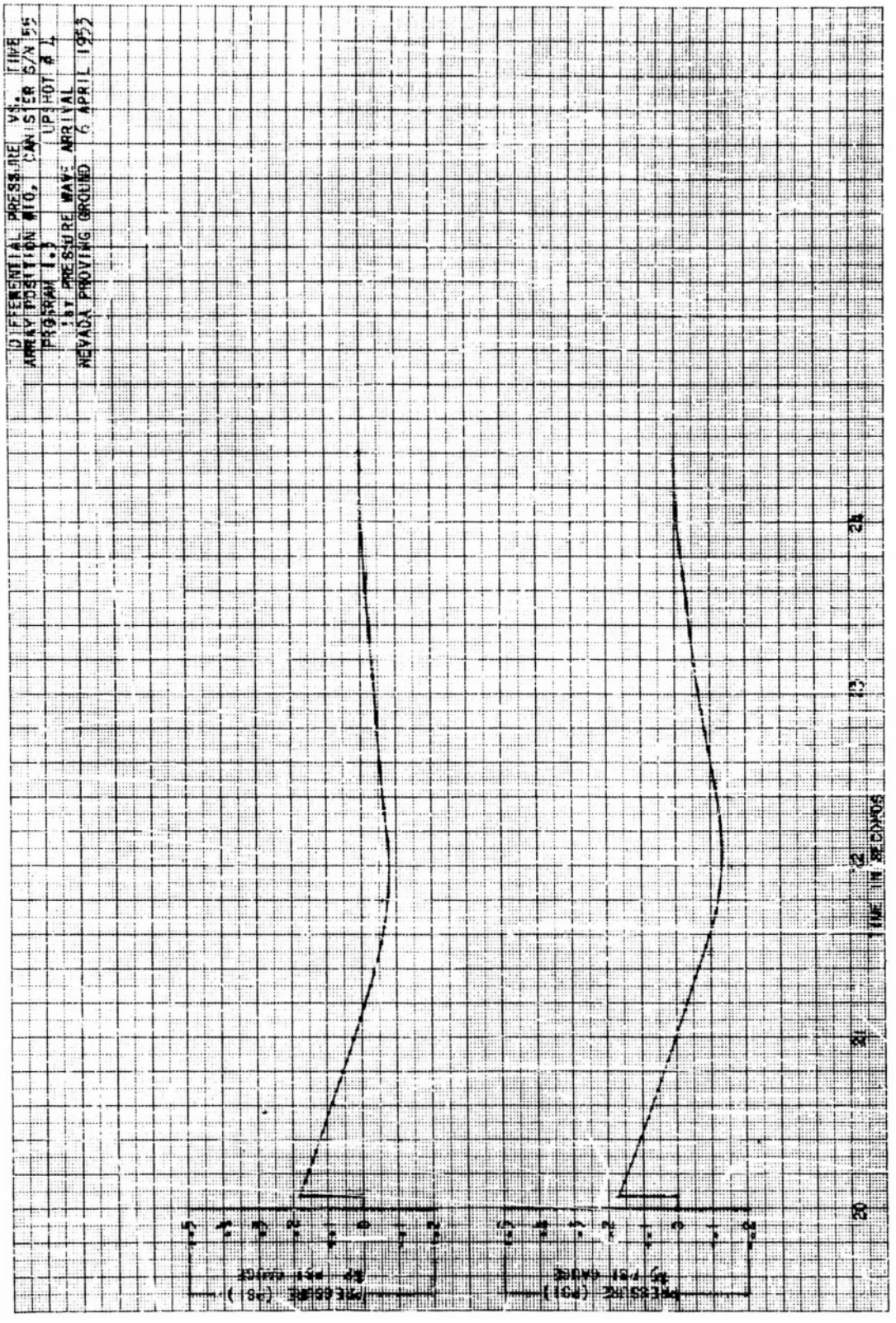

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION MID, CANISTER S/N 55
UPSHOT #4
PROGRAM I.)
1st PRESSURE WAVE ARRIVAL
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS

Figure 15

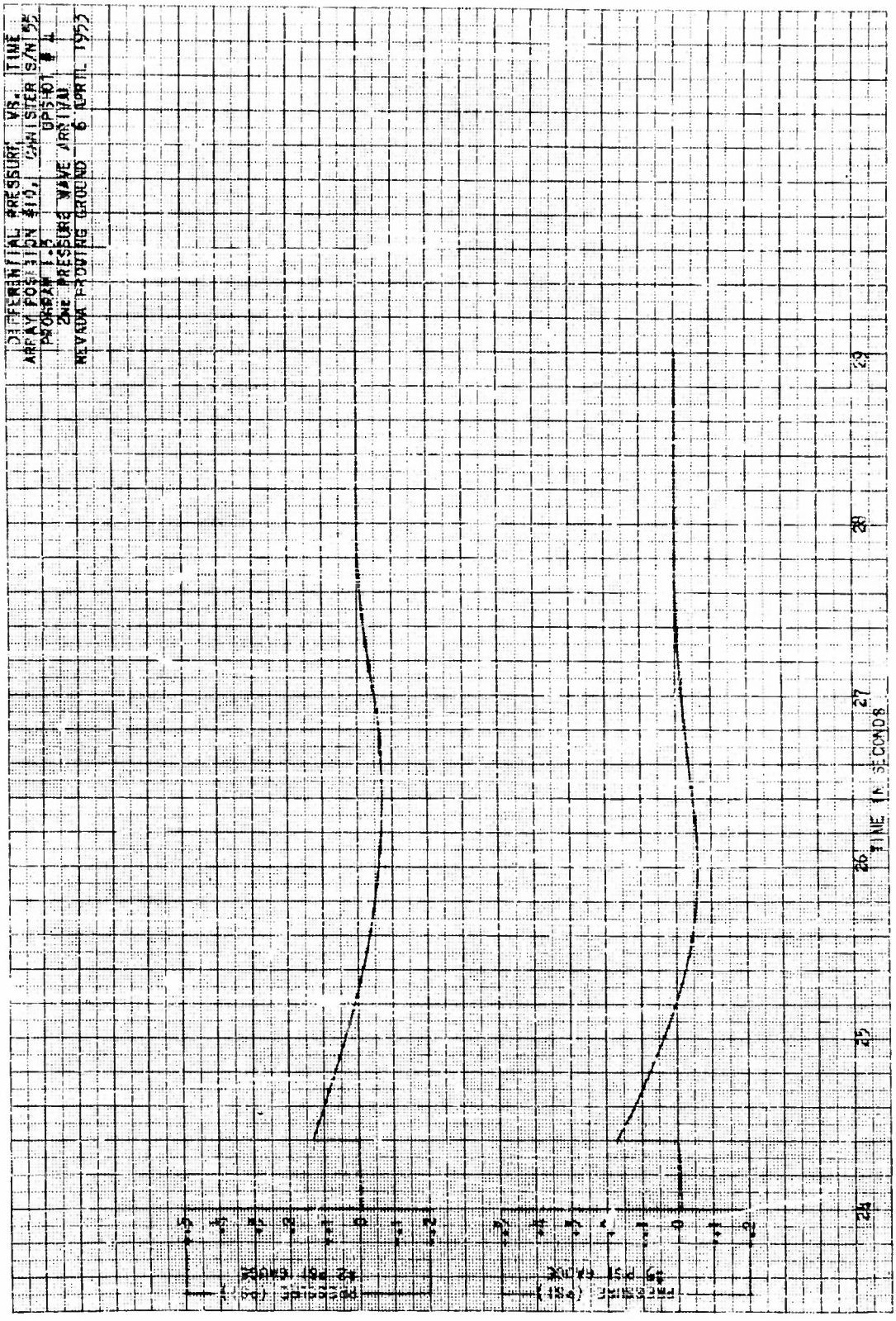

DIFFERENTIAL PRESSURE VS. TIME
AIRFAM POSITION #10, CANISTER S/N 52
PROGRAM I.C. UPSHOT # 4
2nd PRESSURE WAVE ARRIVAL
NEVADA PROVING GROUND 6 APRIL 1953
TIME IN SECONDS
24
25
26
27
28
29

Figure 16

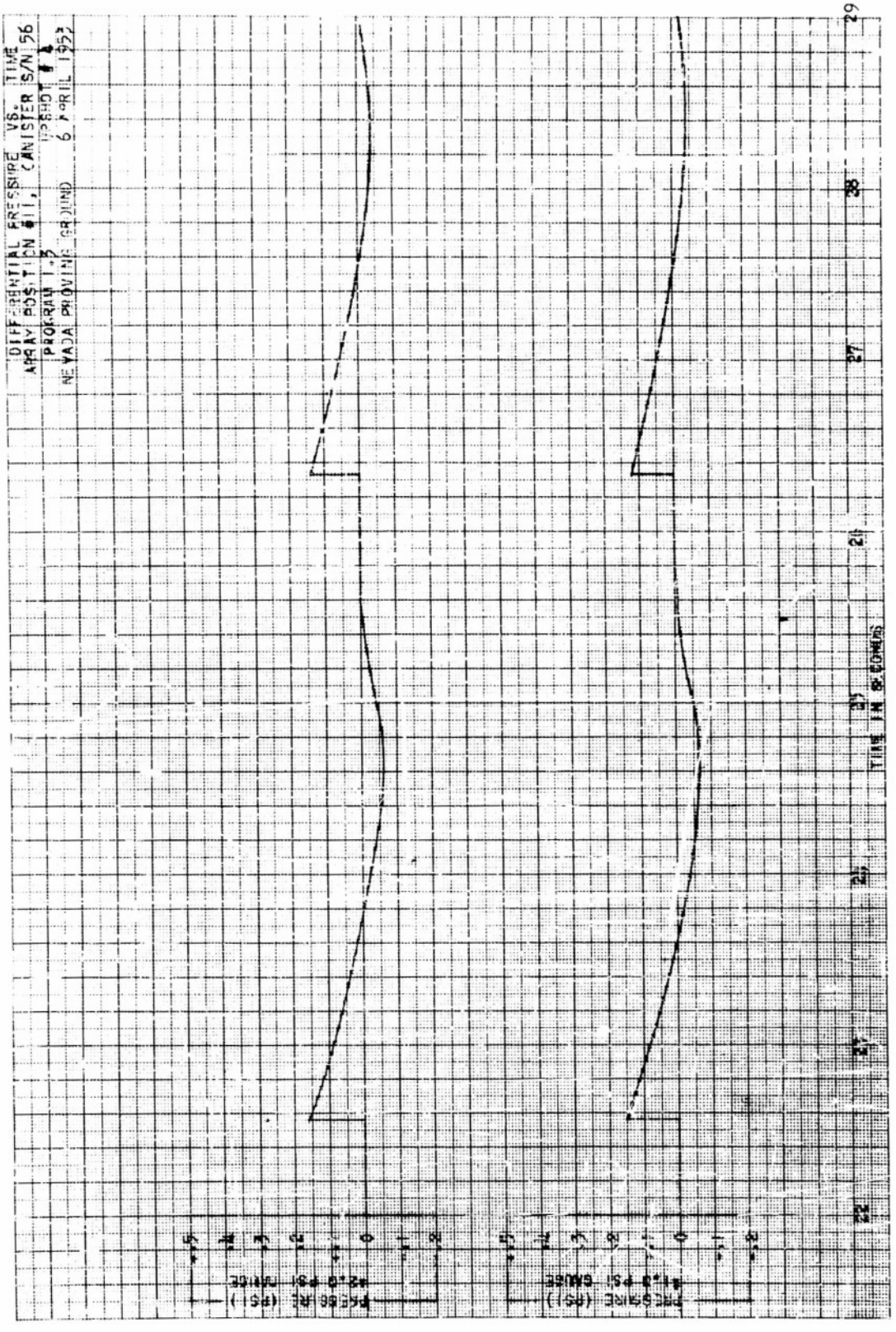

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #11, CANISTER S/N 56
PROGRAM I-B
NEVADA PROVING GROUND
6 APRIL 1953
TIME IN SECONDS
29
28
27
26
25
24
23
22

Figure 17

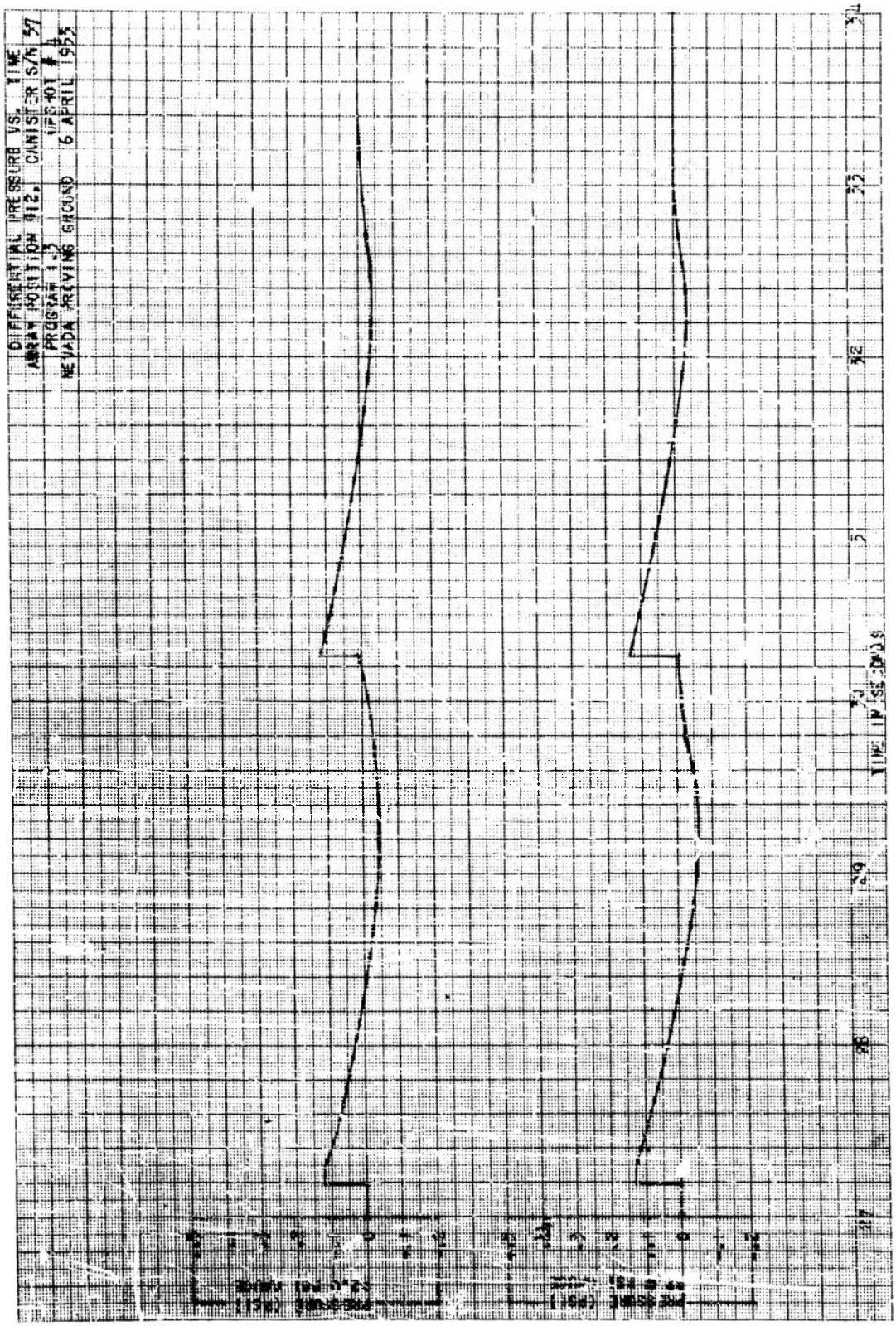

DIFFERENTIAL PRESSURE VS. TIME
ABOVE POSITION 912, CANISTER S/N 57
PROGRAM 1.3
NEVADA PROVING GROUND
6 APRIL 1955
TIME IN SECONDS

Figure 18

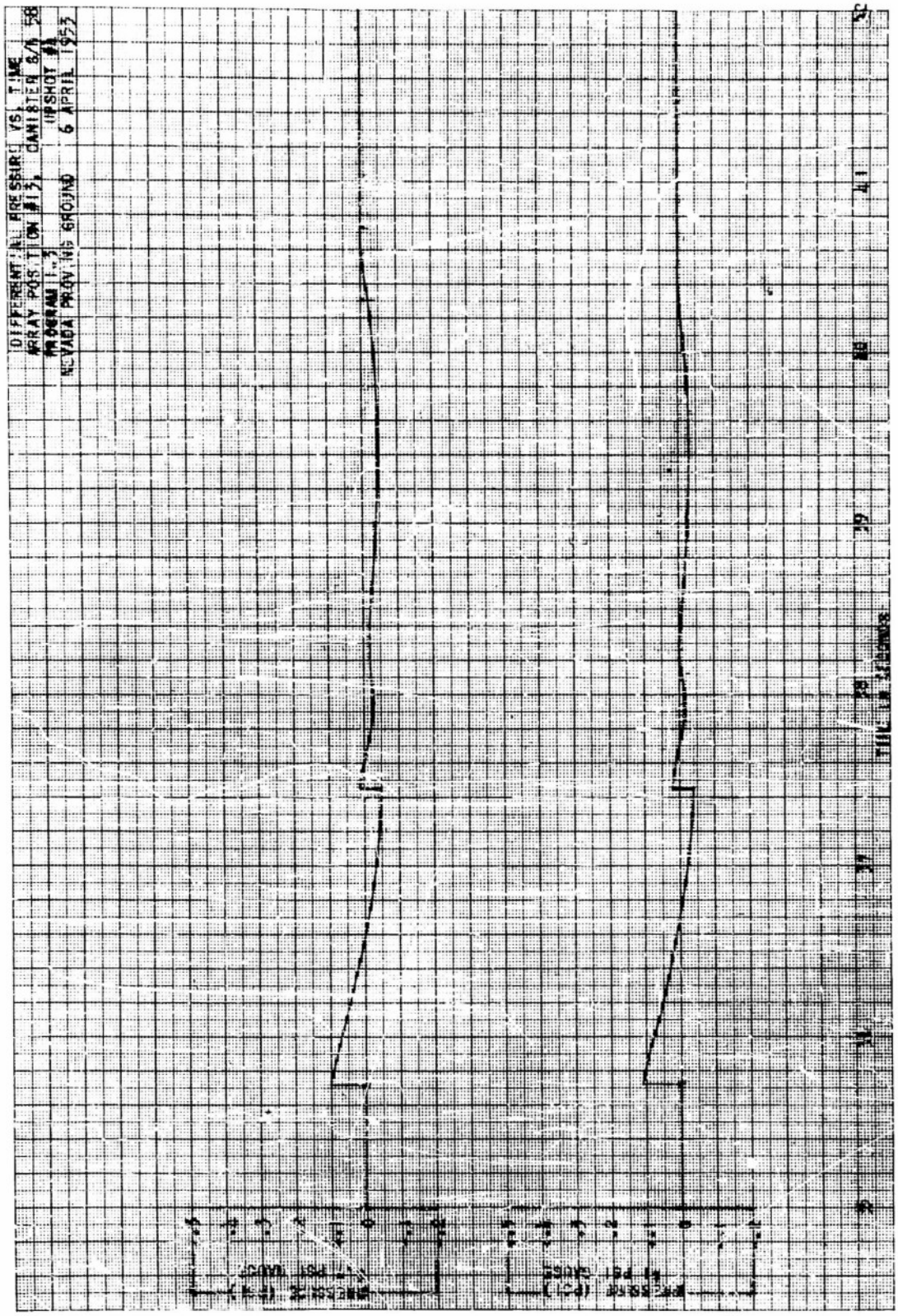

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #12, CANISTER S/N 58
PROGRAM II-3
NEVADA PROVING GROUND
UPSHOT #4
6 APRIL 1953

Figure 19

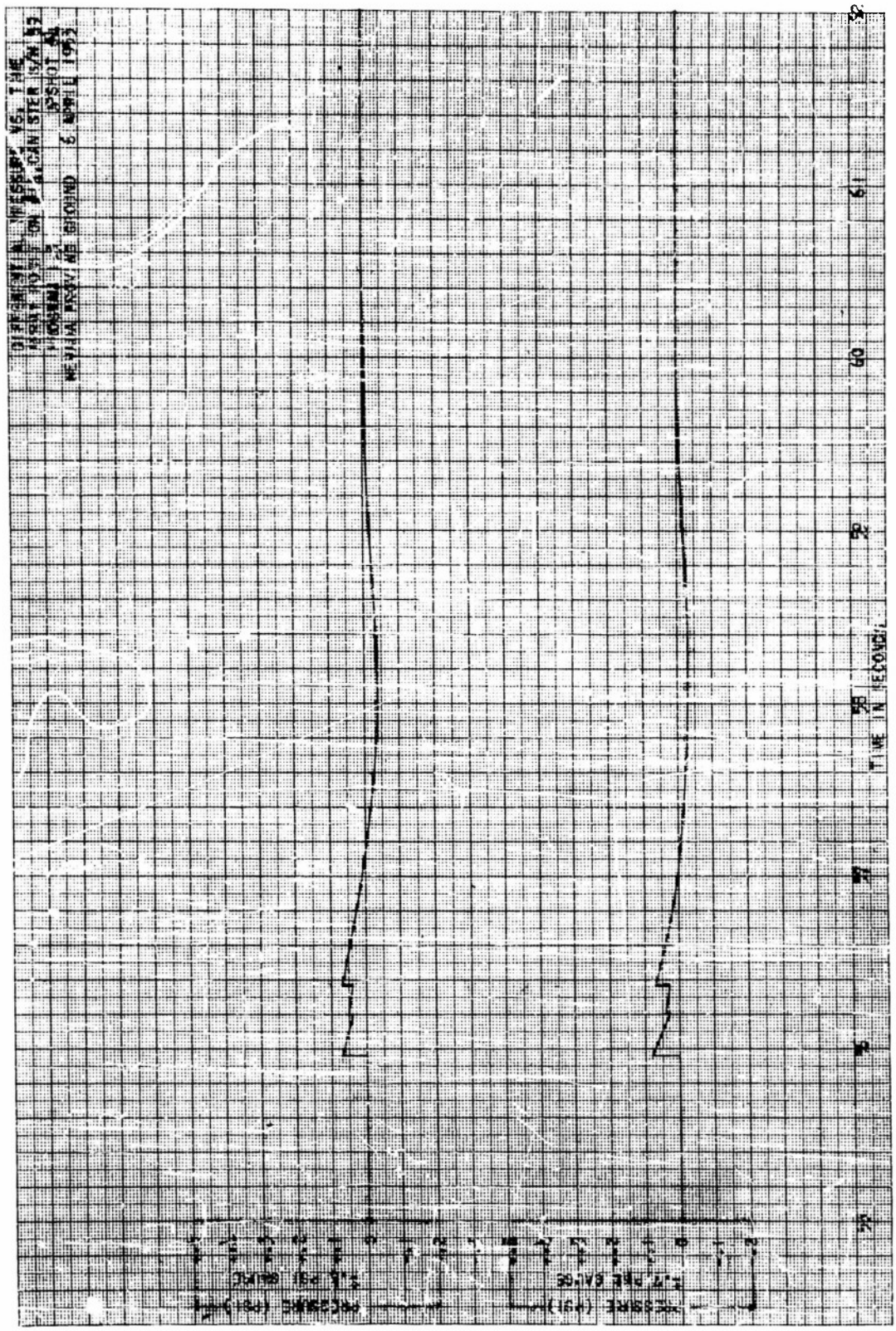


Figure 20

APPENDIX II

OVERPRESSURE DATA - UPSHOT NO. 4

Figure	Title
1	Tabular Overpressure Data, Array Position 1
2	Tabular Overpressure Data, Array Position 1
3	Tabular Overpressure Data, Array Position 1
4	Tabular Overpressure Data, Array Position 2
5	Tabular Overpressure Data, Array Position 2
6	Tabular Overpressure Data, Array Position 3
7	Tabular Overpressure Data, Array Position 3
8	Tabular Overpressure Data, Array Position 4
9	Tabular Overpressure Data, Array Position 4
10	Tabular Overpressure Data, Array Position 5
11	Tabular Overpressure Data, Array Position 5
12	Tabular Overpressure Data, Array Position 6
13	Tabular Overpressure Data, Array Position 6
14	Tabular Overpressure Data, Array Position 7
15	Tabular Overpressure Data, Array Position 7
16	Tabular Overpressure Data, Array Position 8
17	Tabular Overpressure Data, Array Position 8
18	Tabular Overpressure Data, Array Position 9
19	Tabular Overpressure Data, Array Position 9
20	Tabular Overpressure Data, Array Position 10
21	Tabular Overpressure Data, Array Position 10
22	Tabular Overpressure Data, Array Position 11
23	Tabular Overpressure Data, Array Position 11
24	Tabular Overpressure Data, Array Position 12
25	Tabular Overpressure Data, Array Position 12
26	Tabular Overpressure Data, Array Position 13
27	Tabular Overpressure Data, Array Position 13
28	Tabular Overpressure Data, Array Position 14
29	Tabular Overpressure Data, Array Position 14
30	Duration of First Positive Portion of First and Second Pressure Waves

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 1, CANISTER S/N 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
13.00	+ .02	+ .02	0	14.90	- .01	+ .02	- .03
13.85	+ .02	+ .02	0	15.00	- .02	+ .02	- .04
13.85	+ .28	+ .02	+ .26	15.20	- .05	+ .02	- .07
13.90	+ .24	+ .02	+ .22	15.40	- .08	+ .02	- .10
13.95	+ .22	+ .02	+ .20	15.60	- .10	+ .02	- .12
14.00	+ .20	+ .02	+ .18	15.80	- .10	+ .02	- .12
14.05	+ .19	+ .02	+ .17	16.00	- .09	+ .02	- .11
14.10	+ .18	+ .02	+ .16	16.20	- .06	+ .02	- .08
14.15	+ .14	+ .02	+ .12	16.40	- .04	+ .02	- .06
14.20	+ .14	+ .02	+ .12	16.60	- .02	+ .02	- .04
14.25	+ .13	+ .02	+ .11	16.80	0	+ .02	- .02
14.30	+ .12	+ .02	+ .10	17.00	+ .02	+ .02	0
14.35	+ .10	+ .02	+ .08	19.96	+ .02	+ .02	0
14.40	+ .09	+ .02	+ .07	19.96	+ .19	+ .02	+ .17
14.45	+ .08	+ .02	+ .06	20.10	+ .15	+ .02	+ .13
14.50	+ .07	+ .02	+ .05	20.20	+ .12	+ .021	+ .099
14.55	+ .06	+ .02	+ .04	20.40	+ .10	+ .022	+ .078
14.60	+ .05	+ .02	+ .03	20.60	+ .07	+ .023	+ .047
14.65	+ .04	+ .02	+ .02	20.80	+ .04	+ .024	+ .016
14.70	+ .03	+ .02	+ .01	21.00	+ .02	+ .025	- .005
14.75	+ .02	+ .02	0	21.20	0	+ .026	- .026
14.80	+ .01	+ .02	- .01	21.40	- .02	+ .027	- .047
14.85	0	+ .02	- .02	21.60	- .03	+ .028	- .058

14.5 KC BAND

PICKUP RANGE: 2 PSI

DATA TAKEN BY Johnson

ENGINEER

APPROVED BY

APPROVED BY

Figure 1

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 1, CANISTER S/N 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
(SEC)	(PSI)	(PSI)	(PSI)
21.80	- .04	+ .029	- .069
22.00	- .04	+ .030	- .070
22.40	- .01	+ .032	- .042
22.60	0	+ .033	- .033
22.80	+ .01	+ .034	- .024
23.00	+ .02	+ .035	- .015
23.40	+ .04	+ .037	- .003
23.50	+ .04	+ .038	- .002
23.60	+ .04	+ .039	- .001
24.00	+ .04	+ .04	0

14.5 KC BAND
PICKUP RANGE: 2 PSI

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ENGINEER
APPROVED BY
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Figure 2

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A. P.# 1 ; CANISTER S/N 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
13.00	+0.10	± .10	0	20.60	+0.18	± .10	+ .08
13.83	+0.10	± .10	0	20.80	+0.15	± .10	+ .05
13.85	+0.38	± .10	+ .28	21.00	+0.10	± .10	0
14.00	+0.30	± .10	+ .20	21.20	+0.08	± .10	- .02
14.20	+0.25	± .10	+ .15	21.40	0	± .10	- .10
14.40	+0.20	± .10	+ .10	21.60	0	± .10	- .10
14.60	+0.15	± .10	+ .05	21.80	0	± .10	- .10
14.80	+0.10	± .10	0	22.00	+0.05	± .10	- .05
15.00	+0.05	± .10	- .05	22.20	+0.05	± .10	- .05
15.20	0	± .10	- .10	22.40	+0.10	± .10	0
15.40	0	± .10	- .10	↕	↕	↕	↕
15.60	0	± .10	- .10	↕	↕	↕	↕
15.80	0	± .10	- .10	23.50	+0.10	± .10	0
16.20	+0.05	± .10	- .05				
16.40	+0.10	± .10	0				
16.60	+0.10	± .10	0				
↕	↕	↕	↕				
↕	↕	↕	↕				
18.00	+0.10	± .10	0				
19.96	+0.10	± .10	0				
19.96	+0.30	± .10	+ .20				
20.20	+0.25	± .10	+ .15				
20.40	+0.20	± .10	+ .10				

10.5 KC BAND

PICKUP RANGE: ± 5 PSI

DATA TAKEN BY Johnson, Aubrey — ENGINEER

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Figure 3

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 2 , CANISTER S/N 15

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
19.00	+0.10	+ .10	0		24.20	+0.16	+ .102	+ .058
19.28	+0.10	+ .10	0		24.40	+0.12	+ .104	+ .016
19.28	+0.30	+ .10	+ .20		24.80	+0.10	+ .108	- .008
19.40	+0.28	+ .10	+ .18		25.20	+0.06	+ .112	- .052
19.60	+0.24	+ .10	+ .14		25.40	+0.06	+ .114	- .054
19.80	+0.19	+ .10	+ .09		25.60	+0.05	+ .116	- .066
20.00	+0.14	+ .10	+ .04		25.80	+0.08	+ .118	- .038
20.30	+0.09	+ .10	- .01		26.00	+0.10	+ .12	- .02
20.50	+0.05	+ .10	- .05		27.00	+0.13	+ .13	0
20.70	+0.02	+ .10	- .08					
21.00	0	+ .10	- .10					
21.20	0	+ .10	- .10					
21.40	+0.01	+ .10	- .09					
21.60	+0.02	+ .10	- .08					
21.80	+0.03	+ .10	- .07					
22.00	+0.05	+ .10	- .05					
22.20	+0.09	+ .10	- .01					
22.40	+0.10	+ .10	0					
23.61	+0.10	+ .10	0					
23.61	+0.28	+ .10	+ .18					
23.70	+0.25	+ .10	+ .15					
23.80	+0.21	+ .10	+ .11					
24.00	+0.19	+ .10	+ .09					

14.5 KC BAND

PICKUP RANGE: ± 2 PSI

DATA TAKEN BY JOHNSON | ENGINEER

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Figure 4

Pacific Division
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DIFFERENTIAL PRESSURE
A.P.# 2 , CANISTER S/N 15

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
19.00	+0.20	+0.20	0		27.00	+0.20	+0.20	0	
19.28	+0.20	+0.20	0						
19.28	+0.40	+0.20	+0.20						
19.40	+0.38	+0.20	+0.18						
19.60	+0.35	+0.20	+0.15						
19.80	+0.30	+0.20	+0.10						
20.00	+0.25	+0.20	+0.05						
20.20	+0.20	+0.20	0						
20.50	+0.15	+0.20	-0.05						
21.00	+0.15	+0.20	-0.05						
21.50	+0.15	+0.20	-0.05						
22.00	+0.20	+0.20	0						
22.50	+0.20	+0.20	0						
23.61	+0.20	+0.20	0						
23.61	+0.40	+0.20	+0.20						
23.80	+0.35	+0.20	+0.15						
24.00	+0.30	+0.20	+0.10						
24.20	+0.25	+0.20	+0.05						
24.50	+0.20	+0.20	0						
25.00	+0.18	+0.20	-0.02						
25.50	+0.15	+0.20	-0.05						
26.00	-0.15	+0.20	-0.05						
26.50	+0.20	+0.20	0						

10.5 KC BAND

PICKUP RANGE: ±5 PSI

DATA TAKEN BY Johnson | ENGINEER

APPROVED BY | APPROVED BY

Figure 5

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 3 , CANISTER S/N 20

DATE PAGE
REPORT NO.
PROJECT NO.

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
20.0	+0.05	± .05	0						
20.33	+0.05	± .05	0						
20.33	+0.29	± .05	+ .24						
20.40	+0.25	± .05	+ .21						
20.60	+0.18	± .05	+ .13						
20.80	+0.14	± .05	+ .09						
21.00	+0.10	± .05	+ .05						
21.20	+0.06	± .05	+ .01						
21.40	+0.04	± .05	- .01						
21.60	0	± .05	- .05						
22.00	-0.02	± .05	- .07						
22.40	-0.04	± .05	- .09						
23.00	+0.04	± .05	- .01						
23.50	+0.05	± .05	0						
24.60	+0.05	± .05	0						
24.60	+0.25	± .05	+ .20						
24.70	+0.20	± .052	+ .148						
25.00	+0.15	± .055	+ .094						
25.50	+0.08	± .064	+ .016						
26.00	+0.04	± .071	- .031						
26.50	0	± .079	- .079						
27.50	+0.08	± .094	- .014						
28.00	+0.10	± .10	0						

14.5 KC BAND
PICKUP RANGE: ± 2 PSI

DATA TAKEN BY Johnson
ENGINEER
APPROVED BY
APPROVED BY

Figura 6

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 3 , CANITSER S/N 20

DATE _____ PAGE _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
20.0	+ 0.12	+ .12	0
20.33	+ 0.12	+ .12	0
20.33	+ 0.35	+ .12	+ .23
20.50	+ 0.30	+ .12	+ .18
21.00	+ 0.20	+ .12	+ .08
21.50	+ 0.15	+ .12	+ .03
22.00	+ 0.10	+ .12	- .02
22.50	+ 0.05	+ .12	- .07
23.00	+ 0.10	+ .12	- .02
23.50	+ 0.12	+ .12	0
24.60	+ 0.12	+ .12	0
24.60	+ 0.33	+ .12	+ .21
24.80	+ 0.25	+ .125	+ .125
25.00	+ 0.20	+ .130	+ .07
25.50	+ 0.18	+ .142	+ .078
26.00	+ 0.15	+ .154	+ .004
26.50	+ 0.10	+ .177	- .077
27.00	+ 0.15	+ .186	- .036
28.00	+ 0.20	+ .200	0

1015 KC BAND
PICKUP RANGE: ± 5 PSI

DATA TAKEN BY Johnson
ENGINEER
APPROVED BY
APPROVED BY

Figure 7

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 4 , CANISTER S/N 36

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
24.00	+0.06	+ .05	0	27.70	+0.22	+ .062	+ .158
24.18	+0.06	+ .06	0	27.80	+0.20	+ .063	+ .137
24.18	+0.26	+ .06	+ .20	28.00	+0.17	+ .066	+ .103
24.20	+0.24	+ .06	+ .18	28.20	+0.14	+ .069	+ .071
24.30	+0.23	+ .06	+ .17	28.40	+0.12	+ .072	+ .048
24.40	+0.21	+ .06	+ .15	28.60	+0.09	+ .075	+ .015
24.60	+0.16	+ .06	+ .10	28.80	+0.06	+ .078	- .018
24.80	+0.12	+ .06	+ .06	29.00	+0.05	+ .081	- .031
25.00	+0.08	+ .06	+ .02	29.20	+0.03	+ .084	- .054
25.20	+0.05	+ .06	- .01	29.50	+0.02	+ .089	- .069
25.40	+0.02	+ .06	- .04	29.80	+0.03	+ .093	- .063
25.60	+0.01	+ .06	- .05	30.00	+0.04	+ .096	- .056
25.80	-0.01	+ .06	- .07	30.20	+0.06	+ .099	- .039
26.00	-0.02	+ .06	- .08	30.50	+0.08	+ .104	- .024
26.10	-0.03	+ .06	- .09	31.00	+0.11	+ .11	+ .0
26.20	-0.02	+ .06	- .08	31.50	+0.12	+ .12	+ .0
26.40	-0.015	+ .06	- .075				
26.80	+0.02	+ .06	- .04				
27.00	+0.04	+ .06	- .02				
27.20	+0.05	+ .06	- .01				
27.40	+0.06	+ .06	0				
27.59	+0.06	+ .06	0				
27.59	+0.24	+ .06	+ .18				

14.5 KC BAND

PICKUP RANGE: ±1.0 PSI

DATA TAKEN BY Johnson | ENGINEER

APPROVED BY | APPROVED BY

Figure 8

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 4 , CANISTER S/N 36

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24.00	+0.02	± .02	0	28.00	+0.11	± .026	± .084
24.18	+0.02	± .02	0	28.20	+0.09	± .029	± .061
24.18	+0.19	± .02	±.17	28.40	+0.08	± .032	± .048
24.30	+0.15	± .02	± .13	28.60	+0.06	± .035	± .025
24.40	+0.12	± .02	± .10	28.80	+0.04	± .038	± .002
24.60	+0.10	± .02	± .08	28.90	+0.02	± .040	- .020
24.80	+0.08	± .02	± .06	29.20	+0.01	± .045	- .035
25.00	+0.04	± .02	± .02	29.40	0	± .048	- .048
25.20	+0.02	± .02	0	29.60	0	± .051	- .051
25.40	+0	± .02	- .02	29.90	+0.01	± .056	- .046
25.60	-0.02	± .02	- .04	30.20	+0.03	± .060	- .030
25.80	-0.02	± .02	- .04	30.50	+0.05	± .065	- .015
26.00	-0.03	± .02	- .05	31.00	+0.07	± .070	0
26.20	-0.04	± .02	- .06	31.50	+0.08	± .080	0
26.40	-0.03	± .02	- .05				
26.60	-0.02	± .02	- .04				
26.80	0	± .02	- .02				
27.00	+0.01	± .02	- .01				
27.20	+0.02	± .02	0				
27.59	+0.02	± .02	0				
27.59	+0.17	± .02	± .15				
27.70	+0.15	± .021	± .139				
27.80	+0.13	± .023	± .107				

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY Jones & Orr | ENGINEER

APPROVED BY | APPROVED BY

Figure 9

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 5 , CANISTER S/N 37

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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
28.00	+0.08	+ .08	0	31.50	+0.15	+ .085	+.065
28.25	+0.08	+ .08	0	31.80	+0.14	+ .088	+.052
28.25	+0.20	+ .08	+ .12	32.00	+0.10	+ .090	+.010
28.30	+0.19	+ .08	+ .11	32.20	+0.09	+ .092	- .002
28.40	+0.18	+ .08	+ .10	32.40	+0.08	+ .094	- .014
28.50	+0.17	+ .08	+ .09	32.60	+0.07	+ .096	- .026
28.60	+0.16	+ .08	+ .08	32.80	+0.065	+ .098	- .033
28.80	+0.14	+ .08	+ .06	33.00	+0.06	+ .100	- .040
28.90	+0.11	+ .08	+ .03	33.20	+0.06	+ .102	- .042
29.20	+0.09	+ .08	+ .01	33.40	+0.065	+ .104	- .039
29.50	+0.06	+ .08	- .02	33.60	+0.075	+ .106	- .031
29.80	+0.05	+ .08	- .03	33.80	+0.10	+ .108	- .008
30.00	+0.03	+ .08	- .05	34.00	+0.11	+ .110	0
30.10	+0.03	+ .08	- .05	34.50	+0.115	+ .115	0
30.20	+0.035	+ .08	- .045				
30.30	+0.04	+ .08	- .04				
30.50	+0.04	+ .08	- .04				
30.70	+0.045	+ .08	- .035				
30.90	+0.06	+ .08	- .02				
31.00	+0.07	+ .08	- .01				
31.19	+0.07	+ .08	- .01				
31.19	+0.19	+ .08	+ .11				
31.30	+0.17	+ .085	+ .087				

14.5 KC BAND

PICKUP RANGE: ± 1.0 PSI

DATA TAKEN BY Johnson, Aubrey | ENGINEER

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Figure 10

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

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TIME (SEC.)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
28.00	+0.08	+ .08	0	33.60	+0.08	+ .106	-.026
28.25	+0.08	+ .08	0	34.00	+0.11	+ .110	0
28.25	+0.20	+ .08	+ .12	34.50	+0.115	+ .115	0
28.30	+0.185	+ .08	+ .105	35.00	+0.12	+ .120	0
28.40	+0.18	+ .08	+ .10				
28.50	+0.175	+ .08	+ .095				
28.60	+0.15	+ .08	+ .07				
28.80	+0.12	+ .08	+ .04				
29.00	+0.09	+ .08	+ .01				
29.20	+0.08	+ .08	0				
29.50	+0.05	+ .08	- .03				
30.00	+0.02	+ .08	- .06				
30.40	+0.01	+ .08	- .07				
30.70	+0.02	+ .08	- .06				
31.00	+0.05	+ .08	- .03				
31.19	+0.07	+ .08	- .01				
31.19	+0.19	+ .08	+ .11				
31.40	+0.17	+ .084	+ .086				
31.60	+0.13	+ .086	+ .044				
32.00	+0.09	+ .090	0				
32.50	+0.075	+ .095	- .020				
33.00	+0.06	+ .100	- .040				
33.30	+0.06	+ .103	- .043				

10.5 KC BAND

PICKUP RANGE: ± 2 PSI

DATA TAKEN BY JOHNSON

ENGINEER

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Figure 11

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
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TIME (SEC)	PICKUP PRESS. (PSI)
57.00	+0.34
58.06	+0.36
58.06	+0.42
58.20	+0.41
58.20	+0.43
58.30	+0.42
58.40	+0.41
58.50	+0.41
58.60	+0.40
58.80	+0.39
59.00	+0.38
59.50	+0.37
60.00	+0.36
60.50	+0.37
61.00	+0.39
61.50	+0.40
62.00	+0.41
62.50	+0.42
63.50	+0.42
64.00	+0.41
65.00	+0.40
66.50	+0.35

10.5 KC BAND

PICKUP RANGE: ±1.0 Psi

DATA TAKEN BY JOHNSON | ENGINEER

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Figure 12

Pacific Division
Bendix Aviation Corp
North Hollywood, Calif.

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DIFFERENTIAL PRESSURE
A.P.# 6 , CANISTER S/N 50

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TIME (SEC)	PICKUP PRESS. (PSI)				TIME (SEC)	PICKUP PRESS. (PSI)			
57.00	+0.30				64.00	+0.37			
58.00	+0.32				64.50	+0.36			
58.06	+0.37				65.00	+0.35			
58.20	+0.36				65.50	+0.34			
58.20	+0.39				66.00	+0.32			
58.30	+0.38				66.50	+0.30			
58.40	+0.37								
58.50	+0.37								
58.60	+0.34								
58.80	+0.35								
59.00	+0.34								
59.30	+0.325								
59.50	+0.32								
59.70	+0.31								
59.90	+0.31								
60.00	+0.31								
60.50	+0.32								
61.00	+0.35								
61.50	+0.36								
62.00	+0.36								
62.50	+0.37								
63.00	+0.38								
63.50	+0.37								

14.5 KC BAND

PICKUP RANGE: ± .7 PSI

DATA TAKEN BY [illegible] ENGINEER

APPROVED BY APPROVED BY

Figure 13

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 7 , CANISTER S/N 51

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TIME (SEC)	PICKUP PRESS. (PSI)				TIME (SEC)	PICKUP PRESS. (PSI)			
35.00	+0.46				39.80	+0.48			
36.11	+0.47				40.20	+0.475			
36.11	+0.55				40.50	+0.48			
36.20	+0.55				41.00	+0.495			
36.40	+0.54				41.50	+0.51			
36.60	+0.53				42.00	+0.515			
36.80	+0.52				42.50	+0.52			
37.00	+0.50				44.70	+0.54			
37.20	+0.48								
37.40	+0.47								
37.60	+0.46								
37.80	+0.455								
38.00	+0.45								
38.20	+0.44								
38.42	+0.45								
38.42	+0.51								
38.50	+0.515								
38.60	+0.52								
38.70	+0.52								
38.90	+0.52								
39.10	+0.51								
39.40	+0.50								
39.60	+0.49								

10.5 KC BAND

PICKUP RANGE: 1.7 PSI

DATA TAKEN BY JOHNSON | ENGINEER

APPROVED BY | APPROVED BY

Figure 14

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 7 , CANISTER S/N 51

DATE _____ PAGE _____
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TIME (SEC)	PICKUP PRESS. (PSI)				TIME (SEC)	PICKUP PRESS. (PSI)			
35.00	+0.46				39.40	+0.49			
36.11	+0.47				39.60	+0.48			
36.11	+0.55				39.80	+0.475			
36.20	+0.545				40.00	+0.47			
36.40	+0.54				40.50	+0.465			
36.60	+0.53				41.00	+0.49			
36.80	+0.51				41.50	+0.505			
37.00	+0.49				42.00	+0.51			
37.20	+0.48				42.50	+0.52			
37.40	+0.465				44.70	+0.53			
37.60	+0.45								
37.80	+0.44								
38.00	+0.43								
38.20	+0.43								
38.42	+0.43								
38.42	+0.50								
38.50	+0.505								
38.60	+0.515								
38.70	+0.52								
38.80	+0.515								
38.90	+0.51								
39.00	+0.505								
39.20	+0.50								

14.5 KC BAND

PICKUP RANGE: ± .4 PSI

DATA TAKEN BY JOHNSON | ENGINEER

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Figure 15

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A?P.# 8 , CANISTER S/N 52

DATE _____ P. OF _____
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PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
12.00	+.05	+.05	0	19.70	+.19	+.053	+.137
12.90	+.05	+.05	0	20.00	+.11	+.056	+.054
12.90	+.36	+.05	+.31	20.40	+.07	+.060	+.010
13.00	+.32	+.05	+.27	20.80	+.03	+.064	-.034
13.10	+.29	+.05	+.24	21.20	0	+.068	-.068
13.20	+.23	+.05	+.18	21.50	+.01	+.071	-.061
13.40	+.17	+.05	+.12	22.00	+.04	+.076	-.036
13.60	+.10	+.05	+.05	22.50	+.07	+.080	-.010
13.80	+.05	+.05	0	23.00	+.08	+.085	-.005
14.00	+.01	+.05	-.04	24.00	+.09	+.090	0
14.20	0	+.05	-.05				
14.40	-.03	+.05	-.08				
14.60	-.07	+.05	-.12				
14.80	-.08	+.05	-.13				
15.00	-.06	+.05	-.11				
15.20	-.02	+.05	-.07				
15.40	0	+.05	-.05				
15.60	+.02	+.05	-.03				
15.80	+.04	+.05	-.01				
16.00	+.05	+.05	0				
19.35	+.05	+.05	0				
19.35	+.26	+.05	+.21				
19.50	+.23	+.051	+.179				

14.5 KC BAND

PICKUP RANGE: ± 2PSI

DATA TAKEN BY JOHNSON

ENGINEER

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Figure 16

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
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DATE _____ PAGE _____
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TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.		TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.	
+12.00	+0.20	+0.20	0						
12.90	+0.20		0						
12.70	+0.50		+0.30						
13.00	+0.45		+0.25						
13.50	+0.25		+0.05						
14.00	+0.15		-0.05						
14.50	+0.05		-0.15						
15.00	+0.05		-0.15						
15.50	+0.15		-0.05						
16.00	+0.18		-0.02						
17.00	+0.20		0						
19.35	+0.20		0						
19.35	+0.40		+0.20						
19.50	+0.35		+0.15						
20.00	+0.25		+0.05						
20.50	+0.15		-0.05						
21.00	+0.10		-0.10						
21.50	+0.10		-0.10						
22.00	+0.15		-0.05						
22.50	+0.18		-0.02						
23.00	+0.20		0						
24.00	+0.20		0						
25.00	+0.20	+0.20	0						

10.5 KC BAND

PICKUP RANGE: ± 5 PSI

DATA TAKEN BY DOYLE | ENGINEER

APPROVED BY | APPROVED BY

Figure 17

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 9 , CANISTER S/N 53

DATE _____ PAGE _____
REPORT NO. _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
17.00	+.02	+.02	0	22.60	+.23	+.066	+.164
17.56	+.02	+.02	0	22.70	+.22	+.067	+.153
17.56	+.25	+.02	+.23	22.80	+.20	+.068	+.132
17.70	+.21	+.02	+.19	23.00	+.18	+.070	+.110
17.80	+.19	+.02	+.17	23.20	+.15	+.072	+.078
18.00	+.15	+.07	+.13	23.40	+.12	+.074	+.046
18.20	+.11	+.022	+.088	23.60	+.08	+.076	+.004
18.40	+.05	+.024	+.026	23.80	+.05	+.078	-.028
18.60	+.02	+.026	-.006	24.00	+.03	+.080	-.050
18.80	0	+.028	-.028	24.30	+.02	+.083	-.063
19.00	-.02	+.030	-.050	24.60	+.01	+.086	-.076
19.20	-.05	+.032	-.082	24.80	+.02	+.088	-.068
19.50	-.06	+.035	-.095	25.00	+.03	+.090	-.060
19.80	-.04	+.038	-.078	25.20	+.04	+.092	-.052
20.00	-.02	+.040	-.060	25.50	+.09	+.095	-.005
20.20	0	+.042	-.042	26.00	+.10	+.10	0
20.40	+.01	+.044	-.034	27.00	+.11	+.11	0
20.60	+.02	+.046	-.026				
20.80	+.04	+.048	-.008				
21.00	+.05	+.050	0				
21.50	+.055	+.055	0				
22.54	+.065	+.065	0				
22.54	+.23	+.065	+.165				

14.5 KC BAND

PICKUP RANGE: ±2PSI

DATA TAKEN BY Anthony Johnson

ENGINEER

APPROVED BY

APPROVED BY

Figure 18

Pacific Division
Denver Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 9, CANISTER S/N 53

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REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
17.00	+ .25	+.25	0		25.00	+ .25	+.28	-.03	
17.56	+ .25	+.25	0		26.00	+ .29	+.29	0	
17.56	+ .49	+.25	+.24		27.00	+ .29	+.29	0	
17.70	+ .44	+.25	+.19						
17.90	+ .40	+.25	+.15						
18.20	+ .30	+.25	+.05						
18.50	+ .25	+.25	0						
18.80	+ .20	+.25	-.05						
19.20	+ .15	+.25	-.10						
19.50	+ .12	+.25	-.13						
19.70	+ .10	+.26	-.16						
20.00	+ .19	+.26	-.07						
20.50	+ .20	+.26	-.06						
21.00	+ .22	+.26	-.04						
21.50	+ .26	+.26	0						
22.54	+ .26	+.26	0						
22.54	+ .42	+.27	+.15						
22.70	+ .40	+.27	+.13						
22.90	+ .35	+.27	+.08						
23.20	+ .30	+.27	+.03						
23.50	+ .25	+.27	-.02						
24.00	+ .21	+.28	-.07						
24.50	+ .20	+.28	-.08						

10.5 KC BAND

PICKUP RANGE: ± 5PSI

DATA TAKEN BY AUBREY JOHNSON

ENGINEER

APPROVED BY

APPROVED BY

Figure 19

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
D.P.# 10 , CANISTER S/N 35

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
20.00	+0.03	+.03	0	25.20	+0.10	+.08	+.02
20.07	+0.03	+.03	0	25.50	+0.06	+.08	-.02
20.07	+0.21	+.03	+.18	25.80	+0.03	+.08	-.05
20.20	+0.19	+.03	+.16	26.00	+0.01	+.09	-.08
20.40	+0.14	+.03	+.11	26.50	+0.02	+.09	-.07
20.60	+0.11	+.03	+.08	27.00	+0.05	+.10	-.05
20.80	+0.09	+.03	+.06	28.00	+0.11	+.11	0
21.00	+0.07	+.04	+.03	29.00	+0.12	+.12	0
21.20	+0.03	+.04	-.01				
21.40	0	+.04	-.04				
21.60	-0.01	+.04	-.05				
21.80	-0.02	+.04	-.06				
22.00	-0.03	+.05	-.08				
22.20	-0.02	+.05	-.07				
22.40	-0.01	+.05	-.06				
22.60	0	+.05	-.05				
23.00	+0.02	+.06	-.04				
23.50	+0.04	+.06	-.02				
24.00	+0.07	+.07	0				
24.40	+0.20	+.07	+.13				
24.50	+0.19	+.07	+.12				
24.70	+0.16	+.07	+.09				
24.90	+0.12	+.07	+.05				

14.5 KC BAND
PICKUP RANGE: ±2 PSI

DATA TAKEN BY | ENGINEER
APPROVED BY | APPROVED BY

Figure 20

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#10, CANISTER S/N 55

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
20.00	+0.14	+.14	0
20.07	+0.14	+.14	0
20.07	+0.31	+.14	+.17
20.20	+0.29	+.14	+.15
20.40	+0.25	+.14	+.11
20.60	+0.20	+.14	+.06
20.80	+0.18	+.14	+.04
21.00	+0.15	+.15	0
21.20	+0.12	+.15	-.03
21.50	+0.05	+.15	-.10
22.00	0	+.16	-.16
22.50	+0.05	+.16	-.11
23.00	+0.10	+.17	-.07
24.40	+0.18	+.18	0
24.[illegible]	+0.35	+.18	+.17
24.60	+0.30	+.18	+.12
24.80	+0.26	+.18	+.08
25.00	+0.24	+.19	+.05
25.50	+0.15	+.19	-.04
26.00	+0.14	+.20	-.06
27.00	+0.19	+.21	-.02
28.00	+0.22	+.22	0
29.00	+0.23	+.23	0

10.5 KC BAND

PICKUP RANGE: ±5 PSI

DATA TAKEN BY Johnson

ENGINEER

APPROVED BY

APPROVED BY

Figure 21

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 11 , CANISTER S/N 56

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
22.00	+0.07	+.07	0	26.60	+0.20	+.09	+.11
22.56	+0.07	+.07	0	26.80	+0.18	+.09	+.09
22.56	+0.23	+.07	+.16	27.00	+0.15	+.09	+.06
22.65	+0.21	+.07	+.14	27.20	+0.12	+.09	+.03
22.70	+0.20	+.07	+.13	27.40	+0.10	+.09	+.01
22.80	+0.19	+.07	+.12	27.60	+0.09	+.09	0
23.00	+0.16	+.07	+.09	27.80	+0.08	+.09	-.01
23.20	+0.13	+.07	+.06	28.00	+0.07	+.10	-.03
23.40	+0.11	+.07	+.04	28.20	+0.06	+.10	-.04
23.60	+0.09	+.07	+.02	28.40	+0.06	+.10	-.04
23.80	+0.07	+.07	0	28.60	+0.07	+.10	-.03
24.00	+0.05	+.07	-.02	28.80	+0.08	+.10	-.02
24.20	+0.04	+.08	-.04	29.00	+0.09	+.10	-.01
24.40	+0.02	+.08	-.06	29.20	+0.11	+.12	-.01
24.60	+0.02	+.08	-.06	30.00	+0.13	+.13	0
24.80	+0.02	+.08	-.06	30.50	+0.14	+.14	0
25.00	+0.04	+.08	-.04				
25.20	+0.06	+.08	-.02				
25.40	+0.07	+.08	-.01				
25.60	+0.08	+.08	0				
26.33½	+0.09	+.09	0				
26.33	+0.23	+.09	+.14				
26.40	+0.22	+.09	+.13				

14.5 KC BAND

PICKUP RANGE: ± 1.0 PSI

DATA TAKEN BY J. Johnson

ENGINEER

APPROVED BY

APPROVED BY

Figure 22

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 11 , CANISTER S/N 56

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
22.00	0	0	0		30.50	+0.09	+.09	0	
22.56	0	0	0						
22.56	+0.15	0	+.15						
22.70	+0.13	0	+.13						
22.80	+0.11	0	+.11						
23.00	+0.10	+.01	+.09						
23.50	+0.05	+.01	+.04						
24.00	-0.02	+.02	-.04						
24.50	-0.04	+.02	-.06						
25.00	-0.02	+.03	-.05						
25.50	+0.02	+.03	-.01						
26.00	+0.04	+.04	0						
26.33	+0.04	+.04	0						
26.33	+0.16	+.04	+.12						
26.50	+0.14	+.04	+.11						
27.00	+0.10	+.05	+.05						
27.40	+0.07	+.05	+.02						
28.00	+0.03	+.06	-.03						
28.30	+0.02	+.06	-.04						
28.50	+0.02	+.06	-.04						
29.00	+0.05	+.07	-.02						
29.50	+0.07	+.07	0						
30.00	+0.08	+.08	0						

10.5 KC BAND

PICKUP RANGE: ± 2.0 PSI

DATA TAKEN BY Johnson | ENGINEER

APPROVED BY | APPROVED BY

Figure 23

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 12 , CANISTER S/N 57

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
27.00	+0.03	+.03	0	30.80	+0.10	+.037	+.063
27.19	+0.03	+.03	0	31.00	+0.075	+.040	+.035
27.19	+0.15	+.03	+.12	31.50	+0.04	+.046	-.006
27.23	+0.15	+.03	+.12	32.00	+0.02	+.052	-.032
27.30	+0.15	+.03	+.12	32.20	+0.02	+.055	-.035
27.33	+0.14	+.03	+.11	32.50	+0.025	+.058	-.033
27.40	+0.13	+.03	+.10	33.00	+0.025	+.065	-.040
27.60	+0.10	+.03	+.07	33.50	+0.070	+.070	0
27.80	+0.08	+.03	+.05	34.00	+0.070	+.070	0
28.00	+0.06	+.03	+.03				
28.20	+0.04	+.03	+.01				
28.50	+0.02	+.03	-.01				
28.80	0	+.03	-.03				
29.00	-0.01	+.03	-.04				
29.20	-0.015	+.03	-.045				
29.50	-0.01	+.03	-.04				
29.80	+0.01	+.03	-.02				
30.00	+0.025	+.03	-.005				
30.26	+0.04	+.03	+.01				
30.26	+0.15	+.03	+.12				
30.34	+0.14	+.031	+.109				
30.40	+0.14	+.032	+.108				
30.50	+0.125	+.034	+.091				

14.5 KC BAND

PICKUP RANGE: ± 1.0 PSI

DATA TAKEN BY _____ ENGINEER _____

APPROVED BY _____ APPROVED BY _____

Figure 24

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE

A.P.#12 , CANISTER S/N 57

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
27.00	+0.04	±.04	0		33.00	+0.08	±.08	0	
27.19	+0.04	±.04	0		33.50	+0.09	±.09	0	
27.19	+0.17	±.04	±.13		34.00	+0.10	±.10	0	
27.30	+0.17	±.04	±.13						
27.40	+0.16	±.04	±.12						
27.50	+0.14	±.04	±.10						
28.00	+0.09	±.04	±.05						
28.50	+0.02	±.04	-.02						
29.00	-0.01	±.04	-.05						
29.30	-0.02	±.04	-.06						
29.50	-0.01	±.04	-.05						
29.80	+0.02	±.04	-.02						
30.00	+0.02	±.04	-.02						
30.26	+0.05	±.04	±.01						
30.26	+0.17	±.04	±.13						
30.30	+0.17	±.04	±.129						
30.50	+0.15	±.043	±.107						
31.00	+0.11	±.047	±.063						
31.50	+0.07	±.055	±.015						
32.00	+0.03	±.062	-.032						
32.20	+0.02	±.065	-.065						
32.50	+0.04	±.070	-.030						
32.80	+0.06	±.074	-.014						

10.5 KC BAND

PICKUP RANGE: ± 2.0 PSI

DATA TAKEN BY J. Johnson — ENGINEER _____

APPROVED BY _____ — APPROVED BY _____

Figure 25

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#13 , CANISTER S/N 58

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
35.00	+0.05	+.05	0		38.40	+0.035	+.05	-.015	
35.72	+0.05	+.05	0		38.50	+0.030	+.05	-.02	
35.72	+0.15	+.05	+.10		38.70	+0.02	+.05	-.03	
35.80	+0.14	+.05	+.09		39.00	+0.02	+.05	-.03	
36.00	+0.12	+.05	+.07		39.40	+0.01	+.05	-.04	
36.20	+0.09	+.05	+.04		39.60	+0.005	+.05	-.045	
36.40	+0.07	+.05	+.02		39.80	+0.01	+.06	-.04	
36.60	+0.05	+.05	0		40.00	+0.015	+.05	-.035	
36.80	+0.03	+.05	-.02		40.20	+0.03	+.05	-.03	
37.00	+0.02	+.05	-.03		40.40	+0.04	+.05	-.01	
37.20	+0.01	+.05	-.04		40.60	+0.05	+.05	0	
37.40	0	+.05	-.05		41.00	+0.05	+.05	0	
37.45	0	+.05	-.05		41.50	+0.05	+.05	0	
37.45	+0.06	+.05	+.01						
37.50	+0.06	+.05	+.01						
37.60	+0.05	+.05	0						
37.70	+0.04	+.05	-.01						
37.80	+0.03	+.05	-.02						
37.90	+0.03	+.05	-.02						
37.95	+0.02	+.05	-.03						
38.00	+0.025	+.05	-.025						
38.10	+0.03	+.05	-.02						
38.30	+0.03	+.05	-.02						

14.5 KC BAND

PICKUP RANGE: ±.7PSI

DATA TAKEN BY J. Lawson — ENGINEER

APPROVED BY — APPROVED BY

Figure 26

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 13 , CANISTER S/N 58

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)
35.00	+0.04	+.04	0	39.50	+0.01	+.04	-.03
35.72	+0.04	+.04	0	40.00	+0.02	+.04	-.02
35.72	+0.15	+.04	+.11	40.50	+0.04	+.04	0
35.80	+0.14	+.04	+.10	41.00	+0.04	+.04	0
35.90	+0.13	+.04	+.09	41.50	+0.04	+.04	0
36.00	+0.12	+.04	+.08				
36.10	+0.10	+.04	+.06				
36.20	+0.09	+.04	+.05				
36.30	+0.08	+.04	+.04				
36.50	+0.07	+.04	+.03				
37.00	+0.02	+.04	-.02				
37.45	0	+.04	-.04				
37.45	+0.06	+.04	+.02				
37.63	+0.05	+.04	+.01				
37.70	+0.04	+.04	0				
37.80	+0.03	+.04	-.01				
37.90	+0.03	+.04	-.01				
38.00	+0.025	+.04	-.015				
38.10	+0.03	+.04	-.01				
38.20	+0.04	+.04	0				
38.30	+0.04	+.04	0				
38.50	+0.03	+.04	-.01				
39.00	+0.02	+.04	-.02				

10.5 KC BAND

PICKUP RANGE: ± 1 PSI

DATA TAKEN BY Johnson

ENGINEER

APPROVED BY

APPROVED BY

Figure 27

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 14 , CANISTER S/N 59

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS. (PSI)	DIFF. PRESS. (PSI)	
55.00	+0.09	+.09	0		58.80	+0.105	+.12	-.015	
55.96	+0.10	+.10	0		59.00	+0.115	+.13	-.015	
55.96	+0.17	+.10	+.07		59.50	+0.12	+.13	-.01	
56.20	+0.14	+.10	+.04		60.00	+0.135	+.14	-.005	
56.20	+0.15	+.10	+.05		60.50	+0.14	+.14	0	
56.37	+0.14	+.10	+.04		61.00	+0.15	+.15	0	
56.37	+0.17	+.10	+.07		62.00	+0.16	+.16	0	
56.45	+0.15	+.10	+.05						
56.60	+0.145	+.10	+.045						
56.70	+0.135	+.10	+.035						
56.80	+0.135	+.10	+.035						
56.90	+0.125	+.10	+.025						
57.00	+0.12	+.11	+.01						
57.10	+0.115	+.11	+.005						
57.20	+0.11	+.11	0						
57.30	+0.11	+.11	0						
57.40	+0.10	+.11	-.01						
57.60	+0.095	+.11	-.015						
57.80	+0.09	+.11	-.02						
58.00	+0.085	+.12	-.035						
58.20	+0.085	+.12	-.035						
58.40	+0.09	+.12	-.03						
58.60	+0.095	+.12	-.025						

14.5 KC BAND

PICKUP RANGE: ±.4PSI

DATA TAKEN BY Johnson | ENGINEER

APPROVED BY | APPROVED BY

Figure 28

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#14, CANISTER S/N 59

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
(SEC)	(PSI)	(PSI)	(PSI)
55.00	+0.10	+.10	0
55.96	+0.11	+.11	0
55.96	+0.19	+.11	+.08
56.20	+0.14	+.11	+.03
56.20	+0.15	+.11	+.04
56.37	+0.14	+.11	+.03
56.37	+0.18	+.11	+.07
56.50	+0.15	+.11	+.04
56.70	+0.14	+.11	+.03
57.00	+0.125	+.12	+.005
57.30	+0.12	+.12	0
57.60	+0.11	+.12	-.01
57.80	+0.10	+.12	-.02
58.10	+0.10	+.13	-.03
58.30	+0.09	+.13	-.04
58.50	+0.10	+.13	-.03
59.00	+0.12	+.14	-.02
60.00	+0.15	+.15	0
61.00	+0.16	+.16	0
62.00	+0.17	+.17	0

10.5 KC BAND

PICKUP RANGE: ± .7 PSI

DATA TAKEN BY [signature]

ENGINEER

APPROVED BY

APPROVED BY

Figure 29

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DURATION OF 1ST POSITIVE PORTION OF 1ST & 2ND PRESS. WAVES

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POSITION	TIME OF ARRIVAL 1ST PRESS. WAVE	TIME OF ZERO PSI (14.5 KC)	DURATION (SEC.)		TIME OF ARRIVAL 2ND PRESS. WAVE	TIME OF ZERO PSI (14.5 KC)	DURATION (SEC.)		
1	13.83	14.68	.85		19.96	20.98	1.02		
2	19.28	20.20	.92		23.61	24.56	.95		
3	20.33	21.22	.89		24.61	25.60	1.00		
4	24.18	25.06	.88		27.59	28.64	1.05		
5	28.25	29.24	.99		31.19	32.09	.90		
6	58.06				58.20				
7	36.11				38.42				
8	12.90	13.80	.90		19.35	20.43	1.08		
9	17.56	18.59	1.03		22.54	23.61	1.07		
10	20.07	21.07	1.00		24.40	25.24	.84		
11	22.56	23.79	1.23		26.33	27.55	1.22		
12	27.19	28.25	1.06		30.26	31.43	1.17		
13	35.72	36.60	.88		37.45				
14	55.96				56.37				

DATA TAKEN BY J. Johnson
APPROVED BY

ENGINEER
APPROVED BY

Figure 30

APPENDIX III

ALTITUDE DATA - UPSHOT NO. 4

Figure	Title
1 - 2	Altitude Data Array Positions 1, 2, 3 and 4
3 - 4	Altitude Data Array Positions 5, 6, 7 and 8
5 - 6	Altitude Data Array Positions 9, 10, 11 and 12
7	Altitude Data Array Positions 13 and 14

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
A/P 1, 2, 3, 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL. INCHES	FREQ CPS	CORR FREQ CPS	PRESS IN. Hg.	ALTITUDE PRESS	ALTITUDE TRUE	ΔS	ΔT	V_v
1	DROP	-107.30	-1.55	7003	7003	13.93	19700	20000			
2	"	-91.16	-0.11	6990	7000	13.93	19700	20000			
3	"	-83.48	+1.19	6995	7009	13.93	19700	20000			
4	"	-73.52	+2.58	7000	7007	13.93	19700	20000			
1	SQUIB FIRE	-99.22	-1.60	7030	7030	14.30	19100	19450	550	14.53	37.8
2	"	-79.96	-.28	7083	7093	15.20	17620	18000	2000	1.70	178.6
3	"	-70.28	+1.08	7053	7067	14.68	18490	18840	1160	15.20	89.9
4	"	-57.27	+2.43	7084	7091	15.04	17850	18250	1750	16.55	187.7
1	REF CHAN ARMED	19.15	-1.86	7173	7173	16.27	15950	16350			
2	"	21.01	-.465	7183	7193	16.70	15290	15690			
3	"	22.46	+.855	7167	7181	16.27	15950	16350			
4	"	24.73	+2.24	7189	7196	16.59	15460	15850			
1	REF. CHAN SEALED	19.98	-1.86	7173	7173	16.27	15950	16350			
2	"	23.63	-.47	7185	7195	16.72	15220	15620			
3	"	24.62	+.86	7165	7179	16.23	16000	16400			
4	"	27.61	+2.235	7192	7199	16.61	15410	15800			
1	1ST PRESS WAVE ARRIVAL	13.83	-1.85	7167	7167	16.18	16100	16480	2970	113.09	26.3
2	"	19.28	-.46	7182	7192	16.69	15300	15700	2300	79.24	29.0
3	"	20.33	+.86	7165	7179	16.23	16000	16400	2440	90.61	26.9
4	"	24.18	+2.24	1189	7196	16.59	15440	15850	2400	81.45	29.5

DATA TAKEN BY Johnson — ENGINEER

APPROVED BY — APPROVED BY

Figure 1

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
AIP 1, 2, 3, 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

AIP	EVENT	TIME	DEFL. INCHES	FREQ. CPS	CORR. FREQ CPS	PRESS IN. HG.	ALTITUDE PRESS	ALTITUDE TRUE	ΔS	ΔT	V_v
1	2ND PRESS WAVE ARRIVAL	19.96	-1.86	7173	7173	16.27	15950	16350			
2	"	23.61	-.47	7185	7195	16.72	15220	15620			
3	"	26.60	+.85	7170	7184	16.31	15880	16280			
4	"	27.59	+2.23	7192	7199	16.61	15410	15800			
1	LOSS OF SIGNAL	APPROX +556	-2.82	7692	7692	26.30	3500	4480	14970	6'55.24	22.8
2	"	APPROX +612	-1.34	7660	7670	26.10	3750	4650	13350	6'41.96	19.2
3	"	APPROX +561	-.69	7666	7680	26.05	3800	4700	14140	6'31.28	22.4
4	"	APPROX +522	+1.36	7655	7662	26.00	3850	4750	13500	6'21.27	23.3

DATA TAKEN BY Johnson | ENGINEER
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Figure 2

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
ALTITUDE DATA
A/P 5, 6, 7, 8

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL. INCHES	FREQ CPS	FREQ CPS	PRESS IN. HG.	ALT. TUDE PRESS	ALTITUDE TRUE	LS	LT	N
5	DROP	-57.44	-1.55	7013	7030	13.93	19,700	20,000			
6	"	+39.75	- .12	7000	7012	13.93	19,700	20,000			
7	"	-30.93	+1.53	6988	6997	13.93	19,700	20,000			
8	"	-104.73	-1.48	6980	7010	13.93	19,700	20,000			
5	SCOTS FIRE	- 40.19	-1.70	7097	7114	15.18	17,650	18,050	1950	17.25	113.0
6	"	+ 62.11	- .35	7123	7150	16.00	16350	16,750	3250	22.36	145.3
7	"	- 22.69	+1.28	6992	7021	14.23	19,200	19550	450	8.24	54.6
8	"	-101.30	- 1.53	7008	7038	14.30	19,100	19450	550	8.43	65.2
5	REF. CHAN ARMED	+ 29.90	-1.85	7175	7192	16.45	15,690	16,050			
6	"	APPROX +106.7	- .45	7180	7192	16.70	15,280	15,600			
7	"	—	—	—	—	—	—	—			
8	"	+ 17.20	-1.78	7141	7171	16.31	15880	16280			
5	REF. CHAN SEALED	+ 31.22	-1.85	7175	7192	16.45	15,690	16,050			
6	"	-	—	—	—	—	—	—			
7	"	-	—	—	—	—	—	—			
8	"	+ 19.36	- 1.78	7141	7171	16.31	15880	16280			
5	1ST PRESS WAVE ARRIVAL	28.25	-1.85	7175	7192	16.45	15,690	16,050	2000	48.44	29.2
6	"	+ 58.06	- .29	7090	7102	15.25	17,550	17,950		4.05	
7	"	36.11	+ 1.15	7064	7093	15.20	17620	18000	1550	58.50	26.4
8	"	12.90	- 1.76	7135	7165	16.24	16000	16350	3100	114.20	27.1
5	2ND PRESS WAVE ARRIVAL	31.19	- 1.85	7175	7192	16.45	15,690	16,050	—	2.94	—
6	"	58.20	- .29	7090	7102	15.25	17,550	17,950	—	.14	—
7	"	38.42	+ 1.14	7070	7099	15.30	17,450	17,850		2.31	
8	"	19.35	-1.78	7141	7171	16.31	15880	16280		6.45	

DATA TAKEN BY _____ ENGINEER _____
APPROVED BY _____ APPROVED BY _____

Figure 3

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
A/P 5, 6, 7, 8

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL. INCHES	FREQ CPS	CORR FREQ CPS	PRESS. IN. Hg.	ALTITUDE PRESS.	ALTITUDE TRUE	ΔS	ΔT	V,
5	LOSS OF SIGNAL	ABOVE +589	-2.74	7640	7657	26.40	3450	4400	12650	429.19	21.7
6	"	ABOVE +589	-1.33	7645	7657	26.50	3350	4300	12450	426.89	23.6
7	"	UNKNOWN	+.05	7655	7684	26.20	3650	4550	15000		
8	"	ABOVE +566	-2.67	7675	7655	26.10	3750	4650	14800	467.39	22.2

DATA TAKEN BY Johnson
ENGINEER
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APPROVED BY

Figure 4

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
A/P 9, 10, 11, 12.

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL	FREQ CPS	CORR. FREQ CPS	IN. Hg.	PRESS ALTITUDE	TRUE ALTITUDE	ΔS	ΔT	V_v
9	DROP	-93.81	- .18	7010	6988	13.93	19700	20000			
10	"	-85.93	+1.23	6995	7010	13.93	19700	20000			
11	"	-75.61	+2.68	6967	7007	13.93	19700	20000			
12	"	-59.92	+1.22	6975	7020	13.93	19700	20000			
9	SQUIB FIRE	-82.77	- .25	7051	7029	14.46	18740	19190	810	11.04	73.4
10	"	-72.72	+1.12	7050	7065	14.73	18350	18750	1250	13.21	94.6
11	"	-59.57	+2.53	7047	7087	15.04	17850	18250	1750	16.09	108.8
12	"	-42.51	+1.04	7075	7120	15.30	17450	17850	2150	17.41	123.5
9	REF CHART ARMED	+17.75	- .45	7167	7145	16.08	16250	16600			
10	"	+20.14	+ .92	7152	7167	16.29	15900	16300			
11	"	+22.02	+1.35	7144	7184	16.55	15500	15900			
12	"	+26.74	+ .88	7160	7205	16.52	15550	15950			
9	REF. CHART SEALED	+17.75	- .45	7167	7145	16.08	16250	16600			
10	"	+20.14	+ .92	7152	7167	16.29	15900	16300			
11	"	+22.57	+1.35	7144	7184	16.55	15500	15900			
12	"	+27.21	+ .88	7160	7205	16.52	15550	15950			
9	1# PRESS WAVE	+17.56	- .45	7167	7145	16.08	16250	16600	2590	100.77	25.8
10	"	+20.07	+ .92	7152	7167	16.29	15900	16300	2450	92.79	26.4
11	"	+22.56	+1.35	7144	7184	16.55	15500	15900	2350	82.08	28.6
12	"	+27.19	+ .88	7160	7205	16.52	15550	15950	1900	69.10	27.3

DATA TAKEN BY J. [illegible]
ENGINEER
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Figure 5

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
A/P 9, 10, 11, 12

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL.	FREQ	CORR. FREQ	IN. Hg.	PRESS ALTITUDE	TRUE ALTITUDE	ΔS	ΔT	V_v
9	2ND PRESS WAVE ARRIVAL	+ 22.54	- .46	7172	7150	16.15	16150	16500			
10	"	+24.60	+ .91	7153	7110	16.33	15850	16220			
11	"	+ 26.33	+2.34	7149	7189	16.63	15400	15750			
12	"	+30.26	+ .87	7165	7210	16.63	15400	15750			
9	LOSS OF SIGNAL	APPROX +599	-1.32	7678	7656	25.70	4150	5000	14190	668.77	20.8
10	"	APPROX +585	- .02	7623	7638	26.00	3850	4750	14000	658.74	21.3
11	"	APPROX +607	+1.42	7630	7570	26.40	3450	4400	13850	666.97	20.8
12	"	APPROX +580	- .04	7655	7700	26.70	3050	4050	13900	623.51	22.2

DATA TAKEN BY Johnson — ENGINEER

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Figure 6

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
A/P 13, 14

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

A/P	EVENT	TIME	DEFL.	FREQ CPS	CORR FREQ CPS	IN. Hg.	PRESS ALTITUDE	TRUE ALTITUDE	ΔS	Δt	V_o
13	DROP	-32.54	+2.56	6995	7022	13.93	19700	20000			
14	"	+36.78	+ .01	6982	7002	13.93	19700	20000			
13	SQUIB FIRE	- 8.49	+2.30	7132	7159	15.95	16450	16850	3150	24.05	130.9
14	"	+45.20	- .05	7017	7039	14.43	18380	19250	750	8.62	84.1
13	REF. CHAM. ARMED	+37.37	+ 2.18	7195	7222	16.95	14920	15300			
14	"	—	—	—	—	—	—	—			
13	REF. CHAM. SEALED	—	—	—	—	—	—	—			
14	"	—	—	—	—	—	—	—			
13	1st PRESS WAVE ARRIVAL	+35.72	+ 2.19	7190	7217	16.85	15050	15450	1400	44.24	31.6
14	"	+55.96	- .10	7042	7062	14.71	18400	18790	460	10.76	42.7
13	2nd PRESS WAVE ARRIVAL	+37.45	+ 2.18	7195	7222	16.95	14920	15300			
14	"	+56.37	- .10	7042	7062	14.71	18400	18790			
13	LOSS OF SIGNAL	APPROX +524	+ 1.36	7637	7664	26.24	3550	4500	12350	57.69	3.2
14	"	UNKNOWN	- 1.23	7655	7675	25.80	4050	4950			

DATA TAKEN BY Johnson
ENGINEER
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Figure 7

APPENDIX IV

SIGNAL STRENGTH DATA - UPSHOT NO. 4

Figure	Title
1	Signal Strength Data, Array Positions 1, 2, 3 and 4
2	Signal Strength Data, Array Positions 5, 6, 7 and 8
3	Signal Strength Data, Array Positions 9, 10, 11 and 12
4	Signal Strength Data, Array Positions 13 and 14

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
SIGNAL STRENGTH
ARRAY POSITIONS 1, 2, 3, 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)	ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)
1	DROP	-107.30	-2.68	64	1	ARRIVAL 1ST PRESS WAVE	+13.83	-2.57	80
2	"	- 91.16	- 1.46	36	2	"	+ 19.26	- .98	114
3	"	- 83.48	- .28	25	3	"	+ 20.33	+ .43	160
4	"	- 73.52	+ 1.67	80	4	"	+ 24.18	+ 2.05	150
1	SQUIB FIRE	- 99.22	- 2.37	114	1	ARRIVAL 2ND PRESS WAVE	+ 19.96	- 2.61	74
2	"	- 79.86	- 1.28	64	2	"	+ 23.61	- 1.00	108
3	"	- 70.28	+ .39	148	3	"	+ 24.60	+ .42	158
4	"	- 57.27	+ 2.13	170	4	"	+ 27.59	+ 2.05	150
1	ARMING	+ 19.15	- 2.64	70	1	LOSS OF P.P. SIG.	APPROX + 556	- 3.00	0
2	"	+ 21.01	- .98	114	2	"	APPROX + 612	- 1.60	5
3	"	+ 22.46	+ .43	160	3	"	APPROX + 561	- .36	0
4	"	+ 24.72	+ 2.01	140	4	"	APPROX + 522	+ 1.14	20
1	SEALING	+ 19.98	- 2.61	74					
2	"	+ 23.63	- 1.00	108					
3	"	+ 24.62	+ .42	158					
4	"	+ 27.61	+ 2.05	150					

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Figure 1

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET

SIGNAL STRENGTH

ARRAY POSITIONS 5, 6, 7, & 8

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)	ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)
5	DROP	- 57.44	- 2.95	25	5	ARRIVAL 1ST PRESS WAVE	+ 28.25	- 2.27	155
6	"	+ 39.75	- 1.65	5	6	"	+ 58.06	- 1.50	36
7	"	- 30.93	- .02	35	7	"	+ 36.11	+ .46	115
8	"	- 109.73	- 2.90	20	8	"	+ 12.90	- 2.35	140
5	SQUIB FIRE	- 40.17	- 2.28	155	5	ARRIVAL 2ND PRESS WAVE	+ 31.19	- 2.30	150
6	"	+ 62.11	- 1.48	40	6	"	+ 58.20	- 1.50	36
7	"	- 22.69	+ .30	90	7	"	+ 38.42	+ .46	115
8	"	- 101.30	- 2.88	46	8	"	+ 19.35	- 2.35	140
5	ARMING	+ 29.90	- 2.28	155	5	LOSS OF R.F. SIG.	APPROX + 589	- 3.00	0
6	"	APPROX + 106.70	- 1.56	25	6	"	APPROX + 585	- 1.67	0
7	"	NO INDICATION	—	—	7	"	UNKNOWN	- .21	0
8	"	+ 17.20	- 2.35	140	8	"	APPROX + 566	- 3.00	10
5	SEALING	+ 31.22	- 2.30	150					
6	"	NO SEAL	—	—					
7	"	NO INDICATION	—	—					
8	"	+ 19.36	- 2.35	140					

DATA TAKEN BY D. JOHNSON — ENGINEER

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Figure 2

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET

SIGNAL STRENGTH

ARRAY POSITIONS 9, 10, 11, & 12

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)	ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (μV)
9	DROP	- 93.81	- 1.62	10	9	ARRIVAL 1ST PRESS WAVE	+ 17.56	- 1.23	98
10	"	- 85.93	- .30	15	10	"	+ 20.07	0	80
11	"	- 75.61	+ 1.02	10	11	"	+ 22.56	+ 1.08	50
12	"	- 53.92	- .25	10	12	"	+ 27.19	+ .32	150
9	SQUIB FIRE	- 82.77	- 1.48	47	9	ARRIVAL 2ND PRESS WAVE	+ 22.54	- 1.14	115
10	"	- 72.72	- .10	63	10	"	+ 24.40	0	80
11	"	- 59.52	+ 1.02	10	11	"	+ 26.33	+ 1.12	68
12	"	- 47.51	+ .30	148	12	"	+ 30.76	+ .26	140
9	ARMING	+ 17.75	- 1.22	100	9	LOSS OF R.F. SIG.	APPROX + 599	- 1.65	0
10	"	+ 20.14	0	80	10	"	APPROX + 586	- .29	20
11	"	+ 22.02	+ 1.06	45	11	"	APPROX + 607	+ 1.10	70
12	"	+ 26.74	+ .32	150	12	"	APPROX + 550	- .25	0
9	SEALING	+ 17.75	- 1.22	100					
10	"	+ 20.14	0	80					
11	"	+ 22.57	+ 1.08	50					
12	"	+ 27.21	+ .32	150					

DATA TAKEN BY D. JOHNSON — ENGINEER

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Figure 3

Pacific Division
Republic Aviation Corporation
NORTH HOLLYWOOD, CALIF.

DATA SHEET

SIGNAL STRENGTH

ARRAY POSITIONS 13 & 14

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POSITION	EVENT	TIME (SEC.)	DEFL. (INCHES)	SIGNAL STRENGTH (HV)
13	DROP	- 32.54	+ 1.12	30
14	"	+ 36.78	- 1.36	30
13	SQUIB FIRE	- 8.94	+ 1.66	130
14	"	+ 45.20	- .92	105
13	ARMING	+ 37.37	+ 1.66	130
14	"	NO INDICATION	—	—
13	SEALING	NO SEAL	—	—
14	"	NO INDICATION	—	—
13	ARRIVAL 1ST PRESS WAVE	+ 35.72	+ 1.70	140
14	"	+ 55.96	- .88	113
13	ARRIVAL 2ND PRESS WAVE	+ 51.45	+ 1.66	130
14	"	+ 56.37	- .85	115
13	LOSS OF R.F. SIG.	APPROX + 52.4	+ 1.06	10
14	"	UNKNOWN	- 1.47	0

DATA TAKEN BY D. JOHNSON — ENGINEER

APPROVED BY — APPROVED BY

Figure 4

APPENDIX V

OVERPRESSURE VS. TIME - KNOTHOLE NO. 1

Figure	Title
1	Overpressure vs. Time, Array Position 1
2	Overpressure vs. Time, Array Position 1
3	Overpressure vs. Time, Array Position 2
4	Overpressure vs. Time, Array Position 2
5	Overpressure vs. Time, Array Position 3
6	Overpressure vs. Time, Array Position 3
7	Overpressure vs. Time, Array Position 4
8	Overpressure vs. Time, Array Position 5
9	Overpressure vs. Time, Array Position 6
10	Overpressure vs. Time, Array Position 7
11	Overpressure vs. Time, Array Position 8
12	Overpressure vs. Time, Array Position 9
13	Overpressure vs. Time, Array Position 10
14	Overpressure vs. Time, Array Position 11
15	Overpressure vs. Time, Array Position 11
16	Overpressure vs. Time, Array Position 12
17	Overpressure vs. Time, Array Position 13
18	Overpressure vs. Time, Array Position 14
19	Overpressure vs. Time, Array Position 15
20	Overpressure vs. Time, Array Position 16
21	Overpressure vs. Time, Array Position 17
22	Overpressure vs. Time, Array Position 18
23	Overpressure vs. Time, Array Position 19
24	Overpressure vs. Time, Array Position 20

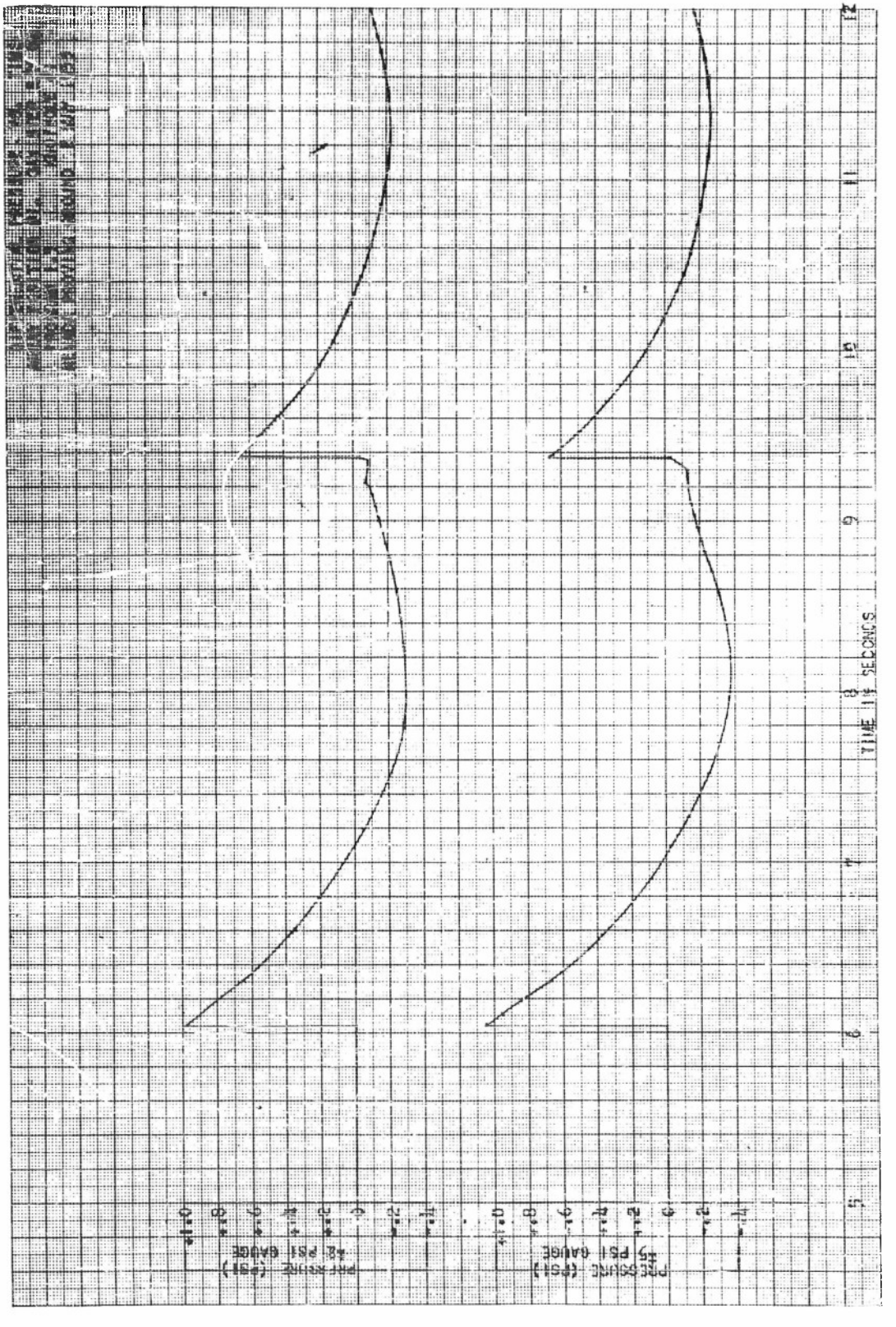


Figure 1

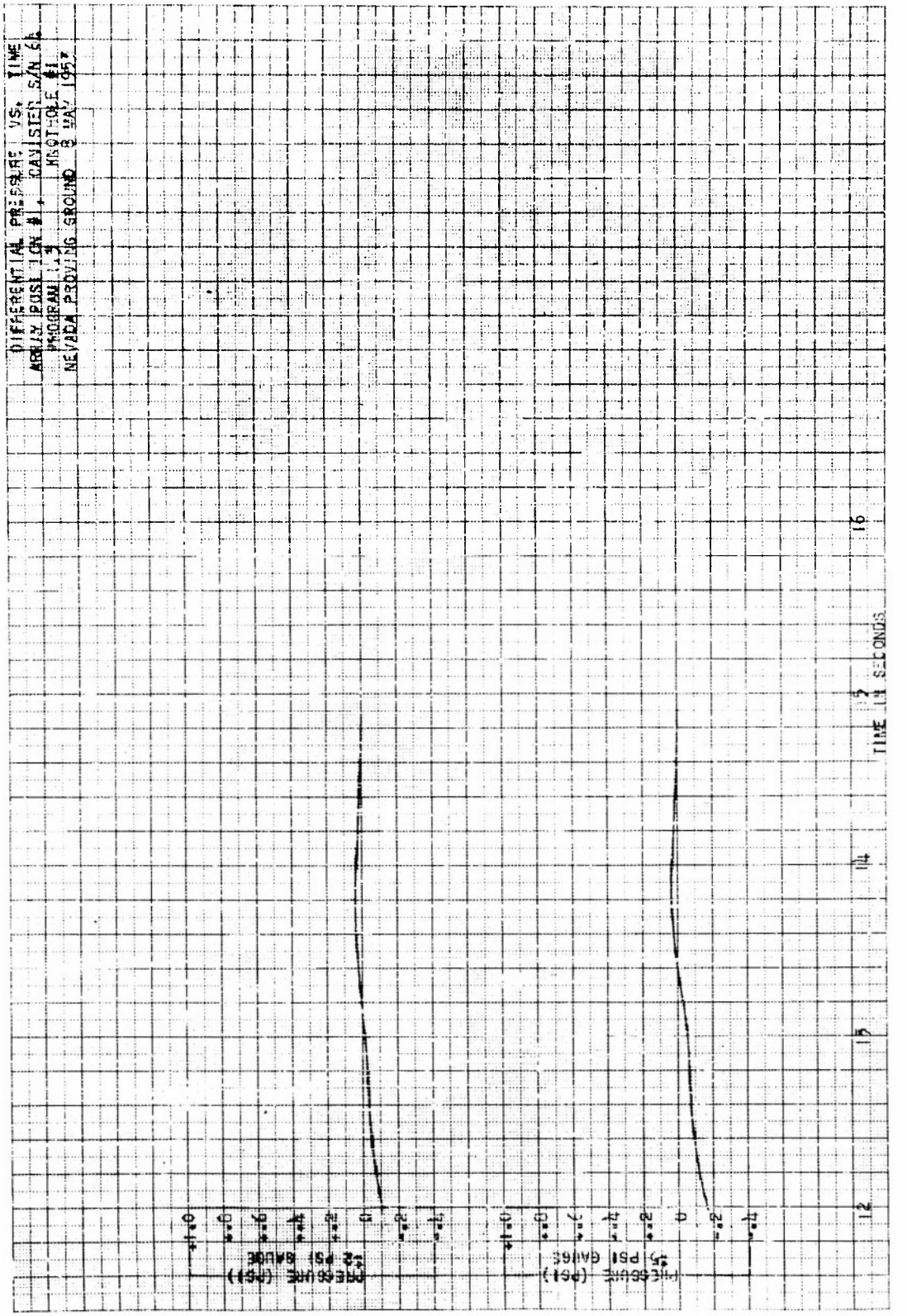

DIFFERENTIAL PRESSURE VS. TIME
ARMY BUSTER #1, CAVITIES 5/N 6A
PROGRAM 4 MINOTAUR #1
NEVADA PROVING GROUND 2 MAY 1957
TIME IN SECONDS
12
14
16
PRESSURE (PSI)
+5 PSI GAUGE
+2 PSI GAUGE

Figure 2

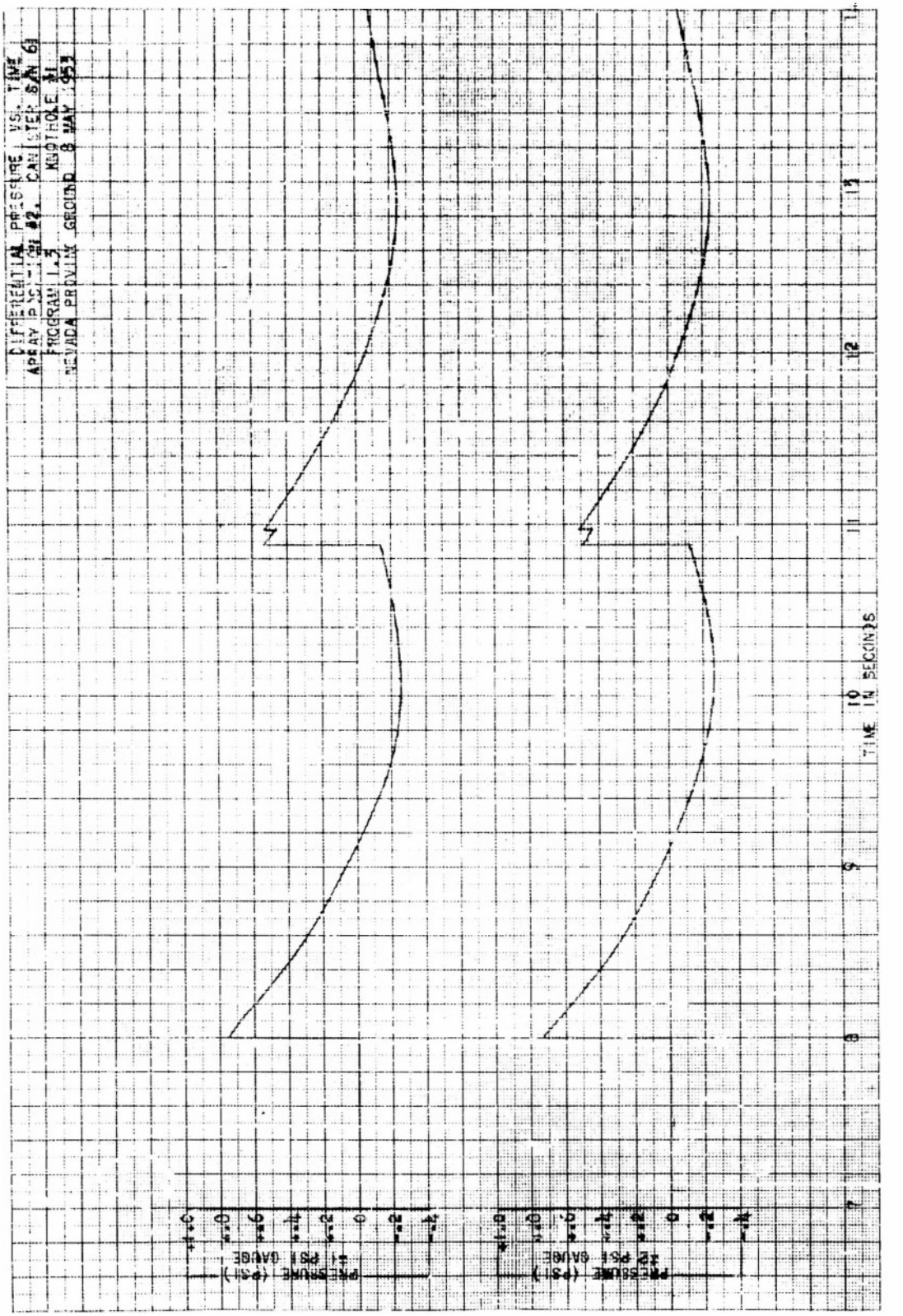


Figure 3

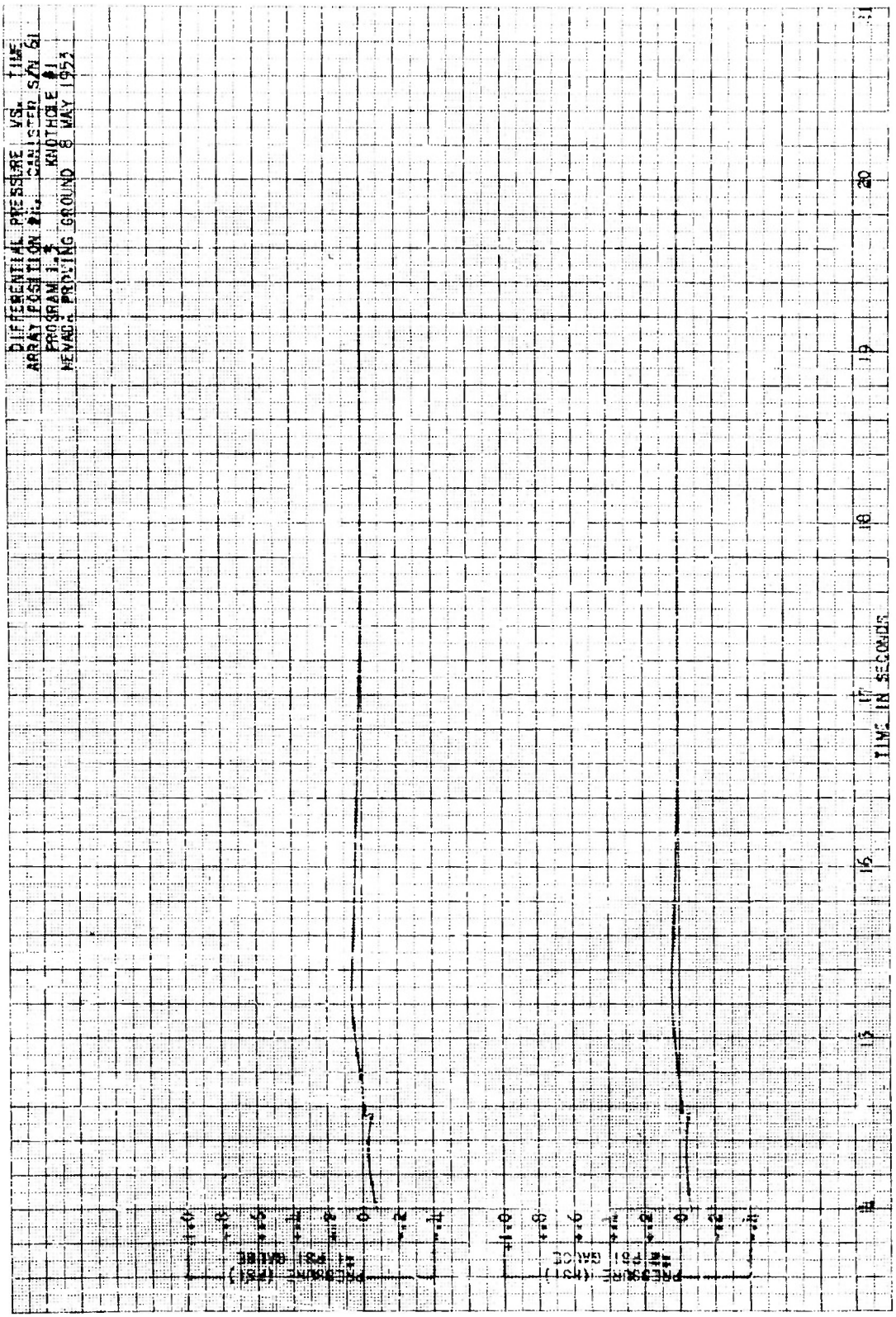

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #1 CANISTER S/N 61
PROGRAM 1-5 KNOTHOLE #1
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
PRESSURE (PSI)

Figure 4

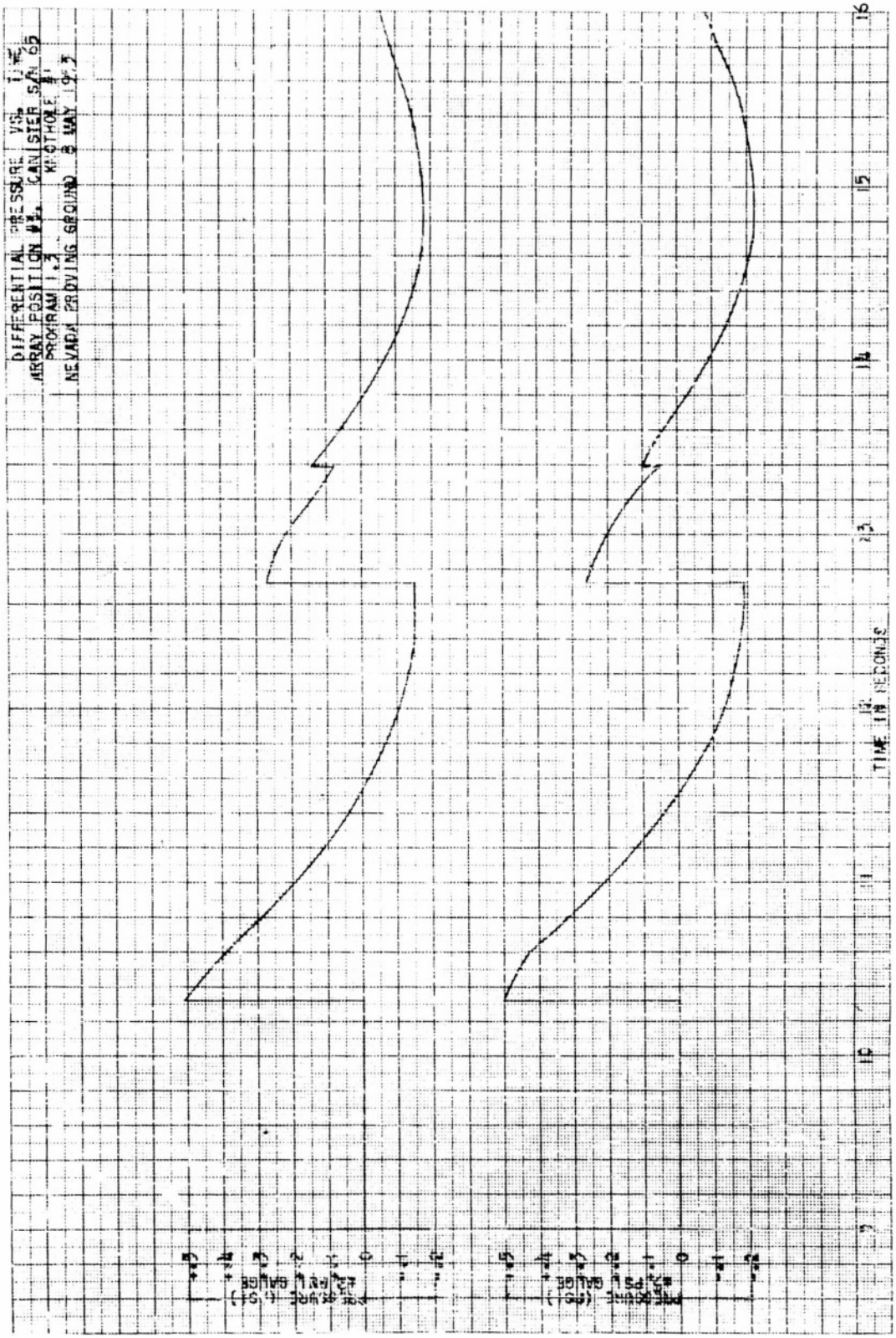

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #2 CANISTER SAN 65
PROGRAM I.2 METHOD #1
NEVADA PROVING GROUND 8 MAY 1957
TIME IN SECONDS

Figure 5

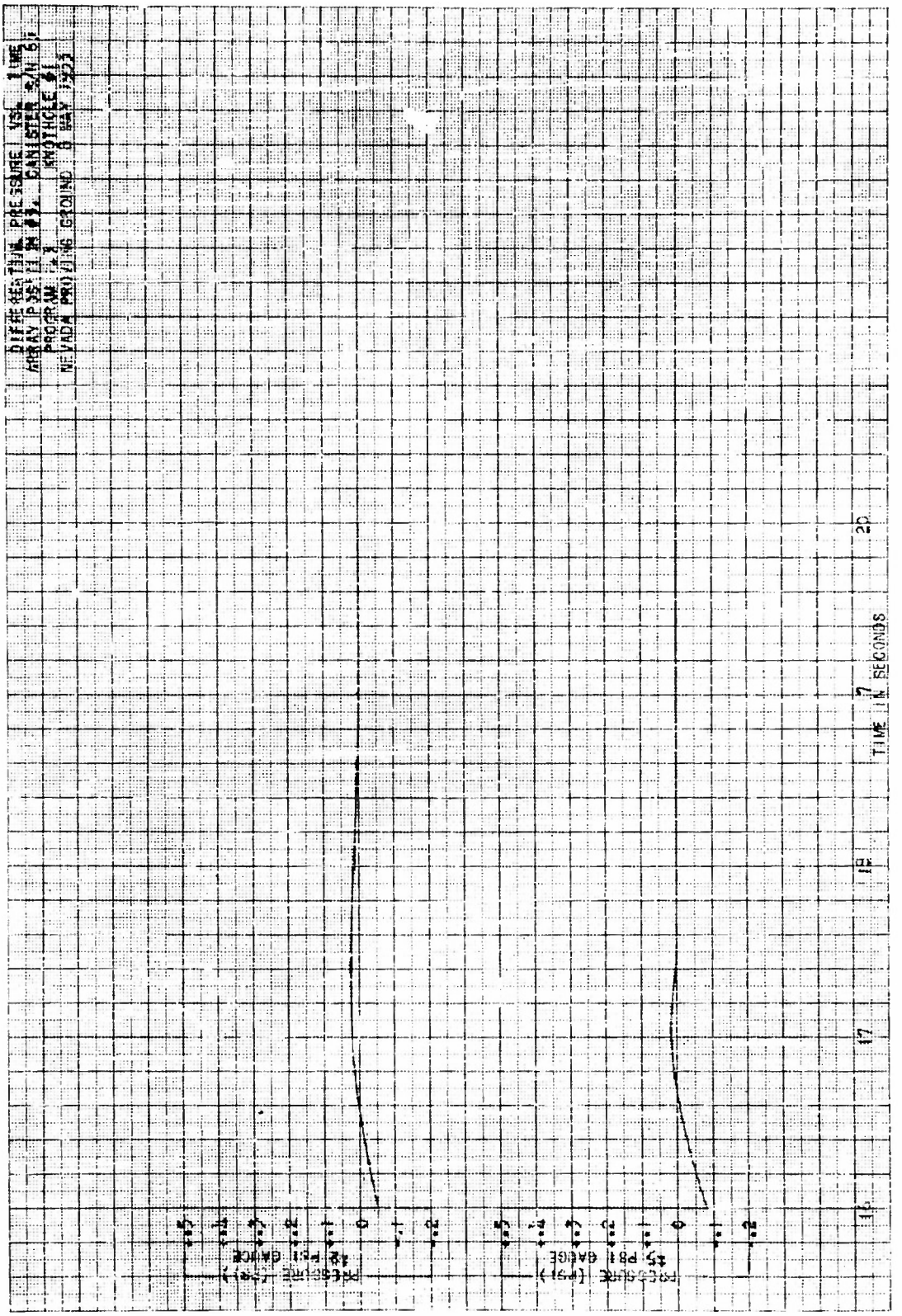

DIFFERENTIAL PRESSURE VS. TIME
ARRAY PASE II SN #12 CANISTER S/N 6,F
PROGRAM # 1 KNOTHOLE #1
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
10
17
18
20
PRESSURE (PSI)
+5 +4 +3 +2 +1 0 -1 -2
+5 P81 GAUGE
+5 P81 GAUGE

Figure 6

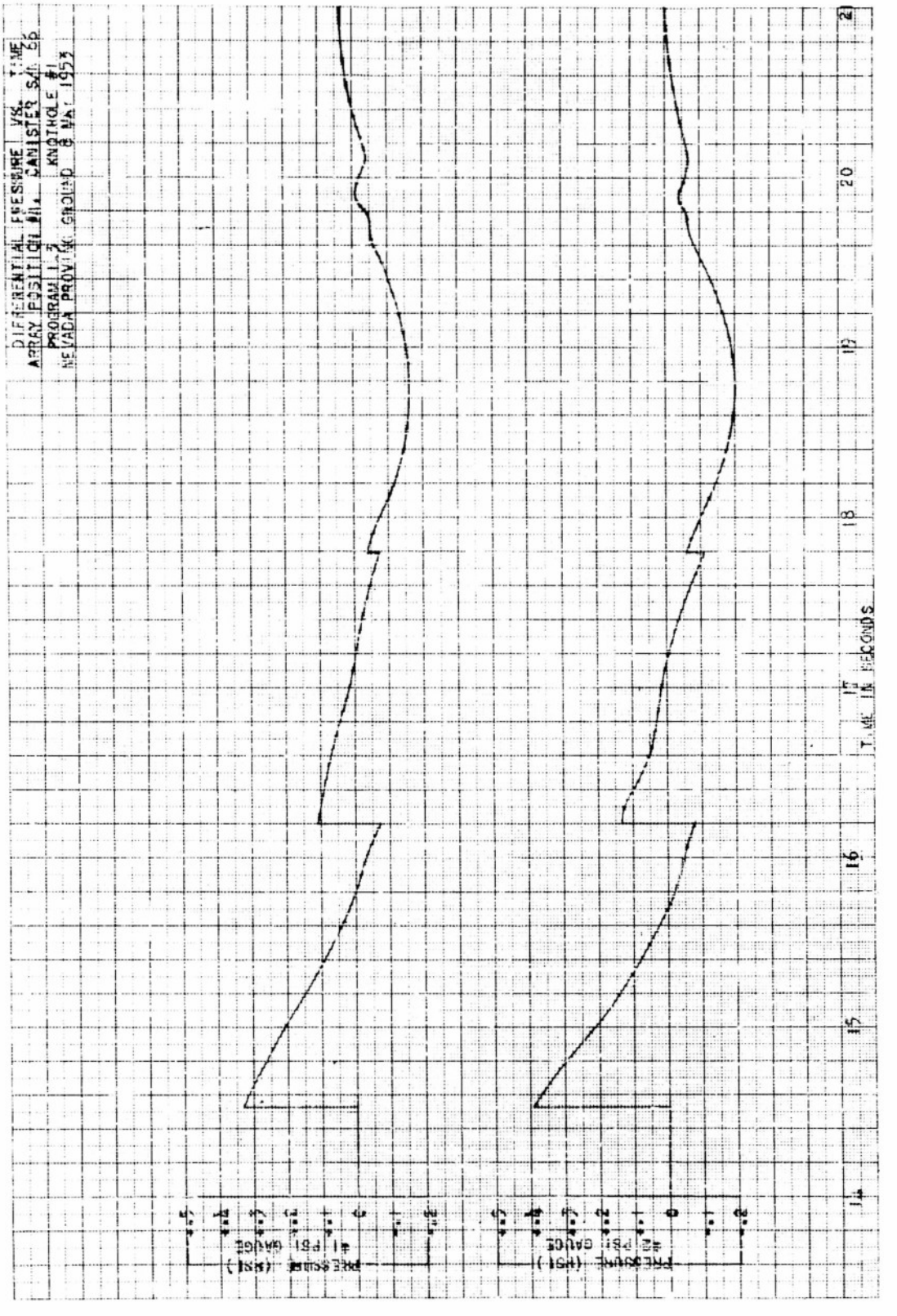

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #1, CANISTER S/N 26
PROGRAM I-3 KNOTHOLE #1
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
14
15
16
17
18
19
20
21

Figure 7

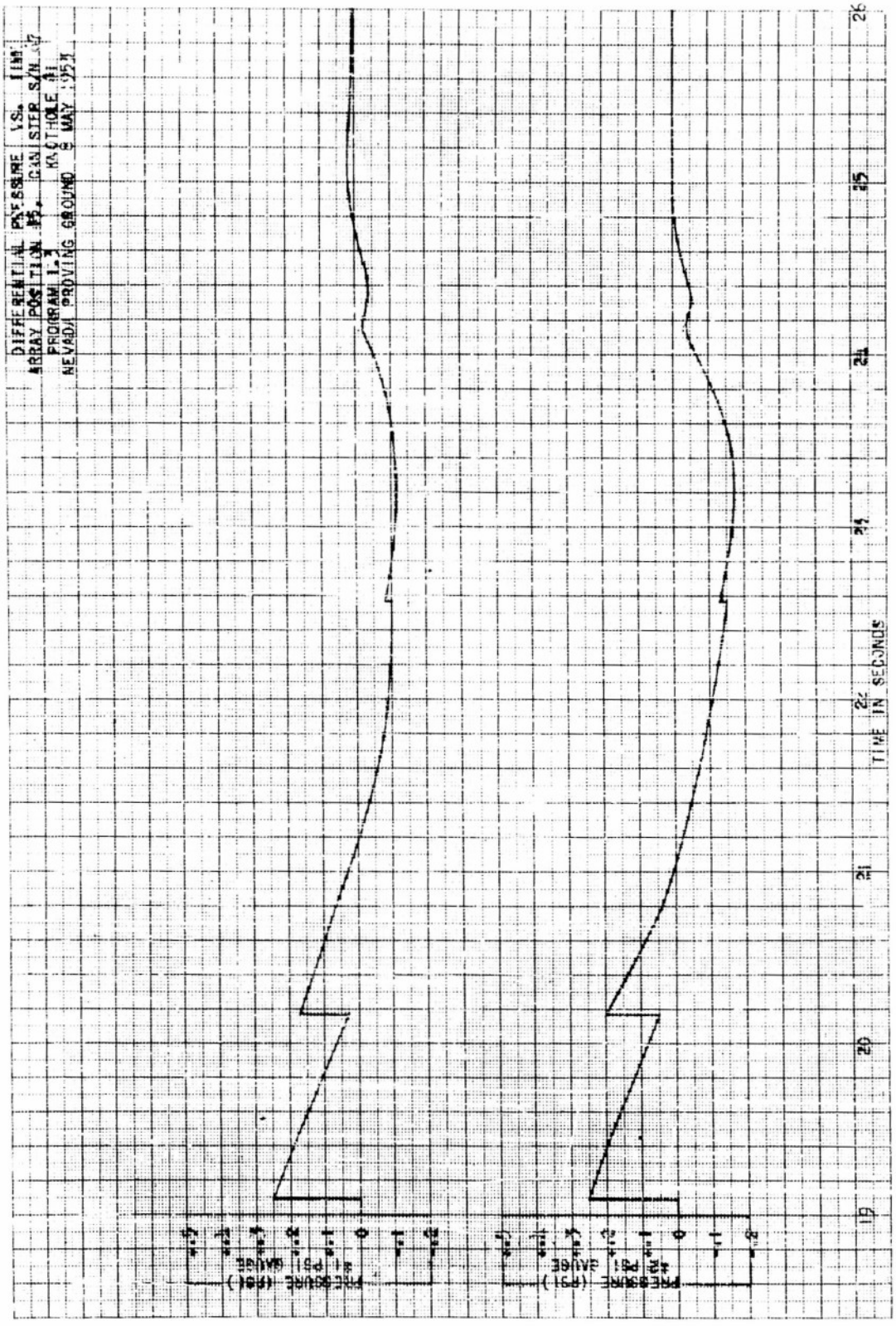

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #5, GAUGE S/N 47
PROGRAM 1-3
NEVADA PROVING GROUND 9 MAY 1952
TIME IN SECONDS
PRESSURE (P91)
#5 P91 GAUGE
PRESSURE (P91)
#5 P91 GAUGE

Figure 8

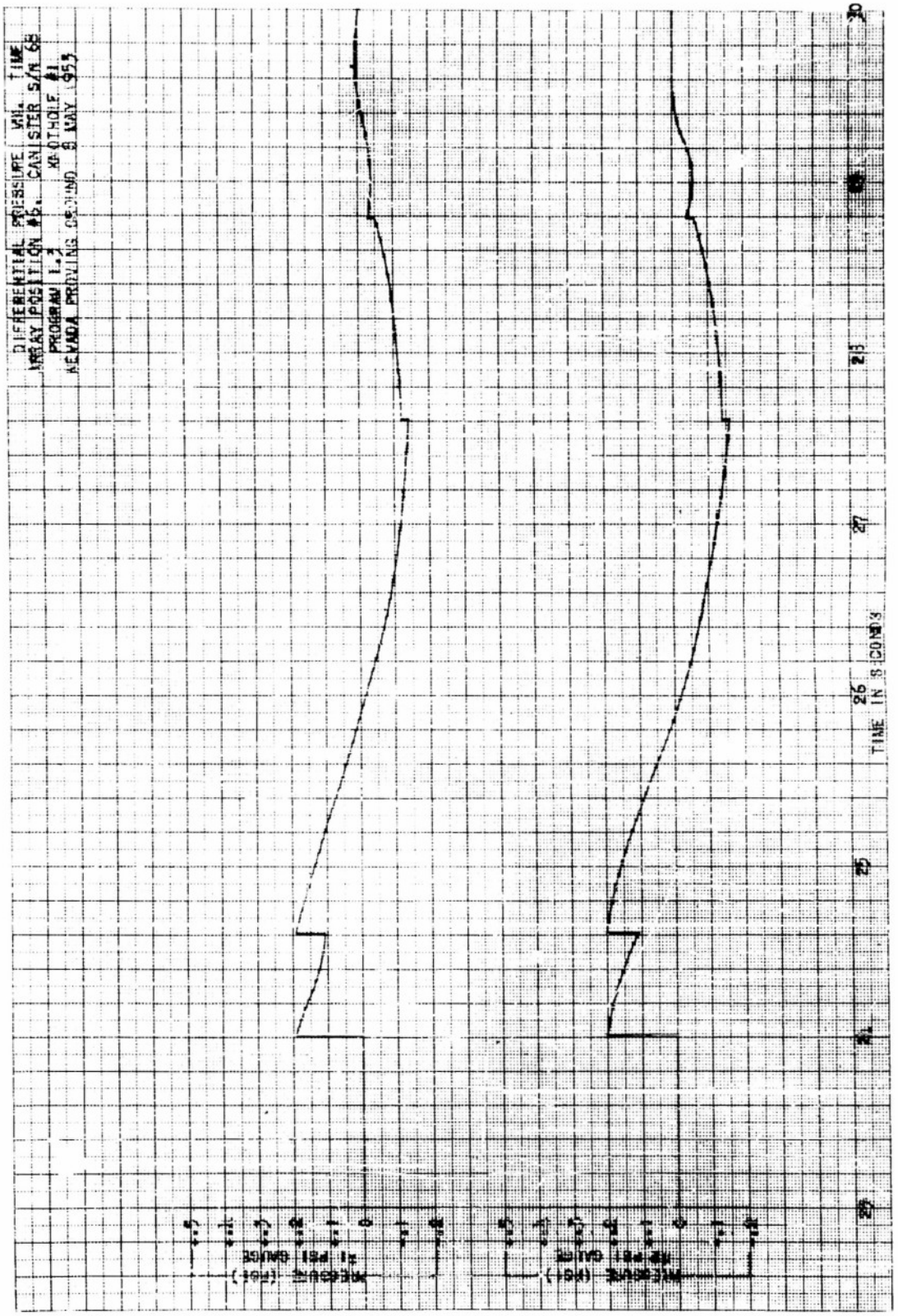

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #5. CANISTER S/N 68
KRATHOLE #1
PROGRAM 1.2
NEVADA PROVING GROUND 8 MAY 1955
TIME IN SECONDS
25
26
27

Figure 9

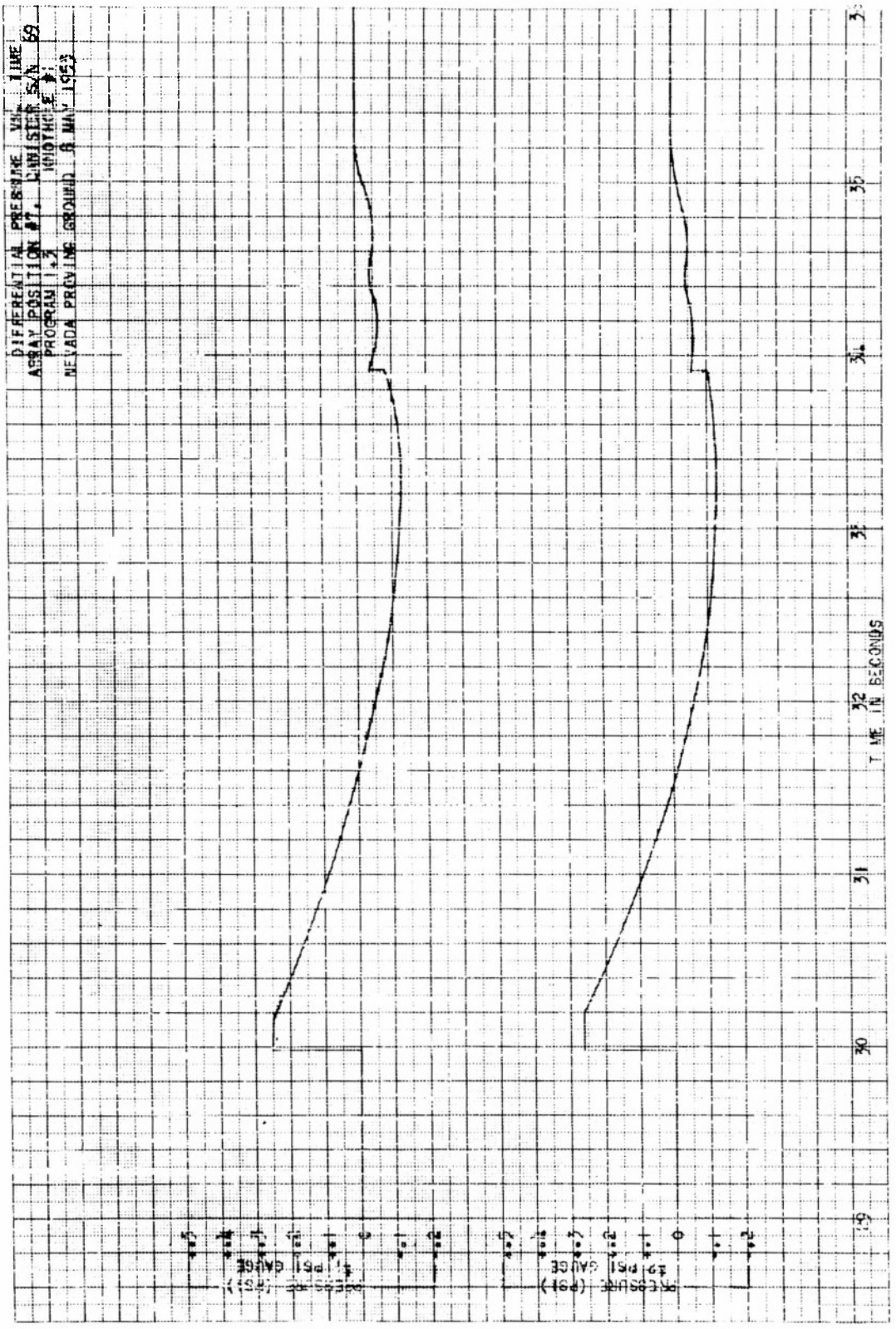

DIFFERENTIAL PRESSURE VS TIME
ARRAY POSITION #1, CANISTER S/N 69
PROGRAM 1+2
NEVADA PROVING GROUND 8 MAY 1968
TIME IN SECONDS
30
31
32
33
34
35
36
PRESSURE GAUGE (PSI)

Figure 10

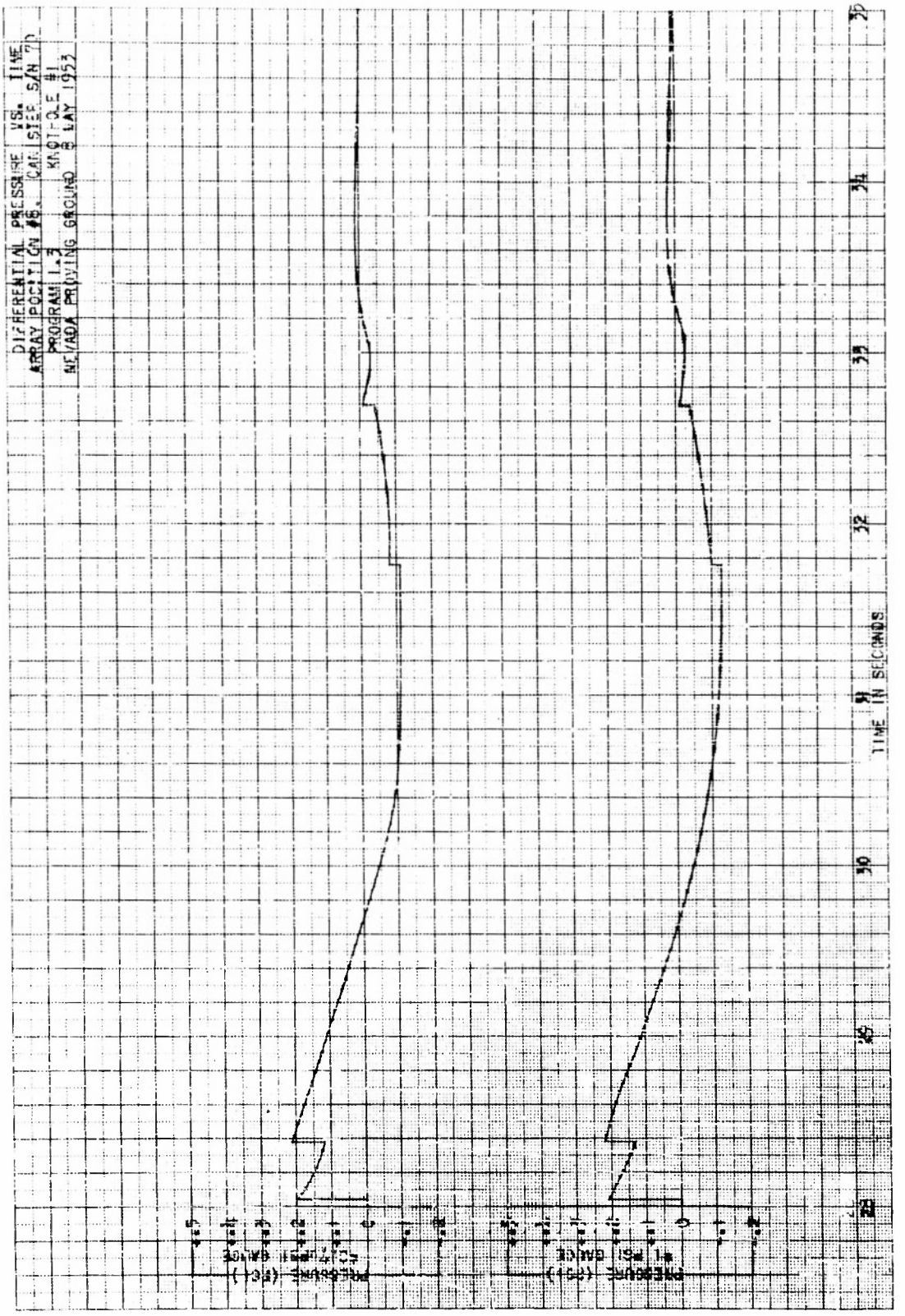

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #6 (CANISTER S/N 7)
PROGRAM 1-3
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
29
30
31
32
33
34
35

Figure 11

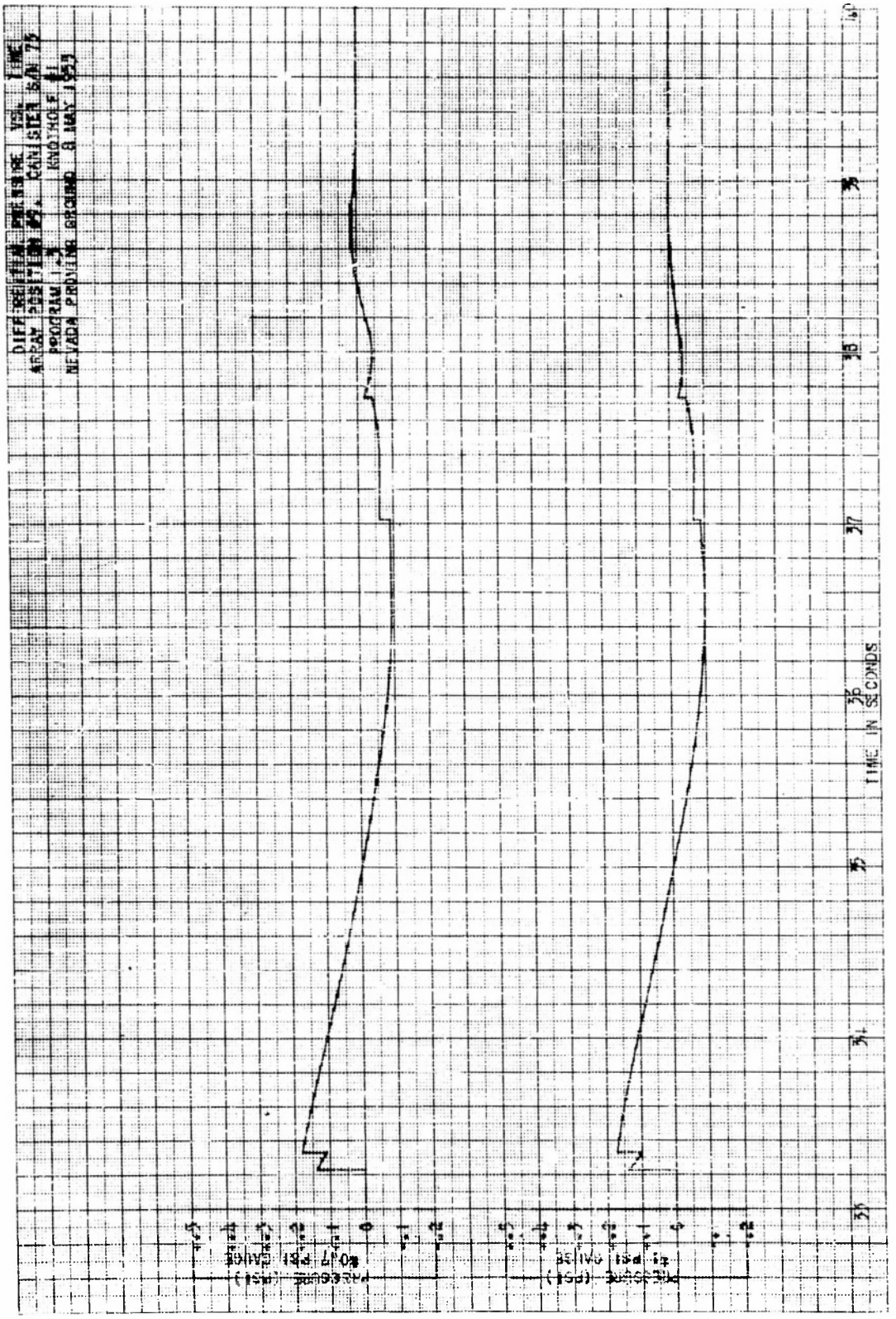


Figure 12

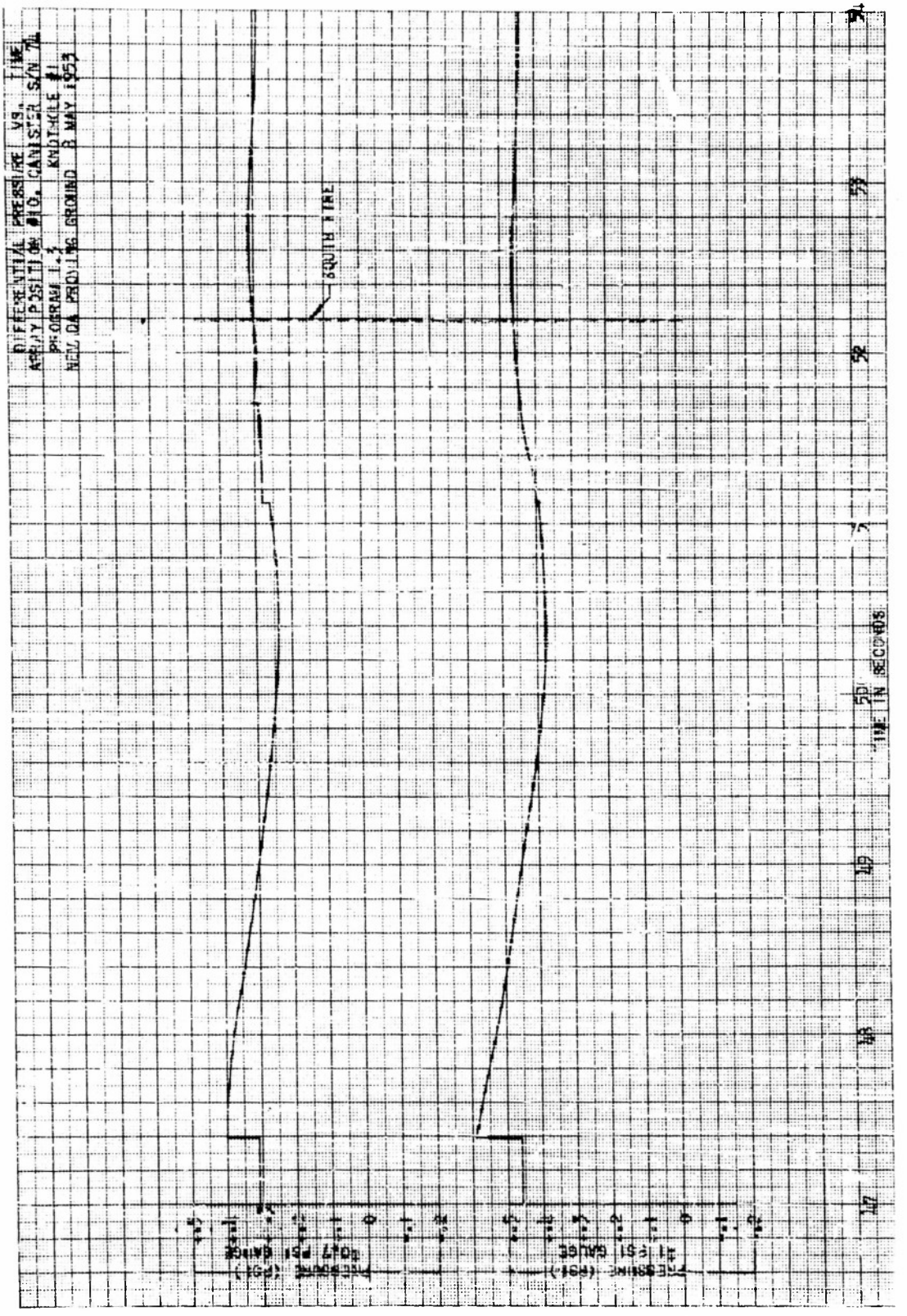

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #10, CANISTER S/N 7M
PROGRAM 1-3
KNOTMILE #1
NEW OA PROFILING GROUND 8 MAY 1953
SOUTH FIRE
TIME IN SECONDS

Figure 13

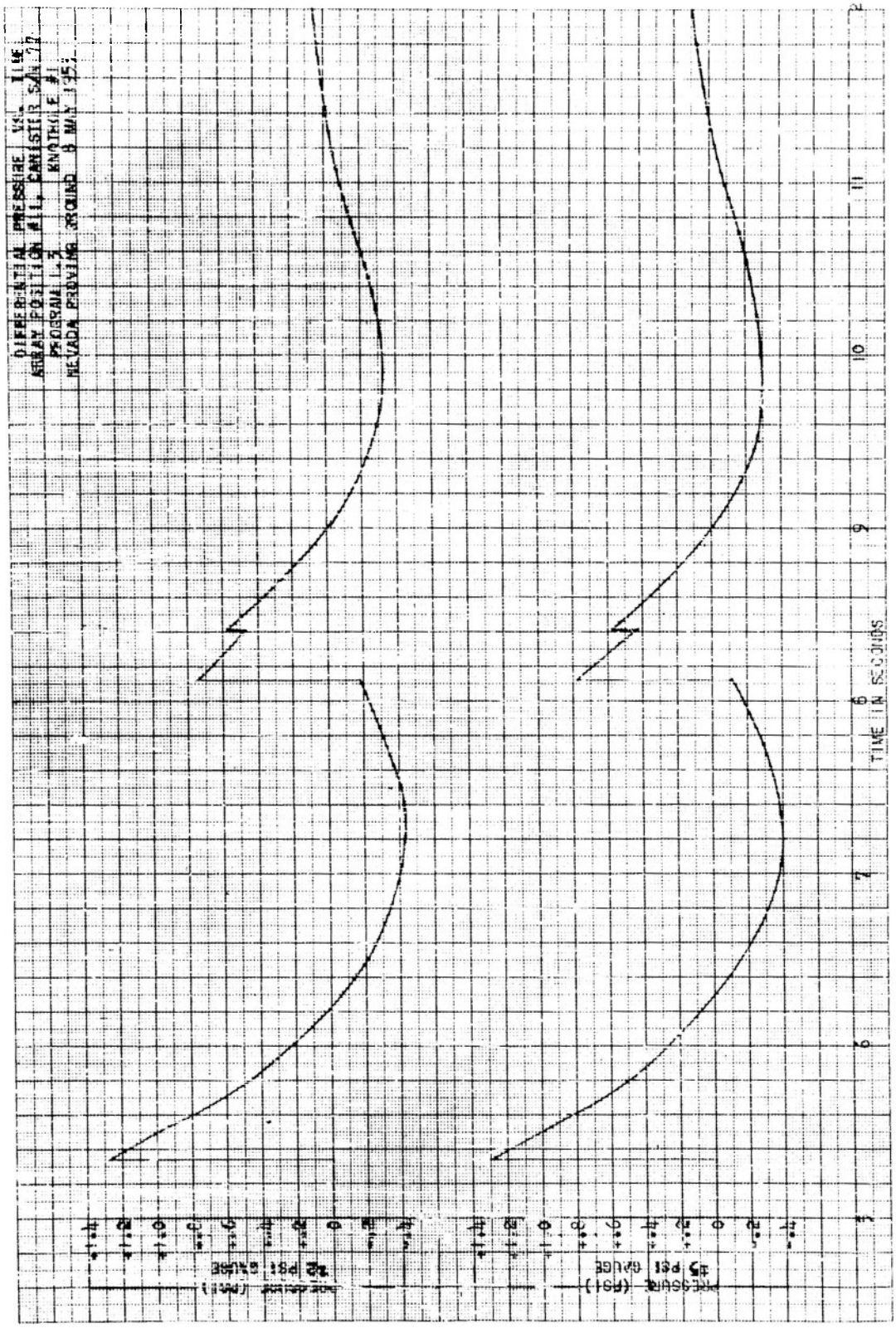

DIFFERENTIAL PRESSURE VS. TIME
AIRLAY POSITION #11, CANISTER SAM-77
PROGRAM 1-2
NEVADA PROVING GROUND 8 MAY 1952
TIME IN SECONDS
PRESSURE (PSI)
75 PSI GAUGE

Figure 14

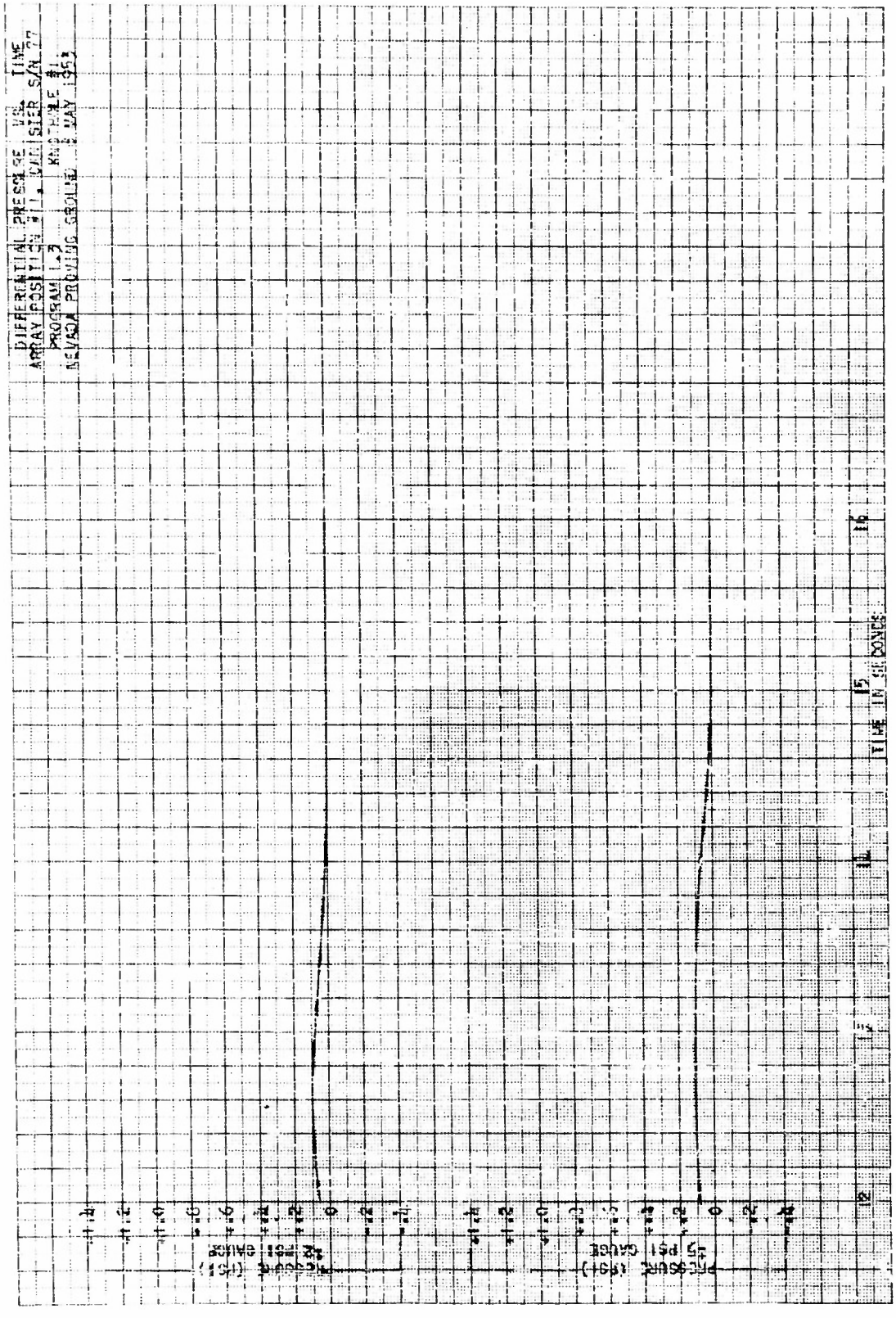

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #11 + CONDITIONER S/N 27
PROGRAM I-3
NEVADA PROVING GROUND
TIME IN SECONDS

Figure 15

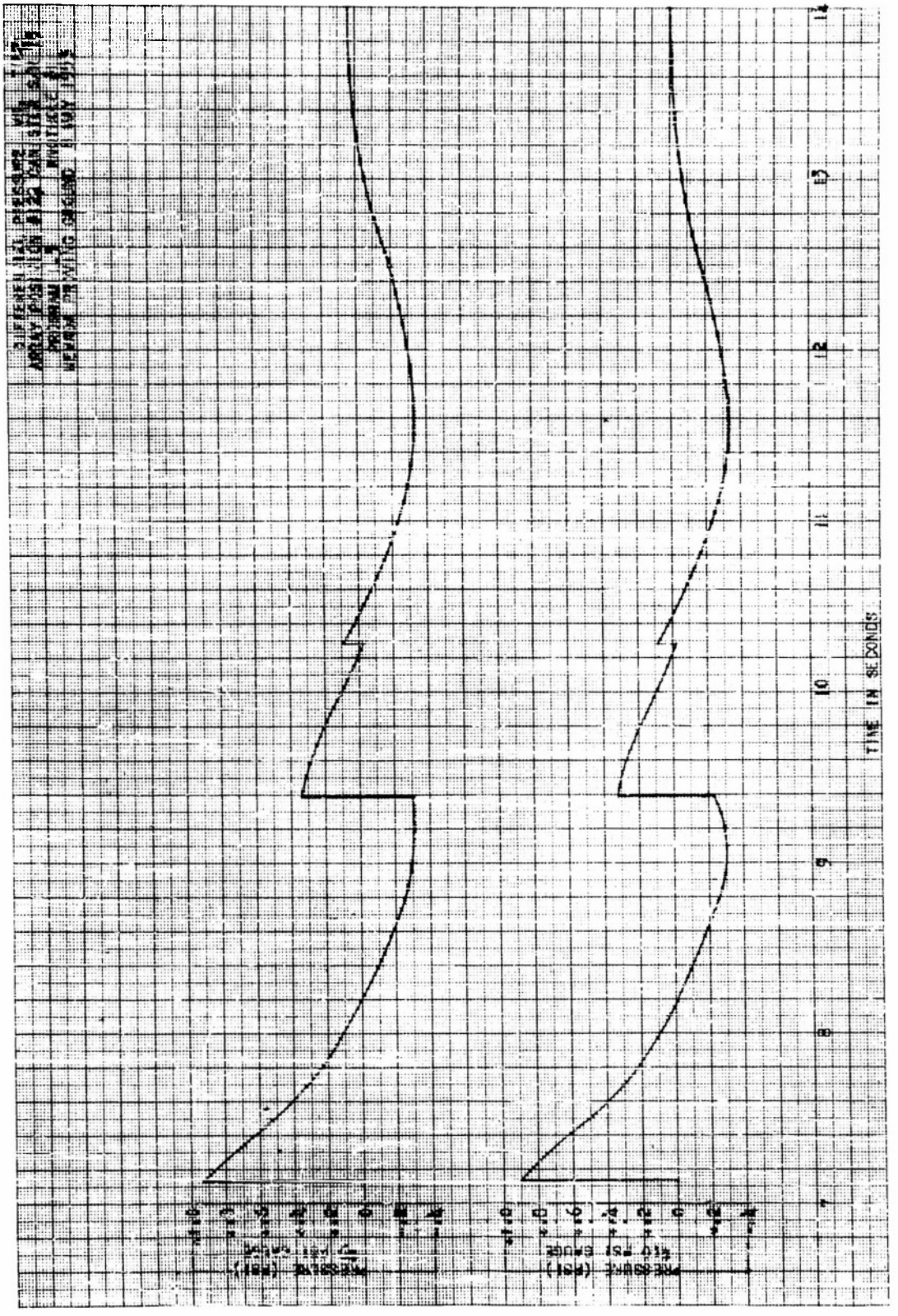


Figure 16

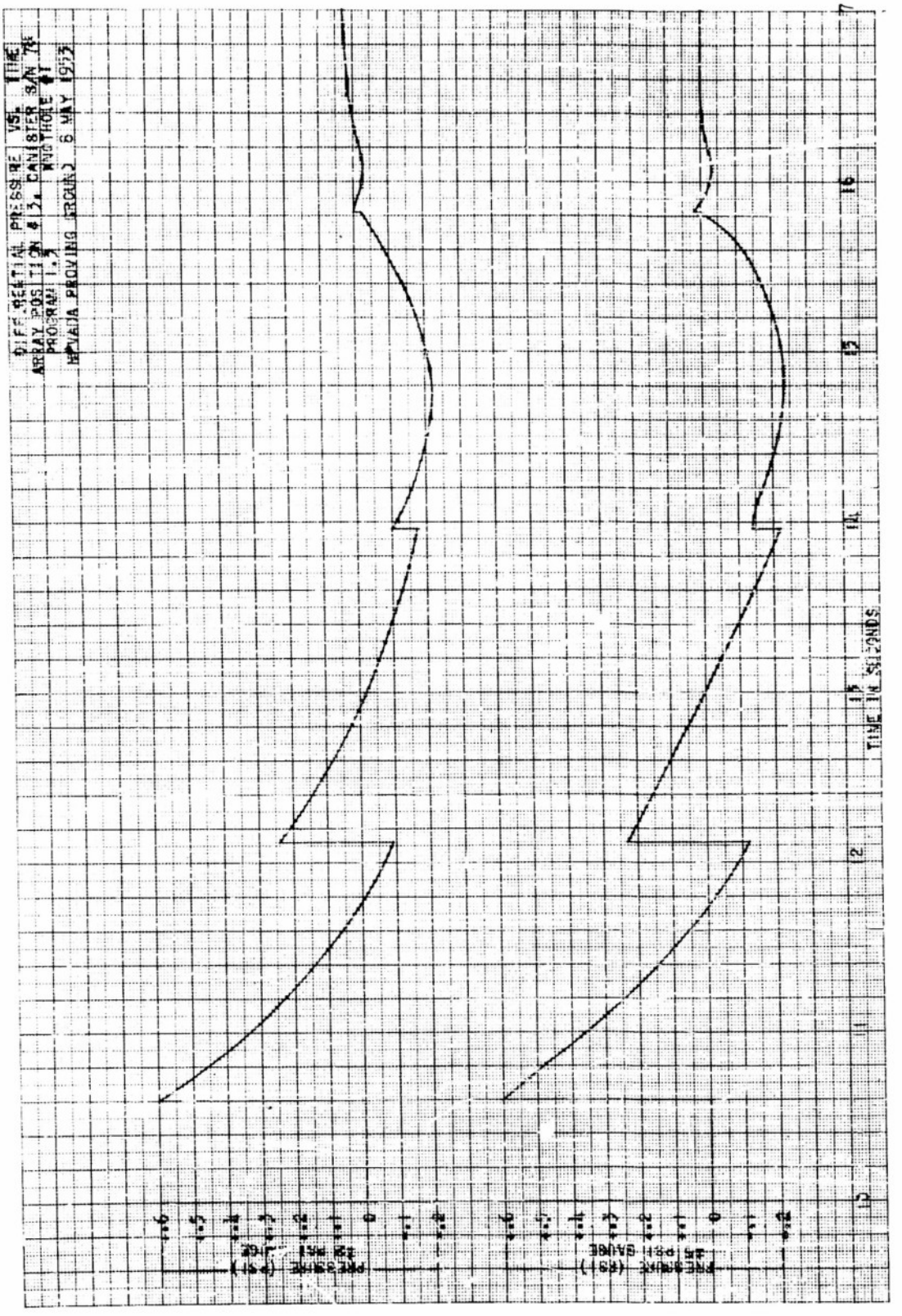

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #12, CANISTER SAW TOE
PROGRAM 1.3 ANDTHORE #1
NEVADA PROVING GROUND 6 MAY 1953
TIME IN SECONDS
PRESSURE (PSI) ABOVE AMBIENT
PRESSURE (PSI) BELOW AMBIENT

Figure 17

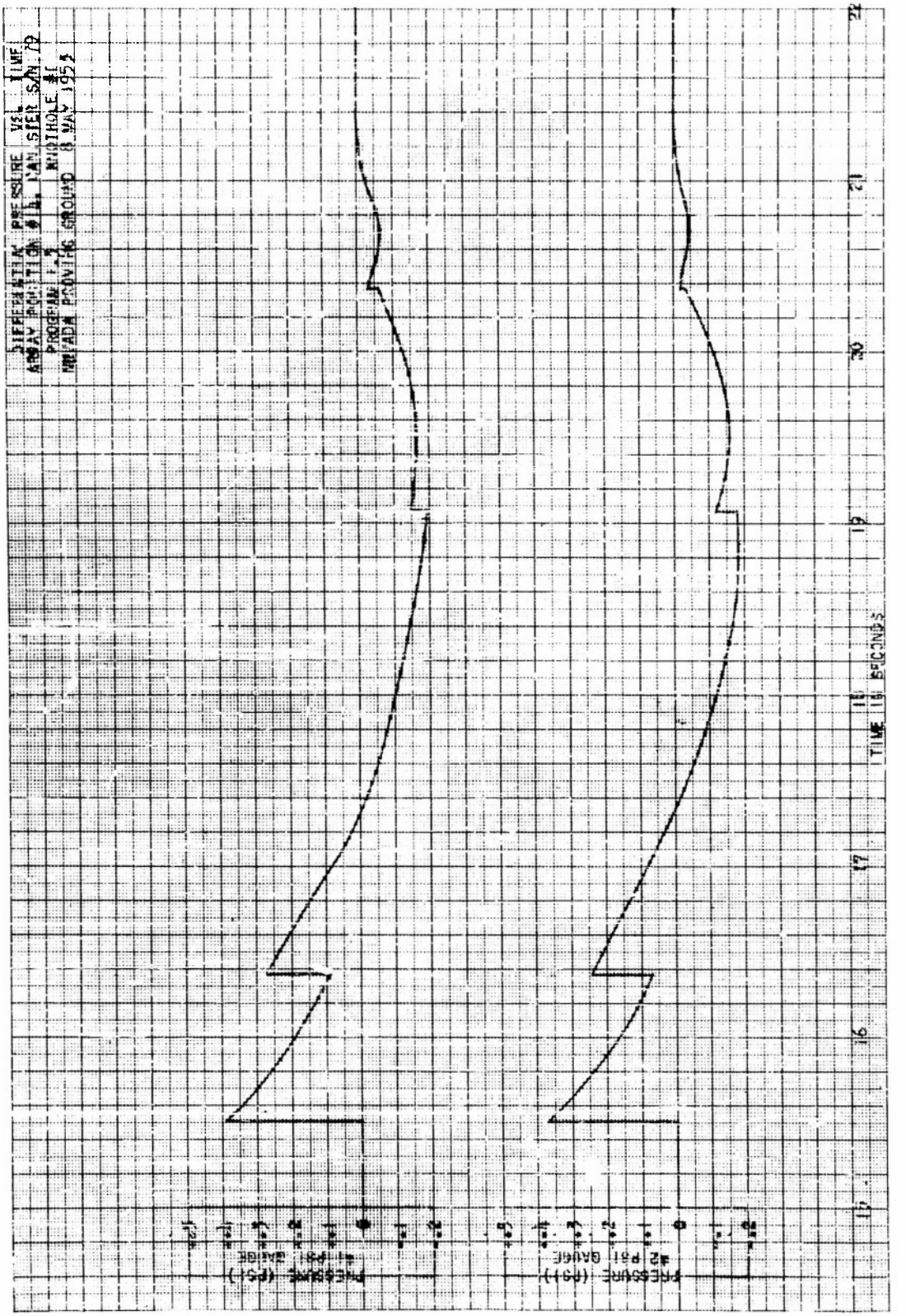

DIFFERENTIAL PRESSURE VS. TIME
AT AV NOB STATION #1, 1.4 MI. FROM SHOT SAN 12
PROGRAM 1.5 NUCLEAR DEVICE
NEVADA PROVING GROUND 8 MAY 1955
TIME IN SECONDS
PRESSURE (PSI)
#1 P51 GAUGE
PRESSURE (PSI)
#2 P51 GAUGE

Figure 18

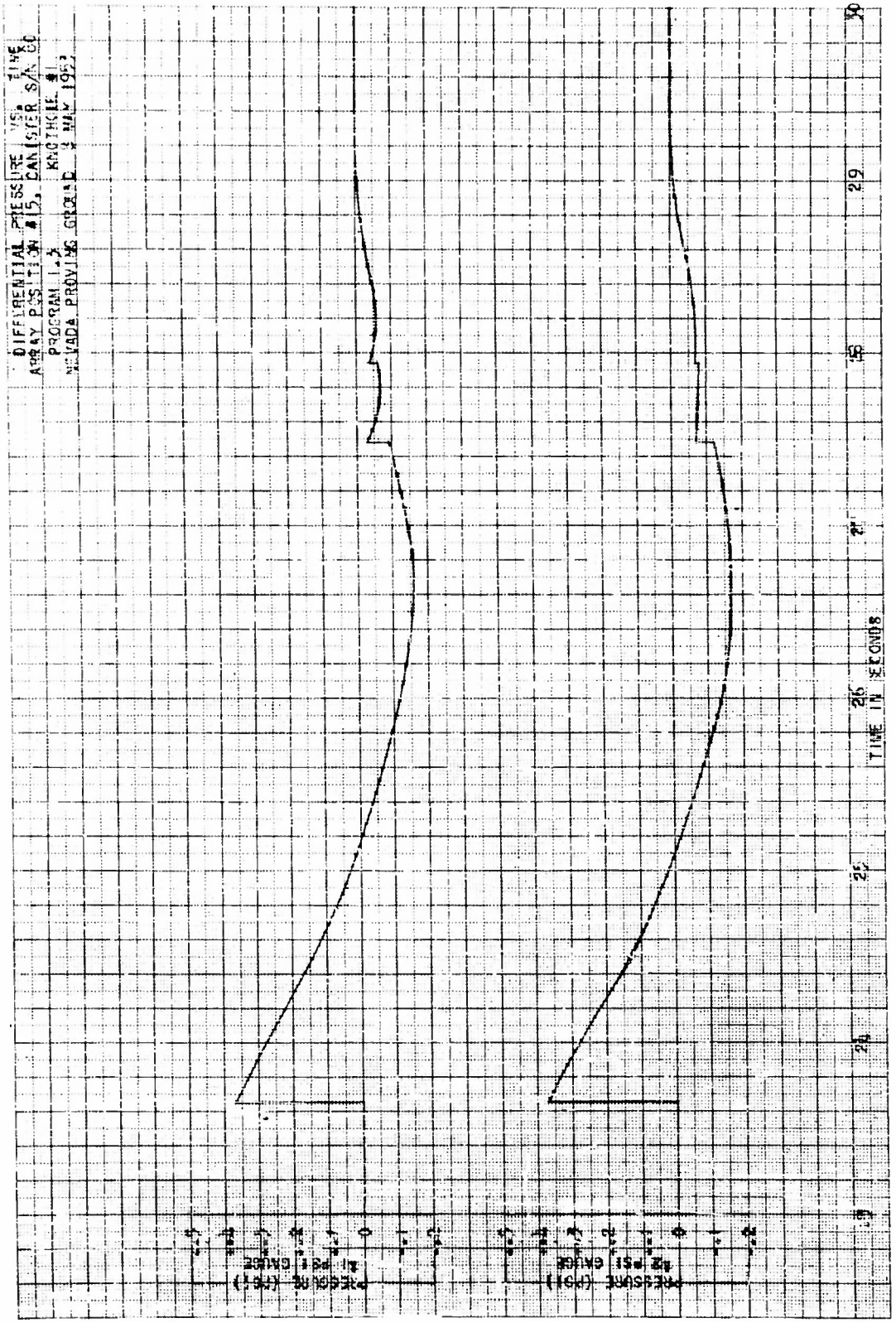

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #15, CANISTER S/N 60
PROGRAM 1.3
NEVADA PROVING GROUND 4 MAY 1962
TIME IN SECONDS
PRESSURE (PSI)
PRESSURE (PSI)

Figure 19

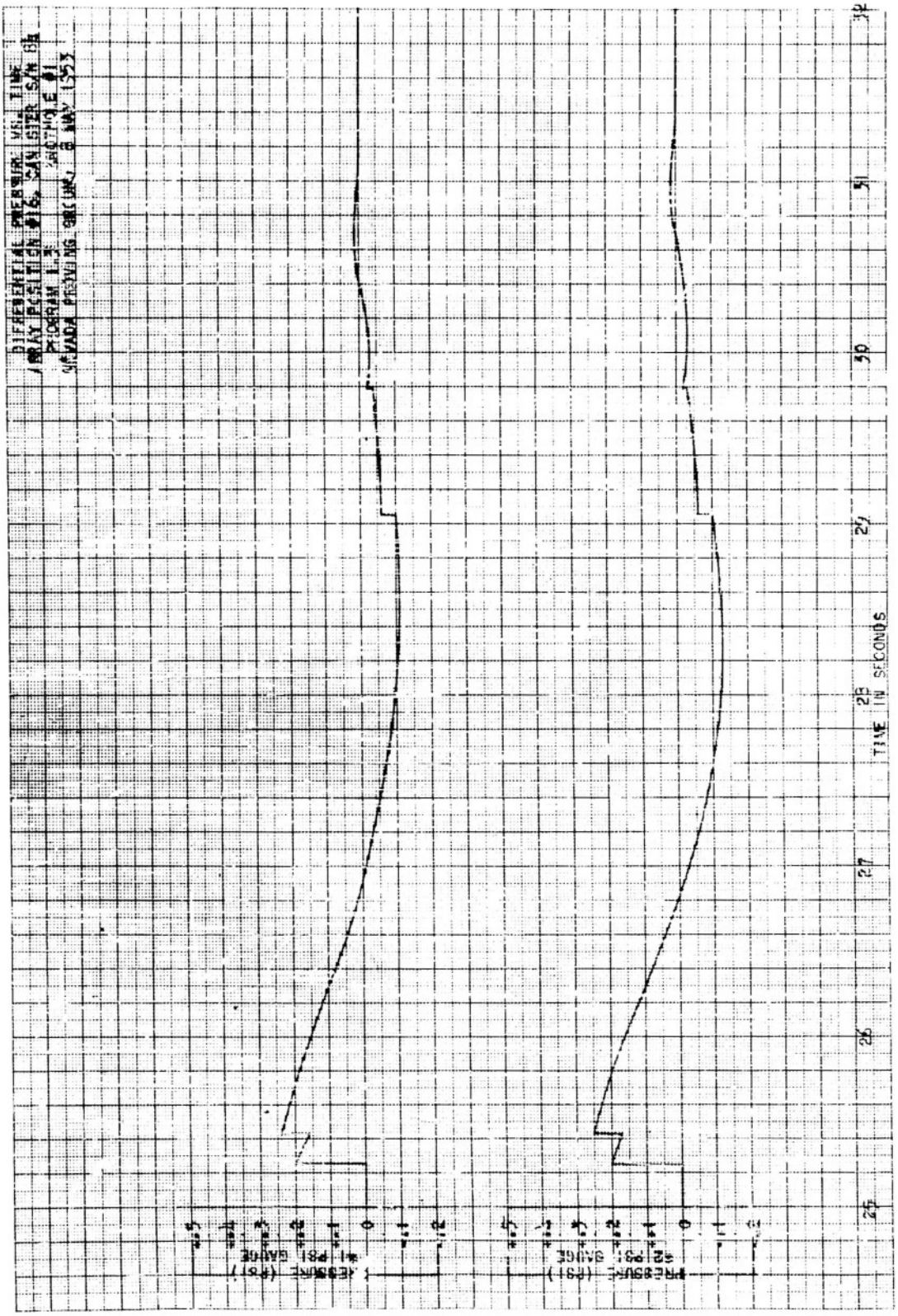

TIME IN SECONDS
25
26
27
30
31
32
PRESSURE (PSI)
RANGE
PRESSURE (PSI)
RANGE

Figure 20

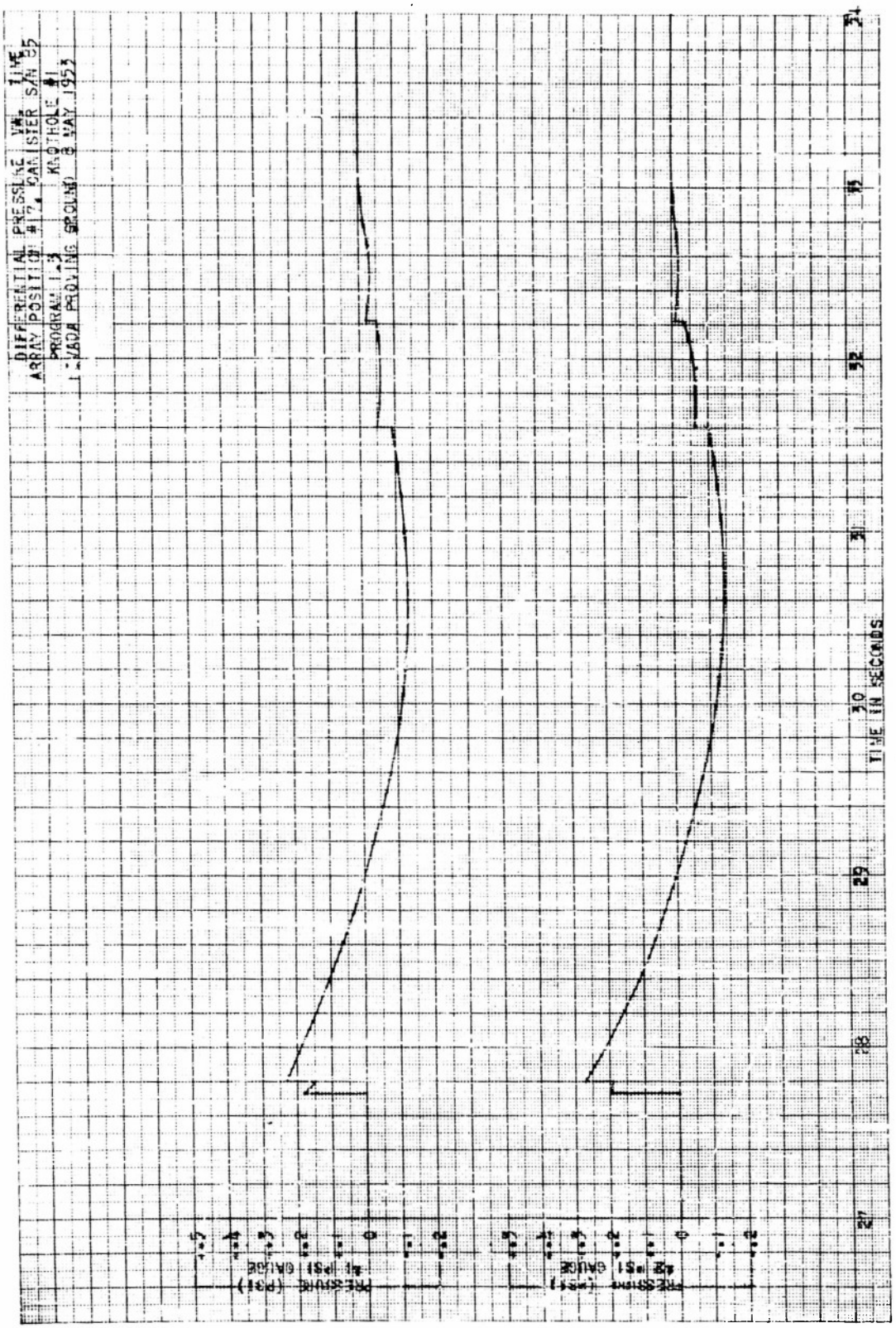

DIFFERENTIAL PRESSURE VS TIME
ARRAY POSITION #12, CANISTER S/N 05
PROGRAM 1-3 KNOTHOLE #1
NEVADA PROVING GROUND 3 MAY 1953
TIME IN SECONDS
28
29
30
31
32
PRESSURE (psi)
PRESSURE (psi)

Figure 21

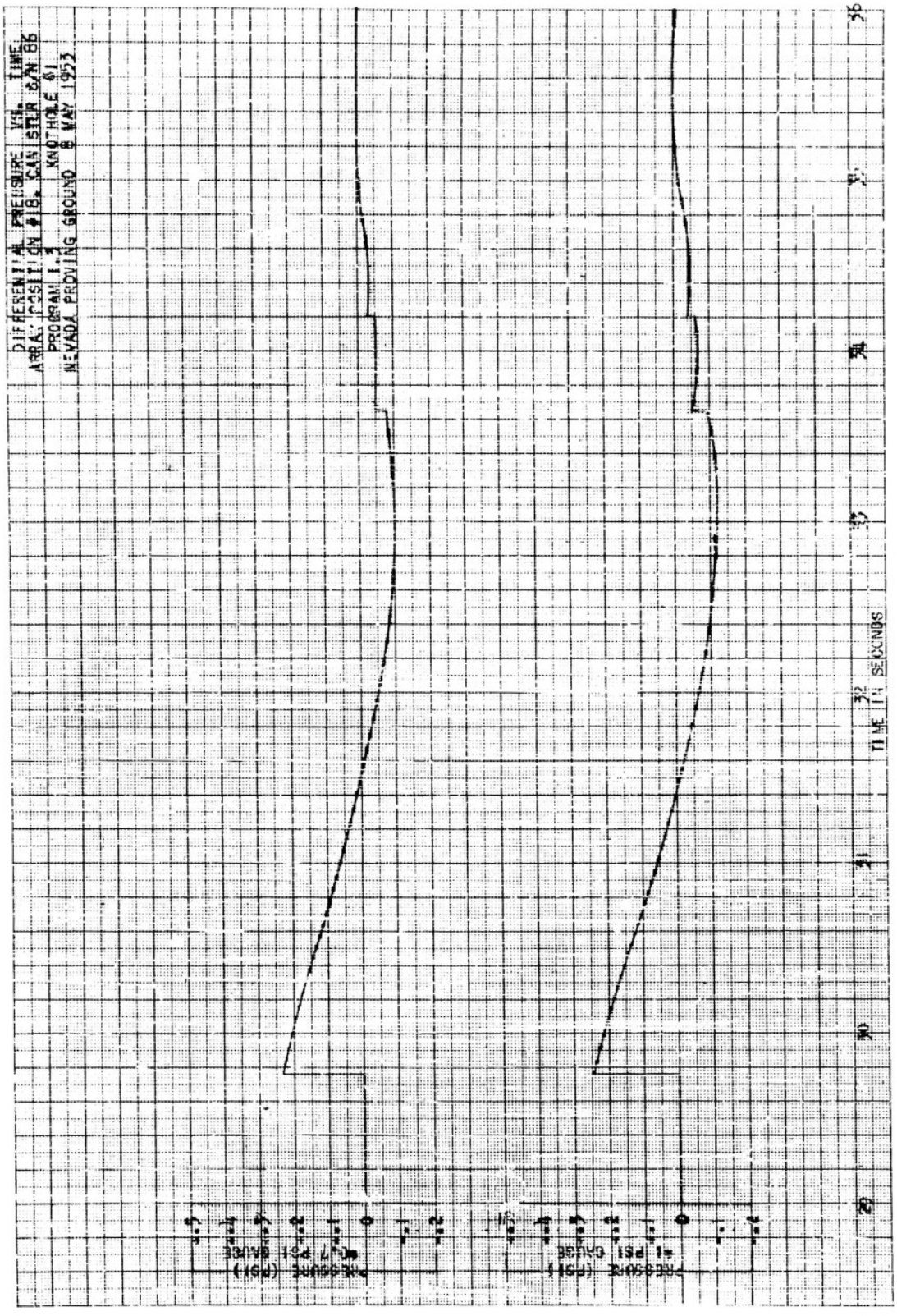

DIFFERENTIAL PRESSURE VS. TIME
ARRANGEMENT STATION #18, CANISTER S/N 86
PROGRAM I-3
KNOTHOLE G1
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
PRESSURE (PSI)
PRESSURE (PSI)

Figure 22

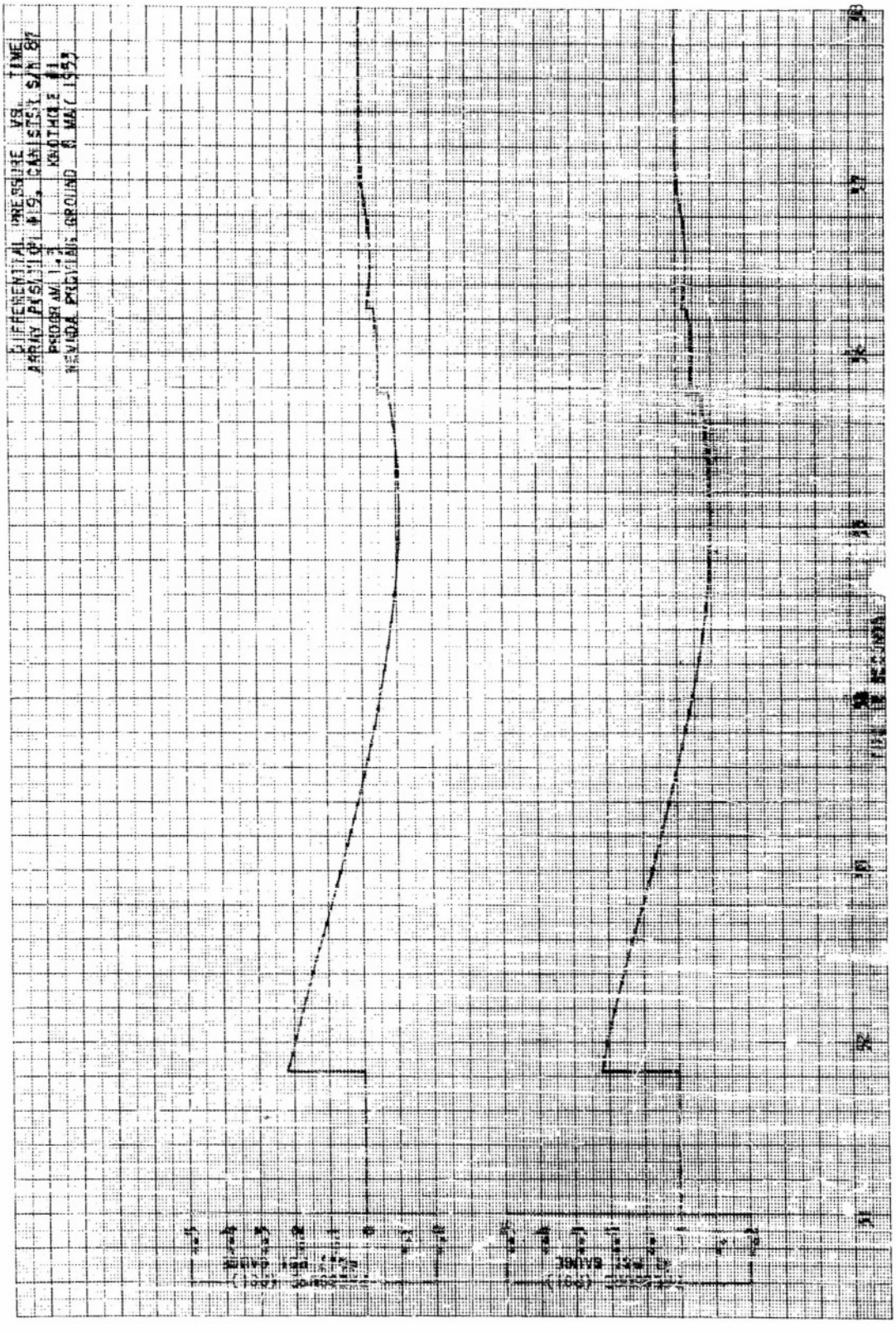


Figure 23

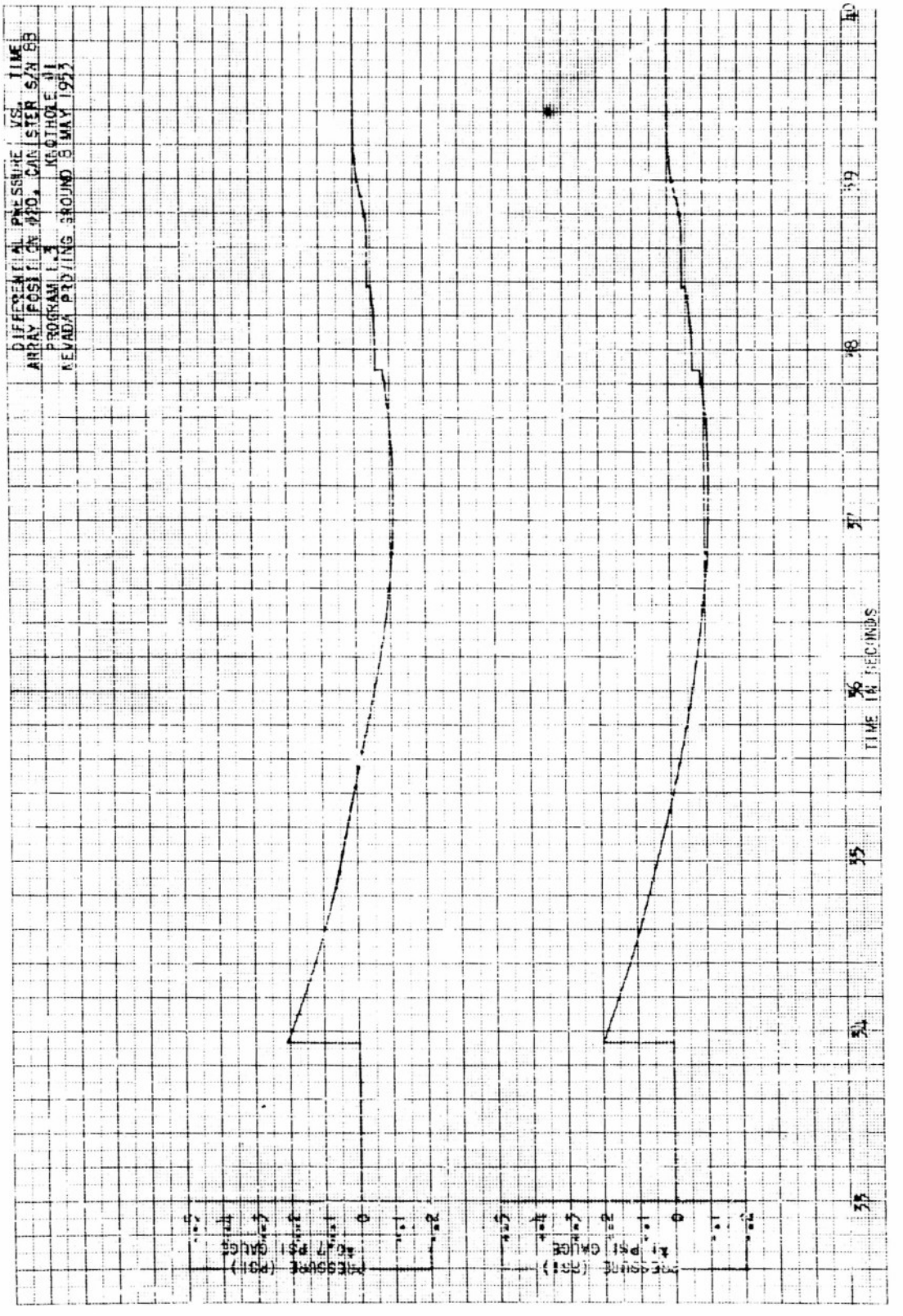

DIFFERENTIAL PRESSURE VS. TIME
ARRAY POSITION #20, CANISTER S/N 88
PROGRAM I-3 NEVADA TEST SITE
NEVADA PROVING GROUND 8 MAY 1953
TIME IN SECONDS
PRESSURE (PSI)
PRESSURE (PSI)

Figure 24

APPENDIX VI

OVERPRESSURE DATA - KNOTHOLE NO. 1

Figure	Title
1- 4	Tabular Overpressure Data, Array Position 1
5- 8	Tabular Overpressure Data, Array Position 2
9-11	Tabular Overpressure Data, Array Position 3
12-13	Tabular Overpressure Data, Array Position 4
14-15	Tabular Overpressure Data, Array Position 5
16-17	Tabular Overpressure Data, Array Position 6
18-19	Tabular Overpressure Data, Array Position 7
20-21	Tabular Overpressure Data, Array Position 8
22-23	Tabular Overpressure Data, Array Position 9
24-25	Tabular Overpressure Data, Array Position 10
26-29	Tabular Overpressure Data, Array Position 11
30-32	Tabular Overpressure Data, Array Position 12
33-34	Tabular Overpressure Data, Array Position 13
35-38	Tabular Overpressure Data, Array Position 14
39-40	Tabular Overpressure Data, Array Position 15
41-42	Tabular Overpressure Data, Array Position 16
43-44	Tabular Overpressure Data, Array Position 17
45-46	Tabular Overpressure Data, Array Position 18
47-48	Tabular Overpressure Data, Array Position 19
49-50	Tabular Overpressure Data, Array Position 20

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DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 1 , CANISTER S/N 64

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.	TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
05.00	+0.04	+0.04	0	09.36	0	+0.06	-0.06
06.04	+0.04	+0.04	0	09.37	+0.02	+0.06	-0.04
06.04	+1.03	+0.04	+0.99	09.37	+0.73	+0.06	+0.67
06.10	+0.95	+0.04	+0.91	09.40	+0.70	+0.06	+0.64
06.20	+0.84	+0.04	+0.80	09.50	+0.60	+0.06	+0.54
06.30	+0.70	+0.04	+0.66	09.60	+0.50	+0.06	+0.44
06.40	+0.60	+0.04	+0.56	09.70	+0.40	+0.06	+0.34
06.50	+0.49	+0.04	+0.45	09.80	+0.34	+0.07	+0.27
06.60	+0.39	+0.04	+0.35	09.90	+0.26	+0.07	+0.19
06.80	+0.20	+0.04	+0.16	10.00	+0.21	+0.07	+0.14
07.00	+0.10	+0.04	+0.06	10.20	+0.11	+0.07	+0.04
07.20	0	+0.06	-0.04	10.40	+0.03	+0.07	-0.04
07.40	-0.11	+0.05	-0.16	10.60	-0.02	+0.07	-0.09
07.60	-0.19	+0.05	-0.24	10.80	-0.09	+0.07	-0.16
07.80	-0.24	+0.05	-0.29	11.00	-0.12	+0.08	-0.20
08.00	-0.25	+0.05	-0.30	11.20	-0.14	+0.08	-0.22
08.20	-0.24	+0.05	-0.29	11.40	-0.14	+0.08	-0.22
08.40	-0.23	+0.05	-0.28	11.60	-0.11	+0.08	-0.19
08.60	-0.19	+0.06	-0.25	11.80	-0.09	+0.08	-0.17
08.80	-0.13	+0.06	-0.19	12.00	-0.02	+0.08	-0.10
09.00	-0.09	+0.06	-0.15	12.20	0	+0.09	-0.09
09.20	-0.03	+0.06	-0.09	12.40	+0.03	+0.09	-0.06
09.22	-0.01	+0.06	-0.07	12.60	+0.06	+0.09	-0.03
09.35	-0.03	+0.06	-0.09	12.80	+0.06	+0.09	-0.03

14.5 KC BAND

PICKUP RANGE: ±2PSI

DATA TAKEN BY OBERST & MATTSON

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Figure 1

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DATE _____ PAGE _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)			
13.00	+0.06	+0.09	-0.03						
13.20	+0.10	+0.09	+0.01						
13.40	+0.12	+0.10	+0.02						
13.60	+0.13	+0.10	+0.03						
13.80	+0.14	+0.10	+0.04						
14.00	+0.13	+0.10	+0.03						
14.20	+0.12	+0.10	+0.02						
14.40	+0.12	+0.10	+0.02						
14.60	+0.11	+0.10	+0.01						
14.80	+0.11	+0.11	0						
15.00	+0.11	+0.11	0						
15.50	+0.11	+0.11	0						
16.00	+0.12	+0.12	0						

16.5 KC BAND
PICKUP RANGE: ±2PSI

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Figure 2

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A.P.# / CANISTER S/N 6

DATE _____ PAGE _____
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PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
05.00	0	0	0	09.40	+0.65	+ .03	+0.62
06.04	0	0	0	09.50	+0.55	+ .03	+0.52
06.04	+ 1.05	0	+ 1.05	09.60	+0.45	+ .04	+0.41
06.10	+0.95	0	+ 0.95	09.70	+0.38	+ .04	+0.34
06.20	+0.85	0	+ 0.85	09.80	+0.29	+ .04	+0.25
06.30	+0.67	0	+ 0.67	09.90	+0.20	+ .04	+0.16
06.50	+0.45	0	+ 0.45	10.00	+0.15	+ .04	+0.11
06.70	+0.25	0	+ 0.25	10.20	+0.05	+ .04	+0.01
06.90	+0.10	+ .01	+0.09	10.40	-0.05	+ .04	- 0.09
07.10	-0.02	+ .01	-0.03	10.60	-0.10	+ .05	-0.15
07.30	-0.10	+ .01	-0.11	10.80	-0.15	+ .05	-0.20
07.60	-0.28	+ .01	-0.29	11.00	-0.20	+ .05	-0.25
07.80	-0.30	+ .02	- 0.32	11.20	-0.20	+ .05	-0.25
08.00	-0.35	+ .02	-0.37	11.40	-0.20	+ .06	-0.26
08.20	-0.35	+ .02	-0.37	11.60	-0.20	+ .06	-0.26
08.40	-0.35	+ .02	-0.37	11.80	-0.15	+ .06	-0.21
08.60	-0.28	+ .03	-0.31	12.00	-0.10	+ .06	-0.16
08.80	-0.20	+ .03	-0.23	12.20	-0.05	+ .06	-0.11
09.00	-0.15	+ .03	-0.18	12.40	-0.02	+ .07	-0.09
09.20	-0.10	+ .03	-0.13	12.60	0	+ .07	-0.07
09.30	-0.10	+ .03	-0.13	12.80	0	+ .07	-0.07
09.37	0	+ .03	-0.03	13.00	0	+ .07	-0.07
09.37	+0.70	+ .03	+0.67	13.20	+0.05	+.08	-0.03

10.5 KC BAND

PICKUP RANGE: ±5PSI

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Figure 3

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DIFFERENTIAL PRESSURE
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DATE PAGE
REPORT NO.
PROJECT NO.

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
13.40	+0.05	+ .08	-0.03					
13.60	+0.10	+ .08	+0.02					
13.80	+0.12	+ .08	+0.04					
14.00	+0.12	+ .09	+0.03					
14.30	+0.10	+ .09	+0.01					
14.60	+0.10	+ .09	+0.01					
14.90	+0.10	+ .10	0					
15.20	+0.10	+ .10	0					
15.60	+0.10	+ .10	0					
16.00	+0.10	+ .10	0					

10.5 KC BAND

PICKUP RANGE: ±5 PSI

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Figure 4

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Bendix Aviation Corp.
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DIFFERENTIAL PRESSURE
A.P. # 2, CANISTER S/N 61

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
07.00	+0.03	+.03	0	10.60	-0.15	+.04	-.19
08.00	+0.03	+.03	0	10.70	-0.14	+.04	-.18
08.00	+0.78	+.03	+.75	10.80	-0.12	+.04	-.16
08.10	+0.71	+.03	+.68	10.88	-0.10	+.04	-.14
08.20	+0.62	+.03	+.59	10.88	+0.57	+.04	+.53
08.40	+0.57	+.03	+.54	10.95	+0.52	+.04	+.48
08.60	+0.32	+.03	+.29	10.97	+0.50	+.04	+.46
08.80	+0.20	+.03	+.18	10.97	+0.57	+.04	+.53
09.00	+0.10	+.03	+.07	11.00	+0.55	+.05	+.50
09.20	0	+.03	-.03	11.10	+0.49	+.05	+.44
09.30	-0.05	+.03	-.08	11.20	+0.42	+.05	+.37
09.40	-0.09	+.03	-.12	11.40	+0.30	+.05	+.25
09.50	-0.12	+.09	-.16	11.60	+0.17	+.05	+.12
09.60	-0.14	+.04	-.18	11.80	+0.08	+.05	+.03
09.70	-0.17	+.04	-.21	12.00	-0.01	+.05	-.06
09.80	-0.18	+.04	-.22	12.20	-0.08	+.05	-.13
09.90	-0.19	+.04	-.23	12.40	-0.13	+.05	-.18
10.00	-0.21	+.04	-.25	12.60	-0.16	+.06	-.22
10.10	-0.21	+.04	-.25	12.80	-0.19	+.06	-.25
10.20	-0.21	+.04	-.25	13.00	-0.18	+.06	-.24
10.30	-0.20	+.04	-.24	13.20	-0.16	+.06	-.22
10.40	-0.19	+.04	-.23	13.40	-0.13	+.06	-.19
10.50	-0.18	+.04	-.22	13.60	-0.09	+.06	-.15

14.5 SAND
PICKUP RANGE: ±1 PSI

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Figure 5

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Bendix Aviation Corp.
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DIFFERENTIAL PRESSURE
A.P.E. CANISTER S/N 41

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS (PSI)	MEAN PRESS.	DIFF PRESS.		TIME (SEC)	PICKUP PRESS (PSI)	MEAN PRESS.	DIFF PRESS.
13.80	-0.04	+.06	-.10		19.00	+0.11	+.11	0
14.00	-0.01	+.07	-.08		19.50	+0.12	+.12	0
14.20	+0.03	+.07	-.04		20.00	+0.13	+.13	0
14.30	+0.04	+.07	-.03					
14.40	+0.03	+.07	-.04					
14.55	+0.02	+.07	-.05					
14.55	+0.06	+.07	-.01					
14.60	+0.06	+.07	-.01					
14.70	+0.07	+.07	0					
14.80	+0.08	+.07	+.01					
14.90	+0.10	+.07	+.03					
15.00	+0.11	+.07	+.04					
15.10	+0.12	+.07	+.05					
15.20	+0.13	+.07	+.06					
15.30	+0.13	+.07	+.06					
15.50	+0.13	+.08	+.05					
16.00	+0.12	+.08	+.04					
16.40	+0.11	+.08	+.03					
16.60	+0.10	+.08	+.02					
17.00	+0.09	+.08	+.01					
17.50	+0.09	+.08	+.01					
18.00	+0.09	+.09	0					
18.50	+0.10	+.10	0					

14.5 KC BAND
PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON — ENGINEER

APPROVED BY Johnson — APPROVED BY

Figure 6

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 2 CANISTER S/N 61

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
07.00	+0.05	+ .05	0	10.97	+0.50	+.06	+0.44
08.00	+0.05	+ .05	0	10.97	+0.57	+.06	+0.51
08.00	+0.79	+ .05	+0.74	11.00	+0.55	+.07	+0.48
08.10	+0.70	+ .05	+0.65	11.10	+0.50	+.07	+0.43
08.20	+0.62	+.05	+0.57	11.20	+0.45	+.07	+0.38
08.30	+0.53	+.05	+0.48	11.40	+0.30	+.07	+0.23
08.40	+0.47	+.05	+0.42	11.60	+0.28	+.07	+0.21
08.50	+0.38	+.05	+0.33	11.80	+0.09	+.07	+0.02
08.60	+0.30	+.05	+0.25	12.00	0	+.07	-0.07
08.80	+0.20	+.05	+0.15	12.20	-0.05	+.07	-0.12
09.00	+0.10	+.05	+0.05	12.40	-0.10	+.07	-0.17
09.20	0	+.05	-0.05	12.60	-0.13	+.08	-0.21
09.40	-0.06	+.05	-0.11	12.80	-0.15	+.08	-0.23
09.60	-0.11	+.06	-0.17	12.90	-0.16	+.08	-0.24
09.80	-0.16	+.06	-0.22	13.10	-0.15	+.08	-0.23
10.00	-0.20	+.06	-0.26	13.30	-0.11	+.08	-0.19
10.20	-0.19	+.06	-0.25	13.50	-0.09	+.08	-0.17
10.40	-0.18	+.06	-0.24	13.70	-0.02	+.08	-0.10
10.60	-0.12	+.06	-0.18	13.90	0	+.08	-0.08
10.80	-0.09	+.06	-0.15	14.00	+0.01	+.09	-0.08
10.88	-0.06	+.06	-0.12	14.20	+0.05	+.09	-0.04
10.88	+0.55	+.06	+0.49	14.30	+0.06	+.09	-0.03
10.90	+0.52	+.06	+0.46	14.40	+0.07	+.09	-0.02

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY

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Figure 7

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 2, CANISTER S/N 61

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
14.50	+0.05	+.09	-0.04		19.50	+0.13	+.13	0	
14.55	+0.04	+.09	-0.05		20.00	+0.13	+.13	0	
14.55	+0.08	+.09	-0.01						
14.60	+0.08	+.09	-0.01						
14.70	+0.09	+.09	0						
14.80	+0.10	+.09	+0.01						
14.90	+0.11	+.09	+0.02						
15.00	+0.12	+.09	+0.03						
15.10	+0.13	+.09	+0.04						
15.20	+0.13	+.09	+0.04						
15.40	+0.13	+.09	+0.04						
15.60	+0.13	+.10	+0.03						
15.80	+0.13	+.10	+0.03						
16.00	+0.12	+.10	+0.02						
16.20	+0.12	+.10	+0.02						
16.40	+0.12	+.10	+0.02						
16.60	+0.11	+.10	+0.01						
16.80	+0.11	+.10	+0.01						
17.00	+0.11	+.11	0						
17.50	+0.11	+.11	0						
18.00	+0.11	+.11	0						
18.50	+0.11	+.11	0						
19.00	+0.12	+.12	0						

10.5 KC BAND

PICKUP RANGE: ±2PSI

DATA TAKEN BY ODERST & MATTSON — ENGINEER

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Figure 8

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 3, CANISTER S/N 65

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
09.00	+0.01	+.01	0	13.39	+0.18	+.04	+.14
10.32	+0.01	+.01	0	13.60	+0.10	+.04	+.06
10.32	+0.53	+.01	+.52	13.80	+0.03	+.04	-.01
10.40	+0.50	+.01	+.49	14.00	-0.01	+.04	-.05
10.60	+0.39	+.01	+.38	14.20	-0.08	+.05	-.13
10.80	+0.30	+.01	+.29	14.40	-0.10	+.05	-.16
11.00	+0.21	+.01	+.20	14.60	-0.12	+.05	-.17
11.20	+0.12	+.01	+.11	14.80	-0.13	+.05	-.18
11.40	+0.06	+.02	+.04	15.00	-0.12	+.05	-.17
11.60	0	+.02	-.02	15.20	-0.11	+.06	-.17
11.80	-0.05	+.02	-.07	15.40	-0.09	+.06	-.15
12.00	-0.10	+.02	-.13	15.60	-0.04	+.06	-.10
12.20	-0.11	+.02	-.13	15.80	0	+.06	-.06
12.40	-0.12	+.03	-.15	16.00	+0.01	+.06	-.05
12.60	-0.12	+.03	-.15	16.17	+0.06	+.07	-.01
12.72	-0.12	+.03	-.15	16.30	+0.02	+.07	-.05
12.72	+0.30	+.03	+.27	16.40	+0.02	+.07	-.05
12.80	+0.29	+.03	+.26	16.43	+0.05	+.07	-.02
12.90	+0.28	+.03	+.25	16.50	+0.05	+.07	-.02
13.00	+0.25	+.03	+.22	16.70	+0.08	+.07	+.01
13.10	+0.21	+.03	+.18	17.00	+0.10	+.08	+.02
13.20	+0.16	+.04	+.12	17.40	+0.10	+.08	+.02
13.39	+0.12	+.04	+.08	17.80	+0.10	+.08	+.02

14.5 KC BAND
PICKUP RANGE: ±2PSI

DATA TAKEN BY OBERST & MATTSON | ENGINEER

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Figure 9

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 5, CANISTER S/N 65

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
18.20	+0.10	+.09	+.01						
18.50	+0.10	+.09	+.01						
19.00	+0.10	+.10	0						
19.50	+0.10	+.10	0						
20.00	+0.10	+.10	0						

14.5 KC BAND
PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON — ENGINEER

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Figure 10

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE

A.P. # 3 CANISTER S/N 65

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
0900	+0.12	+.12	0		13.70	+0.19	+.15	+.04
10.32	+0.12	+.12	0		13.90	+0.10	+.16	-.06
10.32	+0.62	+.12	+.50		14.10	+0.03	+.16	-.13
10.40	+0.61	+.12	+.49		14.20	0	+.16	-.16
10.60	+0.55	+.12	+.43		14.50	-0.01	+.16	-.17
10.80	+0.41	+.12	+.39		14.70	-0.05	+.17	-.22
11.00	+0.35	+.12	+.23		15.00	-0.05	+.17	-.22
11.20	+0.22	+.13	+.09		15.50	0	+.18	-.18
11.40	+0.18	+.13	+.05		15.80	+0.07	+.18	-.11
11.60	+0.10	+.13	-.03		16.00	+0.10	+.18	-.08
11.80	+0.02	+.13	-.11		16.50	+0.12	+.19	-.07
12.00	0	+.13	-.13		16.80	+0.20	+.19	+.01
12.20	-0.02	+.14	-.16		17.00	+0.20	+.20	0
12.40	-0.02	+.14	-.16		17.50	+0.20	+.20	0
12.60	-0.03	+.14	-.17		18.00	+0.20	+.20	0
12.72	-0.05	+.14	-.19		18.50	+0.20	+.20	0
12.72	+0.40	+.14	+.26		19.00	+0.20	+.20	0
12.80	+0.39	+.14	+.25		19.50	+0.20	+.20	0
13.00	+0.35	+.15	+.20		20.00	+0.20	+.20	0
13.20	+0.30	+.15	+.15					
13.39	+0.20	+.15	+.05					
13.39	+0.25	+.15	+.10					
13.50	+0.23	+.15	+.08					

10.5 KC BAND

PICKUP RANGE: ±5PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

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Figure 11

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#4. CANISTER S/N 66

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
14.00	+0.02	+ .02	0	17.70	-0.02	+ .04	- .06
14.53	+0.02	+ .02	0	17.79	-0.03	+ .04	- .07
14.53	+0.35	+ .02	+ .33	17.79	0	+ .04	- .04
14.60	+0.32	+ .02	+ .30	17.90	-0.01	+ .09	- .05
14.70	+0.30	+ .02	+ .28	18.10	-0.05	+ .05	- .10
14.80	+0.28	+ .02	+ .26	18.30	-0.08	+ .05	- .13
14.90	+0.26	+ .02	+ .24	18.50	-0.10	+ .05	- .15
15.00	+0.23	+ .02	+ .21	18.70	-0.11	+ .05	- .16
15.10	+0.20	+ .02	+ .18	18.90	-0.11	+ .05	- .16
15.30	+0.14	+ .02	+ .12	19.10	-0.09	+ .05	- .14
15.50	+0.10	+ .02	+ .08	19.30	-0.06	+ .06	- .12
15.70	+0.05	+ .03	+ .02	19.50	-0.02	+ .06	- .08
15.90	+0.02	+ .03	- .01	19.60	0	+ .06	- .06
16.00	0	+ .03	- .03	19.80	+0.02	+ .06	- .04
16.20	-0.04	+ .03	- .07	19.90	+0.05	+ .06	- .01
16.20	+0.14	+ .03	+ .11	20.00	+0.04	+ .06	- .02
16.30	+0.13	+ .03	+ .10	20.10	+0.02	+ .06	- .04
16.50	+0.11	+ .03	+ .08	20.30	+0.05	+ .06	- .01
16.70	+0.09	+ .03	+ .06	20.50	+0.08	+ .07	+ .01
16.90	+0.07	+ .04	+ .03	20.70	+0.10	+ .07	+ .03
17.10	+0.05	+ .04	+ .01	21.00	+0.10	+ .07	+ .03
17.30	+0.03	+ .04	- .01	23.00	+0.09	+ .09	0
17.50	+0.01	+ .04	- .03	24.00	+0.10	+ .10	0

16.5 KC BAND
PICKUP RANGE: ± 1 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 12

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 4 - CANISTER S/N 66

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
14.00	+0.11	+ .11	0	18.00	+0.04	+ .14	- .10
14.53	+0.11	+ .11	0	18.20	0	+ .14	- .14
14.53	+0.50	+ .11	+ .39	18.40	-0.02	+ .14	- .16
14.60	+0.49	+ .11	+ .38	19.60	-0.05	+ .15	- .20
14.80	+0.40	+ .11	+ .29	18.80	-0.05	+ .15	- .20
15.00	+0.34	+ .11	+ .23	19.00	-0.04	+ .15	- .19
15.20	+0.29	+ .11	+ .18	19.20	-0.01	+ .15	- .16
15.24	+0.21	+ .11	+ .10	19.40	+0.02	+ .15	- .13
15.60	+0.17	+ .12	+ .05	19.60	+0.08	+ .16	- .08
15.80	+0.10	+ .12	- .02	19.80	+0.10	+ .16	- .06
16.00	+0.08	+ .12	- .04	19.90	+0.12	+ .16	- .04
16.20	+0.04	+ .12	- .08	20.00	+0.10	+ .16	- .06
16.20	+0.25	+ .12	+ .13	20.10	+0.09	+ .16	- .07
16.30	+0.25	+ .12	+ .13	20.20	+0.10	+ .16	- .06
16.40	+0.22	+ .12	+ .10	20.40	+0.12	+ .16	- .04
16.60	+0.18	+ .13	+ .05	20.60	+0.15	+ .17	- .02
16.80	+0.16	+ .13	+ .03	20.80	+0.16	+ .17	- .01
17.00	+0.15	+ .13	+ .02	21.00	+0.17	+ .17	0
17.20	+0.12	+ .13	- .01	21.20	+0.18	+ .17	+ .01
17.40	+0.10	+ .13	- .03	21.80	+0.18	+ .18	0
17.60	+0.07	+ .14	- .07	22.50	+0.18	+ .18	0
17.79	+0.03	+ .14	- .11	23.40	+0.18	+ .18	0
17.79	+0.08	+ .19	- .06	24.00	+0.18	+ .18	0

10.5 KC BAND

PICKUP RANGE: ±2PSI

DATA TAKEN BY OBERST & MATTSON

APPROVED BY Johnson

ENGINEER

APPROVED BY

Figure 13

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 5 . CANISTER S/N67

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
18.00	+0.02	+.02	0	22.57	-0.04	+.04	-.08
19.09	+0.02	+.02	0	22.60	-0.05	+.04	-.09
19.09	+0.27	+.02	+.25	22.80	-0.06	+.04	-.10
19.20	+0.24	+.02	+.22	23.00	-0.06	+.05	-.11
19.40	+0.21	+.02	+.19	23.20	-0.07	+.05	-.12
19.60	+0.17	+.02	+.15	23.40	-0.06	+.05	-.11
19.80	+0.13	+.02	+.11	23.60	-0.05	+.05	-.10
20.00	+0.10	+.02	+.08	23.80	-0.03	+.05	-.08
20.17	+0.05	+.02	+.03	24.00	0	+.05	-.05
20.17	+0.19	+.02	+.17	24.10	+0.02	+.05	-.03
20.30	+0.17	+.02	+.15	24.14	+0.04	+.05	-.01
20.50	+0.14	+.03	+.11	24.25	+0.02	+.05	-.03
20.70	+0.11	+.03	+.08	24.35	+0.02	+.06	-.04
20.90	+0.08	+.03	+.05	24.50	+0.03	+.06	-.03
21.00	+0.06	+.03	+.03	24.70	+0.06	+.06	0
21.20	+0.03	+.03	0	24.90	+0.08	+.06	+.02
21.40	0	+.03	-.03	25.10	+0.08	+.06	+.02
21.60	-0.01	+.03	-.04	25.30	+0.08	+.06	+.02
21.80	-0.03	+.04	-.07	25.50	+0.08	+.07	+.01
22.00	-0.04	+.04	-.08	26.00	+0.08	+.07	+.01
22.20	-0.05	+.04	-.09	27.00	+0.08	+.08	0
22.40	-0.06	+.04	-.10	27.50	+0.08	+.08	0
22.57	-0.06	+.04	-.10	28.00	+0.09	+.09	0

14.5 KC BAND
PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
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Figure 14

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 5, CANISTER S/N 67

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
18.00	+0.03	+.03	0	22.70	-0.07	+.08	-.15
19.09	+0.05	+.05	0	22.90	-0.08	+.08	-.16
19.09	+0.30	+.05	+.25	23.10	-0.09	+.08	-.17
19.20	+0.29	+.05	+.24	23.30	-0.09	+.08	-.17
19.40	+0.25	+.05	+.20	23.50	-0.08	+.08	-.16
19.60	+0.21	+.05	+.16	23.70	-0.04	+.08	-.12
19.80	+0.17	+.05	+.12	23.90	0	+.09	-.09
20.00	+0.12	+.05	+.07	24.00	+0.01	+.09	-.08
20.17	+0.10	+.05	+.05	24.10	+0.02	+.09	-.07
20.17	+0.25	+.05	+.20	24.14	+0.06	+.09	-.03
20.40	+0.19	+.06	+.13	24.30	+0.03	+.09	-.06
20.60	+0.14	+.06	+.08	24.50	+0.05	+.09	-.04
20.80	+0.10	+.06	+.04	24.70	+0.08	+.09	-.01
21.00	+0.08	+.06	+.02	24.90	+0.10	+.10	0
21.20	+0.04	+.06	-.02	25.00	+0.10	+.10	0
21.40	0	+.06	-.06	25.50	+0.10	+.10	0
21.60	0	+.07	-.07	26.00	+0.10	+.10	0
21.80	-0.01	+.07	-.08	26.50	+0.10	+.10	0
22.00	-0.03	+.07	-.10	27.00	+0.10	+.10	0
22.20	-0.05	+.07	-.12	27.50	+0.10	+.10	0
22.40	-0.07	+.07	-.14	28.00	+0.11	+.11	0
22.57	-0.08	+.07	-.15				
22.57	-0.06	+.07	-.13				

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON

APPROVED BY J. Lamar

ENGINEER

APPROVED BY

Figure 15

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 6, CANISTER S/N 68

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
23.00	+0.02	+.02	0	27.61	-0.08	+.06	-.14
24.61	+0.02	+.02	0	27.61	-0.06	+.06	-.12
24.01	+0.21	+.02	+.19	27.80	-0.05	+.06	-.11
24.10	+0.20	+.02	+.18	28.00	-0.05	+.06	-.11
24.30	+0.16	+.02	+.14	28.20	-0.04	+.06	-.10
24.50	+0.13	+.02	+.11	28.40	-0.03	+.06	-.09
24.61	+0.13	+.02	+.11	28.60	-0.01	+.07	-.08
24.61	+0.21	+.02	+.19	28.79	+0.02	+.07	-.05
24.70	+0.20	+.02	+.18	28.79	+0.04	+.07	-.03
24.90	+0.18	+.03	+.15	29.00	+0.03	+.07	-.04
25.10	+0.15	+.03	+.12	29.10	+0.03	+.07	-.04
25.30	+0.12	+.03	+.09	29.20	+0.04	+.07	-.03
25.50	+0.09	+.03	+.06	29.40	+0.07	+.08	-.01
25.70	+0.07	+.03	+.04	29.60	+0.08	+.08	0
25.90	+0.04	+.04	0	29.80	+0.09	+.08	+.01
26.10	+0.01	+.04	-.03	30.00	+0.09	+.09	0
26.30	-0.02	+.04	-.06	30.50	+0.09	+.09	0
26.50	-0.03	+.04	-.07	31.00	+0.09	+.09	0
26.70	-0.05	+.05	-.10	31.50	+0.09	+.09	0
26.90	-0.05	+.05	-.10	32.00	+0.09	+.09	0
27.10	-0.05	+.05	-.10	32.50	+0.09	+.09	0
27.20	-0.06	+.05	-.11	33.00	+0.09	+.09	0
27.40	-0.07	+.05	-.12				

14.5 KG SAND
PICKUP RANGE: ±1PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY J. Johnson
APPROVED BY

Figure 16

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 6, CANISTER S/N 68

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF PRESS.
23.00	+0.02	+.02	0	27.61	-0.06	+.08	-.14
24.01	+0.04	+.04	0	27.80	-0.05	+.08	-.13
24.01	+0.24	+.04	+.20	28.00	-0.05	+.08	-.13
24.10	+0.23	+.04	+.19	28.20	-0.04	+.08	-.12
24.30	+0.21	+.04	+.17	28.40	-0.02	+.08	-.10
24.50	+0.18	+.04	+.14	28.60	0	+.09	-.09
24.61	+0.15	+.04	+.11	28.70	+0.01	+.09	-.08
24.61	+0.24	+.04	+.20	28.79	+0.03	+.09	-.06
24.80	+0.22	+.04	+.18	28.99	+0.05	+.09	-.04
25.00	+0.20	+.05	+.15	28.90	+0.04	+.09	-.05
25.20	+0.18	+.05	+.13	29.00	+0.03	+.09	-.06
25.40	+0.14	+.05	+.09	29.10	+0.03	+.09	-.06
25.60	+0.10	+.05	+.05	29.30	+0.07	+.09	-.02
25.80	+0.07	+.06	+.01	29.50	+0.10	+.10	0
26.00	+0.04	+.06	-.02	29.70	+0.10	+.10	0
26.20	0	+.06	-.06	29.90	+0.10	+.10	0
26.40	-0.02	+.06	-.04	30.10	+0.10	+.10	0
26.60	-0.03	+.06	-.09	30.50	+0.10	+.10	0
26.80	-0.04	+.07	-.11	31.00	+0.11	+.11	0
27.00	-0.05	+.07	-.12	31.50	+0.11	+.11	0
27.20	-0.06	+.07	-.13	32.00	+0.11	+.11	0
27.40	-0.07	+.07	-.14	32.50	+0.11	+.11	0
27.61	-0.08	+.08	-.16	33.00	+0.11	+.11	0

10.5 KC BAND

PICKUP RANGE: ± 2 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY

APPROVED BY

Figure 17

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 7, CANISTER S/N 69

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
29.00	+0.05	+ .05	0	33.60	-0.02	+ .10	-.12
29.98	+0.05	+ .05	0	33.80	0	+ .10	-.10
29.98	+0.30	+ .05	+.25	33.91	+0.02	+ .10	-.08
30.05	+0.29	+ .05	+.24	33.91	+0.06	+ .10	-.04
30.14	+0.30	+ .05	+.25	34.00	+0.05	+ .10	-.05
30.20	+0.29	+ .05	+.24	34.10	+0.04	+ .10	-.06
30.30	+0.28	+ .05	+.23	34.30	+0.05	+ .11	-.06
30.50	+0.22	+ .05	+.18	34.40	+0.07	+ .11	-.04
30.70	+0.18	+ .06	+.12	34.45	+0.06	+ .11	-.05
30.90	+0.16	+ .06	+.10	34.50	+0.07	+ .11	-.04
31.00	+0.15	+ .06	+.09	34.60	+0.06	+ .11	-.05
31.20	+0.12	+ .06	+.06	34.70	+0.06	+ .11	-.05
31.40	+0.11	+ .07	+.04	34.80	+0.07	+ .12	-.05
31.60	+0.07	+ .07	0	35.00	+0.10	+ .12	-.02
31.80	+0.05	+ .07	-.02	35.20	+0.12	+ .12	0
32.00	+0.03	+ .07	-.04	35.40	+0.13	+ .13	0
32.20	+0.01	+ .08	-.07	35.60	+0.13	+ .13	0
32.40	-0.01	+ .08	-.09	35.80	+0.13	+ .13	0
32.60	-0.02	+ .08	-.10	36.00	+0.13	+ .13	0
32.80	-0.02	+ .09	-.11	37.00	+0.13	+ .13	0
33.00	-0.03	+ .09	-.12	38.00	+0.13	+ .13	0
33.20	-0.03	+ .09	-.12				
33.40	-0.03	+ .09	-.12				

14.5 KC BAND
PICKUP RANGE: ± 1 PSI

DATA TAKEN BY OBERST & MATTSON
APPROVED BY

ENGINEER
APPROVED BY

VI-18

Figure 18

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 7, CANISTER S/N 69

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS	DIFF. PRESS.
29.00	+0.09	+.09	0		33.91	+0.03	+.13	-.10
29.98	+0.09	+.09	0		33.91	+0.07	+.13	-.06
29.98	+0.35	+.09	+.26		34.10	+0.07	+.13	-.06
30.10	+0.35	+.09	+.26		34.30	+0.00	+.14	-.06
30.20	+0.35	+.09	+.26		34.40	+0.10	+.14	-.04
30.40	+0.30	+.09	+.21		34.60	+0.09	+.14	-.05
30.60	+0.24	+.09	+.15		34.80	+0.10	+.14	-.04
30.80	+0.20	+.10	+.10		35.00	+0.12	+.14	-.02
31.00	+0.19	+.10	+.09		35.20	+0.15	+.15	0
31.20	+0.15	+.10	+.05		35.40	+0.15	+.15	0
31.40	+0.12	+.10	+.02		35.50	+0.15	+.15	0
31.60	+0.09	+.10	-.01		36.00	+0.16	+.16	0
31.80	+0.07	+.11	-.04		36.30	+0.16	+.16	0
32.00	+0.03	+.11	-.08		36.60	+0.16	+.16	0
32.20	+0.02	+.11	-.09		36.90	+0.16	+.16	0
32.40	+0.01	+.11	-.10		37.20	+0.16	+.16	0
32.60	0	+.12	-.12		37.50	+0.16	+.16	0
32.80	0	+.12	-.12		38.00	+0.16	+.16	0
33.00	0	+.12	-.12					
33.20	0	+.12	-.12					
33.40	0	+.13	-.13					
33.60	+0.01	+.13	-.12					
33.80	+0.03	+.13	-.10					

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON — ENGINEER

APPROVED BY Johnson — APPROVED BY

Figure 19

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 8 CANISTER S/N 70

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
27.00	+0.09	+.09	0	31.50	-.02	+.09	-.11
28.04	+0.09		0	31.60	-0.03		-.12
28.04	+0.29		+.20	31.76	-0.02		-.11
29.10	+0.26		+.17	31.71	+0.01		-.08
28.20	+0.24		+.15	31.80	+0.01		-.08
28.30	+0.22		+.13	32.00	+0.01		-.08
28.38	+0.21		+.12	32.20	+0.02		-.07
28.36	+0.30		+.21	32.40	+0.02		-.07
28.50	+0.29		+.19	32.60	+0.04		-.05
28.70	+0.24		+.15	32.67	+0.05		-.04
28.90	+0.22		+.13	32.69	+0.08		-.01
29.10	+0.18		+.09	32.80	+0.07		-.02
29.30	+0.15		+.06	32.90	+0.06		-.03
29.50	+0.12		+.03	33.00	+0.06		-.03
29.70	+0.09		0	33.10	+0.07		-.02
29.90	+0.06		-.03	33.20	+0.08		-.01
30.10	+0.03		-.06	33.30	+0.10		+.01
30.30	+0.01		-.08	33.50	+0.10		+.01
30.50	-0.01		-.10	34.00	+0.10		+.01
30.70	-0.01		-.10	35.00	+0.09		0
30.90	-0.02		-.11	36.00	+0.09		0
31.10	-0.02		-.11	37.00	+0.09	+.09	0
31.30	-0.02	+.09	-.11				

14.5 KC BAND
PICKUP RANGE: ± 0.7 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 20

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 5, CANISTER S/N 70

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
27.00	+0.13	+.13	0	32.20	+0.05	+.13	-.08
28.04	+0.13	↓	0	32.40	+0.05	↓	-.08
28.04	+0.34		+.21	32.60	+0.05		-.05
28.10	+0.32		+.19	32.69	+0.09		-.04
28.20	+0.30		+.17	32.69	+0.12		-.01
28.30	+0.28		+.15	32.80	+0.11		-.02
28.38	+0.26		+.13	33.00	+0.10		-.03
28.38	+0.35		+.22	33.10	+0.10		-.03
28.50	+0.33		+.20	33.30	+0.14		+.01
28.70	+0.30		+.17	33.50	+0.15		+.02
29.00	+0.24		+.11	33.70	+0.15		+.02
29.30	+0.20		+.07	34.00	+0.15		+.02
29.60	+0.14		+.01	34.50	+0.14		+.01
29.90	+0.10		-.03	35.00	+0.14		+.01
30.20	+0.05		-.08	35.50	+0.13		0
30.50	+0.04		-.09	36.00	+0.12		0
31.00	+0.02		-.11	36.50	+0.13	↓	0
31.40	0		-.13	37.00	+0.13	+.13	0
31.60	0		-.13				
31.76	0		-.13				
31.76	+0.02		-.10				
31.80	+0.03	↓	-.10				
32.00	+0.04	+.13	-.09				

10.5 KC BAND

PICKUP RANGE: ±.1 PSI

DATA TAKEN BY: OBERST & MATTSON

APPROVED BY: [signature]

ENGINEER

APPROVED BY

Figure 21

Pacific Division
Douglas Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 9 , CANISTER S/N 73

DATE PAGE
REPORT NO.
PROJECT NO.

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.	TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
32.00	+0.06	+ .06	0	37.73	+0.08	+ .10	- .02
33.23	+0.06	+ .06	0	38.00	+0.06	+ .11	- .05
33.25	+0.20	+ .06	+ .14	38.20	+0.09	+ .11	- .02
33.33	+0.17	+ .06	+ .11	38.40	+0.11	+ .11	0
33.53	+0.24	+ .06	+ .18	38.60	+0.12	+ .11	+ .01
33.60	+0.20	+ .06	+ .14	38.80	+0.13	+ .11	+ .02
33.80	+0.19	+ .06	+ .13	39.00	+0.12	+ .12	0
34.00	+0.17	+ .07	+ .10	39.20	+0.12	+ .12	0
34.20	+0.15	+ .07	+ .08	39.50	+0.12	+ .12	0
34.50	+0.11	+ .07	+ .04	40.00	+0.12	+ .12	0
34.80	+0.09	+ .07	+ .02	40.30	+0.13	+ .13	0
35.10	+0.07	+ .08	- .01	40.90	+0.13	+ .13	0
35.40	+0.06	+ .08	- .02	41.00	+0.13	+ .13	0
35.80	+0.02	+ .08	- .06	41.50	+0.13	+ .13	0
36.00	+0.01	+ .09	- .08	42.00	+0.13	+ .13	0
36.20	0	+ .09	- .09				
36.40	0	+ .09	- .09				
36.60	0	+ .09	- .09				
36.80	0	+ .09	- .09				
37.02	+0.01	+ .10	- .09				
37.22	+0.04	+ .10	- .06				
37.30	+0.04	+ .10	- .06				
37.50	+0.04	+ .10	- .06				
37.73	+0.06	+ .10	- .04				

14.5 KC BAND

PICKUP RANGE: ± 0.7 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY Johnson

APPROVED BY

Figure 22

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 9 CANISTER S/N 73

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.	TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
(SEC)	(PSI)			(SEC)	(PSI)		
32.00	+0.05	+.05	0	37.20	+0.02	+.09	-.07
33.23	+0.05	+.05	0	37.40	+0.03	+.10	-.07
33.23	+0.19	+.05	+.14	37.60	+0.04	+.10	-.06
33.33	+0.15	+.05	+.10	37.73	+0.05	+.10	-.05
33.33	+0.22	+.05	+.17	37.73	+0.07	+.10	-.03
33.50	+0.20	+.05	+.15	37.90	+0.06	+.10	-.04
33.70	+0.19	+.05	+.14	38.10	+0.07	+.10	-.03
34.00	+0.17	+.06	+.11	38.50	+0.09	+.11	-.02
34.20	+0.13	+.06	+.07	38.50	+0.10	+.11	-.01
34.40	+0.12	+.06	+.06	38.70	+0.11	+.11	0
34.70	+0.09	+.06	+.03	38.90	+0.11	+.11	0
34.90	+0.07	+.07	0	39.00	+0.12	+.12	0
35.10	+0.06	+.07	-.01	39.20	+0.12	+.12	0
35.30	+0.04	+.07	-.03	39.50	+0.12	+.12	0
35.50	+0.02	+.07	-.05	40.00	+0.12	+.12	0
35.70	+0.01	+.08	-.07	40.50	+0.12	+.12	0
35.90	0	+.08	-.08	41.00	+0.12	+.12	0
36.20	0	+.08	-.08	41.30	+0.13	+.13	0
36.50	0	+.09	-.09	41.50	+0.13	+.13	0
36.70	-0.01	+.09	-.10	42.00	+0.13	+.13	0
36.90	0	+.09	-.09				
37.02	0	+.09	-.09				
37.02	+0.02	+.09	-.07				

10.5 KC BAND

PICKUP RANGE: ±1.0 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY

APPROVED BY

Figure 23

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.U. 10, CANISTER S/N 74

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
46.50	+0.31				51.30	+0.28			
47.59	+0.31				51.50	+0.28			
47.59	+0.40				51.70	+0.30			
47.60	+0.40				51.90	+0.29			
47.80	+0.39				52.10	+0.30			
48.00	+0.38				52.30	+0.31			
48.20	+0.36				52.50	+0.31			
48.40	+0.34				52.70	+0.31			
48.60	+0.33				52.90	+0.31			
48.80	+0.32				53.10	+0.31			
49.00	+0.30				53.50	+0.31			
49.20	+0.29				53.60	+0.30			
49.40	+0.27				53.90	+0.29			
49.60	+0.27				54.00	+0.29			
49.80	+0.25				54.40	+0.29			
50.00	+0.25				54.60	+0.28			
50.20	+0.24				54.80	+0.27			
50.40	+0.24				55.00	+0.26			
50.60	+0.24								
50.80	+0.25								
51.00	+0.25								
51.12	+0.26								
51.12	+0.28								

14.5 KC BAND — SQUIB FIRE AT 52.19 SEC. PICKUP
PICKUP RANGE: ±0.7PSI — PRESSURE PLOTTED.

DATA TAKEN BY OBERST & MATTSON — ENGINEER
APPROVED BY Johnson — APPROVED BY

Figure 24

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#10, CANISTER S/N74

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
46.50	+0.46				52.30	+0.46			
47.39	+0.46				52.70	+0.46			
47.59	+0.59				52.90	+0.46			
47.60	+0.57				53.10	+0.45			
47.80	+0.55				53.50	+0.45			
48.00	+0.55				53.80	+0.45			
48.30	+0.50				54.00	+0.44			
48.50	+0.50				54.20	+0.44			
48.70	+0.47				54.40	+0.42			
48.90	+0.46				54.60	+0.42			
49.10	+0.44				55.00	+0.42			
49.40	+0.42								
49.60	+0.40								
49.80	+0.39								
50.10	+0.36								
50.40	+0.35								
50.60	+0.38								
51.00	+0.38								
51.20	+0.40								
51.40	+0.42								
51.60	+0.44								
51.80	+0.45								
52.10	+0.45								

10.5 KC BAND — SQUIB FIRE AT 57.19 SEC.

PICKUP RANGE: ±1 PSI — PICKUP PRESSURES PLOTTED.

DATA TAKEN BY: OBERST & MATTSON — ENGINEER

APPROVED BY: — APPROVED BY

Figure 25

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 11 , CANISTER S/N 77

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
04.00	+0.14	+ .14	0	08.12	-0.04	+ .14	-0.18
05.34	+0.14	+ .14	0	08.12	+0.89	+ .14	+0.75
05.34	+1.41	+ .14	+1.27	08.20	+0.80	+ .14	+0.66
05.40	+1.33	+ .14	+1.19	08.30	+0.70	+ .14	+0.56
05.50	+1.14	+ .14	+1.00	08.41	+0.61	+ .14	+0.47
05.60	+0.94	+ .14	+0.80	08.41	+0.71	+ .14	+0.57
05.70	+0.75	+ .14	+0.61	08.50	+0.62	+ .14	+0.48
05.80	+0.60	+ .14	+0.46	08.60	+0.51	+ .14	+0.37
05.90	+0.48	+ .14	+0.34	08.70	+0.40	+ .14	+0.26
06.00	+0.35	+ .14	+0.21	08.80	+0.30	+ .14	+0.16
06.10	+0.24	+ .14	+0.10	08.90	+0.20	+ .14	+0.06
06.20	+0.16	+ .14	+0.02	09.00	+0.12	+ .14	-0.02
06.30	+0.09	+ .14	-0.05	09.20	0	+ .14	-0.14
06.40	0	+ .14	-0.14	09.40	-0.10	+ .14	-0.24
06.50	-0.07	+ .14	-0.21	09.60	-0.15	+ .14	-0.29
06.60	-0.12	+ .14	-0.26	09.80	-0.18	+ .14	-0.32
06.80	-0.21	+ .14	-0.35	10.00	-0.19	+ .14	-0.33
07.00	-0.26	+ .14	-0.40	10.20	-0.17	+ .14	-0.31
07.20	-0.29	+ .14	-0.43	10.40	-0.11	+ .14	-0.25
07.40	-0.28	+ .14	-0.42	10.60	-0.06	+ .14	-0.20
07.60	-0.24	+ .14	-0.38	10.80	0	+ .14	-0.14
07.80	-0.16	+ .14	-0.30	11.00	+0.06	+ .14	-0.08
08.00	-0.09	+ .14	-0.23	11.20	+0.10	+ .14	-0.04

14.5 KC BAND
PICKUP RANGE: ±2 PSI

DATA TAKEN BY ORERST & MATTSON
ENGINEER
APPROVED BY Johnson
APPROVED BY

Figure 26

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 11 , CANISTER S/N 77

DATE _____ PAGE _____
REPORT NO. _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
11.40	+0.14	+ .14	0						
11.60	+0.16	+ .14	+0.02						
11.80	+0.17	+ .14	+0.03						
12.00	+0.20	+ .14	+0.06						
12.20	+0.23	+ .14	+0.09						
12.40	+0.24	+ .14	+0.10						
12.60	+0.23	+ .14	+0.09						
12.80	+0.23	+ .14	+0.09						
13.00	+0.22	+ .14	+0.08						
13.30	+0.20	+ .14	+0.06						
13.60	+0.18	+ .14	+0.04						
13.90	+0.17	+ .14	+0.03						
14.10	+0.15	+ .14	+0.01						
14.30	+0.15	+ .14	+0.01						
14.50	+0.14	+ .14	0						
14.80	+0.14	+ .14	0						
15.00	+0.14	+ .14	0						

11.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON

APPROVED BY

ENGINEER

APPROVED BY

Figure 27

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 11, CANISTER S/N 77

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REPORT NO. _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
04.00	+0.08	+.08	0	08.60	+0.50	+.08	+0.42
05.34	+0.08	+.08	0	08.80	+0.30	+.08	+0.22
05.34	+1.38	+.08	+1.30	08.90	+0.12	+.08	+0.04
05.40	+1.25	+.08	+1.17	09.10	0	+.08	-0.08
05.60	+0.90	+.08	+0.82	09.30	-0.09	+.08	-0.17
05.80	+0.55	+.08	+0.47	09.50	-0.20	+.08	-0.28
06.00	+0.35	+.08	+0.27	09.80	-0.21	+.08	-0.29
06.20	+0.15	+.08	+0.07	10.00	-0.20	+.09	-0.29
06.40	0	+.08	-0.08	10.20	-0.19	+.09	-0.28
06.60	-0.20	+.08	-0.28	10.40	-0.18	+.09	-0.27
06.80	-0.22	+.08	-0.30	10.60	-0.11	+.09	-0.20
07.00	-0.30	+.08	-0.38	10.80	-0.01	+.09	-0.10
07.20	-0.32	+.08	-0.40	11.00	+0.01	+.09	-0.08
07.40	-0.30	+.08	-0.38	11.20	+0.06	+.09	-0.03
07.60	-0.24	+.08	-0.32	11.40	+0.10	+.09	+0.01
07.80	-0.19	+.08	-0.27	11.60	+0.13	+.09	+0.04
08.00	-0.10	+.08	-0.18	11.80	+0.15	+.09	+0.06
08.12	-0.03	+.08	-0.11	12.00	+0.18	+.09	+0.09
08.12	+0.65	+.08	+0.77	12.20	+0.19	+.09	+0.10
08.20	+0.80	+.08	+0.72	12.40	+0.20	+.09	+0.11
08.30	+0.65	+.08	+0.57	12.60	+0.20	+.09	+0.11
08.41	+0.51	+.08	+0.43	12.80	+0.20	+.09	+0.11
08.41	+0.65	+.08	+0.57	13.00	+0.20	+.09	+0.11

10.5 KC BAND

PICKUP RANGE: ±5 PSI

DATA TAKEN BY OBERST & MATTSON

APPROVED BY

ENGINEER

APPROVED BY

Figure 28

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE

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A.P. # 11 , CANISTER S/N 77

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
13.20	+0.19	+.09	+0.10				
13.40	+0.19	+.09	+0.10				
13.60	+0.19	+.09	+0.10				
13.80	+0.18	+.09	+0.09				
14.00	+0.16	+.09	+0.07				
14.20	+0.15	+.09	+0.06				
14.40	+0.14	+.09	+0.05				
14.60	+0.12	+ .10	+0.02				
14.80	+0.10	+ .10	0				
15.00	+0.10	+ .10	0				

KC BAND

PICKUP RANGE: 1 5 PSI

DATA TAKEN BY: OBERST & MATTSON

ENGINEER

APPROVED BY

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Figure 29

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#12. CANISTER S/N 75

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REPORT NO.
PROJECT NO.

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.	TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
(SEC)	(PSI)			(SEC)	(PSI)		
06.00	+0.29	+.29	0	09.39	+0.01	+.31	-0.30
07.13	+0.29	+.29	0	09.39	+0.65	+.31	+0.34
07.13	+1.22	+.29	+0.93	09.50	+0.62	+.31	+0.31
07.20	+1.18	+.29	+0.89	09.60	+0.59	+.31	+0.28
07.30	+1.04	+.29	+0.75	09.70	+0.57	+.31	+0.26
07.40	+0.92	+.29	+0.63	09.80	+0.55	+.31	+0.24
07.50	+0.83	+.29	+0.54	09.90	+0.48	+.32	+0.16
07.60	+0.70	+.29	+0.41	10.00	+0.42	+.32	+0.10
07.70	+0.60	+.29	+0.31	10.20	+0.35	+.32	+0.03
07.80	+0.52	+.29	+0.23	10.28	+0.30	+.32	-0.02
07.90	+0.45	+.29	+0.16	10.28	+0.41	+.32	+0.09
08.00	+0.40	+.29	+0.11	10.50	+0.30	+.32	-0.02
08.10	+0.34	+.30	+0.9	10.70	+0.20	+.32	-0.12
08.20	+0.37	+.30	+0.07	10.90	+0.15	+.33	-0.18
08.30	+0.25	+.30	-0.05	11.10	+0.06	+.33	-0.27
08.40	+0.20	+.30	-0.10	11.30	+0.02	+.33	-0.31
08.50	+0.17	+.30	-0.13	11.50	0	+.33	-0.33
08.60	+0.10	+.30	-0.20	11.70	0	+.33	-0.33
08.70	+0.06	+.30	-0.22	12.00	+0.04	+.34	-0.30
08.80	+0.05	+.30	-0.25	12.20	+0.15	+.34	-0.19
08.90	+0.02	+.30	-0.28	12.40	+0.20	+.34	-0.14
09.00	0	+.31	-0.31	12.60	+0.22	+.34	-0.12
09.20	0	+.31	-0.31	12.80	+0.22	+.35	-0.13

14.5 KC BAND

PICKUP RANGE: ±5 PSI

DATA TAKEN BY OBERST & MATTSON | ENGINEER

APPROVED BY | APPROVED BY

Figure 30

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 12. CANISTER S/N 75

DATE _____ PAGE _____
REPORT NO. _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	
13.00	+0.30	+ .35	-0.05						
13.50	+0.38	+ .36	+0.02						
14.00	+0.40	+ .36	+0.04						
14.50	+0.40	+ .37	+0.03						
15.00	+0.39	+ .37	+0.02						
15.50	+0.38	+ .38	0						
16.00	+0.38	+ .38	0						

14.5 KC BAND

PICKUP RANGE: ±5 PSI

DATA TAKEN BY OBERST & MATTSON

APPROVED BY

Figure 31

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 12, CANISTER S/N 75

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REPORT NO. _____
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
06.90	+0.40	+.40	0	10.70	+0.30	+.42	-0.12
07.13	+0.40	+.40	0	10.90	+0.25	+.42	-0.17
07.13	+1.30	+.40	+0.90	11.10	+0.20	+.42	-0.22
07.30	+1.20	+.40	+0.80	11.40	+0.10	+.43	-0.33
07.50	+0.90	+.40	+0.50	11.70	+0.10	+.43	-0.33
07.70	+0.70	+.40	+0.30	12.00	+0.20	+.43	-0.23
07.90	+0.55	+.40	+0.15	12.50	+0.25	+.43	-0.18
08.10	+0.45	+.40	+0.05	13.00	+0.40	+.44	-0.04
08.30	+0.40	+.40	0	13.50	+0.42	+.44	-0.02
08.50	+0.30	+.40	-0.10	14.00	+0.45	+.45	0
08.70	+0.20	+.41	-0.21	14.50	+0.45	+.45	0
08.90	+0.18	+.41	-0.23	15.00	+0.45	+.45	0
09.10	+0.10	+.41	-0.31	15.50	+0.45	+.45	0
09.30	+0.15	+.41	-0.26	16.00	+0.45	+.45	0
09.39	+0.18	+.41	-0.23				
09.39	+0.73	+.41	+0.32				
09.60	+0.70	+.41	+0.29				
09.80	+0.60	+.41	+0.19				
10.00	+0.52	+.42	+0.10				
10.20	+0.50	+.42	+0.08				
10.28	+0.40	+.42	-0.02				
10.29	+0.50	+.42	+0.08				
10.50	+0.40	+.42	-0.02				

10.5 KC BAND

PICKUP RANGE: ± 10 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY

APPROVED BY

Figure 32

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.A. 18 CANISTER S/N 22

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REPORT NO.
PROJECT NO.

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
10.00	+0.05	+.05	0	13.96	-0.02	+.08	-.10
10.60	+0.05	+.05	0	14.10	-0.06	+.08	-.14
10.60	+0.65	+.05	+.60	14.30	-0.10	+.08	-.18
10.70	+0.58	+.05	+.53	14.50	-0.12	+.08	-.20
10.90	+0.44	+.05	+.39	14.60	-0.13	+.09	-.22
11.10	+0.33	+.05	+.28	14.80	-0.13	+.09	-.22
11.30	+0.22	+.05	+.17	15.00	-0.11	+.09	-.20
11.50	+0.15	+.05	+.10	15.20	-0.09	+.09	-.18
11.70	+0.09	+.06	+.03	15.40	-0.03	+.09	-.12
11.90	+0.02	+.06	-.04	15.60	+0.02	+.10	-.08
12.00		+.06	-.06	15.82	+0.00	+.10	-.02
12.12	-0.03	+.06	-.09	15.82	+0.10	+.10	0
12.12	+0.30	+.06	+.24	15.90	+0.09	+.10	-.01
12.20	+0.25	+.06	+.19	16.00	+0.07	+.10	-.03
12.40	+0.20	+.06	+.14	16.10	+0.07	+.10	-.03
12.60	+0.13	+.07	+.06	16.30	+0.10	+.10	0
12.80	+0.10	+.07	+.03	16.50	+0.12	+.10	+.02
13.00	+0.05	+.07	-.02	16.70	+0.13	+.11	+.02
13.30	0	+.07	-.07	16.90	+0.14	+.11	+.03
13.50	-0.01	+.07	-.08	17.10	+0.14	+.11	+.03
13.70	-0.06	+.08	-.14	17.30	+0.14	+.11	+.03
13.90	-0.08	+.08	-.16	18.00	+0.14	+.12	+.02
13.96	-0.09	+.08	-.17	20.00	+0.13	+.13	0

14.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTISON

ENGINEER

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Figure 33

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
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TIME (SEC)	PICK UP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
10.00	+0.10	+.10	0	13.96	+0.01	+.15	-.14
10.60	+0.10	+.10	0	14.10	0	+.15	-.15
10.60	+0.70	+.10	+.60	14.30	-0.03	+.16	-.19
10.70	+0.65	+.10	+.55	14.50	-0.06	+.16	-.22
10.80	+0.58	+.10	+.48	14.70	-0.09	+.16	-.25
11.00	+0.47	+.10	+.37	14.90	-0.06	+.17	-.23
11.20	+0.35	+.11	+.24	15.10	-0.03	+.17	-.20
11.40	+0.25	+.11	+.19	15.30	-0.01	+.17	-.18
11.60	+0.20	+.11	+.09	15.50	+0.03	+.18	-.15
11.80	+0.13	+.12	+.01	15.70	+0.10	+.18	-.08
12.00	+0.06	+.12	-.06	15.82	+0.18	+.18	0
12.12	0	+.12	-.12	15.82	+0.20	+.18	+.02
12.12	+0.35	+.12	+.23	16.00	+0.14	+.19	-.05
12.20	+0.33	+.12	+.21	16.20	+0.17	+.19	-.02
12.40	+0.25	+.13	+.12	16.40	+0.19	+.19	0
12.60	+0.20	+.13	+.07	16.60	+0.20	+.20	0
12.80	+0.18	+.13	+.05	16.80	+0.20	+.20	0
13.00	+0.16	+.14	+.01	17.50	+0.20	+.20	0
13.20	+0.10	+.14	-.04	18.00	+0.20	+.20	0
13.40	+0.08	+.14	-.06	18.50	+0.20	+.20	0
13.60	+0.01	+.15	-.14	19.00	+0.20	+.20	0
13.80	-0.01	+.15	-.16	19.50	+0.20	+.20	0
13.94	-0.07	+.15	-.22	20.00	+0.20	+.20	0

10.5 KC BAND

PICKUP RANGE: ±5PSI

DATA TAKEN BY ORBERT & MATTSON

APPROVED BY

ENGINEER

APPROVED BY

Figure 34

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
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DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
14.00	+0.05	+.05	0	18.40	-0.06	+.03	-0.14
15.51	+0.05	+.05	0	18.60	-0.08	+.08	-0.16
15.51	+0.44	+.05	+0.39	18.70	-0.09	+.08	-0.17
15.60	+0.39	+.05	+0.34	18.80	-0.08	+.09	-0.17
15.70	+0.35	+.05	+0.30	18.90	-0.10	+.09	-0.19
15.80	+0.31	+.05	+0.26	19.07	-0.10	+.09	-0.19
15.90	+0.28	+.05	+0.23	19.07	-0.06	+.09	-0.15
16.00	+0.25	+.05	+0.20	19.30	-0.06	+.09	-0.15
16.10	+0.21	+.05	+0.16	19.50	-0.07	+.09	-0.16
16.20	+0.19	+.05	+0.14	19.70	-0.07	+.10	-0.17
16.30	+0.17	+.05	+0.12	19.90	-0.04	+.10	-0.14
16.37	+0.14	+.05	+0.09	20.10	-0.01	+.10	-0.11
16.39	+0.32	+.05	+0.27	20.30	+0.03	+.10	-0.07
16.50	+0.30	+.06	+0.24	20.37	+0.04	+.10	-0.06
16.60	+0.27	+.06	+0.21	20.37	+0.07	+.10	-0.03
16.70	+0.24	+.06	+0.18	20.40	+0.07	+.11	-0.04
16.80	+0.21	+.06	+0.15	20.50	+0.06	+.11	-0.05
17.00	+0.17	+.06	+0.11	20.60	+0.05	+.11	-0.06
17.20	+0.10	+.07	+0.03	20.70	+0.04	+.11	-0.07
17.40	+0.05	+.07	-0.02	20.80	+0.06	+.11	-0.05
17.60	+0.02	+.07	-0.05	20.90	+0.07	+.11	-0.04
17.90	-0.02	+.07	-0.09	21.00	+0.09	+.11	-0.02
18.10	-0.04	+.08	-0.12	21.10	+0.10	+.11	-0.01

14.5 KC BAND
PICKUP RANGE: ± 1 PSI

DATA TAKEN BY: OBERST & MATTSON
APPROVED BY: [signature]

ENGINEER:
APPROVED BY:

Figure 35

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
21.30	+0.12	± .12	0
21.50	+0.12	± .12	0
21.70	+0.12	± .12	0
22.20	+0.12	± .12	0
22.50	+0.12	± .12	0
23.00	+0.11	± .11	0
23.50	+0.11	± .11	0
24.00	+0.11	± .11	0

14.5 KC BAND

PICKUP RANGE: ± 1 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY J. Johnson

APPROVED BY

Figure 36

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#14, CANISTER S/N 79

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TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
14.00	+0.08	+.08	0		18.00	0	+.10	-.10
15.51	+0.08	+.08	0		18.20	-0.04	+.10	-.14
15.51	+0.45	+.08	+.37		18.40	-0.05	+.10	-.15
15.60	+0.40	+.08	+.32		18.60	-0.08	+.10	-.18
15.70	+0.36	+.08	+.28		18.80	-0.08	+.10	-.18
15.80	+0.32	+.08	+.24		19.00	-0.09	+.10	-.19
15.90	+0.29	+.08	+.21		19.07	-0.09	+.10	-.18
16.00	+0.24	+.08	+.16		19.07	-0.02	+.10	-.12
16.10	+0.21	+.08	+.13		19.30	-0.04	+.11	-.15
16.20	+0.19	+.08	+.11		19.50	-0.05	+.11	-.16
16.30	+0.17	+.08	+.09		19.70	-0.04	+.11	-.15
16.37	+0.15	+.08	+.07		19.90	-0.02	+.11	-.13
16.39	+0.32	+.08	+.24		20.00	-0.01	+.11	-.12
16.50	+0.30	+.08	+.22		20.10	+0.01	+.11	-.10
16.70	+0.25	+.08	+.17		20.30	+0.06	+.11	-.05
16.80	+0.20	+.09	+.11		20.37	+0.08	+.11	-.03
16.90	+0.18	+.09	+.09		20.37	+0.09	+.11	-.02
17.00	+0.17	+.09	+.08		20.40	+0.10	+.12	-.02
17.10	+0.15	+.09	+.06		20.50	+0.09	+.12	-.03
17.30	+0.10	+.09	+.01		20.60	+0.08	+.12	-.04
17.50	+0.05	+.09	-.04		20.70	+0.07	+.12	-.05
17.70	+0.02	+.09	-.07		20.80	+0.08	+.12	-.04
17.80	0	+.09	-.09		20.90	+0.09	+.12	-.03

10.5 KC BAND
PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 37

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. #14, CANISTER S/N 742

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
(SEC)	(PSI)		
21.00	+0.10	+.12	-.02
21.10	+0.11	+.12	-.01
21.20	+0.11	+.12	-.01
21.40	+0.12	+.12	0
21.60	+0.13	+.13	0
21.80	+0.13	+.13	0
22.00	+0.13	+.13	0
22.20	+0.13	+.13	0
22.40	+0.12	+.12	0
22.80	+0.12	+.12	0
23.50	+0.12	+.12	0
24.00	+0.12	+.12	0

10.5 KC BAND

PICKUP RANGE: ± 2 PSI

DATA TAKEN BY OBERST & MATTSON

ENGINEER

APPROVED BY Johnson

APPROVED BY

Figure 38

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 15, CANISTER S/N 80

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
22.00	+0.06	+.06	0	27.48	+0.01	+.10	-.03
23.65	+0.06	+.06	0	27.60	+0.04	+.11	-.07
23.65	+0.43	+.06	+.37	27.70	+0.03	+.11	-.08
23.70	+0.41	+.06	+.35	27.94	+0.05	+.11	-.06
23.90	+0.36	+.06	+.30	27.94	+0.07	+.11	-.04
24.10	+0.31	+.06	+.25	28.10	+0.06	+.11	-.05
24.30	+0.27	+.06	+.21	28.30	+0.06	+.12	-.06
24.50	+0.21	+.07	+.14	28.50	+0.08	+.12	-.04
24.70	+0.16	+.07	+.09	28.70	+0.11	+.12	-.01
24.90	+0.11	+.07	+.04	28.80	+0.11	+.12	-.01
25.10	+0.09	+.07	+.02	29.00	+0.13	+.13	0
25.30	+0.06	+.08	-.02	29.20	+0.13	+.13	0
25.50	+0.03	+.08	-.05	29.50	+0.13	+.13	0
25.70	+0	+.08	-.08	30.00	+0.13	+.13	0
25.90	-0.03	+.08	-.11	30.05	+0.13	+.13	0
26.10	-0.04	+.09	-.13	31.00	+0.13	+.13	0
26.30	-0.05	+.09	-.14	31.50	+0.13	+.13	0
26.50	-0.05	+.09	-.14	32.00	+0.13	+.13	0
26.70	-0.06	+.10	-.16				
26.90	-0.05	+.10	-.15				
27.10	-0.04	+.10	-.14				
27.30	-0.02	+.10	-.12				
27.48	+0.01	+.10	-.09				

14.5 KC BAND
PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 39

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
R.P. #15 CANISTER S/N 80

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
22.00	+0.07	+ .07	0	27.60	+0.05	+ .12	-.07
23.65	+0.07	+ .07	0	27.80	+0.05	+ .12	-.07
23.65	+0.44	+ .07	+.37	27.94	+0.05	+ .13	-.08
23.70	+0.42	+ .07	+.35	27.94	+0.06	+ .13	-.07
23.90	+0.38	+ .07	+.31	28.20	+0.07	+ .13	-.06
24.10	+0.32	+ .07	+.25	28.40	+0.07	+ .13	-.06
24.30	+0.28	+ .07	+.21	28.60	+0.10	+ .14	-.04
24.50	+0.20	+ .08	+.12	28.80	+0.12	+ .14	-.02
24.70	+0.16	+ .08	+.08	29.00	+0.12	+ .14	-.02
24.90	+0.12	+ .08	+.04	29.20	+0.14	+ .14	0
25.10	+0.10	+ .09	+.01	29.40	+0.15	+ .15	0
25.30	+0.06	+ .09	-.03	29.60	+0.15	+ .15	0
25.50	+0.04	+ .09	-.05	29.80	+0.15	+ .15	0
25.70	0	+ .09	-.09	30.00	+0.15	+ .15	0
25.90	-0.02	+ .10	-.12	30.50	+0.15	+ .15	0
26.10	-0.05	+ .10	-.15	31.00	+0.15	+ .15	0
26.30	-0.05	+ .10	-.15	31.50	+0.15	+ .15	0
26.50	-0.05	+ .11	-.16	32.00	+0.15	+ .15	0
26.70	-0.05	+ .11	-.16				
27.00	-0.05	+ .11	-.16				
27.20	-0.03	+ .12	-.15				
27.48	0	+ .12	-.12				
27.48	+0.05	+ .12	-.07				

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY DREHST & MATTSON | ENGINEER

APPROVED BY Johnson | APPROVED BY

Figure 40

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. #16, CANISTER S/N84

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
24.00	+ 0.01	+.01	0	29.05	-0.02	+.04	-0.06
25.25	+ 0.01	+.01	0	29.20	-0.01	+.04	-0.05
25.25	+0.21	+.01	+0.20	29.40	-0.01	+.04	-0.05
25.43	+0.17	+.01	+0.16	29.60	0	+.04	-0.04
25.43	+0.25	+.01	+0.24	29.79	0	+.04	-0.04
25.50	+0.24	+.01	+0.23	29.79	+0.02	+.04	-0.02
25.70	+0.21	+.01	+0.20	30.00	+0.02	+.05	-0.03
25.90	+0.18	+.01	+0.17	30.20	+0.05	+.05	-0.02
26.10	+0.15	+.01	+0.14	30.40	+0.05	+.05	0
26.30	+0.11	+.01	+0.10	30.60	+0.06	+.05	+0.01
26.50	+0.08	+.02	+0.06	30.80	+0.07	+.05	+0.02
26.70	+0.05	+.02	+0.03	31.00	+0.06	+.06	0
27.00	+0.01	+.02	-0.01	31.40	+0.06	+.06	0
27.20	-0.01	+.02	-0.03	31.80	+0.06	+.06	0
27.40	-0.02	+.02	-0.04	32.20	+0.06	+.06	0
27.60	-0.05	+.03	-0.08	32.60	+0.06	+.06	0
27.80	-0.05	+.03	-0.08	32.80	+0.06	+.06	0
28.10	-0.07	+.03	-0.10	33.20	+0.06	+.06	0
28.30	-0.07	+.03	-0.10	33.60	+0.06	+.06	0
28.60	-0.07	+.03	-0.10	34.00	+0.06	+.06	0
28.80	-0.07	+.04	-0.11				
29.00	-0.05	+.04	-0.09				
29.05	-0.05	+.04	-0.09				

14.5 KC BAND
PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 42

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 16 CANISTER S/N84

DATE PAGE
REPORT NO.
PROJECT NO.

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
24.00	0	0	0	29.05	-0.03	+.03	-0.06
25.25	0	0	0	29.20	-0.03	+.03	-0.06
25.25	+0.20	0	+0.20	29.40	-0.02	+.03	-0.05
25.43	+0.17	0	+0.17	29.60	-0.01	+.03	-0.04
25.43	+0.25	0	+0.25	29.79	0	+.03	-0.03
25.50	+0.25	0	+0.25	29.79	+0.01	+.03	-0.02
25.70	+0.20	0	+0.20	30.00	+0.01	+.04	-0.03
25.90	+0.18	0	+0.18	30.50	+0.01	+.04	-0.03
26.10	+0.14	0	+0.14	30.80	+0.05	+.04	+0.01
26.30	+0.10	0	+0.10	31.10	+0.07	+.04	+0.03
26.50	+0.06	+.01	+0.05	31.30	+0.05	+.05	0
26.70	+0.02	+.01	+0.01	31.50	+0.05	+.05	0
26.90	+0.01	+.01	0	31.70	+0.05	+.05	0
27.10	-0.01	+.01	-0.02	32.00	+0.05	+.05	0
27.30	-0.04	+.01	-0.05	32.50	+0.05	+.05	0
27.50	-0.08	+.01	-0.09	33.00	+0.05	+.05	0
27.70	-0.09	+.02	-0.11	33.50	+0.05	+.05	0
27.90	-0.10	+.02	-0.12	34.00	+0.05	+.05	0
28.10	-0.10	+.02	-0.12				
28.50	-0.10	+.02	-0.12				
28.80	-0.10	+.03	-0.13				
29.00	-0.10	+.03	-0.13				
29.05	-0.07	+.03	-0.10				

10.5 KC BAND

PICKUP RANGE: ±2 PSI

DATA TAKEN BY OBERST & MATTSON ENGINEER

APPROVED BY J. Lawrence APPROVED BY

Figure 42

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSU
A.P.#17. CANISTER

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.		TIME (SEC)	P
27.00	+0.02	+.02	0		31.60	-
27.73	+0.02	+.02	0		31.60	
27.73	+0.20	+.02	+.18		31.80	
27.80	+0.17	+.02	+.15		31.95	
27.80	+0.25	+.02	+.23		32.22	+0
28.00	+0.22	+.02	+.20		32.22	+0
28.20	+0.17	+.03	+.14		32.40	+0.
28.40	+0.13	+.03	+.10		32.60	+0.
28.60	+0.10	+.03	+.07		32.80	+0.
28.80	+0.06	+.03	+.03		33.00	+0.
29.00	+0.05	+.03	0		33.20	+0.
29.20	+ 0	+.03	-.03		33.40	+0.
29.40	-0.03	+.04	-.07		33.60	+0.
29.60	-0.04	+.04	-.08		33.80	+0.
29.80	-0.06	+.04	-.10		34.00	+0.
30.00	-0.07	+.04	-.11		34.10	+0.
30.20	-0.09	+.04	-.13		34.80	+0.0
30.40	-0.09	+.04	-.13		35.20	+0.0
30.60	-0.08	+.05	-.13		35.50	+0.0
30.80	-0.08	+.05	-.13		35.70	+0.0
31.00	-0.08	+.05	-.13		36.00	+0.0
31.20	-0.07	+.05	-.12		36.50	+0.0
31.40	-0.05	+.05	-.10		37.00	+0.0

11.5 KC BAND
PICKUP RANGE: ±1 PSI

DATA TAKEN BY ERNEST M. MATTSON — ENGINEER
APPROVED BY — APPROVED BY

Figure 43

		.02
	.10	-.06
	+.10	-.07
	+ .11	-.05
	+.11	-.03
	+.11	- .01
	+.11	-.02
1	+.11	-.02
19	+.11	-.02
10	+.11	-.01
12	+ .12	0
.12	+.12	0
0.12	+.12	0
0.10	+ .10	0
+0.10	+.10	0
+0.10	+.10	0
+0.09	+.09	0
+0.09	+.09	0
+0.09	+.09	0
+0.09	+.09	0
+0.09	+.09	0
+0.09	+.09	0

ENGINEER

APPROVED BY

Figure 44

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.# 18; CANISTER S/N 86

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS.	MEAN PRESS.	DIFF. PRESS.
29.00	+0.06	+.06	0	33.65	+0.05	+.10	-.05
29.15	+0.06	+.06	0	33.70	+0.05	+.10	-.05
29.76	+0.29	+.06	+.23	33.80	+0.05	+.10	-.05
29.90	+0.28	+.06	+.22	34.15	+0.06	+.11	-.05
30.00	+0.26	+.06	+.20	34.20	+0.06	+.11	-.05
30.20	+0.24	+.06	+.18	34.20	+0.08	+.11	-.03
30.40	+0.21	+.06	+.15	34.40	+0.08	+.11	-.03
30.60	+0.18	+.06	+.12	34.60	+0.08	+.11	-.03
30.80	+0.15	+.07	+.08	34.80	+0.10	+.11	-.01
31.00	+0.13	+.07	+.06	35.00	+0.12	+.12	0
31.20	+0.11	+.07	+.04	35.20	+0.13	+.13	0
31.40	+0.09	+.07	+.02	35.60	+0.13	+.13	0
31.60	+0.07	+.08	-.01	36.00	+0.13	+.13	0
31.80	+0.05	+.08	-.03	37.00	+0.14	+.14	0
32.00	+0.03	+.08	-.05	37.50	+0.15	+.15	0
32.20	+0.01	+.08	-.07	38.00	+0.15	+.15	0
32.40	0	+.09	-.09	38.50	+0.15	+.15	0
32.80	-0.01	+.09	-.10	39.00	+0.15	+.15	0
33.00	-0.01	+.09	-.10				
33.20	0	+.09	-.09				
33.30	0	+.10	-.10				
33.50	+0.01	+.10	-.09				
33.65	+0.02	+.10	-.08				

14.5 KC BAND
PICKUP RANGE: ±0.7PSI

DATA TAKEN BY ODERST & MATTSON
ENGINEER
APPROVED BY
APPROVED BY

Figure 45

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. # 19 CANISTER S/N 106

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME	PICKUP PRESS	MEAN PRESS.	DIFF. PRESS.		TIME	PICKUP PRESS	MEAN PRESS.	DIFF. PRESS.	
(SEC)	(PSI)				(SEC)	(PSI)			
29.00	+0.06	+ .06	0		33.90	+0.05	+.12	-.07	
29.76	+0.06	+ .06	0		34.10	+0.06	+.12	-.06	
29.76	+0.30	+ .06	+.24		34.20	+0.06	+.12	-.06	
29.90	+0.29	+ .06	+.23		34.20	+0.08	+.12	-.04	
30.10	+0.26	+ .06	+.20		34.40	+0.08	+.12	-.04	
30.50	+0.23	+ .06	+.17		34.70	+0.09	+.13	-.04	
30.50	+0.19	+ .07	+.12		35.00	+0.13	+.14	-.01	
30.80	+0.16	+ .07	+.09		35.40	+0.13	+.14	-.01	
31.10	+0.11	+ .07	+.04		35.80	+0.15	+.15	0	
31.30	+0.08	+ .08	0		36.20	+0.14	+.15	-.01	
31.90	+0.07	+ .08	-.01		36.40	+0.15	+.15	0	
31.80	+0.05	+ .09	-.04		36.60	+0.15	+.15	0	
32.00	+0.02	+ .09	-.07		36.80	+0.15	+.15	0	
32.30	0	+ .09	-.09		37.00	+0.15	+.15	0	
32.50	0	+ .10	-.10		37.40	+0.15	+.15	0	
32.70	+0.01	+ .10	-.11		37.80	+0.15	+.15	0	
32.90	-0.01	+ .10	-.11		38.20	+0.15	+.15	0	
33.10	-0.01	+ .11	-.12		38.60	+0.15	+.15	0	
33.30	-0.01	+ .11	-.12		39.00	+0.15	+.15	0	
33.50	0	+ .11	-.11						
33.65	+0.02	+ .11	-.09						
33.65	+0.06	+ .11	-.05						
33.70	+0.05	+ .11	-.06						

10.5 KC BAND

PICKUP RANGE: ± 1 PSI

DATA TAKEN BY: OBERST & MATTSON — ENGINEER

APPROVED BY: — APPROVED BY

Figure 46

Pacific Division
Douglas Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#19, CANISTER S/N87

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
31.00	+0.20	+ .20	0	35.90	+0.21	+ .26	-.05
31.83	+0.21	+ .21	0	36.10	+0.21	+ .26	-.05
31.83	+0.43	+ .21	+ .22	36.20	+0.22	+ .26	-.04
32.00	+0.40	+ .21	+ .19	36.26	+0.22	+ .26	-.04
32.20	+0.38	+ .21	+ .17	36.26	+0.24	+ .26	-.02
32.40	+0.35	+ .21	+ .14	36.40	+0.24	+ .27	-.03
32.60	+0.33	+ .22	+ .11	36.70	+0.24	+ .27	-.03
32.80	+0.31	+ .22	+ .09	36.90	+0.26	+ .27	-.01
33.00	+0.28	+ .22	+ .06	37.10	+0.28	+ .28	0
33.20	+0.26	+ .22	+ .04	37.30	+0.28	+ .28	0
33.40	+0.24	+ .23	+ .01	37.60	+0.28	+ .28	0
33.60	+0.22	+ .23	-.01	37.90	+0.28	+ .28	0
33.80	+0.20	+ .23	-.03	38.20	+0.29	+ .29	0
34.00	+0.19	+ .23	-.04	38.50	+0.29	+ .29	0
34.20	+0.17	+ .24	-.07	39.00	+0.29	+ .29	0
34.40	+0.16	+ .24	-.08	39.00	+0.29	+ .29	0
34.70	+0.15	+ .24	-.09	39.50	+0.29	+ .29	0
34.90	+0.14	+ .25	-.11	40.00	+0.29	+ .29	0
35.10	+0.14	+ .25	-.11	40.30	+0.29	+ .29	0
35.31	+0.15	+ .25	-.10	40.50	+0.30	+ .30	0
35.50	+0.16	+ .25	-.09	41.00	+0.30	+ .30	0
35.77	+0.18	+ .26	-.08				
25.77	+0.21	+ .26	-.05				

14.5 KC BAND
PICKUP RANGE: ±0.7 PSI

DATA TAKEN BY OBERST & MATTSON
APPROVED BY

ENGINEER
APPROVED BY

Figure 47

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P. #19 CANISTER S/N 37

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
31.00	+0.26	+.26	0	36.00	+0.27	+.32	-.05
31.83	+0.27	+.27	0	36.20	+0.28	+.32	-.04
31.83	+0.49	+.27	+.22	36.26	+0.29	+.32	-.03
32.00	+0.48	+.27	+.21	36.24	+0.30	+.32	-.02
32.20	+0.45	+.27	+.18	36.40	+0.30	+.33	-.03
32.40	+0.43	+.27	+.16	36.60	+0.30	+.33	-.03
32.60	+0.40	+.27	+.13	36.80	+0.30	+.33	-.03
32.80	+0.38	+.28	+.10	36.90	+0.32	+.33	-.01
33.00	+0.35	+.28	+.07	37.00	+0.34	+.34	0
33.20	+0.33	+.28	+.05	37.20	+0.34	+.34	0
33.40	+0.31	+.29	+.02	37.40	+0.34	+.34	0
33.60	+0.29	+.29	0	37.50	+0.35	+.35	0
33.80	+0.27	+.29	-.02	37.70	+0.35	+.35	0
34.00	+0.27	+.29	-.02	38.00	+0.35	+.35	0
34.20	+0.25	+.30	-.05	38.50	+0.35	+.35	0
34.40	+0.24	+.30	-.06	39.00	+0.35	+.35	0
34.70	+0.23	+.30	-.07	39.50	+0.35	+.35	0
34.90	+0.21	+.31	-.10	39.80	+0.36	+.36	0
35.10	+0.21	+.31	-.10	40.00	+0.36	+.36	0
35.30	+0.22	+.31	-.09	40.30	+0.37	+.37	0
35.50	+0.23	+.31	-.08	41.00	+0.37	+.37	0
35.77	+0.25	+.32	-.07				
35.77	+0.28	+.32	-.04				

10.5 KC BAND

PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON

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ENGINEER

APPROVED BY

Figure 48

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#20, CANISTER S/N88

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
33.00	+0.11	+.11	0	38.10	+0.07	+.13	-.06
33.93	+0.10	+.10	0	38.30	+0.09	+.14	-.05
33.93	+0.31	+.10	+.21	38.37	+0.09	+.14	-.05
34.10	+0.27	+.10	+.17	38.37	+0.10	+.14	-.04
34.30	+0.24	+.10	+.14	38.60	+0.10	+.14	-.04
34.50	+0.20	+.10	+.10	38.80	+0.10	+.14	-.04
34.70	+0.18	+.10	+.08	39.00	+0.13	+.14	-.01
34.90	+0.16	+.10	+.06	39.20	+0.15	+.15	0
35.10	+0.15	+.11	+.04	39.40	+0.15	+.15	0
35.30	+0.13	+.11	+.02	39.80	+0.15	+.15	0
35.50	+0.11	+.11	0	40.00	+0.15	+.15	0
35.70	+0.09	+.11	-.02	40.20	+0.16	+.16	0
35.90	+0.07	+.11	-.04	40.60	+0.16	+.16	0
36.10	+0.05	+.12	-.07	41.00	+0.16	+.16	0
36.30	+0.04	+.12	-.08	41.10	+0.16	+.16	0
36.50	+0.03	+.12	-.09	41.40	+0.17	+.17	0
36.70	+0.03	+.12	-.09	41.80	+0.17	+.17	0
37.00	+0.02	+.12	-.10	42.30	+0.17	+.17	0
37.20	+0.02	+.13	-.11	43.00	+0.18	+.18	0
37.50	+0.03	+.13	-.10				
37.80	+0.04	+.13	-.09				
37.88	+0.05	+.13	-.08				
37.88	+0.07	+.13	-.06				

14.5 KC BAND
PICKUP RANGE: ± 0.7PSI

DATA TAKEN BY OBERST & MATTSON
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ENGINEER
APPROVED BY

Figure 49

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
DIFFERENTIAL PRESSURE
A.P.#20, CANISTER S/N88

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.	TIME (SEC)	PICKUP PRESS. (PSI)	MEAN PRESS.	DIFF. PRESS.
33.00	+0.14	+.14	0	38.10	+0.10	+.17	-.07
33.93	+0.14	+.14	0	38.37	+0.12	+.17	-.05
33.93	+0.34	+.14	+.20	38.57	+0.13	+.17	-.04
34.00	+0.32	+.14	+.18	38.50	+0.13	+.17	-.04
34.20	+0.29	+.14	+.15	38.80	+0.13	+.17	-.04
34.40	+0.24	+.14	+.10	39.00	+0.16	+.17	-.01
34.60	+0.22	+.14	+.08	39.20	+0.18	+.18	0
34.80	+0.20	+.14	+.06	39.60	+0.18	+.18	0
35.00	+0.18	+.14	+.04	39.80	+0.19	+.19	0
35.20	+0.16	+.15	+.01	40.00	+0.18	+.18	0
35.40	+0.14	+.15	-.01	40.20	+0.19	+.19	0
35.60	+0.13	+.15	-.02	40.40	+0.19	+.19	0
35.80	+0.10	+.15	-.05	41.00	+0.19	+.19	0
36.00	+0.08	+.15	-.07	42.00	+0.19	+.19	0
36.20	+0.07	+.15	-.08	43.00	+0.19	+.19	0
36.40	+0.07	+.15	-.08				
36.60	+0.05	+.16	-.11				
37.00	+0.05	+.16	-.11				
37.40	+0.05	+.16	-.11				
37.60	+0.06	+.16	-.10				
37.80	+0.08	+.17	-.09				
37.88	+0.08	+.17	-.09				
37.88	+0.10	+.17	-.07				

10.5 KC BAND

PICKUP RANGE: ±1 PSI

DATA TAKEN BY OBERST & MATTSON
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Figure 50

APPENDIX VII

ALTITUDE DATA - KNOTHOLE NO. 1

Figure	Title
1	Altitude Data, Array Positions 1, 2, 3 and 4
2	Altitude Data, Array Positions 5, 6, 7 and 8
3	Altitude Data, Array Positions 9, 10, 19 and 20
4	Altitude Data, Array Positions 11, 12, 13 and 14
5	Altitude Data, Array Positions 15, 16, 17 and 18

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
ARRAY POSITIONS 1, 2, 3, & 4

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POS	EVENT	DEL	FREQ	DELTA	CORR FREQ	PRESS ALT	TRUE ALT		
1	DROP	-1.46	7005	15.4	7025	17,300	17,650		
2	"	-0.12	7045	15.4	7027	17,300	17650		
3	"	1.22	7020	15.4	7036	17,300	17,650		
4	"	2.61	7015	15.4	7023	17,300	17,650		
1	SQUIB FIRE	-1.76	7165	17.64	7185	13,875	14,275		
2	"	-0.45	7222	17.78	7204	13.675	14,075		
3	"	0.83	7222	18.10	7238	13,250	13.575		
4	"	2.23	7220	18.35	7228	12,900	13,225		
1	ARMING	-2.01	7303	19.73	7323	11,075	11,250		
2	"	-0.68	7343	19.65	7325	11,150	11,400		
3	"	0.61	7343	20.00	7359	10,725	10,875		
4	"	2.04	7325	20.05	7333	10,650	10,825		
1	PRESS WAVE	-2.02	7307	19.80	7327	11,000	11,150		
2	"	-0.70	7353	19.82	7335	10,975	11,125		
3	"	0.59	7352	20.15	7368	10,550	10,700		
4	"	2.03	7330	20.15	7338	10,550	10,700		
1	LOSS OF RF SIG	-2.67	7660	26.85	7680	3,000	4,000		
2	"	-1.31	7680	26.30	7662	3,550	4,400		
3	"	-0.03	7682	26.75	7698	3,100	4,100		
4	"	1.42	7662	26.75	7670	3,100	4100		

DATA TAKEN BY [signature] ENGINEER

APPROVED BY [signature] APPROVED BY

Figure 1

Pacific Division
Curtiss Aviation Corp.
NORTH HOLLYWOOD CALIF.

DATA SHEET
ALTITUDE DATA
ARRAY POSITIONS 5, 6, 7 & 8

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POS	EVENT	DEFL	FREQ	In.Hg.	CORR FREQ	PRESS ALT	TRUE ALT		
5	DROP	-1.51	7040	15.40	7028	17,300	17,650		
6	"	-0.06	7022	15.40	7026	17,300	17,650		
7	"	1.21	7022	15.40	7041	17,300	17,650		
8	"	2.67	7020	15.40	7045	17,300	17,650		
5	SQUIB FIRE	-1.97	7288	18.70	7276	12,425	12,725		
6	"	-0.53	7270	19.00	7274	12,050	12,250		
7	"	0.46	7421	21.80	7440	8,525	8,700		
8	"	2.14	7283	19.45	7306	11,425	11,600		
5	ARMING	-2.10	7352	19.70	7340	11,100	11,300		
6	"	-0.64	7328	20.00	7332	10,725	10,875		
7	"	0.36	7475	22.90	7494	7,225	7,500		
8	"	2.05	7328	20.25	7351	10,400	10,575		
5	PRESS WAVE	-2.13	7369	20.00	7357	10,725	10,875		
6	"	-0.66	7340	20.20	7344	10,450	10,650		
7	"	0.33	7518	23.80	7537	6,200	6,550		
8	"	2.02	7345	20.55	7368	10,000	10,150		
5	LOSS OF RF SIG	-2.77	7705	26.70	7693	3,150	4,125		
6	"	-1.26	7660	26.70	7664	3,150	4,125		
7	"	0.04	7650	26.80	7669	3,050	4,50		
8	"	1.44	7642	26.85	7665	3,00	4,000		

DATA TAKEN BY DRQ — ENGINEER

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Figure 2

Pacific Division
Bendix Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
ALTITUDE DATA
ARRAY POSITIONS 9,10,19 & 20

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POS	EVENT	DEFL	FREQ	In.Hg.	CORR FREQ	PRESS ALT	TRUE ALT
9	DROP	-1.59	7022	15.40	7032	17,300	17,650
10	"	-0.14	7022	15.40	7036	17,300	17,650
19	"	1.23	7000	15.40	7015	17,300	17,650
20	"	2.56	7022	15.40	7015	17,300	17,650
9	SQUIB FIRE	-2.12	7318	19.94	7328	10,800	10,950
10	"	-0.68	7313	19.80	7327	11,000	11,150
19	"	0.39	7433	21.75	7448	8,550	8,750
20	"	1.80	7423	21.65	7416	8,675	8,875
9	ARMING	-2.19	7345	20.40	7355	10,200	10,350
10	"	-0.74	7342	20.30	7356	10,350	10,500
19	********** DID NOT ARM		**********		**********	**********	
20	********** DID NOT ARM		**********		**********	**********	
9	1st PRESS WAVE	-2.20	7350	20.49	7360	10,100	10,250
10	"	-0.61	7280	1923	7249	11,700	11,925
19	"	0.35	7451	22.05	7466	8,200	8,400
20	"	1.76	7446	22.10	7439	8,150	8,350
9	LOSS OF RF SIG	-2.76	7657	26.90	7667	2,950	3,950
10	"	-1.21	7600	25.45	7614	4,400	5,075
19	"	-0.06	7655	26.60	7670	3,250	4,200
20	"	1.39	7649	26.40	7642	3,450	4,325

DATA TAKEN BY D.B.Jr
ENGINEER
APPROVED BY J. Johnson
APPROVED BY

Figure 3

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
ALTITUDE DATA
ARRAY POSITIONS 11,12,13 & 14

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POS	EVENT	DEFL	FREQ	In, Hz.	CORR FREQ	PRESS ALT	TRUE ALT		
11	DROP	-1.60	7050	15.40	7045	17,300	17,650		
12	"	-0.16	7027	15.40	7037	17,300	17,650		
13	"	1.20	6997	15.40	7012	17,300	17,650		
14	"	2.50	7050	15.40	7047	17,300	17,650		
11	SQUIB FIRE	-2.11	7308	19.30	7303	11,650	11,850		
12	"	-0.69	7308	19.75	7318	11,050	11,200		
13	"	0.58	7320	19.90	7325	10,850	11,025		
14	"	1.66	7385	20.35	7382	10,250	10,425		
11	ARMING	**********							
12	"	-0.89	7415	21.75	7425	8,550	8,750		
13	"	0.37	7432	21.90	7437	8,400	8,600		
14	"	1.72	7468	21.85	7465	8,450	8,650		
11	1st PRESS WAVE	-2.36	7437	21.70	7432	8,625	8,825		
12	"	-0.89	7415	21.75	7425	8,550	8,750		
13	"	0.36	7440	22.00	7445	8,250	8,450		
14	"	1.71	7472	21.90	7469	8,400	8,600		
11	LOSS OF RF SIG	-2.82	7670	26.80	7665	3,050	4,050		
12	"	-1.32	7648	26.80	7658	3,050	4,050		
13	"	-0.08	7670	26.80	7675	3,050	4,050		
14	"	1.32	7688	26.60	7685	3,250	4,200		

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APPROVED BY

Figure 4

Pacific Division
Bendix Aviation Corp.
North Hollywood, Calif.

DATA SHEET
ALTITUDE DATA
ARRAY POSITIONS 15,16,17 & 18

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY POS	EVENT	DEFL.	FREQ	In.Hg.	CORR FREQ	PRESS ALT	TRUE ALT
15	DROP	-1.52	6995	15.40	7017	17,300	17,650
16	"	-0.11	6997	15.40	7018	17,300	17,650
17	"	1.10	7030	15.40	7042	17,300	17,650
15	SQUIB FIRE	-2.41	7474	22.60	7496	7,575	7,825
16	"	-0.84	7396	21.40	7417	9,000	9,175
17	"	0.37	7410	21.50	7422	8,850	9,050
18	"	1.74	7434	21.85	7439	8,450	8,650
15	ARMING	-2.53	7535	23.80	7557	6,200	6,575
16	"	-0.92	7440	22.20	7461	8,050	8,250
17	"	0.30	7448	22.35	7460	7,975	8,175
18	"	1.68	7460	22.35	7465	7,650	8,100
15	1st PRESS WAVE	-2.55	7547	24.05	7569	5,900	6,325
16	"	-0.93	7447	22.35	7468	7,850	8,100
17	"	0.28	7457	22.40	7469	7,800	8,050
18	"	1.67	7470	22.54	7457	7,625	7,875
15	LOSS OF RF SIG	-2.81	7686	27.00	7708	2,825	3,900
16	"	-1.34	7670	26.95	7691	2,900	3,925
17	"	-0.07	7642	26.50	7654	3,350	4,250
18	"	1.32	7655	26.45	7660	3,400	4,300

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ENGINEER
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Figure 5

APPENDIX VIII

SIGNAL STRENGTH DATA - KNOTHOLE NO. 1

Figure	Title
1	Signal Strength, Array Positions 1-20

SECURITY INFORMATION

Pacific Division
Douglas Aviation Corp.
NORTH HOLLYWOOD, CALIF.

DATA SHEET
SIGNAL STRENGTH
ARRAY POSITIONS 1 THRU 20

DATE _____ PAGE _____
REPORT NO. _____
PROJECT NO. _____

ARRAY NO.	DROP		SQUIB FIRE		ARMING		1st PRESS WAVE ARRIVAL		LOSS OF R.F. SIGNAL	
	DEFL.	SIG STR	DEFL.	SIG STR	DEFL	SIG STR	DEFL	SIG STR	DEFL	SIG STR
1	-2.53	76	-2.28	120	-1.92	220	-1.91	225	-3.03	0
2	-1.24	46	-1.15	63	-0.82	127	-0.85	120	-1.38	12
3	-0.20	0	-0.13	30	0.09	96	0.10	98	-0.19	0
4	1.23	1	1.42	50	1.23	1	1.26	12	1.22	0
5	-3.02	0	-3.00	36	-2.89	58	-2.85	65	-3.04	0
6	-1.53	17	-1.48	35	-1.52	21	-1.48	35	-1.55	0
7	0.16	88	0.22	0	0.24	100	0.21	97	0.22	0
8	1.37	44	1.38	46	1.49	64	1.46	60	1.19	0
9	-2.97	30	-2.82	58	-2.44	132	-2.51	236	-3.02	10
10	-1.48	52	-1.38	68	-1.40	65	-1.42	62	-1.50	40
11	-2.52	295	-2.22	365			-2.37	335	-2.91	1
12	-1.65	1	-1.44	32	-1.40	36	-1.41	35	-1.65	1
13	-0.31	0	+0.51	168	0.81	284	0.82	290	-0.33	0
14	1.21	30	2.08	155	2.56	320	2.58	330	1.11	0
15	-3.00	0	-2.74	84	-2.88	58	-2.87	60	-3.03	0
16	-1.52	17	-1.45	43	-1.42	48	-1.50	35	-1.64	10
17	-0.16	76	0.02	115	0.00	110	0.00	110	-0.31	25
18	1.30	70	1.65	135	1.48	103	1.40	103	1.20	52
19	-0.32	32	-0.06	88			0.05	115	-0.35	10
20	1.24	60	1.40	113			1.46	132	1.10	0

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Figure 1

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