

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

SF-1201 (4-60)

SYMBOLS	
DL	= Day Letter
NL	= Night Letter
LT	= International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

545P EDT JUN 1 64 PA394

DOCKET, NO. 70-58

P BRMN002 NL PD

WUX BRMN BALTIMORE MD 6/1

DIVISION OF MATERIAL LICENSING AITN: MR KENNETH LAUTERBACH

4915 ST ELMO AVE

BETHESDA MD

THANKS FOR SOLUTION SHIPMENT APPROVAL. REQUEST TWX APPROVAL FOR SHIP-

MENT OF SOLUTION AND SOLID SCRAP TO UTILIZE VAN LOAD. SHIPMENT TO BE AS FOLLOWS:

APPROX. 15 SOLUTION DRUMS EACH 350 GMS U-235 AS PREVIOUSLY PRESENTED.

APPROX. 25-55 GALLON DRUM 4 INCH-40 SCHEDULE PIPE SHIPPING CONTAINERS

FOR 3000 GMS U-235 AS SOLID AND POWDER SCRAP.

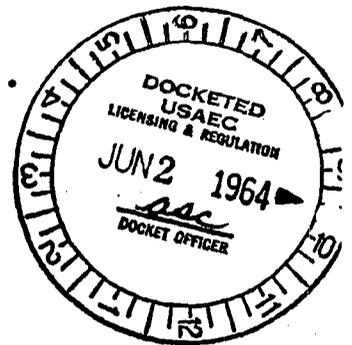
2978

APPROVAL FOR THIS CONTAINER GIVEN FOR FUEL PLATES UNDER AMENDMENT 15 TO SNM-53. TIE-DOWNS SIMILAR TO PREVIOUSLY PRESENTED. BOE PERMITS IN EFFECT. WOULD LIKE APPROVAL BY JUNE 5 TO KEEP TRUCK ROLLING AND MAKE SHIPMENT ON JUNE 8.

MARTIN CO C W KELLER 807 6/1

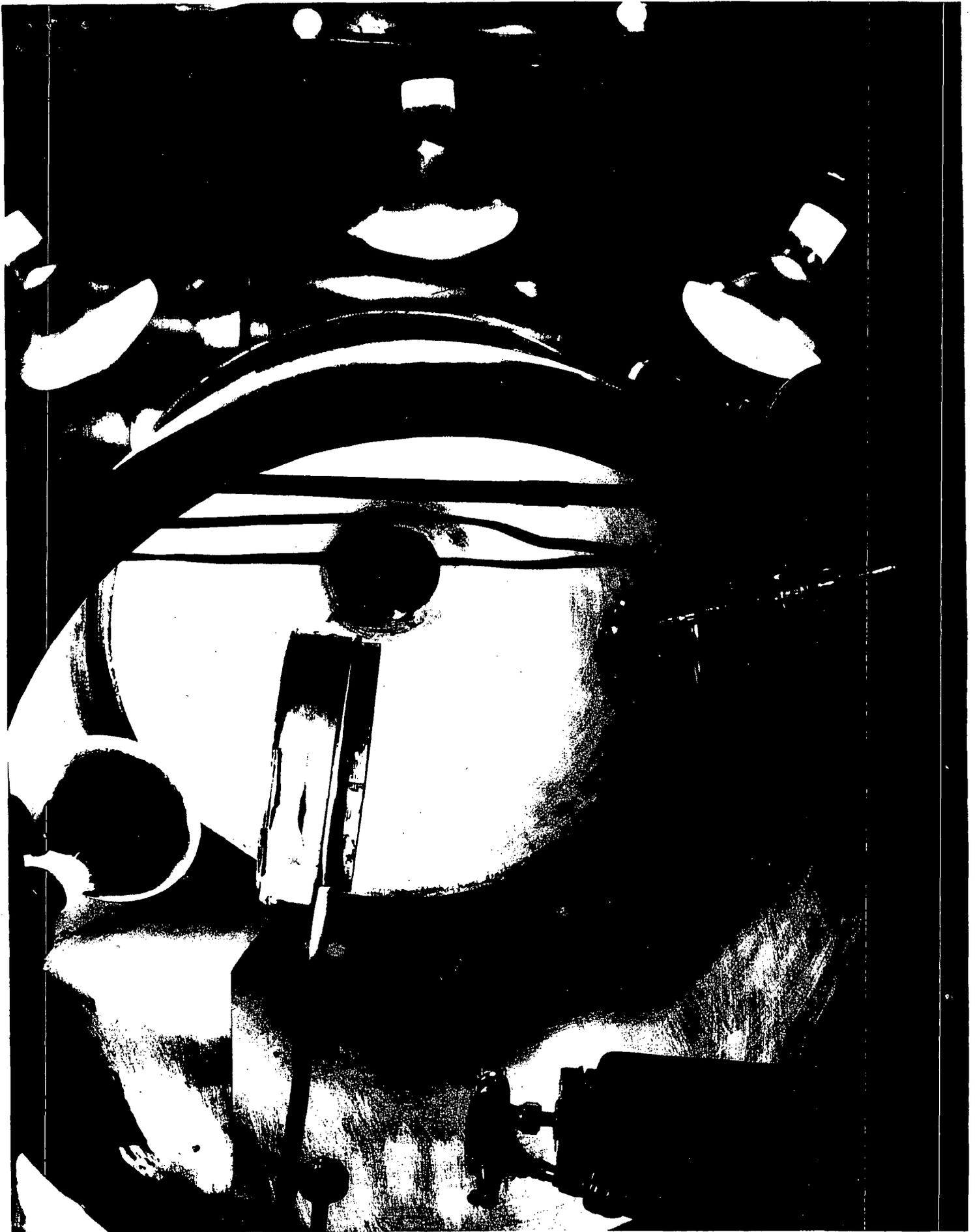
15 350 U-235 25-55 4 40 3000 U-235 15 SNM-53 5 8 807 6/1.

*Copy Provided Compliance
2 CEB K.S.L. 6/2/64*



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B/ [Signature]



EXTRUSION OF TUBULAR COMPONENT

Tubular nuclear components can be formed by either forming a tube from a flat plate or through direct extrusion of a tube by pressure. In the formation of a tube by extrusion, nuclear safety is governed by the diameter of the extrusion die. An always safe five inch diameter shall be maintained for any extrusion. Normally, the always safe diameter will not exceed that of a 1½ inch diameter tubular component. A limit of 800 gms U-235 has been established, as the batch limit for extrusion, which is based on an always safe mass, which during extrusion, will comply with an always safe diameter configuration.

HYDROSTATIC PRESSING

To densify the tubular component, resulting from extrusion or a cermet plate, a hydrostatic pressing operation is employed. The component is assembled in appropriate framework and enclosed in a rubber capsule, prior to the pressing operation.

Nuclear safety is defined by the always safe 2½ inch inner diameter of the hydrostatic press. A maximum limit of 2000 gms U-235 has been established for the operation. The hydrostatic fluid is a mixture of a special oil and kerosene. The maximum internal volume of the press with 2½ inch diameter and 40 inch length is calculated to approximate 197 cubic inches or 3.2 liters. The quantity of fluid used will, of course, always be less than the 3.2 liters dependent on the number of components being pressed. The following sketch details the hydrostatic press and shows a typical placement of tubes in the press.

Page 4 redacted for the following reason:

(b)(4)