The original documents are located in Box 30, folder "Nixon - Papers General Services Administration (6)" of the Philip Buchen Files at the Gerald R. Ford Presidential Library.

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LAW OFFICES

#### MILLER, CASSIDY, LARROCA & LEWIN

2555 M STREET, N.W. - SUITE 500 WASHINGTON, D. C. 20037

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R. STAN MORTENSON
THOMAS B. CARR
WILLIAM C. BRYSON
JAMIE S. GORELICK

JOSEPH S. MCCARTHY COURTNEY A. EVANS ANDREW F. OEHMANN OF COUNSEL

August 4, 1976

Dr. James B. Rhoads, Archivist 18th and F Streets, N.W. Washington, D.C. 20405

Dear Doctor Rhoads:

On Monday morning I was informed by Steven Garfinkel, General Counsel's Office, General Services Administration, that Archives personnel had discovered an equipment failure in the vault housing a portion of former President Nixon's Presidential Materials in Suitland, Maryland, and that some of the boxes of materials had been soaked by water and possibly damaged. Feeling I had no reasonable alternative under the circumstances, I subsequently consented to Archives personnel removing the contents of those boxes which had incurred water damage so that the severity of the damage could be assessed and appropriate preservation steps taken. I have now learned that approximately 180 boxes were affected but that the contents of only a few absorbed water and were damaged.

As you know, when the transfer of material to Suitland was proposed, we strenuously objected to it because we believed the materials had been adequately maintained without incident for over a year and a half in the Executive Office Building and that the reasons given for the transfer were far from sufficient to justify whatever risks would attend that move. I must say that I personally had not anticipated that any of the materials might be subjected to water damage from an equipment failure. However, if I had been informed of the fact that shortly before the move a similar failure of this same equipment had occurred and the Archives had decided that adequate steps had been taken to preclude a reoccurrence, I would have been in a position to evaluate the situation for myself, and perhaps to have had the court determine the steps had been taken to preclude a securior to the situation for myself, and perhaps to have had the court determine the situation for myself, and perhaps to have had the court determine the situation for myself, and perhaps to have had the court determine the situation for myself.

Dr. James B. Rhoads Page Two August 4, 1976

water damage risk outweighed the need for temperature and humidity controlled storage. The fact that you did not inform me of this matter makes the present situation particularly disturbing.

Fortunately, it appears from the oral inventory summary report I received from Richard Jacobs Monday afternoon that the material affected consists principally of public opinion mail, GPO publications and similar material of lesser political sensitivity. Nevertheless as a precautionary measure in protecting material in which the former President claims certain rights and privileges, I feel I must request a written report concerning the incident so that I can determine whether additional steps are warranted. In that regard I would like to know the following:

- 1. When, and under what circumstances was the water leakage discovered?
- 2. What caused the water leakage and how long had the condition been in existence before it was discovered?
- 3. What steps have been taken to repair the malfunction and to preclude its reoccurrence?
- 4. What steps were taken after the malfunction of the equipment in April of this year to preclude a reoccurrence, and why were those steps inadequate?
- 5. Were alarms in the storage vault operating properly at all times during the equipment failure?
- 6. Have the alarms operated without malfunction since the material was moved from the EOB?
- 7. How many times have alarms been triggered since the material was transferred and what prompted each occurrence?

Dr. James B. Rhoads Page Three August 4, 1976

- 8. Has any material stored at the Suitland facility (not limited to the Nixon Presidential Materials) ever been subjected to water, fire, or other damage of any kind or has any such material ever been stolen or temporarily removed without authorization?
- 9. Are there areas within the vault in which the material can be stored where it will not be susceptible to damage in the event of a reoccurrence?
- 10. Has there been any electrical malfunction to date of equipment inside or servicing the vault area?
- 11. Please provide me an inventory of the approximately 180 boxes affected in any way by this leakage, and designate those boxes in which the contents were affected?
- 12. Please describe the extent of water damage incurred by material inside the boxes and what preservation steps have been taken.
- 13. How many persons had access to the Presidential materials during the course of moving the affected boxes and/or preserving their contents?

Thank you for your cooperation in this matter.

E. Syan Mortensony time

R. Stan Mortenson

RSM/tc
cc Philip Buchen /
Barry Roth
Jack Eckerd
Irwin Goldbloom
Steve Garfinkel
Marie Allen



# UNITED STATES OF AMERICA GENERAL SERVICES ADMINISTRATION

National Archives and Records Service Washington, DC 20408



August 5, 1976

Mr. R. Stan Mortenson Attorney at Law Miller, Cassidy, Larroca & Lewin 2555 M Street, NW., Suite 500 Washington, D. C. 20037

Dear Mr. Mortenson:

This is an interim reply to your letter of August 4 regarding the water leak at the Washington National Records Center and its effect on the Nixon historical materials stored there.

As Mr. Jacobs reported to you on Monday and Tuesday nothing was destroyed. Most of the boxes touched by water were only dampened, with minimal effect upon the contents. The contents of only two boxes sustained serious damage. These consisted of publications acquired or purchased by the National Archives and Records Service for a future Nixon Library and can be easily replaced by other copies. In addition, the contents of some boxes containing public opinion mail were wet and required drying.

None of the materials transferred from the Old Executive Office Building in April and May of this year were among the materials affected by the water leak.

The malfunction which caused the leak has been corrected by the Public Buildings Service. The Preservation Laboratory at the Washington National Records Center is carefully drying the damp materials, the dry materials are being reboxed, and these and other boxes are being reshelved elsewhere away from the air-conditioning equipment. Our archivists have now returned to the reference service which you had requested earlier.



As Mr. Jacobs explained to you on Tuesday a report on this entire incident is being prepared. When it has been completed a copy will be sent to you.

Sincerely,

JAMES E. O'NEILL Acting Archivist of the United States

cc: Mr. Philip Buchen



IG:DJA:JTB:cjc 145-171-135 copy point

AUG 18 1976

John J. Wilson, Esquire Whiteford, Hart, Carmody & Wilson 815 15th Street, N.W. Washington, D.C. 20005

Dear Mr. Wilson:

Mr. Buchen has asked us to respond to your letter of July 1, 1976, concerning the arrangement between counsel for Mr. Nixon and counsel for Mr. Halperin in the case of Halperin v. Kissinger, USDC DC, Civil Action No. 1187-73. Your letter requests that the examination of papers relating to Mr. Haldeman be terminated until the question concerning Mr. Halperin's access to the papers has been resolved. We have conferred with those who are responsible for conducting the search provided for in the stipulation and they have advised us that the search is now completed and that the relevant documents have already been turned over to the counsel for Mr. Halperin.

We believe that this arrangement was proper under the Presidential Reportings and Materials Preservation Act, Public Law No. 93-526 and the Court's decision in Nixon v. Administrator, 408 F.Supp. 321 (D.D.C., 1976). Under Section 101 of the Act, the files and papers of Mr. Haldeman and many other presidential staff members come within the definition of presidential historical materials. Under the Act and the Court's decision upholding its validity, Mr. Nixon has a right of access to any of the Mixon presidential historical materials. See, Nixon v. Administrator, supra, 408 F.Supp. at 375. Since the stipulation between counsel for Mr. Mixon and Mr. Halperin provided that these papers were to be searched at the behest of Mr. Mixon, the search appears to come squarely within the scope of both the Act and the Court Order.



As you may know, Miss Rose Mary Woods has intervened in the three related civil actions relating to the Mixon materials seeking the recovery of her personal property. If you believe that any of Mr. Haldeman's papers do not properly come within the definition of Mixon presidential materials, I can only suggest that you are free to pursue a course of action similar to that followed by counsel for Miss Woods.

Yours very truly,

IRWIN GOLDBLOOM Deputy Assistant Attorney General

cc: Philip Buchen, Esq.



THE WHITE HOUSE

. WASHINGTON

August 27, 1976

MEMORANDUM FOR:

MARIE ALLEN

FROM:

BARRY ROTH

SUBJECT:

\* Water Leak in the Vault in Room 84

Confirming our conversation of yesterday, would you please provide me with a report on the water leak which you found in the vault in Room 84 of the Old Executive Office Building. I am particularly interested in the cause of the leak, a description of the extent of damage, if any, to the Nixon Presidential materials contained therein and a recommendation for preventive maintenance and other measures to avoid a recurrence of this problem in the future. I notified Mr. Mortenson yesterday of this problem and I intend to provide a copy of your report to him as soon as possible.

Thank you for your assistance.

cc: Phil Buchen

H.S. Knight

R. Stan Mortenson



THE WHITE HOUSE
WASHINGTON
September 3, 1976

(cy in him papers)

Dear Mr. Mortenson:

Enclosed is a letter to me dated August 26, 1976, from Dr. James B. Rhoads, Archivist of the United States, in which he requests permission to begin rewinding the Nixon Presidenital tape recordings, in accordance with the provisions of the motion filed on March 23, 1976, by the government in Nixon v. Administrator and subsequently approved by the Court in its Order of April 15, 1976.

Dr. Rhoads' request does not include listening to these recordings and appears to be consistent with the above-referenced Order. Accordingly, it is my intention to approve Dr. Rhoads' request. However, I would appreciate as soon as possible any comments or suggestions you may have regarding the procedures described in Dr. Rhoads' letter and the enclosed report.

Sincerely,

Philip W. Buchen

Counsel to the President

Kilin W. Buchen

Mr. R. Stan Mortenson Miller, Cassidy, Larroca & Lewin 2555 - M Street, N.W. (Suite 500) Washington, D.C. 20037

cc: Irwin Goldbloom, Esq.
James B. Rhoads



mi B's file

THE WHITE HOUSE

September 3, 1976

Dear Mr. Mortenson:

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Sincerely,

Philip W. Buchen

Counsel to the President

Mr. R. Stan Mortenson
Miller, Cassidy, Larroca & Lewin
2555 - M Street, N.W. (Suite 500)
Washington, D.C. 20037

cc: Irwin Goldbloom, Esq.
James B. Rhoads



# UNITED STATES OF AMERICA GENERAL SERVICES ADMINISTRATION

National Archives and Records Service Washington, DC 20408



AUG 2 6 1976

Honorable Philip W. Buchen Counsel to the President The White House Washington, D.C. 20500

Dear Phil:

Having completed the transfer of most of the Nixon materials to the Washington National Records Center, we are now ready to initiate the other preservation measures authorized by the order of the United States District Court for the District of Columbia, dated April 15, 1976. These measures include the rewinding and inspection of tapes presently in your custody.

We have retained the services of Robert Halvorson as technical consultant on the matter of tape preservation, and we plan to employ him further to train and supervise technicians in the actual rewinding of the tapes. Mr. Halvorson is familiar with these tapes, having worked with them in 1974. For your information, I enclose a copy of his report on "Preservation of the Nixon Presidential Tape Recordings."

We would like to begin this lengthy rewinding process as soon as possible, and request that you make arrangements with the Executive Protective Service to provide access to the tapes for us beginning September 15, 1976.

Please contact me if you have any questions about this matter.

Sincerely,

Burt

JAMES B. RHOADS
Archivist of the United States

Enclosure





# HALVORSON ASSOCIATES

Box 9975 Chevy Chase, Md. 20015

### Preservation of the Nixon Presidential Tape Recordings

by

Robert L. Halvorson, Technical Consultant National Archives and Record Service (NARS)

The purpose of this report is to justify and outline a necessary technical step in the preservation of the Nixon Presidential Tape Recordings to enhance the ultimate usefulness of the recordings for the time when transcribing is authorized after the current inactive storage period. The necessary technical step for preservation is the physical rewinding of all the tapes to minimize deterioration which may likely occur if the tapes continue to be stored in their present condition. The plan outlined below bars any listening, duplicating or transcribing during the preservation process.

The processing of the White House tapes other than preservation is covered in some detail in the General Services Administration Report to Congress on Title 1, Presidential Recordings and Materials Preservation Act, P. L. 93-526, March 1975 as revised October 15, 1975, under section E-Processing the White House Tapes.

## Present Condition of the Tapes:

Approximately 900 five inch reels of magnetic tape (very thin, 1/2 mil) 1800 feet in length recorded at several locations over approximately a period of two years are now stored in the Executive Office Building in the White House complex. Each reel was recorded at 15/16 IPS resulting in a recording duration of 6 hours per reel or approximately 5,000 hours total time for the 900 reels. The actual total length of recording time is uncertain with respect to total available tape length time until a survey is made. Technical Consultant is not aware of any previous survey to determine actual individual reel or total recording time.

The recorded tapes are stored, according to our understanding on the original five inch reels as received from the tape manufacturer. Each reel is contained in a white chip board box and the boxes are collectively stored in four, four-drawer file cabinets under the protection of the U.S. Secret Service.

As is normal during the original recording process, the fresh blank tape reel was placed on the left-hand supply reel of the Sony Model 800B tape recorder. As the individual recording took place the tape moved from the left-hand supply reel passing the recording head from left to right and was spooled onto the right-hand take-up reel. At the end of the available 6 hours of tape the supply reel was empty and the take-up reel to the right was full of tape. To store the tape, after recording, the full take-up reel was then rewound (right to left) back onto the supply reel. This rewinding process immediately after recording results typically in a loose, uneven wind, with "heads out", meaning the start of the recording is at the outside layer or full diameter of the roll of tape.

The advantage of "heads out" storage is that the tape is ready to play immediately when placed on the machine. However, the disadvantage, and principal cause for the present apprehension and concern for the preservation of the subject tapes is the resulting loose, uneven wind. This type of wind is not satisfactory for long term storage of tapes because of the likely damage to tape edge and possible physical distortion of the tape layer itself. A further disadvantage of the loose, uneven wind is the contamination of the oxide surface of the projecting layers by dust and moisture which can adversely affect the playing quality of the tape and tape playing equipment.

The recording industry has recognized since the beginning of the use of tape machines that a flat, even wind on the tape reel for storage is essential to extend the useful life of the recording and the quality of the audio on playback. A properly tensioned wind, which is flat and even, minimizes contamination by dust and moisture, reduces or eliminates tape edge distortion, and over repeated playing on the machine the tape lasts longer with better audio quality.

Typically, a flat, even wind <u>for storage</u> is obtained by simply removing the take-up reel of tape with "tails out" as it comes from the right hand side of the machine after recording or playing. The machine itself, if properly adjusted, provides the flat, even wind correctly tensioned. The tape is then stored in its box standing on edge on its shelf until needed again. The disadvantage of having to re-wind the tape to the start before playing is small in comparison to the great advantage of proper storage condition. In fact after a long period of storage (perhaps a year) tape manufacturers recommend rewinding the tape before playing.

Another most serious deterioration of tapes in long term inactive storage is the possibility of layer to layer adhesion of the tape on the reel. Layer to layer adhesion takes place when the oxide sufface which contains the audio signal adheres or sticks to the backing of the adjacent layer. If this type of adhesion is greater than that which bonds the oxide surface to its proper backing the audio bearing oxide is transferred to the wrong side of the backing material and the tape is

destroyed when unreeled in the playing process. Deterioration of this type is almost impossible to correct once it has taken place. The best remedy for this problem is, first, to use high quality tape for the original recording and, second, to periodically (once a year) rewind the tape to arrest the chemical action causing the layer to layer adhesion.

## Summary of the Tape Storage Problem:

Due to (1) the loose, uneven wind of tapes in storage, and (2) the long term (1½ to 4 years) storage of a major portion of the tapes without rewinding, the quality and usefulness of the tapes may be jeopardized when duplicating and transcribing is authorized by court order. It is highly recommended by Technical Consultant that simple steps outlined below be taken to preserve the subject tapes.

## Recommendation for Preservation:

It is recommended that the Presidential tapes currently in inactive storage in the Executive Office Building be rewound one by one on a machine or machines designed and adjusted to provide a proper wind for further and continued storage. It is recommended that the machine or machines be operated by competent personnel and under suitable security control to assure that the desired results are obtained and that the tapes are returned to storage after preservation steps have been taken without unauthorized duplicating, listening or transcribing.

## Function I. Rewinding the tapes:

The recommended rewinding process involves use of a machine or machines which exist and are available and which operate in the same manner as a professional, high quality tape playing machine to provide a flat, even wind of the tape reel, with proper tension, for long term storage. Each individual reel of tape will be spooled from its current loose, uneven wind, by means of the machine, to the desired flat, even wind with "tails out". Extreme care will be exercised utilizing the services of competent technical personnel during the rewinding process. Difficulties which arise, if any, will be carefully noted in a permanent record and a log will be maintained of the progress from start to finish of the tape preservation.

To prevent unauthorized duplicating, listening or transcribing, the machines which are capable of performing these functions will be strictly excluded from the assigned tape rewinding area. Further, the recommended rewinding machine (s) will operate at very high speed with respect to the normal playing speed of the tapes. The rewinding will be accomplished at approximately fifty times normal playing speed.

Several machines may be used simultaneously to reduce the overall time

for the rewinding preservation. If the work progresses smoothly with no delays in access to the tapes once the work commences, and assuming adhesion problems or other technical difficulties do not exist during the course of the work, it is expected that 100 reels per 8 hour day can be re-wound and the entire job can be completed in two weeks if simple rewinding is authorized by the court.

#### Alternative A:

Off-the-shelf tape rewinding machines are available from several manufacturers in the U.S. Typical of machines of this type is the RAMKO RESEARCH, Sacramento, California Model ACL/E of lower capability or the Model ACL-120BT/E of greater capability (data sheet attached). With the purchase of this equipment, NARS personnel would be trained by Technical Consultant in proper operation, and further, the equipment would be available to NARS for future rewinding preservation.

### Alternative B:

NARS Technical Consultant is by way of training and experience a licensed professional engineer whose business is recording educational and commercial tapes. Among his capital equipment is a four unit tape machine of custom design with a capacity for rewinding four reels simultaneously at approximately fifty times normal tape playing speed to provide the desired result. Technical Consultant and machine is available to perform the rewind preservation with the assistance of NARS archival personnel.

## Function II. Rewinding the Tapes with Chart Record.

One of the unknowns about the 900 reels of White House tapes is the amount of actual total recorded conversation time and the recorded time on the individual six hour reels. This uncertainty causes difficulty in estimating, for example, the time, facilities and personnel required to transcribe the tapes. A further difficulty is the lack of knowledge concerning presence or absence of recorded conversations on the individual reels currently in storage, for comparison with review in the future after inactive storage and when transcribing is authorized to begin. Again, the tapes have been in storage for 1½ to 4 years and may be stored for some time to come. A data reference obtained concurrently with the rewind preservation showing recorded conversation time and blank or erased time on each individual reel would serve an extremely useful purpose in the record of the preservation of the subject tapes. A comparison of data obtained at the first rewind with that of subsequent rewinds would prove the integrity of the storage security.

To obtain the signal versus no signal duration on the individual tape reels after the present 1½ to 4 year storage period, Technical

Consultant recommends an additional simultaneous function be undertaken during the first rewind process. This additional function will provide a permanent paper chart record or graph of signal and/or no signal in the vertical direction of the chart vs. time duration of the individual reel tape recording in the horizontal direction of the chart. An X-Y paper chart of 11 by 17 inches for each reel of tape would form the record by proper cross reference identification.

It must be emphasized strongly that although a pick-up tape head is required for reading signal or no signal on the recorded tape, again, the tape is moving at approximately 50 times normal speed and only time events (start and stop) of the audio signal would be indicated on the chart where 6 hours of tape would be displayed in the 17 inch horizontal dimension of the chart. Thus, the security against unauthorized monitoring or retrieval of audio intelligence is preserved with this technique.

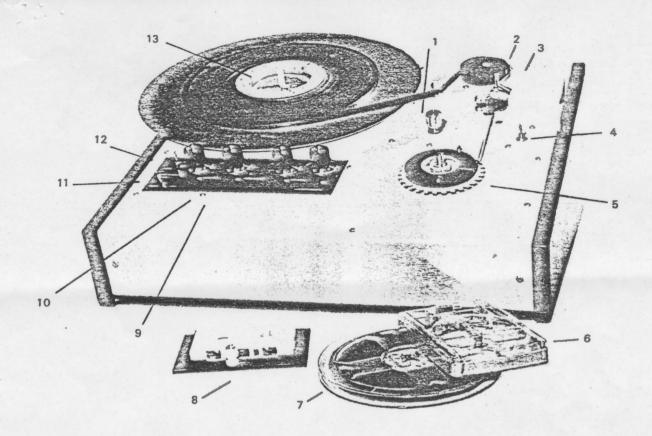
In summary, Technical Consultant believes that a knowledge of audio conversation vs. gaps (if any) after the current storage duration should be obtained during the first rewind preservation operation to prove the integrity of subsequent storage periods, and that such necessary knowledge can be obtained easily and quickly if NARS is authorized to perform Functions I and II above.

Date:

Signed;

Robert L. Halvorson, P.E.

Head



#### OPERATING FEATURES

Easy to load. Takes only seconds to set up and start.

Automatic tape length determination. Playback speed selector eliminates guesswork. No need to divide or multiply for carts and cassettes to be played back at different speeds. Simply set selector to 17/8, 33/4 or 71/2 i.p.s.

Exclusive torsion control. Insures proper tape pack on all size hubs, cassettes and reels.

Accurate. Precise braking stops tape within one second of playback time.

**Easy Reset.** RESET/RUN switch resets circuitry, for next tape to be wound, without erasing previously entered settings.

Able to wind all tapes. Cartridge, cassette and reel.

Guaranteed performance. 2 year warranty on all electronics and 6 months on mechanical parts.

Loads from any tape source. All machines are capable of winding off of the smallest reels and/or up to 14" pancakes.

#### DESIGN FEATURES

1-Take up tape tension control.

2-Light beam chopping tachometer.

3—Cue tone sense head (BT models only).

4-AC on/off switch.

5—Tape take-up spindle.

6-Loads all sizes of tape cartridges.

7—Loads up to 7" reels from pancake supply.

8—Optional cassette adapter for ACL 25/E only.

9—Digital time select panel (select from 1 second to 100 minutes, 00 seconds).

10-Tone/blank select (BT models only).

11—Playback speed select switch, 17/8, 33/4, 71/2 i.p.s.

12-RUN/RESET switch.

13-Pancake adapter (for ACL-25/E only).

#### MODELS AND PRICES

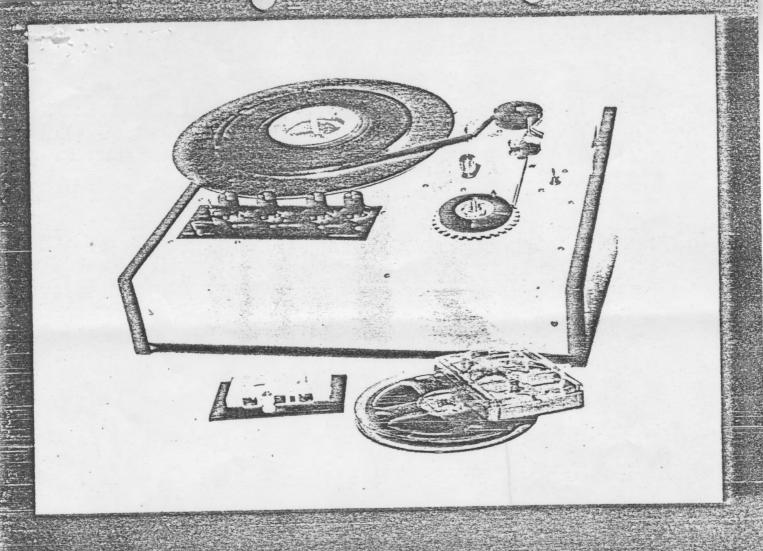
ACL-25/E (30 i.p.s. winding speed)	,	. \$	185.00
ACL-120BT/E Tone and blank winding but at 120 i.p.s		. \$	545.00
ACL-C Cassette adapter (standard on ACL-120's)		. \$	20.00
ACL-P Pancake adapter for ACL-25 only		. \$	8.00

Shipping weight: ACL-25's — 24 lbs.

ACL-120 -- 29 15s

Power requirement: 115 vac., 50/60Hz

**FOB Factory** 



# Automatic Cart & Cassette Loaders

Reduce your costs — Improve your quality — Increase your flexibility.

Now that RAMKO RESEARCH has made automatic tape winding affordable you can no longer disregard the advantages of doing it yourself!

If you are now without a winder, you'll find the new "E" series ACL's offer an immediate means to cut reloading costs up to 40%, save time and obtain a faster self dependent operation.

Tried loading your own before but were unhappy with the results? The ACL is for you. Solid state tape tension control insures prop-

er tape pack on all sizes of hubs, cassettes and reels. Attention free operation. Dial in the time desired, hit the run button and walk away. Stops automatically and precisely to -0, +1 second of playback time. Exclusive playback speed selector ends mental gymnastics figuring tape length versus playback speed. Simply set to 11/8,  $3\frac{3}{4}$ , or  $7\frac{1}{2}$  i.p.s. and the ACL does the rest. An optional cassette adapter enables you to wind both carts and cassettes on the same machine. Takes only a minute or two to change over.

RAMKO's ACL's come in two different versions to fill any tape loading need. All modestly priced. From the ACL-25/E (30 i.p.s. nominal winding speed) to our latest high speed unit, the ACL-120BT/E (120 i.p.s. nominal).

Compare prices and versatility. We unconditionally guarantee these units to have more features and be easier to use than any other comparably priced unit on the market, or your money back.

Try an ACL today. It's a sound investment.

WRITE — 3516-C LaGrande Blvd. Sacramento, CA 95823

PHONE - (916) 392-2100

RAMKO RESEARCH

LAW OFFICES

#### MILLER, CASSIDY, LARROCA & LEWIN

2555 M STREET, N.W. - SUITE 500 WASHINGTON, D. C. 20037

> AREA CODE 202 TELEPHONE 293-6400

HERBERT J. MILLER, JR.
JOHN JOSEPH CASSIDY
RAYMOND G. LARROCA
NATHAN LEWIN
MARTIN D. MINSKER
WILLIAM H. JEFFRESS, JR.
R. STAN MORTENSON
THOMAS B. CARR

WILLIAM C. BRYSON

JAMIE S. GORELICK

HAND DELIVERED

September 9, 1976

Honorable Philip Buchen Counsel to the President The White House 1600 Pennsylvania Avenue Washington, D.C. 20500

Dear Phil:

I have received your letter of September 3 referring to Archivist Rhoads' request for permission to begin rewinding the Nixon presidential tape recordings beginning September 15, 1976. You invited my comments. I have three to offer.

First, in order to protect former President Nixon's interests in the recordings, I consider it absolutely essential that I be present during the inital stages of the rewinding program. Among other things, I want to be assured that adequate security precautions have been taken, and I want to inspect the equipment that is being used. Because of previous commitments, I will be in California during the entire week of September 12. After I return I am obligated to conclude my review of certain documentary items previously requested by the Special Prosecutor and the Justice Department. Accordingly, I request that the rewinding program, if approved by you, not go forward until after September 27.

Second, it has been my understanding since the time the Government originally requested court authorization to undertake the rewinding program, that the program would not involve monitoring of the recordings in any way whatsoe ever. The report of the National Archives' consultant (Robert Halvorson) which was appended to Doctor Rhoads'

JOSEPH S. MCCARTHY COURTNEY A. EVANS ANDREW F. OEHMANN

OF COUNSEL

Honorable Philip Buchen September 9, 1976 Page Two

letter to you, refers to preparation of a "chart record" which would involve electronic monitoring. I assume that no one intends this "chart record" to be a part of the rewinding program.

Third, I want to express once again my continuing belief that the entire rewinding program is unnecessary to the preservation of these tapes at this time. In discussions with technical experts of the 3M Company, I have learned that rewinding of these tapes at this stage is not essential and perhaps of no value at all. Accordingly, I believe that whatever minimal preservation might be served through this procedure is strongly outweighed by the potential that one or more of the tapes will be damaged during the course of the rewinding. There has already been at least one instance in which a tape split or began to unravel in the course of preparing a duplicate tape pursuant to a request made by the Special Prosecutor. The potential is extremely high that during the rewinding of over 900 individual tapes at a speed 50 times the normal recording speed a similar mishap will occur. In that event, I will not consent to -and will take every step available to me to prevent -- any person listening to a recording for any purported preservation or other purpose. In short, I believe the Archives' record in handling the documentary Nixon presidential materials thus far evidences that despite extreme precautions, if something can go wrong it will. Under those circumstances, I believe it is a mistake to approve a rewinding program which will be of little if any value.

Sincerely,

R. Stan Mortenson

RSM/tc

SERALO TO ROLL ON OTHER PROPERTY OF THE PROPER

#### THE WHITE HOUSE

WASHINGTON

September 3, 1976

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Sincerely,

Philip W. Buchen

Counsel to the President

Mr. R. Stan Mortenson
Miller, Cassidy, Larroca & Lewin
2555 - M Street, N.W. (Suite 500)
Washington, D.C. 20037

cc: Irwin Goldbloom, Esq.
James B. Rhoads



# UNITED STATES OF AMERICA GENERAL SERVICES ADMINISTRATION

National Archives and Records Service Washington, DC 20408



AUG 2 6 1976

Honorable Philip W. Buchen Counsel to the President The White House Washington, D.C. 20500

Dear Phil:

Having completed the transfer of most of the Nixon materials to the Washington National Records Center, we are now ready to initiate the other preservation measures authorized by the order of the United States District Court for the District of Columbia, dated April 15, 1976. These measures include the rewinding and inspection of tapes presently in your custody.

We have retained the services of Robert Halvorson as technical consultant on the matter of tape preservation, and we plan to employ him further to train and supervise technicians in the actual rewinding of the tapes. Mr. Halvorson is familiar with these tapes, having worked with them in 1974. For your information, I enclose a copy of his report on "Preservation of the Nixon Presidential Tape Recordings."

We would like to begin this lengthy rewinding process as soon as possible, and request that you make arrangements with the Executive Protective Service to provide access to the tapes for us beginning September 15, 1976.

Please contact me if you have any questions about this matter.

Sincerely,

Bert

JAMES B. RHOADS
Archivist of the United States

Enclosure





# HALVORSON ASSOCIATES

## Preservation of the Nixon Presidential Tape Recordings

by

Robert L. Halvorson, Technical Consultant National Archives and Record Service (NARS)

The purpose of this report is to justify and outline a necessary technical step in the preservation of the Nixon Presidential Tape Recordings to enhance the ultimate usefulness of the recordings for the time when transcribing is authorized after the current inactive storage period. The necessary technical step for preservation is the physical rewinding of all the tapes to minimize deterioration which may likely occur if the tapes continue to be stored in their present condition. The plan outlined below bars any listening, duplicating or transcribing during the preservation process.

The processing of the White House tapes other than preservation is covered in some detail in the General Services Administration Report to Congress on Title 1, Presidential Recordings and Materials Preservation Act, P. L. 93-526, March 1975 as revised October 15, 1975, under section E-Processing the White House Tapes.

### Present Condition of the Tapes:

Approximately 900 five inch reels of magnetic tape (very thin, 1/2 mil) 1800 feet in length recorded at several locations over approximately a period of two years are now stored in the Executive Office Building in the White House complex. Each reel was recorded at 15/16 IPS resulting in a recording duration of 6 hours per reel or approximately 5,000 hours total time for the 900 reels. The actual total length of recording time is uncertain with respect to total available tape length time until a survey is made. Technical Consultant is not aware of any previous survey to determine actual individual reel or total recording time.

The recorded tapes are stored, according to our understanding, on the original five inch reels as received from the tape manufacturer. Each reel is contained in a white chip board box and the boxes are collectively stored in four, four-drawer file cabinets under the protection of the U.S. Secret Service.

As is normal during the original recording process, the fresh blank tape reel was placed on the left-hand supply reel of the Sony Model 800B tape recorder. As the individual recording took place the tape moved from the left-hand supply reel passing the recording head from left to right and was spooled onto the right-hand take-up reel. At the end of the available 6 hours of tape the supply reel was empty and the take-up reel to the right was full of tape. To store the tape, after recording, the full take-up reel was then rewound (right to left) back onto the supply reel. This rewinding process immediately after recording results typically in a loose, uneven wind, with "heads out", meaning the start of the recording is at the outside layer or full diameter of the roll of tape.

The advantage of "heads out" storage is that the tape is ready to play immediately when placed on the machine. However, the disadvantage, and principal cause for the present apprehension and concern for the preservation of the subject tapes is the resulting loose, uneven wind. This type of wind is not satisfactory for long term storage of tapes because of the likely damage to tape edge and possible physical distortion of the tape layer itself. A further disadvantage of the loose, uneven wind is the contamination of the oxide surface of the projecting layers by dust and moisture which can adversely affect the playing quality of the tape and tape playing equipment.

The recording industry has recognized since the beginning of the use of tape machines that a flat, even wind on the tape reel for storage is essential to extend the useful life of the recording and the quality of the audio on playback. A properly tensioned wind, which is flat and even, minimizes contamination by dust and moisture, reduces or eliminates tape edge distortion, and over repeated playing on the machine the tape lasts longer with better audio quality.

Typically, a flat, even wind for storage is obtained by simply removing the take-up reel of tape with "tails out" as it comes from the right hand side of the machine after recording or playing. The machine itself, if properly adjusted, provides the flat, even wind correctly tensioned. The tape is then stored in its box standing on edge on its shelf until needed again. The disadvantage of having to re-wind the tape to the start before playing is small in comparison to the great advantage of proper storage condition. In fact after a long period of storage (perhaps a year) tape manufacturers recommend rewinding the tape before playing.

Another most serious deterioration of tapes in long term inactive storage is the possibility of layer to layer adhesion of the tape on the reel. Layer to layer adhesion takes place when the oxide surface which contains the audio signal adheres or sticks to the backing of the adjacent layer. If this type of adhesion is greater than that which bonds the oxide surface to its proper backing the audio bearing oxide is transferred to the wrong side of the backing material and the tape is

destroyed when unreeled in the playing process. Deterioration of this type is almost impossible to correct once it has taken place. The best remedy for this problem is, first, to use high quality tape for the original recording and, second, to periodically (once a year) rewind the tape to arrest the chemical action causing the layer to layer adhesion.

## Summary of the Tape Storage Problem:

Due to (1) the loose, uneven wind of tapes in storage, and (2) the long term (1½ to 4 years) storage of a major portion of the tapes without rewinding, the quality and usefulness of the tapes may be jeopardized when duplicating and transcribing is authorized by court order. It is highly recommended by Technical Consultant that simple steps outlined below be taken to preserve the subject tapes.

## Recommendation for Preservation:

It is recommended that the Presidential tapes currently in inactive storage in the Executive Office Building be rewound one by one on a machine or machines designed and adjusted to provide a proper wind for further and continued storage. It is recommended that the machine or machines be operated by competent personnel and under suitable security control to assure that the desired results are obtained and that the tapes are returned to storage after preservation steps have been taken without unauthorized duplicating, listening or transcribing.

## Function I. Rewinding the tapes:

The recommended rewinding process involves use of a machine or machines which exist and are available and which operate in the same manner as a professional, high quality tape playing machine to provide a flat, even wind of the tape reel, with proper tension, for long term storage. Each individual reel of tape will be spooled from its current loose, uneven wind, by means of the machine, to the desired flat, even wind with "tails out". Extreme care will be exercised utilizing the services of competent technical personnel during the rewinding process. Difficulties which arise, if any, will be carefully noted in a permanent record and a log will be maintained of the progress from start to finish of the tape preservation.

To prevent unauthorized duplicating, listening or transcribing, the machines which are capable of performing these functions will be strictly excluded from the assigned tape rewinding area. Further, the recommended rewinding machine (s) will operate at very high speed with respect to the normal playing speed of the tapes. The rewinding will be accomplished at approximately fifty times normal playing speed.

Several machines may be used simultaneously to reduce the overall time

for the rewinding preservation. If the work progresses smoothly with no delays in access to the tapes once the work commences, and assuming adhesion problems or other technical difficulties do not exist during the course of the work, it is expected that 100 reels per 8 hour day can be re-wound and the entire job can be completed in two weeks if simple rewinding is authorized by the court.

#### Alternative A:

Off-the-shelf tape rewinding machines are available from several manufacturers in the U.S. Typical of machines of this type is the RAMKO RESEARCH, Sacramento, California Model ACL/E of lower capability or the Model ACL-120BT/E of greater capability (data sheet attached). With the purchase of this equipment, NARS personnel would be trained by Technical Consultant in proper operation, and further, the equipment would be available to NARS for future rewinding preservation.

### Alternative B:

NARS Technical Consultant is by way of training and experience a licensed professional engineer whose business is recording educational and commercial tapes. Among his capital equipment is a four unit tape machine of custom design with a capacity for rewinding four reels simultaneously at approximately fifty times normal tape playing speed to provide the desired result. Technical Consultant and machine is available to perform the rewind preservation with the assistance of NARS archival personnel.

## Function II. Rewinding the Tapes with Chart Record.

One of the unknowns about the 900 reels of White House tapes is the amount of actual total recorded conversation time and the recorded time on the individual six hour reels. This uncertainty causes difficulty in estimating, for example, the time, facilities and personnel required to transcribe the tapes. A further difficulty is the lack of knowledge concerning presence or absence of recorded conversations on the individual reels currently in storage, for comparison with review in the future after inactive storage and when transcribing is authorized to begin. Again, the tapes have been in storage for 1½ to 4 years and may be stored for some time to come. A data reference obtained concurrently with the rewind preservation showing recorded conversation time and blank or erased time on each individual reel would serve an extremely useful purpose in the record of the preservation of the subject tapes. A comparison of data obtained at the first rewind with that of subsequent rewinds would prove the integrity of the storage security.

To obtain the signal versus no signal duration on the individual taper reels after the present 1/2 to 4 year storage period, Technical

Consultant recommends an additional simultaneous function be undertaken during the first rewind process. This additional function will provide a permanent paper chart record or graph of signal and/or no signal in the vertical direction of the chart vs. time duration of the individual reel tape recording in the horizontal direction of the chart. An X-Y paper chart of 11 by 17 inches for each reel of tape would form the record by proper cross reference identification.

It must be emphasized strongly that although a pick-up tape head is required for reading signal or no signal on the recorded tape, again, the tape is moving at approximately 50 times normal speed and only time events (start and stop) of the audio signal would be indicated on the chart where 6 hours of tape would be displayed in the 17 inch horizontal dimension of the chart. Thus, the security against unauthorized monitoring or retrieval of audio intelligence is preserved with this technique.

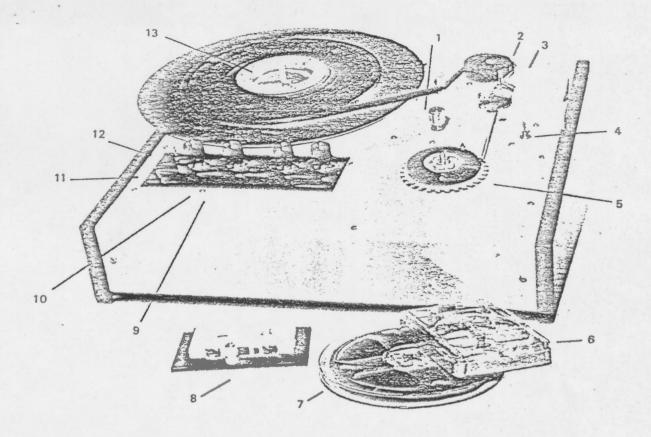
In summary, Technical Consultant believes that a knowledge of audio conversation vs. gaps (if any) after the current storage duration should be obtained during the first rewind preservation operation to prove the integrity of subsequent storage periods, and that such necessary knowledge can be obtained easily and quickly if NARS is authorized to perform Functions I and II above.

Date

Signed

Robert L. Halvorson

Head



#### OPERATING FEATURES

Easy to load. Takes only seconds to set up and start.

Automatic tape length determination. Playback speed selector eliminates guesswork. No need to divide or multiply for carts and cassettes to be played back at different speeds. Simply set selector to 11/8, 33/4 or 71/2 i.p.s.

Exclusive torsion control. Insures proper tape pack on all size hubs, cassettes and reels.

Accurate. Precise braking stops tape within one second of playback time.

Easy Reset. RESET/RUN switch resets circuitry, for next tape to be wound, without erasing previously entered settings.

Able to wind all tapes. Cartridge, cassette and reel.

Guaranteed performance. 2 year warranty on all electronics and 6 months on mechanical parts.

Loads from any tape source. All machines are capable of winding off of the smallest reels and/or up to 14" pancakes.

#### DESIGN FEATURES

1—Take up tape tension control.

2-Light beam chopping tachometer.

3-Cue tone sense head (BT models only).

4—AC on/off switch.

5-Tape take-up spindle.

6-Loads all sizes of tape cartridges.

7—Loads up to 7" reels from pancake supply. 8—Optional cassette adapter for ACL 25/E only.

9—Digital time select panel (select from 1 second to 100 minutes, 00 seconds).

10-Tone/blank select (BT models only).

11—Playback speed select switch, 17/8, 33/4, 71/2 i.p.s.

12-RUN/RESET switch.

13-Pancake adapter (for ACL-25/E only).

#### MODELS AND PRICES

ACL-25/E (30 i.p.s. winding speed) . \$185.00 ACL-120BT/E Tone and blank winding but at 120 i.p.s. . . . \$545.00

ACL-C Cassette adapter (standard on ACL-120's) . . . . . . . \$ 20.00

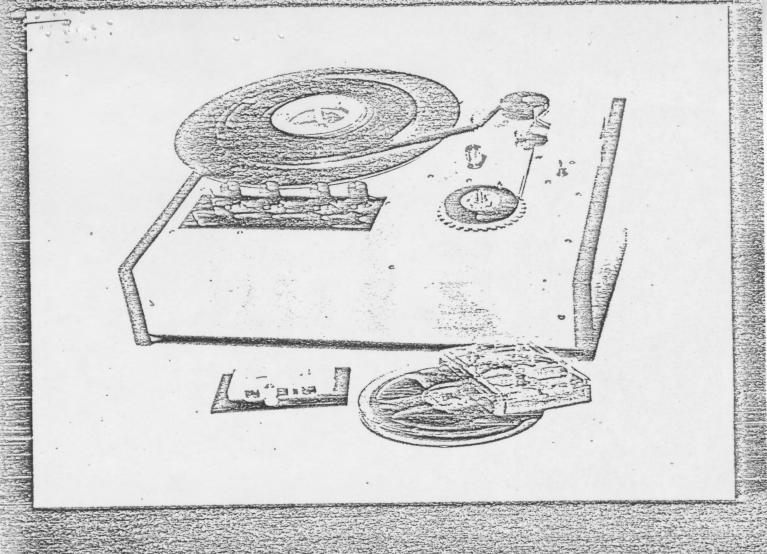
ACL-P Pancake adapter for ACL-25 only . . . .

Shipping weight: ACL-25's — 24 15s.

ACL-120 — 29 tbs.

Power requirement: 115 vac., 50/60Hz

FOB Factory



# Automatic Cant & Cassette Loaders

Reduce your costs — Improve your quality — Increase your flexibility.

Now that RAMKO RESEARCH has made automatic tape winding affordable you can no longer disregard the advantages of doing it yourself!

If you are now without a winder, you'll find the new "E" series ACL's offer an immediate means to cut reloading costs up to 40%, save time and obtain a faster self dependent operation.

Tried loading your own before but were unhappy with the results? The ACL is for you. Solid state tape tension control insures proper tape pack on all sizes of hubs, cassettes and reels. Attention free operation. Dial in the time desired, hit the run button and walk away. Stops automatically and precisely to -0, +1 second of playback time. Exclusive playback speed selector ends mental gymnastics figuring tape length versus playback speed. Simply set to 11/8, 33/4, or 71/2 i.p.s. and the ACL does the rest. An optional cassette adapter enables you to wind both carts and cassettes on the same machine. Takes only a minute or two to change over.

RAMKO's ACL's come in two different versions to fill any tape loading need. All modestly priced. From the ACL-25/E (30 i.p.s. nom-

inal winding speed) to our latest high speed unit, the ACL-120BT/E (120 i.p.s. nominal).

Compare prices and versatility. We unconditionally guarantee these units to have more features and be easier to use than any other comparably priced unit on the market, or your money back.

Try an ACL today. It's a sound investment.

WRITE — 3516-C LaGrande Blvd. Sacramento, CA 95823

PHONE - (916) 392-2100

RAMKO RESEARCH

myon Paper THE WHITE HOUSE WASHINGTON September 20, 1976 MEMORANDUM FOR: H. S. Knight Director United States Secret Service

Referencing the attached memorandum to Dr. James B. Rhoads, dated September 2, 1976, this is to authorize Dr. Rhoads or such agents designated by him, or the Office of Presidential Materials of the National Archives and Records Service, to periodically enter the vault in Room 84 and Room 522 of the Old Executive Office Building, as necessary, for the purpose of conducting periodic inspections of all electrical and plumbing apparatus contained therein. Dr. Rhoads or his agents is authorized to enter these rooms and to admit the appropriate repair personnel, in the event of an emergency. In addition, this will authorize the placement of a hydrothermographic device and such other test equipment as needed in these rooms, and the periodic inspections of such equipment.

All such entries are to be made in accordance with the procedures outlined at 41 CFR 105-63 concerning the preservation and protection of the Nixon Presidential historical materials. The Presidential Materials Staff is to maintain a written record of each entry, including the areas entered, time of entry and departure, the names of all individuals entering, and the purposes for the entry. This memorandum is not to be considered as authorizing access or inspection of the Presidential materials except in situations where such access is absolutely necessary to protect these materials. In such instances, notice is to be given immediately to me or a member of my staff.

Counsel to the President

cc: James B. Rhoads

Dipo Paper

THE WHITE HOUSE

WASHINGTON

September 2, 1976

MEMORANDUM FOR

Dr. James B. Rhoads
Archivist of the United States

Referencing your letter to me of September 1, 1976, concerning the water leak which was discovered in the vault in Room 84 of the Old Executive Office Building, I have provided a copy of your report to Mr. Mortenson.

With respect to Items No. III and IV of your report, either you or your designee is hereby authorized to enter the vault in Room 84 and Room 522 of the Old Executive Office Building, as necessary, for the purpose of conducting periodic inspections of all electrical and plumbing apparatus contained therein. Of course, such entry should be made in accordance with the procedures found in 41 CFR 105-63 concerning the preservation and protection of the Nixon historical materials. I believe that this measure will allow for adequate protection of the Nixon Presidential materials for the interim period that they remain in the Old Executive Office Building.

As you are aware, there are no shelving units in either Room 522 or in Safe Zone 128. However, all Nixon Presidential materials contained therein are stored in safes or similar metal storage cabinets which should serve to minimize any storage problems during this interim period. In addition, the temperature and humidity in Safe Zone 128 were checked by GSA engineers in the summer of 1975. Mr. Wolf was advised by my office of the results of these tests, and it is my understanding he was advised by members of your staff that the temperature and humidity in this room were within acceptable limits for the storage of the tape recordings.

Philip W. Buchen Counsel to the President

cc: R. Stan Mortenson Irwin Goldbloom, Esq.



# THE WHITE HOUSE

September 2, 1976

Dear Mr. Mortenson:

Referencing your recent conversations with Barry Roth of my staff, enclosed is a copy of a report prepared by the Archivist of the United States concerning the water leak that was discovered on August 26, 1976, in the vault in Room 84 of the Old Executive Office Building.

In response to Dr. Rhoads' report, I have requested the appropriate GSA personnel to conduct periodic inspections of the electrical and plumbing apparatus in the vault in Room 84 and in Room 522. Such examinations will be limited to the physical facilities and will not include examination of the Presidential historical materials contained therein without your express approval. In this manner, I believe we will be able to lessen any risk of damage to these materials.

I would appreciate any comments that you might have concerning the procedures I have described above or the report prepared by Dr. Rhoads.

Sincerely,

Philip W. Buchen Counsel to the President

Mr. R. Stan Mortenson
Miller, Cassidy, Larroca & Lewin
2555 - M Street, N.W. (Suite 500)
Washington, D.C. 20037

cc: Dr. James B. Rhoads Irwin Goldbloom, Esq.



# UNITED STATES OF AMERICA GENERAL SERVICES ADMINISTRATION

National Archives and Records Service
Washington, DC 20408



SEP 1 1976

Honorable Philip W. Buchen Counsel to the President The White House Washington, D.C. 20500

Dear Mr. Buchen:

On August 26 of this year a water leak was discovered which caused some water damage to Nixon historical materials under your custody in the Old Executive Office Building. Enclosed is a report concerning this incident and a list of the boxes damaged, as requested by Mr. Barry Roth of your office. The second copy of the report is for your use in informing Mr. Mortenson concerning the incident.

I continue to be concerned about the problems resulting from the present division of custody and control of the Nixon materials. Uniform inspection, preservation, and control techniques cannot be applied so long as that division continues. Moreover, this incident reinforces my conviction that the material still stored in the Old Executive Office Building should be transferred either to Suitland or to the National Archives Building.

I would, of course, be glad to discuss these matters with you at any time.

Sincerely,

JAMES B. RHOADS

Archivist of the United States

**Enclosures** 





# REPORT OF THE WATER LEAK INCIDENT IN THE NIXON PAPERS STORAGE VAULT 84 AT THE OLD EXECUTIVE OFFICE BUILDING

#### I. Discovery and Response

At 1 p.m. on Thursday, August 26, 1976, Nixon Records Liaison Staff and Presidential Materials Staff members, Executive Protective Service officers, and a representative of Richard M. Nixon (Mrs. Marjorie Acker) entered Room 84 of the Old Executive Office Building to provide access to the Nixon materials stored in the adjacent Vault 84 for Mrs. Acker. When Vault 84 was opened by the EPS officers, one officer noticed water dripping from the ceiling in a corner of the Vault. He informed the Director of the Presidential Materials Staff and she assisted in the removal of six damaged boxes from the affected area.

The Director of the Presidential Materials Staff informed the Office of the Counsel to the President of the water damage and requested permission to admit GSA repairmen to the Vault and to open the damaged boxes. Vault 84 is one of the three Nixon materials storage rooms in the OEOB which is under the custody and control of the Counsel to the President. After a representative of the Counsel's office discussed the problem with Mr. Nixon's attorney, archivists were given permission to begin preservation measures and to admit GSA repairmen to the area.

One of the six boxes was extensively damaged and was emptied and discarded. The contents of this box were spread out in Vault 84 for drying. Three other boxes were damp enough to be discarded and their contents reboxed.

Two of the boxes were only slightly damp, and dried overnight.

GSA repairmen removed part of the ceiling tile in Vault 84 and drained water above the tile. The repairmen estimated that the leaking pipe problem was caused by a defective air conditioning unit in Room 184 (directly above Vault 84). They placed receptacles in Vault 84 to catch the dripping water and left to work on the defective unit on the floor above. At 9 p.m. on the evening of August 26, GSA engineers notified the Presidential Materials Staff and EPS officers that the water problem in Vault 84 had not been connected with the defective air conditioning unit, and that water might still be accumulating above the ceiling tile potentially causing the entire ceiling to collapse. After securing the permission of the Office of the Counsel to the President, Presidential Materials Staff and Nixon Records Liaison Staff members and EPS officers admitted GSA engineers to Vault 84 at 11 p.m. Additional water was drained from above the ceiling tile and final repair work was completed on the defective pipe.

### II. Assessment of Damage

All of the damaged documents in the six affected boxes dried overnight and, except for slight discoloration and water wrinkles, none of the documents were destroyed. The contents of four of the six containers were reboxed.

### III. Actions to Avoid Recurrence

GSA engineers report that the defective pipe is repaired. Because Vault 84 is not under GSA custody, we cannot institute measures to prevent a recurrence of this incident. We do suggest, however, that the Counsel

the President institute periodic inspections of all electrical and plumbing apparatus in Vault 84, Room 522 and Room 128, OEOB.

#### IV. Conclusions

The incident in Vault 84 on August 26 highlights the difficulties inherent in the present division of custody of the Nixon papers between GSA and the Counsel to the President:

(1) All rooms under GSA custody are inspected periodically by archivists, but there are no such procedures for rooms under the custody of the Counsel to the President. If Vault 84 had not been entered to carry out reference responsibilities on August 26, the leaking water might have accumulated and created more extensive damage. All of the materials in Vault 84, Room 522, and Room 128 are highly sensitive and valuable; any water damage in these rooms might cause critical losses. It has now come to our attention that water leaks have occurred in other storage rooms in the OEOB that have gone undiscovered for lengthy periods of time. One such leak occurred in Room 401 OEOB where publications concerning the 1973 inaugural ceremonies stored by the White House Gift Unit were extensively damaged. Four boxes of publications were completely destroyed by mildew and mold damage resulting from long term water exposure caused by a radiator leak.

- (2) Because the Counsel to the President or his representative must approve any access to Vault 84, we are necessarily limited in responding quickly in emergency situations. Only one representative has been designated by the Counsel to the President to authorize access to Nixon papers storage areas under his custody. Fortunately that representative was in his office at the Old Executive Office Building on the day of the water leak. If he had been out of town or out of touch with his office, we could not have admitted repair personnel to Vault 84.
- (3) The Old Executive Office Building was not designed for archival storage purposes, and the records in Vault 84,

  Room 522, and Room 128 are not properly maintained as a result. There are, for instance, inadequate shelving units in these rooms, and Rooms 522 and 128 are subject to extreme variations in temperature and humidity which may be harmful to the materials. There are no records preservation facilities available in the OEOB building as there are in the National Archives Building and the Washington National Records Center.

#### V. Recommendations

We recommend that custody of all of the Nixon materials be vested in the Administrator of the General Services Administration and that all of the records presently stored in the Old Executive Office Building be transferred to archival storage facilities.

## LIST OF BOXES DAMAGED BY WATER LEAK IN VAULT 84 OEOB, AUGUST 26, 1976

- 1. "White House, Patrick J. Buchanan, Carton A, 1971 Chron File, 1972 Chron File, 1971 Calendar, 1972 Calendar" (reboxed)
- 2. "White House, Patrick J. Buchanan, Carton D, 1972 Staff Memos and Election '72" (reboxed)
- "White House, Patrick J. Buchanan, Carton E, McG Assault Book" (reboxed)
- 4. "Bruce Whelihan, Press Office, Confidential, Box 4 of 6, Special Files #243" (reboxed)
- 5. "White House, Patrick J. Buchanan, Carton B, 1971 Subject-Staff Memos"
- 6. "White House, Patrick J. Buchanan, Carton C, 1972 Staff Memos and Pol. Media Analysis"



National Archives and Records Service Washington, DC 20408



AUG 2 6 1976

Honorable Philip W. Buchen Counsel to the President The White House Washington, D.C. 20500

Dear Phil:

Having completed the transfer of most of the Nixon materials to the Washington National Records Center, we are now ready to initiate the other preservation measures authorized by the order of the United States District Court for the District of Columbia, dated April 15, 1976. These measures include the rewinding and inspection of tapes presently in your custody.

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Please contact me if you have any questions about this matter. Sincerely.

Bert

JAMES B. RHOADS Archivist of the United States





## HALVORSON ASSOCIATES

## Preservation of the Nixon Presidential Tape Recordings

by

Robert L. Halvorson, Technical Consultant National Archives and Record Service (NARS)

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### Function I. Rewinding the tapes:

The recommended rewinding process involves use of a machine or machines which exist and are available and which operate in the same manner as a professional, high quality tape playing machine to provide a flat, even wind of the tape reel, with proper tension, for long term storage. Each individual reel of tape will be spooled from its current loose, uneven wind, by means of the machine, to the desired flat, even wind with "tails out". Extreme care will be exercised utilizing the services of competent technical personnel during the rewinding process. Difficulties which arise, if any, will be carefully noted in a permanent record and a log will be maintained of the progress from start to finish of the tape preservation.

To prevent unauthorized duplicating, listening or transcribing, the machines which are capable of performing these functions will be strictly excluded from the assigned tape rewinding area. Further, the recommended rewinding machine (s) will operate at very high speed with respect to the normal playing speed of the tapes. The rewinding will be accomplished at approximately fifty times normal playing speed.

Several machines may be used simultaneously to reduce the overall time

To the rewinding preservation. If the work progresses smoothly with no delays in access to the tapes once the work commences, and assuming adhesion problems or other technical difficulties do not exist during the course of the work, it is expected that 100 reels per 8 hour day can be re-wound and the entire job can be completed in two weeks if simple rewinding is authorized by the court.

### Alternative A:

Off-the-shelf tape rewinding machines are available from several manufacturers in the U.S. Typical of machines of this type is the RAMKO RESEARCH, Sacramento, California Model ACL/E of lower capability or the Model ACL-120BT/E of greater capability (data sheet attached). With the purchase of this equipment, NARS personnel would be trained by Technical Consultant in proper operation, and further, the equipment would be available to NARS for future rewinding preservation.

### Alternative B:

NARS Technical Consultant is by way of training and experience a licensed professional engineer whose business is recording educational and commercial tapes. Among his capital equipment is a four unit tape machine of custom design with a capacity for rewinding four reels simultaneously at approximately fifty times normal tape playing speed to provide the desired result. Technical Consultant and machine is available to perform the rewind preservation with the assistance of NARS archival personnel.

## Function II. Rewinding the Tapes with Chart Record.

One of the unknowns about the 900 reels of White House tapes is the amount of actual total recorded conversation time and the recorded time on the individual six hour reels. This uncertainty causes difficulty in estimating, for example, the time, facilities and personnel required to transcribe the tapes. A further difficulty is the lack of knowledge concerning presence or absence of recorded conversations on the individual reels currently in storage, for comparison with review in the future after inactive storage and when transcribing is authorized to begin. Again, the tapes have been in storage for 1½ to 4 years and may be stored for some time to come. A data reference obtained concurrently with the rewind preservation showing recorded conversation time and blank or erased time on each individual reel would serve an extremely useful purpose in the record of the preservation of the subject tapes. A comparison of data obtained at the first rewind with that of satisfacturent rewinds would prove the integrity of the storage security.

To obtain the signal versus no signal duration on the individual tare reels after the present 1½ to 4 year storage period, Technical

Consultant recommends an additional simultaneous function be undertaken during the first rewind process. This additional function will provide a permanent paper chart record or graph of signal and/or no signal in the vertical direction of the chart vs. time duration of the individual reel tape recording in the horizontal direction of the chart. An X-Y paper chart of 11 by 17 inches for each reel of tape would form the record by proper cross reference identification.

It must be emphasized strongly that although a pick-up tape head is required for reading signal or no signal on the recorded tape, again, the tape is moving at approximately 50 times normal speed and only time events (start and stop) of the audio signal would be indicated on the chart where 6 hours of tape would be displayed in the 17 inch horizontal dimension of the chart. Thus, the security against unauthorized monitoring or retrieval of audio intelligence is preserved with this technique.

In summary, Technical Consultant believes that a knowledge of audio conversation vs. gaps (if any) after the current storage duration should be obtained during the first rewind preservation operation to prove the integrity of subsequent storage periods, and that such necessary knowledge can be obtained easily and quickly if NARS is authorized to perform Functions I and II above.

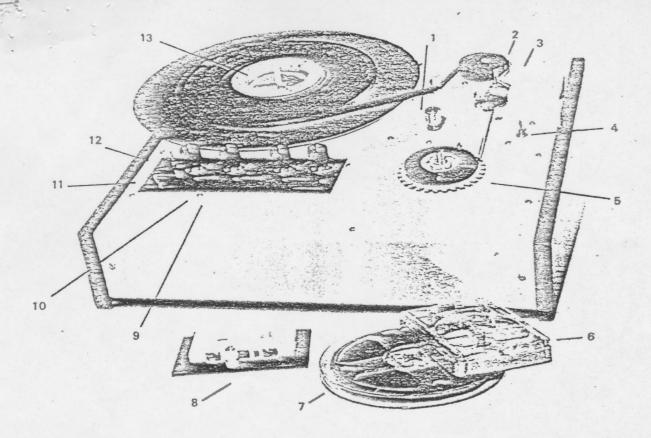
Date

Signed;

Robert L'. Halvorson, P.E.

Head





## OPERATING FEATURES

Easy to load. Takes only seconds to set up and start.

Automatic tape length determination. Playback speed selector eliminates guesswork. No need to divide or multiply for carts and cassettes to be played back at different speeds. Simply set selector to 17/8, 33/4 or 71/2 i.p.s.

Exclusive torsion control. Insures proper tape pack on all size hubs, cassettes and reels.

Accurate. Precise braking stops tape within one second of playback time.

Easy Reset. RESET/RUN switch resets circuitry, for next tape to be wound, without erasing previously entered settings.

Able to wind all tapes. Cartridge, cassette and reel.

Guaranteed performance. 2 year warranty on all electronics and 6 months on mechanical parts.

Loads from any tape source. All machines are capable of winding off of the smallest reels and/or up to 14" pancakes.

### DESIGN FEATURES

1-Take up tape tension control.

2-Light beam chopping tachometer.

3-Cue tone sense head (BT models only).

4—AC on/off switch.

5—Tape take-up spindle.

6-Loads all sizes of tape cartridges.

7—Loads up to 7" reels from pancake supply.

8—Optional cassette adapter for ACL 25/E only.
9—Digital time select panel (select from 1 sec-

ond to 100 minutes, 00 seconds). 10—Tone/blank select (BT models only).

11—Playback speed select switch, 17/8, 33/4, 71/2 i.p.s.

12-RUN/RESET switch.

13-Pancake adapter (for ACL-25/E only).

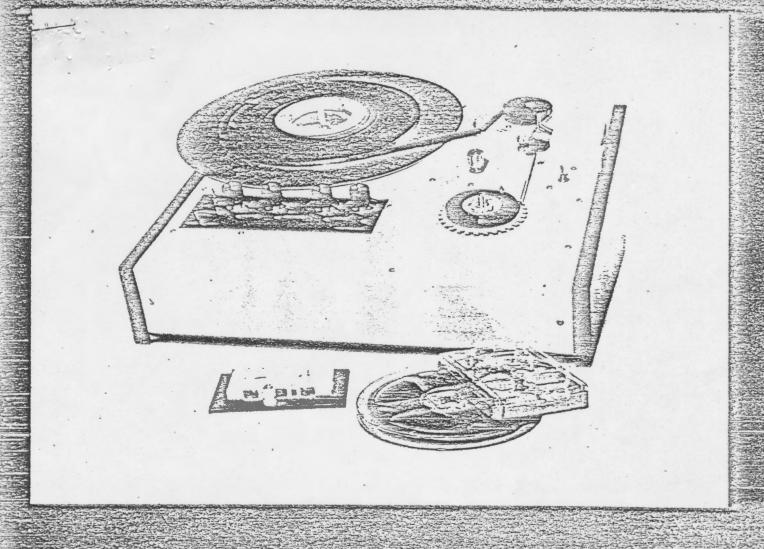
### MODELS AND PRICES

ACL-25/E (30 i.p.s. winding speed)	\$185.00
ACL-120BT/E Tone and blank winding but at 120 i.p.s	
ACL-C Cassette adapter (standard on ACL-120's)	\$ 20.00
ACL-P Pancake adapter for ACL-25 only	\$ 8.00

Shipping weight: ACL-25's — 24 tbs. ACL-120 — 29 tbs.

Power requirement: 115 vac., 50/60Hz

FOB Factory



## Automatic Cant & Cassette Loaders

Reduce your costs — Improve your quality — Increase your flexibility.

Now that RAMKO RESEARCH has made automatic tape winding affordable you can no longer disregard the advantages of doing it yourself!

If you are now without a winder, you'll find the new "E" series ACL's offer an immediate means to cut reloading costs up to 40%, save time and obtain a faster self dependent operation.

Tried loading your own before but were unhappy with the results? The ACL is for you. Solid state tape tension control insures prop-

er tape pack on all sizes of hubs, cassettes and reels. Attention free operation. Dial in the time desired, hit the run button and walk away. Stops automatically and precisely to -0, +1 second of playback time. Exclusive playback speed selector ends mental gymnastics figuring tape length versus playback speed. Simply set to 17/8, 33/4, or 71/2 i.p.s. and the ACL does the rest. An optional cassette adapter enables you to wind both carts and cassettes on the same machine. Takes only a minute or two to change over.

RAMKO's ACL's come in two different versions to fill any tape loading need. All modestly priced. From the ACL-25/E (30 i.p.s. nominal winding speed) to our latest high speed unit, the ACL-120BT/E (120 i.p.s. nominal).

Compare prices and versatility. We unconditionally guarantee these units to have more features and be easier to use than any other comparably priced unit on the market, or your money back.

Try an ACL today. It's a sound investment.

WRITE 3516-C LaGrande Blvd. Sacramento, CA 95823

PHONE - (916) 392-2100

RAMKO RESEARCH

National Archives and Records Service
Washington, DC 20408



NOV 1 0 1976

Honorable Philip Buchen Counsel to the President The White House Washington, D.C. 20500

Dear Phil:

Enclosed for your consideration is a contingency plan for storing in the National Archives Building the Nixon Presidential historical materials currently in the Old Executive Office Building. It would take a minimum of 30 days to prepare the proposed storage area once we receive an indication to proceed. During that period, if you approve, we will devise a specific transfer plan providing maximum security of the materials and we will draft modified procedures to govern custody and control and provide for authorized reference service on the materials.

Please advise me whether to proceed with this plan and whether there is any further assistance we can give concerning the Nixon historical materials.

Sincerely,

Best

JAMES B. RHOADS Archivist of the United States





National Archives and Records Service
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## CONTINGENCY PLAN FOR STORAGE OF NIXON PRESIDENTIAL HISTORICAL MATERIALS AT THE NATIONAL ARCHIVES

Objective. The purpose of this plan is to outline a course of action for NARS in the event it is asked to store Nixon Presidential historical materials currently stored in the Old Executive Office Building.

The materials. The materials immediately encompassed within this plan include approximately 20 cubic feet of audiotapes, 1,000 cubic feet of textual materials, and 500 cubic feet of give-away materials, such as commemorative souvenirs and related materials, which had been kept by the White House Gift Unit. Technically this material is in the same class as other Nixon Presidential historical materials now stored in a protected vault at the WNRC at Suitland, Maryland, although the audiotapes and textual materials are presumably more sensitive than those materials at the WNRC. The give-away materials are of a lower sensitivity and value.

NARS may also be asked to take custody of 500 cubic feet of NSC material from the Nixon period, and these will include Restricted Data and Special Intelligence material. This plan, however, does not presently encompass the NSC material.

Storage requirements. The audiotapes and the sensitive textual materials should be stored within a Top Secret security area, and within that area, must be further segregated so that each and every access to them by persons in instances authorized under GSA regulations can be documented. As a practical matter, the storage area should make adequate allowance for preservation and reference activities. The give-away and related materials should likewise be stored in a secure area with access governed by GSA regulations, but these materials need not be specially segregated and protected within that area.

Proposed storage areas. The sensitive audiotape and textual materials can best be stored and preserved in a secure vault of the National Archives Building. The present storage arrangement at Suitland is sufficiently secure, but it is temporary and limited pending settlement of the court case. Moreover, existing space at the WNRC does not allow for the special segregation of sensitive materials nor does it provide sufficient area for rewinding the audiotapes. After the court case has been settled, it is planned to move to a different part of the center where space will be more ample and where maximum security storage spaces can be differentiated. We propose that the 500 cubic feet of give-away material, however, be stored now with other Nixon materials at the WNRC.

Vault area 2-W-2 represents the best currently available storage alternative within the National Archives Building. This is for several reasons: it is a Top Secret security area; it contains adequate vacant storage space; access to it is currently administered by the unit which administers access to the Nixon historical materials protected by court order; other materials currently stored within it are exclusively Nixon related; it would allow adequate work space for reference, preservation, and related activities. Given these initial advantages, the storage of the materials in 2-W-2 can be accomplished with a few modifications to the area, as discussed below and illustrated in the attached floor plan.

For enhancing the general security level of 2-W-2:

1. Adjustment of the existing intrusion alarm system at the two doorways into 2-W-2, which currently feeds into the FPS guard post at the National Archives Building, so that the alarm system additionally feeds into the FPS Communications Center at Regional Office Building #3, 7th and D Streets, SW.

For storage of approximately 1,000 cubic feet of textual materials:

- Construction of an enclosure in the NW quadrant of 2-W-2, with a doorway spanning the northern aisle, access controlled by a combination lock and a key lock.
- Installation of an alarm system within the enclosure, with that system tied into both the FPS guard post at the National Archives and the FPS Communications Center at ROB #3.

For storage of approximately 20 cubic feet of audiotapes:

- Construction of an enclosure at the SE portion of 2-W-2, with a doorway access controlled by a combination lock and a key lock.
- Installation of an alarm system within the enclosure, with that system tied into both the FPS guard post at the National Archives Building and the FPS Communications Center at ROB #3.
- 3. Removal of existing metal shelving within that enclosure.



4. Installation of 40 linear feet of wooden shelving at the center of the enclosure with no unit adjoining any wall of the enclosure.

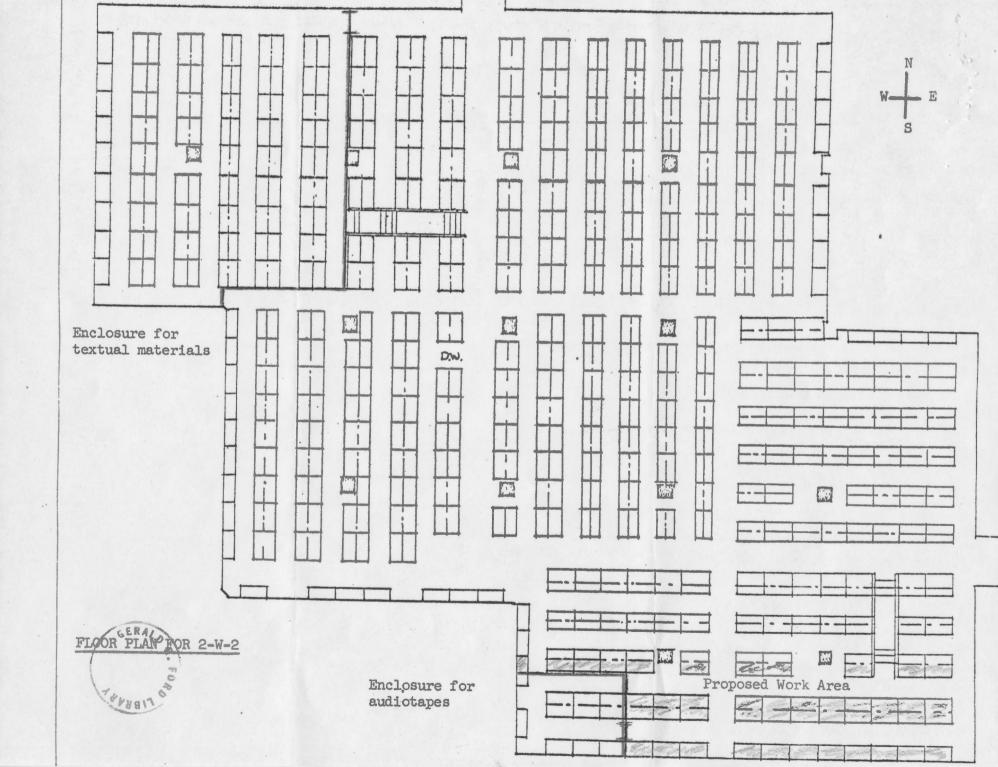
For work space, especially audiovisual preservation activities:

1. Removal of portions of four rows of metal shelving in the SE corner of 2-W-2.

Nixon Records Liaison Staff Office of Presidential Libraries

November 4, 1976





National Archives and Records Service Washington, DC 20408



NOV 1 0 1976

Honorable Philip Buchen Counsel to the President The White House Washington, D.C. 20500

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