

FEDERAL REGISTER

VOLUME 18 1934 NUMBER 237

Washington, Saturday, December 5, 1953

TITLE 6—AGRICULTURAL CREDIT

Chapter I—Farm Credit Administration

[Farm Credit Administration Order 585]

CONTINUATION OF ORDERS, REGULATIONS, AND SIMILAR INSTRUMENTS

DECEMBER 4, 1953.

1. All orders, regulations, rules, delegations of authority, directives, and other actions of the Farm Credit Administration whether issued, made, or taken by the Governor or through the exercise of authority delegated by the Governor, which were in effect imme-

diately prior to the effective date (December 4, 1953) of the Farm Credit Act of 1953 (Pub. Law 202, 83d Cong.), are hereby continued in effect except to the extent modified by law and by this order.

2. All orders, regulations, rules, delegations of authority, directives, and other actions continued in effect by the first paragraph of this order which refer to an officer or employee of the Farm Credit Administration by the title shown below in the column designated "First Column" are hereby amended to refer to the title shown below in the column designated "Second Column" directly opposite the title listed in the "First Column".

First Column	Second Column
Land Bank Commissioner.....	Deputy Governor, and Director of Land Bank Service.
Production Credit Commissioner....	Deputy Governor, and Director of Production Credit Service.
Intermediate Credit Commissioner...	Deputy Governor, and Director of Intermediate Credit Bank Service.
Cooperative Bank Commissioner....	Deputy Governor, and Director of Cooperative Bank Service.
Deputy Land Bank Commissioner...	Deputy Director of Land Bank Service.
Deputy Production Credit Commissioner.	Deputy Director of Production Credit Service.
Deputy Intermediate Credit Commissioner.	Deputy Director of Intermediate Credit Bank Service.
Deputy Cooperative Bank Commissioner.	Deputy Director of Cooperative Bank Service.
Assistant Intermediate Credit Commissioner.	Assistant Director of Intermediate Credit Bank Service.
Assistant Cooperative Bank Commissioner.	Assistant Director of Cooperative Bank Service.
Assistant Deputy Land Bank Commissioner.	Assistant Deputy Director of Land Bank Service.
Assistant Deputy Production Credit Commissioner.	Assistant Deputy Director of Production Credit Service.
Assistant Deputy Intermediate Credit Commissioner.	Assistant Deputy Director of Intermediate Credit Bank Service.
Assistant Deputy Cooperative Bank Commissioner.	Assistant Deputy Director of Cooperative Bank Service.

3. The Deputy Governor and Director of Land Bank Service is hereby designated a member of the Board of Directors of the Federal Farm Mortgage Corporation.

4. The Deputy Governor and Director of Cooperative Bank Service is hereby designated a member of the Board of Directors of the Central Bank for Coop-

eratives, Chairman of said Board of Directors, and Executive Officer of said Bank.

(Secs. 5, 7; Pub. Law 202, 83d Cong.; 67 Stat. 392, 393)

[SEAL]

C. R. ARNOLD,
Acting Governor.

[F. R. Doc. 53-10251; Filed, Dec. 4, 1953; 10:33 a. m.]

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FEDERAL REGISTER

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TITLE 7—AGRICULTURE

Chapter VII—Production and Marketing Administration (Agricultural Adjustment), Department of Agriculture

[Amdt. 1]

PART 722—COTTON

MARKETING QUOTA REGULATIONS RELATING TO APPORTIONMENT OF NATIONAL ACREAGE ALLOTMENT FOR 1954 CROP OF UPLAND COTTON TO STATES, COUNTIES AND FARMS

Basis and purpose. The purpose of this amendment is to establish the county acreage allotments for the 1954 crop of upland cotton pursuant to section 344 (e) of the Agricultural Adjustment Act of 1938, as amended. Notice of the proposed establishment of such allotments was given on October 21, 1953 (18 F. R. 6661), pursuant to section 4 of the Administrative Procedure Act (5 U. S. C. 1003).

Farmers engaged in the production of upland cotton in 1953 will determine in a referendum to be held on December 15, 1953, whether marketing quotas will be in effect on the 1954 crop of upland cotton. In order that county acreage allotments may be apportioned to farms and notices of individual farm acreage allotments mailed, insofar as practicable, so as to be received by farmers prior to the referendum, as required by section 362 of the Agricultural Adjustment Act of 1938, as amended, it is essential that this amendment be made effective as soon as

possible. Accordingly, it is hereby determined and found that compliance with the 30-day effective date requirements of section 4 of the Administrative Procedure Act is impracticable and contrary to the public interest, and the county acreage allotments contained herein shall be effective upon filing of this document with the Director, Division of the FEDERAL REGISTER.

Section 722.516 (e) of the Marketing Quota Regulations Relating to Apportionment of the National Acreage Allotment for the 1954 Crop of Upland Cotton to States, Counties, and Farms (18 F. R. 7531) is amended to read as follows:

(e) *County acreage allotment.* The county acreage allotment shall be the sum of (1) the computed county acreage allotment determined under paragraph (b) of this section and (2) the acreages, if any, allocated to the county by the State committee from the State acreage reserve as adjustments for trends in acreage and for abnormal conditions adversely affecting plantings, pursuant to subparagraphs (1) and (2) of paragraph (c) of this section. The county acreage allotment for each county is set out below. The amounts of the acreages set aside and reserved by each county committee pursuant to § 722.517 (a) and (b) are available for inspection by any interested person at the office of the county committee. Also available for inspection at the office of the county committee are the data pertaining to the establishment of administrative areas in accordance with paragraph (f) of this section.

County:	ALABAMA	County acreage allotments
Autauga		9,614
Baldwin		1,767
Barbour		13,215
Bibb		3,891
Blount		19,347
Bullock		9,945
Butler		8,857
Calhoun		7,209
Chambers		11,691
Cherokee		23,188
Chilton		8,960
Choctaw		5,182
Clarke		4,191
Clay		4,480
Cleburne		3,812
Coffee		17,378
Colbert		23,520
Conecuh		10,074
Coosa		1,830
Covington		14,988
Crenshaw		10,882
Cullman		37,412
Dale		6,667
Dallas		26,531
De Kalb		34,259
Elmore		17,075
Escambia		9,483
Etowah		12,606
Fayette		9,241
Franklin		15,051
Geneva		18,756
Greene		13,627
Hale		15,506
Henry		13,739
Houston		23,852
Jackson		26,296
Jefferson		3,155
Lamar		12,699
Lauderdale		30,406
Lawrence		42,213
Lee		9,667
Limestone		51,382
Lowndes		11,770

County—Con.	ALABAMA—Con.	County acreage allotments
Macon		17,434
Madison		61,537
Marango		17,118
Marion		15,481
Marshall		34,569
Mobile		2,295
Monroe		17,039
Montgomery		11,633
Morgan		31,865
Perry		11,169
Pickens		16,234
Pike		16,868
Randolph		10,887
Russell		10,978
St. Clair		6,074
Shelby		6,075
Sumter		14,235
Talladega		13,777
Tallapoosa		8,313
Tuscaloosa		17,253
Walker		7,098
Washington		1,591
Wilcox		12,061
Winston		8,211

a. State total	1,025,209
b. State acreage reserve for small farms and new farms	113,912
c. State acreage allotment	1,139,121

County:	ARIZONA	County acreage allotments
Cochise		8,495
Graham		11,037
Greenlee		1,508
Maricopa		103,308
Mohave		325
Pima		17,700
Pinal		125,805
Santa Cruz		1,729
Yavapai		15
Yuma		17,801

a. State total	287,723
b. State acreage reserve for small farms and new farms	500
c. State acreage allotment	288,223

County:	ARKANSAS	County acreage allotments
Arkansas		10,106
Ashley		27,239
Baxter		202
Boone		71
Bradley		6,814
Calhoun		4,808
Chicot		32,165
Clark		6,843
Clay		40,172
Cleburne		4,954
Cleveland		5,853
Columbia		16,076
Conway		10,399
Craighead		81,354
Crawford		963
Crittenden		100,303
Cross		38,732
Dallas		3,232
Desha		44,469
Drew		14,458
Faulkner		18,435
Franklin		968
Fulton		1,503
Garland		116
Grant		1,498
Greene		38,064
Hempstead		13,132
Hot Springs		1,336
Howard		4,070
Independence		8,818
Izard		3,977
Jackson		47,141
Jefferson		70,867
Johnson		1,342
Lafayette		16,007
Lawrence		22,425

County—Con.	ARKANSAS—Con.	County acreage allotments
Lee		58,649
Lincoln		35,522
Little River		7,552
Logan		3,150
Lonoke		53,925
Marion		130
Miller		15,170
Mississippi		192,359
Monroe		39,706
Montgomery		249
Nevada		7,424
Newton		79
Ouachita		3,695
Perry		2,019
Phillips		82,305
Pike		780
Poinsett		86,410
Polk		225
Pope		5,478
Prairie		11,039
Pulaski		20,432
Randolph		11,512
St. Francis		68,080
Saline		268
Scott		459
Searcy		403
Sebastian		866
Sevier		1,304
Sharp		4,281
Stone		335
Union		3,806
Van Buren		2,728
White		27,006
Woodruff		38,438
Yell		8,849

a. State total	1,493,545
b. State acreage reserve for small farms and new farms	69,139
c. State acreage allotment	1,562,684

County:	CALIFORNIA	County acreage allotments
Butte		3
Fresno		183,841
Glenn		9
Imperial		40,878
Kern		165,466
Kings		85,928
Los Angeles		159
Madera		46,025
Merced		25,720
Riverside		17,830
San Benito		170
San Bernardino		662
San Diego		253
San Joaquin		3
San Luis Obispo		26
Stanislaus		118
Tehama		58
Tulare		129,955
Yuba		10

a. State total	697,114
b. State acreage reserve for small farms and new farms	692
c. State acreage allotment	697,806

County:	FLORIDA	County acreage allotments ¹
Alachua		89
Baker		2
Bay		52
Calhoun		514
Columbia		196
Dixie		4
Duval		1
Escambia		1,390
Gadsden		139
Gilchrist		1
Hamilton		1,061

¹ County acreage allotments are calculated and rounded to tenths of acres; however, such allotments have been rounded to whole acres for purposes of publication in the FEDERAL REGISTER.

RULES AND REGULATIONS

FLORIDA—Con.	County acreage allotments ¹
County—Con.	
Holmes	4,756
Jackson	6,393
Jefferson	1,615
Lafayette	186
Leon	1,044
Levy	6
Liberty	7
Madison	2,763
Nassau	4
Okaloosa	1,683
Orange	6
Santa Rosa	4,934
Suwannee	623
Taylor	22
Union	4
Walton	2,148
Washington	829

a. State total	30,472
b. State acreage reserve for small farms and new farms	2,650
c. State acreage allotment	33,122

Footnote 1 on p. 7837.

GEORGIA	County acreage allotments ¹
County:	
Appling	4,707
Atkinson	915
Bacon	2,413
Baker	3,400
Baldwin	2,983
Banks	4,039
Barrow	7,386
Bartow	17,750
Ben Hill	5,240
Berrien	3,301
Bibb	1,319
Blackley	7,372
Brantley	45
Brooks	8,882
Bryan	212
Bulloch	16,123
Burke	38,937
Butts	5,443
Calhoun	5,504
Camden	3
Candler	7,052
Carroll	14,046
Catoosa	1,737
Charlton	12
Chatham	45
Chattahoochee	169
Chattooga	5,781
Cherokee	2,119
Clarke	2,475
Clay	3,630
Clayton	1,793
Clinch	129
Cobb	3,162
Coffee	7,133
Colquitt	21,918
Columbia	2,559
Cook	3,844
Coweta	8,760
Crawford	1,950
Crisp	9,906
Dade	530
Dawson	395
Decatur	4,340
De Kalb	929
Dodge	14,499
Dooly	19,720
Dougherty	2,094
Douglas	1,911
Early	14,263
Echols	53
Effingham	1,572
Elbert	9,645
Emanuel	17,824
Evans	2,802
Fayette	6,102
Floyd	10,246

¹ County acreage allotments are calculated and rounded to tenths of acres; however, except for Rabun County, such allotments have been rounded to whole acres for purposes of publication in the FEDERAL REGISTER.

GEORGIA—Con.	County acreage allotments ¹
County—Con.	
Forsyth	4,289
Franklin	9,338
Fulton	3,827
Gilmer	31
Glascok	5,295
Gordon	11,515
Grady	3,577
Greene	4,192
Gwinnett	7,883
Habersham	709
Hall	4,226
Hancock	9,626
Haralson	3,881
Harris	2,232
Hart	13,264
Heard	4,050
Henry	12,745
Houston	6,239
Irwin	9,947
Jackson	12,336
Jasper	5,231
Jeff Davis	2,223
Jefferson	20,822
Jenkins	12,347
Johnson	16,735
Jones	729
Lamar	3,048
Lanier	602
Laurens	30,926
Lee	3,615
Liberty	131
Lincoln	3,349
Long	534
Lowndes	3,306
Lumpkin	177
McDuffie	7,188
McIntosh	7
Macon	12,826
Madison	11,236
Marion	4,001
Meriwether	13,056
Miller	6,062
Mitchell	12,533
Monroe	2,145
Montgomery	4,187
Morgan	15,499
Murray	4,521
Muscogee	223
Newton	8,548
Oconee	8,449
Oglethorpe	8,633
Paulding	4,878
Peach	2,499
Pickens	1,187
Pierce	2,253
Pike	7,040
Polk	7,895
Pulaski	9,223
Putnam	2,289
Quitman	1,661
Rabun	0.4
Randolph	6,048
Richmond	2,924
Rockdale	3,810
Schley	4,250
Screven	17,779
Seminole	4,792
Spalding	3,556
Stephens	1,324
Stewart	3,193
Sumter	11,098
Talbot	1,553
Tallapoosa	2,505
Tattnall	5,402
Taylor	7,507
Telfair	4,936
Terrell	12,238
Thomas	5,740
Tift	6,863
Toombs	8,271
Treutlen	3,827
Troup	2,681
Turner	7,855
Twiggs	3,706
Upson	1,647
Walker	3,959
Walton	20,667
Ware	770

GEORGIA—Con.	County acreage allotments ¹
County—Con.	
Warren	11,899
Washington	18,398
Wayne	2,614
Webster	1,882
Wheeler	3,729
White	867
Whitfield	3,073
Wilcox	11,919
Wilkes	5,701
Wilkinson	2,670
Worth	19,987

a. State total	973,775.4
b. State acreage reserve for small farms and new farms	32,086.6
c. State acreage allotment	1,005,862.0

ILLINOIS	County acreage allotments
County:	
Alexander	1,897
Jefferson	2
Johnson	12
Massac	2.6
Pulaski	1,630
Williamson	1.6

a. State total	3,605.2
b. State acreage reserve for small farms and new farms	394.8
c. State acreage allotment	4,000.0

KANSAS	County acreage allotments
County:	
Cowley	9
Montgomery	63

a. State total	72
b. State acreage reserve for small farms and new farms	8
c. State acreage allotment	80

KENTUCKY	County acreage allotments
County:	
Ballard	9
Calloway	198
Carlisle	94
Fulton	6,826
Graves	125
Hickman	1,100
McCracken	4
Marshall	66

a. State total	8,422
b. State acreage reserve for small farms and new farms	714
c. State acreage allotment	9,136

LOUISIANA	Parish acreage allotments
Parish:	
Acadia	13,591
Allen	974
Ascension	607
Assumption	31
Avoyelles	23,512
Beauregard	307
Bienville	8,379
Bossier	22,797
Caddo	39,276
Calcasieu	361
Caldwell	6,201
Cameron	600
Catahoula	11,303
Claiborne	14,578
Concordia	8,774
De Soto	12,748
East Baton Rouge	882
East Carroll	23,337
East Feliciana	4,536
Evangeline	16,325
Franklin	51,282
Grant	4,031
Iberia	2,276
Iberville	717
Jackson	1,395
Jefferson	2

LOUISIANA—Con.		Parish acreage allotments	MISSISSIPPI—Con.		County acreage allotments	NEW MEXICO—Con.		County acreage allotments ¹
Parish—Con.			County—Con.			County—Con.		
Jefferson Davis	1,142		Madison	34,349		Eddy	27,648	
Lafayette	16,433		Marion	11,003		Grant	62	
Lafourche	248		Marshall	32,323		Guadalupe	6	
La Salle	414		Monroe	30,061		Harding	20	
Lincoln	6,861		Montgomery	8,523		Hidalgo	5,275	
Livingston	406		Neshoba	16,873		Lea	22,302	
Madison	16,157		Newton	10,993		Luna	11,030	
Morehouse	25,707		Noxubee	18,777		Otero	1,087	
Natchitoches	26,811		Oktibbeha	5,376		Quay	2,660	
Orleans	6		Panola	40,769		Roosevelt	15,440	
Ouachita	13,255		Pearl River	232		Sierra	2,128	
Plaquemines	1		Perry	1,701		Socorro	1,235	
Pointe Coupee	10,619		Pike	7,052		Valencia	28	
Rapides	16,316		Pontotoc	20,451				
Red River	14,042		Prentiss	18,135		a. State total	162,851	
Richland	43,013		Quitman	60,932		b. State acreage reserve for small farms and new farms	4,392	
Sabine	3,531		Rankin	11,298		c. State acreage allotment	167,243	
St. Bernard	1		Scott	12,218				
St. Helena	2,355		Sharkey	29,014				
St. James	19		Simpson	14,105				
St. John the Baptist	20		Smith	11,271				
St. Landry	36,218		Stone	115		County:		County acreage allotments
St. Martin	9,556		Sunflower	125,838		NORTH CAROLINA		
St. Mary	15		Tallahatchie	57,776		Alamance	105	
St. Tammany	326		Tate	24,914		Alexander	1,237	
Tangipahoa	1,579		Tippah	17,390		Anson	15,821	
Tensas	18,057		Tishomingo	10,172		Beaufort	1,435	
Union	7,953		Tunica	52,170		Bertie	5,735	
Vermilion	7,156		Union	18,823		Bladen	4,065	
Vernon	1,353		Walsh	14,392		Brunswick	275	
Washington	6,086		Warren	6,919		Burke	252	
Webster	9,183		Washington	89,330		Cabarrus	5,838	
West Baton Rouge	1,097		Wayne	6,657		Caldwell	76	
West Carroll	21,633		Webster	8,740		Camden	583	
West Feliciana	2,374		Wilkinson	5,015		Carteret	121	
Winn	1,260		Winston	13,510		Caswell	2	
			Yalobusha	11,644		Catawba	4,623	
			Yazoo	44,597		Chatham	945	
a. State total	590,023					Chowan	2,068	
b. State acreage reserve for small farms and new farms	44,883		a. State total	1,698,667		Cleveland	38,214	
c. State acreage allotment	634,906		b. State acreage reserve for small farms and new farms	60,974		Columbus	2,616	
			c. State acreage allotment	1,759,641		Craven	563	
County:	MISSISSIPPI	County acreage allotments	County:	MISSOURI	County acreage allotments	Cumberland	13,017	
Adams	3,304		Bollinger	51		Currituck	511	
Alcorn	14,879		Butler	16,404		Davidson	1,030	
Amite	9,816		Cape Girardeau	153		Davie	2,347	
Attala	14,715		Carter	24		Duplin	3,846	
Benton	11,659		Dunklin	78,862		Durham	143	
Bolivar	128,703		Howell	50		Edgecombe	12,921	
Calhoun	16,024		Mississippi	28,595		Forsyth	132	
Carroll	15,603		New Madrid	95,116		Franklin	10,586	
Chickasaw	15,698		Oregon	109		Gaston	4,933	
Choctaw	4,259		Ozark	35		Gates	2,366	
Claborn	5,493		Pemiscot	98,728		Granville	438	
Clarke	4,793		Ripley	2,431		Greene	4,037	
Clay	9,171		Scott	15,652		Guilford	108	
Coahoma	91,112		Stoddard	39,130		Halifax	22,252	
Copiah	9,301					Harnett	14,046	
Covington	10,655		a. State total	375,340		Hertford	3,964	
De Soto	34,215		b. State acreage reserve for small farms and new farms	16,056		Hoke	15,099	
Forrest	1,253		c. State acreage allotment	391,396		Hyde	715	
Franklin	2,147					Iredell	10,851	
George	1,029		County:	NEVADA	County acreage allotments	Johnston	21,496	
Greene	1,004		Clark	25		Jones	372	
Grenada	12,004		Nye	2,264		Lee	1,535	
Hancock	41					Lenoir	2,549	
Harrison	20		a. State total	2,289		Lincoln	9,948	
Hinds	29,341		b. State acreage reserve for small farms and new farms	0		McDowell	4	
Holmes	36,460		c. State acreage allotment	2,289		Martin	2,521	
Humphreys	51,060					Mecklenburg	9,440	
Issaquena	11,773		County:	NEW MEXICO	County acreage allotments ¹	Montgomery	1,547	
Itawamba	12,986		Chaves	31,393		Moore	1,856	
Jackson	50		Curry	1,257		Nash	14,141	
Jasper	7,886		De Baca	307		New Hanover	28	
Jefferson	5,673		Dona Ana	40,973		Northampton	18,603	
Jefferson Davis	16,310					Onslow	341	
Jones	9,348					Orange	143	
Kemper	12,281					Pamlico	466	
Lafayette	17,106					Pasquotank	432	
Lamar	3,433					Pender	325	
Lauderdale	6,661					Perquimans	1,782	
Lawrence	9,075					Pitt	6,835	
Leake	18,936					Polk	1,788	
Lee	28,777					Randolph	113	
Leflore	76,407					Richmond	7,156	
Lincoln	7,300					Robeson	43,783	
Lowndes	17,448					Rockingham	7	
						Rowan	7,060	
						Rutherford	11,041	
						Sampson	22,907	

¹ County Acreage Allotments are calculated and rounded to tenths of acres; however, such allotments have been rounded to whole acres for purposes of publication in the FEDERAL REGISTER.

RULES AND REGULATIONS

NORTH CAROLINA—Con.		County acreage allotments
County—Con.		
Scotland	21,189	
Stanly	3,085	
Tyrrell	257	
Union	20,356	
Vance	2,858	
Wake	7,135	
Warren	8,868	
Washington	601	
Wayne	12,166	
Wilkes	72	
Wilson	9,531	
Yadkin	55	

a. State total	482,308
b. State acreage reserve for small farms and new farms	46,330
c. State acreage allotment	528,638

OKLAHOMA		County acreage allotments
County:		
Adair	18	
Alfalfa	78	
Atoka	2,228	
Beaver	66	
Beckham	69,079	
Blaine	13,608	
Bryan	18,405	
Caddo	50,161	
Canadian	14,308	
Carter	1,733	
Cherokee	316	
Choctaw	6,089	
Cleveland	2,618	
Coal	4,237	
Comanche	14,105	
Cotton	18,927	
Craig	96	
Creek	6,322	
Custer	25,668	
Delaware	3	
Dewey	8,371	
Ellis	589	
Garfield	103	
Garvin	6,988	
Grady	19,447	
Grant	10	
Greer	42,788	
Harmon	52,414	
Harper	25	
Haskell	4,809	
Hughes	7,014	
Jackson	62,993	
Jefferson	19,465	
Johnston	3,335	
Kay	361	
Kingfisher	1,232	
Kiowa	57,308	
Latimer	608	
Le Flore	5,870	
Lincoln	3,614	
Logan	3,905	
Love	8,982	
McClain	11,150	
McCurtain	9,889	
McIntosh	16,080	
Major	2,373	
Marshall	4,791	
Mayes	1,334	
Murray	781	
Muskogee	23,541	
Noble	1,531	
Nowata	950	
Okfuskee	11,042	
Oklahoma	876	
Olomulgee	14,737	
Osage	5,705	
Pawnee	5,451	
Payne	3,855	
Pittsburg	8,731	
Pontotoc	1,819	
Pottawatomie	2,147	
Pushmataha	870	
Roger Mills	22,043	
Rogers	1,422	
Seminole	2,650	
Sequoyah	2,140	
Stephens	7,838	
Texas	41	

OKLAHOMA—Con.		County acreage allotments
County—Con.		
Tillman	78,214	
Tulsa	3,331	
Wagoner	12,705	
Washington	89	
Washita	83,339	
Woodward	495	
a. State total	900,256	
b. State acreage reserve for small farms and new farms	28,946	
c. State acreage allotment	929,202	

SOUTH CAROLINA		County acreage allotments
County:		
Abbeville	9,264	
Aiken	22,475	
Allendale	10,353	
Anderson	31,975	
Bamberg	13,060	
Barnwell	16,938	
Beaufort	959	
Berkeley	8,081	
Calhoun	15,721	
Charleston	1,068	
Cherokee	14,425	
Chester	11,092	
Chesterfield	32,885	
Clarendon	33,852	
Colleton	7,550	
Darlington	31,563	
Dillon	22,778	
Dorchester	9,086	
Edgefield	9,945	
Fairfield	5,851	
Florence	31,207	
Georgetown	2,299	
Greenville	17,783	
Greenwood	5,452	
Hampton	8,017	
Horry	8,365	
Jasper	2,460	
Kershaw	20,188	
Lancaster	9,129	
Laurens	19,358	
Lee	35,706	
Lexington	11,268	
McCormick	4,466	
Marion	12,065	
Marlboro	40,915	
Newberry	9,140	
Oconee	9,385	
Orangeburg	57,940	
Pickens	7,603	
Richland	7,070	
Saluda	8,654	
Spartanburg	26,844	
Sumter	40,183	
Union	7,035	
Williamsburg	32,998	
York	17,523	
a. State total	761,974	
b. State acreage reserve for small farms and new farms	24,032	
c. State acreage allotment	786,006	

a. State total	761,974
b. State acreage reserve for small farms and new farms	24,032
c. State acreage allotment	786,006

TENNESSEE		County acreage allotments ¹
County:		
Bedford	1,591	
Benton	2,662	
Bradley	1,595	
Cannon	31	
Carroll	17,754	
Chester	10,354	
Coffee	1,312	
Crockett	28,509	
Davidson	11	
Decatur	4,310	
DeKalb	34	
Dyer	31,279	
Fayette	40,211	

¹ County acreage allotments are calculated and rounded to tenths of acres; however, such allotments have been rounded to whole acres for purposes of publication in the FEDERAL REGISTER.

TENNESSEE—Con.		County acreage allotments ¹
County—Con.		
Franklin	5,744	
Gibson	39,103	
Giles	8,947	
Grundy	152	
Hamilton	840	
Hardeman	20,028	
Hardin	9,247	
Haywood	39,379	
Henderson	17,535	
Henry	4,771	
Hickman	26	
Humphreys	10	
Knox	13	
Lake	21,357	
Lauderdale	32,618	
Lawrence	20,558	
Lewis	325	
Lincoln	11,913	
Louden	8	
McMinn	1,210	
McNairy	18,631	
Madison	30,825	
Marion	539	
Marshall	392	
Maury	155	
Meigs	691	
Monroe	444	
Moore	85	
Obion	9,383	
Perry	199	
Polk	1,381	
Rhea	23	
Roane	7	
Rutherford	4,633	
Sequatchie	1	
Shelby	44,430	
Stewart	5	
Tipton	41,585	
Van Buren	30	
Warren	490	
Wayne	3,212	
Weakley	8,635	
White	81	
Williamson	120	
Wilson	75	

a. State total	539,489
b. State acreage reserve for small farms and new farms	36,402
c. State acreage allotment	575,891

TEXAS		County acreage allotments
County:		
Anderson	11,136	
Andrews	3,643	
Angelina	3,319	
Aransas	1,158	
Archer	2,551	
Armstrong	1,459	
Atascosa	9,495	
Austin	18,180	
Bailey	88,543	
Bastrop	12,661	
Baylor	19,045	
Bee	13,348	
Bell	73,614	
Bexar	4,407	
Blanco	210	
Borden	18,646	
Bosque	12,423	
Bowie	14,424	
Brazoria	10,841	
Brazos	20,243	
Brewster	129	
Briscoe	23,165	
Brooks	4,027	
Brown	8,835	
Burleson	27,915	
Burnet	6,367	
Caldwell	23,388	
Calhoun	18,231	
Callahan	8,388	
Cameron	165,196	
Camp	3,210	
Carson	264	
Cass	11,942	
Castro	35,097	
Chambers	129	

County—Con.	TEXAS—Con.	County acreage allotments	County—Con.	TEXAS—Con.	County acreage allotments	County—Con.	TEXAS—Con.	County acreage allotments
Cherokee	-----	11,940	Jones	-----	113,907	Stonewall	-----	26,457
Childress	-----	55,452	Karnes	-----	36,809	Sutton	-----	14
Clay	-----	12,501	Kaufman	-----	66,454	Swisher	-----	36,053
Cochran	-----	73,314	Kendall	-----	55	Tarrant	-----	10,826
Coke	-----	7,503	Kenedy	-----	4	Taylor	-----	35,849
Coleman	-----	36,063	Kent	-----	20,487	Terrell	-----	28
Collin	-----	90,211	Kerr	-----	146	Terry	-----	138,824
Collingsworth	-----	68,859	Kimble	-----	139	Throckmorton	-----	12,272
Colorado	-----	9,754	King	-----	10,244	Titus	-----	4,826
Comal	-----	393	Kinney	-----	321	Tom Green	-----	58,655
Comanche	-----	8,724	Kleburg	-----	8,890	Travis	-----	39,603
Concho	-----	28,714	Knox	-----	64,397	Trinity	-----	4,021
Cooke	-----	8,737	Lamar	-----	67,983	Tyler	-----	458
Coryell	-----	20,510	Lamb	-----	193,657	Upshur	-----	4,564
Cottle	-----	58,422	Lampasas	-----	2,494	Uvalde	-----	956
Crockett	-----	26	La Salle	-----	2,749	Val Verde	-----	166
Crosby	-----	114,124	Lavaca	-----	32,895	Van Zandt	-----	24,981
Culberson	-----	3,186	Lee	-----	9,357	Victoria	-----	24,835
Dallam	-----	22	Leon	-----	11,156	Walker	-----	5,997
Dallas	-----	40,421	Liberty	-----	3,047	Weller	-----	5,095
Dawson	-----	213,160	Limestone	-----	73,739	Ward	-----	8,216
Deaf Smith	-----	6,923	Live Oak	-----	19,178	Washington	-----	23,135
Delta	-----	39,213	Llano	-----	454	Webb	-----	2,239
Denton	-----	23,896	Loving	-----	303	Wharton	-----	72,759
DeWitt	-----	17,422	Lubbock	-----	236,635	Wheeler	-----	27,619
Dickens	-----	55,819	Lynn	-----	193,108	Wichita	-----	6,750
Dimmit	-----	1,884	McCulloch	-----	19,802	Wilbarger	-----	53,140
Donley	-----	28,780	McLennan	-----	91,146	Willacy	-----	100,661
Duval	-----	16,131	McMullen	-----	1,545	Williamson	-----	113,996
Eastland	-----	4,071	Madison	-----	6,722	Wilson	-----	6,623
Ector	-----	273	Marion	-----	2,257	Wise	-----	2,263
Ellis	-----	141,593	Martin	-----	93,604	Wood	-----	4,818
El Paso	-----	28,019	Mason	-----	1,756	Yoakum	-----	28,211
Erath	-----	9,270	Matagorda	-----	16,892	Young	-----	12,859
Falls	-----	81,204	Maverick	-----	6,278	Zapata	-----	2,436
Fannin	-----	77,136	Medina	-----	1,065	Zavala	-----	8,137
Fayette	-----	27,933	Menard	-----	775			
Fisher	-----	83,714	Midland	-----	26,277	a. State total	-----	7,233,428
Floyd	-----	84,847	Milan	-----	53,563	b. State acreage reserve for small farms and new farms	-----	143,430
Foard	-----	12,340	Mills	-----	3,168	c. State acreage allotment	-----	7,376,858
Fort Bend	-----	59,573	Mitchell	-----	71,759			
Franklin	-----	4,967	Montague	-----	4,030			
Freestone	-----	19,395	Montgomery	-----	1,111			
Frio	-----	3,546	Moore	-----	292	County:	VIRGINIA	County acreage allotments
Gaines	-----	68,248	Morris	-----	3,095	Accomac	-----	3
Galveston	-----	48	Motley	-----	37,147	Brunswick	-----	2,193
Garza	-----	43,340	Nacogdoches	-----	6,799	Caroline	-----	2
Gillespie	-----	1,157	Navarro	-----	114,928	Charlotte	-----	16
Glasscock	-----	9,414	Newton	-----	441	Chesterfield	-----	2
Goliad	-----	5,042	Nolan	-----	44,162	Cumberland	-----	3
Gonzales	-----	15,704	Nueces	-----	106,568	Dinwiddie	-----	216
Gray	-----	3,341	Ochiltree	-----	178	Franklin	-----	5
Grayson	-----	41,103	Oldham	-----	11	Greensville	-----	3,832
Gregg	-----	1,474	Palo Pinto	-----	3,300	Halifax	-----	28
Grimes	-----	15,526	Panola	-----	9,379	Isle of Wight	-----	287
Guadalupe	-----	21,741	Parker	-----	3,558	Lunenburg	-----	222
Hale	-----	144,763	Parmer	-----	27,742	Necklenburg	-----	1,911
Hall	-----	98,742	Pecos	-----	14,451	Nansemond	-----	1,758
Hamilton	-----	9,196	Polk	-----	4,798	Norfolk	-----	34
Hansford	-----	284	Potter	-----	20	Nottoway	-----	2
Hardeman	-----	35,258	Presidio	-----	2,609	Prince Edward	-----	3
Hardin	-----	48	Rains	-----	9,019	Prince George	-----	57
Harris	-----	4,293	Randall	-----	582	Princess Anne	-----	10
Harrison	-----	13,886	Reagan	-----	799	Southampton	-----	4,353
Haskell	-----	130,423	Real	-----	1	Surry	-----	15
Hays	-----	8,697	Red River	-----	33,227	Sussex	-----	1,558
Hemphill	-----	1,423	Reeves	-----	41,605			
Henderson	-----	9,552	Refugio	-----	12,891	a. State total	-----	16,510
Hidalgo	-----	184,321	Roberts	-----	86	b. State acreage reserve for small farms and new farms	-----	1,834
Hill	-----	120,297	Robertson	-----	28,024	c. State acreage allotment	-----	18,344
Hockley	-----	192,157	Rockwall	-----	22,856	(Sec. 375, 52 Stat. 66, as amended; 7 U. S. C. 1375. Interprets or applies sec. 344, 362, 52 Stat. 57, 62, as amended; 7 U. S. C. 1344, 1362)		
Hood	-----	3,159	Runnels	-----	93,377	Issued at Washington, D. C., this 1st day of December 1953. Witness my hand and the seal of the Department of Agriculture.		
Hopkins	-----	31,414	Rusk	-----	13,993	[SEAL] TRUE D. MORSE,		
Houston	-----	25,009	Sabine	-----	2,484	Acting Secretary of Agriculture.		
Howard	-----	77,629	San Augustine	-----	6,300	[F. R. Doc. 53-10166; Filed, Dec. 1, 1953; 3:11 p. m.]		
Hudspeth	-----	15,462	San Jacinto	-----	3,627			
Hunt	-----	104,355	San Patricio	-----	82,246			
Irion	-----	760	San Saba	-----	8,469			
Jack	-----	2,239	Schleicher	-----	8,747			
Jackson	-----	17,359	Scurry	-----	67,649			
Jasper	-----	423	Shackelford	-----	3,913			
Jeff Davis	-----	371	Shelby	-----	9,474			
Jefferson	-----	97	Smith	-----	9,529			
Jim Hogg	-----	2,159	Somervell	-----	1,454			
Jim Wells	-----	23,786	Starr	-----	24,622			
Johnson	-----	39,448	Stephens	-----	1,237			
			Sterling	-----	277			

Chapter VIII—Production and Marketing Administration (Sugar Branch), Department of Agriculture

Subchapter B—Sugar Requirements and Quotas

[Sugar Reg. 814.20, Amdt. 1]

PART 814—ALLOTMENT OF SUGAR QUOTAS

MAINLAND CANE SUGAR AREA, 1953

Basis and purpose. This amendment is issued under section 205 (a) of the Sugar Act of 1948, as amended (hereinafter called the "act"), for the purpose of revising Sugar Regulation 814.20 which allots the 1953 sugar quota for the mainland cane sugar area.

Revision of Sugar Regulation 814.20 is necessary (1) to give effect to Amendment 7 to Sugar Regulation 813 (18 F. R. 7159) which prorated a deficit in the 1953 quota for the domestic beet area and increased the 1953 quota for the mainland cane area by 7,531 short tons, raw value, to a total of 517,291 short tons, raw value, and (2) to prorate to other allottees the quantity released by one allottee.

On June 23, 1953, a hearing was held in New Orleans, Louisiana, for the purpose of receiving evidence, to enable the Secretary to make a fair, efficient and equitable distribution of the 1953 sugar quota for the mainland cane sugar area.

At that hearing, or following the hearing, 50 of the 51 allottees waived their right to a further hearing for the purpose of (1) giving effect to a change in the quota for the mainland cane area or (2) reallothing to other allottees any quantities released by one or more allottees provided the revised allotments were made on the same basis as the original allotments. Since the initial order was issued (S. R. 814.20 (18 F. R. 5289)), the quota for the mainland cane sugar area has been increased by 7,531 short tons, raw value, due to an additional deficit in the quota for the beet area (S. R. 813, Amendment 7 (18 F. R. 7159)). Also, 660 short tons, raw value, have been released by one allottee.

Since one allottee failed to waive its right to a hearing prior to the revision of the initial allotment order, it became necessary to hold a public hearing. Accordingly, pursuant to the applicable rules of practice and procedure (7 CFR 801.1 et seq.), a notice was issued on November 18, 1953, of a public hearing to be held at Washington, D. C., on November 24, 1953, for the purpose of receiving evidence to enable the Secretary to make a fair, efficient and equitable distribution of the revised 1953 sugar quota for the mainland cane sugar area.

At the hearing the Government witness proposed that the revised allotments should be made on the same basis as the initial allotments. No other testimony was offered. The revised allotments in the amounts set forth in this order are established on the same basis as those in the initial order, and afford a fair, efficient and equitable distribution of the quota, as required by section 205 (a) of the act.

Because of the limited time remaining in the quota year to which the allotments apply it is imperative that this amendment become effective at the earliest

possible date in order to permit continued orderly marketing of sugar. Accordingly, it is hereby found that compliance with the 30-day effective date requirement of the Administrative Procedure Act (60 Stat. 237) is impracticable and contrary to the public interest and consequently this order shall be effective when published in the FEDERAL REGISTER.

Pursuant to the authority vested in the Secretary of Agriculture by section 205 (a) of the act, paragraph (a) of § 814.20 is hereby amended to read as follows:

§ 814.20 *Allotment of the 1953 sugar quota for the mainland cane sugar area—(a) Allotments.* The 1953 sugar quota for the mainland cane sugar area is hereby allotted to the following processors in amounts which appear opposite their respective names:

Processor	Allotment (short tons, raw value)
Albania Sugar Cooperative, Inc.	5,430
Alice C. Refinery & Plantation, Inc.	6,592
Alma Plantation, Ltd.	6,308
J. Aron & Co., Inc.	10,510
Billeaud Sugar Factory	7,860
Breaux Bridge Sugar Cooperative, Inc.	6,521
Burton-Sutton Oil Co., Inc.	5,450
Caire & Graugnard	3,512
Caldwell Sugar Cooperative, Inc.	8,032
Catherine Sugar Co., Inc.	5,683
Columbia Sugar Co.	4,375
Cora-Texas Manufacturing Co.	2,420
Cypremont Sugar Co., Inc.	4,836
Dugas & LeBlanc, Ltd.	9,607
Duhe & Bourgeois Sugar Co., Inc.	7,475
Erath Sugar Co., Ltd.	4,942
Evan Hall Sugar Cooperative, Inc.	17,111
Evangeline Pepper & Food Products	5,495
Fellsmere Sugar Products Association	8,323
Frisco Cane Co., Inc.	650
Glenwood Cooperative, Inc.	8,519
Godchaux Sugars, Inc.	31,990
Helvetia Sugar Cooperative, Inc.	5,937
Iberia Sugar Cooperative, Inc.	12,884
LaFourche Sugar Co.	11,124
Harry L. Laws & Co., Inc.	7,854
Lever-St. John, Inc.	9,744
Loisel Sugar Co.	5,886
Louisiana State Penitentiary	3,634
Louisiana State University	150
Lulu Plantation	10,307
Meeker Sugar Cooperative, Inc.	4,263
Milliken & Farwell, Inc.	9,733
Okeelanta Sugar Refinery, Inc.	10,355
M. A. Patout & Son, Ltd.	7,597
Poplar Grove Plantation & Refining Co.	5,425
E. G. Robichaux Co., Ltd.	3,705
St. James Sugar Cooperative, Inc.	9,586
St. Mary Sugar Cooperative, Inc.	12,331
Slack Bros., Inc.	2,802
Smedes Bros., Inc.	4,223
South Coast Corp.	35,100
Southdown Sugars, Inc.	33,482
Sterling Sugars, Inc.	9,463
J. Supple's Sons Plantation Co.	3,588
United States Sugar Corp.	97,091
Valentine Sugars, Inc.	9,397
Vermillion Sugar Co.	2,690
Vida Sugars, Inc.	4,607
A. Wilbert's Sons Lbr. & Sh. Co.	6,932
Young's Industries, Inc.	5,760
All other persons	0
Total	517,291

(Sec. 403, 61 Stat. 932; 7 U. S. C. Sup. 1153. Interprets or applies sec. 205, 61 Stat. 926; 7 U. S. C. Sup. 1115)

Done at Washington, D. C., this 2d day of December 1953. Witness my

hand and the seal of the Department of Agriculture.

[SEAL] TRUE D. MORSE,
Acting Secretary of Agriculture.

[F. R. Doc. 53-10208; Filed, Dec. 4, 1953; 8:51 a. m.]

Chapter IX—Production and Marketing Administration (Marketing Agreements and Orders), Department of Agriculture

[Navel Orange Reg. 7]

PART 914—NAVEL ORANGES GROWN IN ARIZONA AND DESIGNATED PART OF CALIFORNIA

LIMITATION OF HANDLING

§ 914.307 *Navel Orange Regulation 7—(a) Findings.* (1) Pursuant to the marketing agreement and Order No. 14 (18 F. R. 5638), regulating the handling of navel oranges grown in Arizona and designated part of California, effective September 22, 1953, under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U. S. C. 601 et seq.), and upon the basis of the recommendation and information submitted by the Navel Orange Administrative Committee, established under the said marketing agreement and order, and upon other available information, it is hereby found that the limitation of handling of such navel oranges, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this section until 30 days after publication thereof in the FEDERAL REGISTER (60 Stat. 237; 5 U. S. C. 1001 et seq.) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate the declared policy of the act is insufficient, and a reasonable time is permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions of this section effective as hereinafter set forth. The Navel Orange Administrative Committee held an open meeting on December 3, 1953, after giving due notice thereof, to consider supply and market conditions for navel oranges and the need for regulation; interested persons were afforded an opportunity to submit information and views at this meeting; the recommendation and supporting information for regulation during the period specified herein was promptly submitted to the Department after such meeting was held; the provisions of this section, including its effective time, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such navel oranges; it is necessary, in order to effectuate the declared policy of the act, to make this section

effective during the period herein specified; and compliance with this section will not require any special preparation on the part of persons subject thereto which cannot be completed on or before the effective date hereof.

(b) *Order.* (1) The quantity of navel oranges grown in Arizona and designated part of California which may be handled during the period beginning at 12:01 a. m., P. s. t., December 6, 1953, and ending at 12:01 a. m., P. s. t., December 13, 1953, is hereby fixed as follows:

- (i) District 1: 1,200 carloads;
- (ii) District 2: Unlimited movement;
- (iii) District 3: 125 carloads;
- (iv) District 4: Unlimited movement.

(2) The prorate base of each handler who has made application therefor, as provided in the said marketing agreement and order, is hereby fixed in accordance with the prorate base schedule which is attached hereto and made a part hereof by this reference.

(3) As used in this section "handler," "handler," "carloads," "prorate base," "District 1," "District 2," "District 3," and "District 4" shall have the same meaning as when used in said marketing agreement and order.

(Sec. 5, 49 Stat. 753, as amended; 7 U. S. C. and Sup. 608c)

Done at Washington, D. C., this 4th day of December 1953.

[SEAL] S. R. SMITH,
Director, Fruit and Vegetable
Branch, Production and Mar-
keting Administration.

PRORATE BASE SCHEDULE

[12:01 a. m., P. s. t., Dec. 6 to 12:01 a. m., P. s. t., Dec. 13, 1953]

NAVEL ORANGES

PRORATE DISTRICT NO. 1

Handler	Prorate base (percent)
Total.....	100.0000
A. F. G. Lindsay.....	2.0017
A. F. G. Porterville.....	2.5281
Ivanhoe Cooperative Association.....	.7088
Anderson Packing Co.....	1.4619
Euclid Avenue Orange Association.....	1.1251
Lindsay Mutual Groves.....	1.7636
Martin Ranch.....	1.4745
Orange Cove Orange Growers.....	2.7418
Woodlake Packing House.....	1.9561
Doffemyer & Son, W. Todd.....	.5230
Earliest Orange Association.....	1.8068
Elderwood Citrus Association.....	.7415
Exeter Citrus Association.....	3.4785
Exeter Orange Growers Association.....	1.4526
Exeter Orchards Association.....	1.4443
Hillside Packing Association.....	1.4195
Ivanhoe Mutual Orange Association.....	1.1599
Klink Citrus Association.....	4.1837
Lemon Cove Citrus Association.....	.8711
Lindsay Citrus Growers, Association.....	2.4086
Lindsay Cooperative Association.....	1.4437
Lindsay Fruit Association.....	2.4023
Lindsay Orange Growers Association.....	.8273
Natanjo Packing House Co.....	1.3123
Orange Cove Citrus Association.....	3.6221
Orange Packing Co.....	1.0597
Orosi Foothill Citrus Association.....	1.4530
Paloma Citrus Fruit Association.....	.8193
Rocky Hill Citrus Association.....	1.4390
Sanger Citrus Association.....	3.0705
Sequoia Citrus Association.....	.8356
Stark Packing Co.....	2.7628
Visalia Citrus Association.....	2.0635

No. 237—2

PRORATE BASE SCHEDULE—Continued

NAVEL ORANGES—continued

PRORATE DISTRICT NO. 1—continued

Handler	Prorate base (percent)
Waddell & Son.....	2.5779
Baird Neece Corp.....	1.9183
Beattie Association, D. A.....	.5040
Grand View Heights Citrus Association.....	3.2626
Magnolia Citrus Association.....	2.5964
Porterville Citrus Association, The.....	1.6537
Randolph Marketing Co.....	1.9946
Richgrove-Jasmine Citrus Association.....	1.2382
Strathmore Cooperative Citrus Association.....	1.0666
Strathmore District Orange Association.....	1.7597
Strathmore Packing House Co.....	2.2555
Sunflower Citrus Growers.....	2.5608
Sunland Packing House Co.....	2.9255
Terra Bella Citrus Association.....	1.3518
Tule River Citrus Association.....	.8856
Baker Ranch Packing House.....	.4626
Batkins, Jr., Fred A.....	.0602
California Citrus Groves, Inc., Ltd.....	2.8218
Darby, Fred J.....	.0249
Dubendorf, John.....	.1351
Evans Bros. Packing Co.....	.2318
Far West Produce Distributors.....	.0646
Foothill Packing Co.....	.3317
Friesen, Lawrence.....	.0083
Gluskin, Ludwig E.....	.0000
Harding & Leggett.....	1.8263
Independent Growers, Inc.....	.9539
Lo Bue Bros.....	.7148
Maas, W. A.....	.1230
Marks, W. & M.....	.4448
McNees, Hubert K.....	.0249
Morin, Carl W.....	.0216
Orange Belt Fruit Distributors, Inc.....	.3387
Paramount Citrus Association, Inc.....	1.9819
Reimers, Don H.....	.5060
Riverside Fruit Co.....	.2488
Sequoia Cider Mill.....	.0177
Stephens & Cain.....	.0297
Tashjian, John.....	.1185
Zaninovich Bros., Inc.....	1.5950

PRORATE DISTRICT NO. 3

Total.....	100.0000
Consolidated Citrus Growers.....	11.1993
McKellips Citrus Co., Inc.....	15.2823
Phoenix Citrus Package Co.....	2.2180
Pioneer Fruit Co.....	3.9207
Arizona Citrus Growers.....	13.8423
Chandler Heights Citrus Growers.....	2.0774
Desert Citrus Growers.....	6.6555
Mesa Citrus Growers.....	21.5502
Tal' Wi-Wi Ranches.....	2.6071
Tempeco Groves.....	6.6972
Yuma Mesa Fruit Growers Association.....	.9518
Allen & Allen Citrus Package Co.....	.6331
Clark & Sons Produce Co., J. H.....	.3790
Commercial Citrus Co.....	1.4213
Ishikawa, Paul.....	.0474
Leppla, H. Lorain.....	3.7570
Macchiaroli Fruit Co., James.....	2.7622
Potato House, The.....	.2081
Sunny Valley Citrus Package Co.....	1.1758
Valley Citrus Package Co.....	2.6143

[F. R. Doc. 53-10253; Filed, Dec. 4, 1953; 11:43 a. m.]

[Lemon Reg. 514]

PART 953—LEMONS GROWN IN CALIFORNIA AND ARIZONA

LIMITATION OF SHIPMENTS

§ 953.621 *Lemon Regulation 514—*
(a) *Findings.* (1) Pursuant to the marketing agreement, as amended, and

Order No. 53, as amended (7 CFR Part 953), regulating the handling of lemons grown in the State of California or in the State of Arizona, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U. S. C. 601 et seq.), and upon the basis of the recommendation and information submitted by the Lemon Administrative Committee, established under the said amended marketing agreement and order, and upon other available information, it is hereby found that the limitation of the quantity of such lemons which may be handled, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this section until 30 days after publication thereof in the FEDERAL REGISTER (60 Stat. 237; 5 U. S. C. 1001 et seq.) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate the declared policy of the act is insufficient, and a reasonable time is permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions of this section effective as hereinafter set forth. Shipments of lemons, grown in the State of California or in the State of Arizona, are currently subject to regulation pursuant to said amended marketing agreement and order; the recommendation and supporting information for regulation during the period specified in this section was promptly submitted to the Department after an open meeting of the Lemon Administrative Committee on December 2, 1953, such meeting was held, after giving due notice thereof to consider recommendations for regulation, and interested persons were afforded an opportunity to submit their views at this meeting; the provisions of this section, including its effective time, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such lemons; it is necessary, in order to effectuate the declared policy of the act, to make this section effective during the period hereinafter specified; and compliance with this section will not require any special preparation on the part of persons subject thereto which cannot be completed by the effective time thereof.

(b) *Order.* (1) The quantity of lemons grown in the State of California or in the State of Arizona which may be handled during the period beginning at 12:01 a. m., P. s. t., December 6, 1953, and ending at 12:01 a. m., P. s. t., December 13, 1953, is hereby fixed as follows:

- (i) District 1: 30 carloads;
- (ii) District 2: 200 carloads;
- (iii) District 3: 20 carloads.

(2) The prorate base of each handler who has made application therefor, as provided in the said amended market-

ing agreement and order, is hereby fixed in accordance with the prorate base schedule which is attached to Lemon Regulation 513 (18 F. R. 7584) and made a part hereof by this reference.

(3) As used in this section, "handled," "handler," "carloads," "prorate base," "District 1," "District 2," and "District 3," shall have the same meaning as when used in the said amended marketing agreement and order.

(Sec. 5, 49 Stat. 753, as amended; 7 U. S. C. and Sup. 608c)

Done at Washington, D. C., this 3d day of December 1953.

[SEAL] S. R. SMITH,
Director, Fruit and Vegetable
Branch, Production and Mar-
keting Administration.

[F. R. Doc. 53-10242; Filed, Dec. 4, 1953;
8:52 a. m.]

[959.309 Amdt. 2]

**PART 959—IRISH POTATOES GROWN IN THE
COUNTIES OF CROOK, DESCHUTES, JEF-
FERSON, KLAMATH, AND LAKE IN OREGON,
AND MODOC AND SISKIYOU IN CALIFORNIA**

LIMITATION OF SHIPMENTS

Findings. (1) Pursuant to Marketing Agreement No. 114 and Order No. 59, as amended (7 CFR Part 959), regulating the handling of Irish potatoes grown in the counties of Crook, Deschutes, Jefferson, Klamath and Lake in the State of Oregon, and Modoc and Siskiyou in the State of California, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (48 Stat. 31, as amended; 7 U. S. C. 601 et seq.), and upon the basis of the recommendation and information submitted by the Oregon-California Potato Committee, established pursuant to said marketing agreement and order, as amended, and upon other available information, it is hereby found that the amendment to the limitation of shipments, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this amendment until 30 days after publication in the FEDERAL REGISTER (5 U. S. C. 1001 et seq.) in that (i) the time intervening between the date when information upon which this amendment is based became available and the time when this amendment must become effective in order to effectuate the declared policy of the act is insufficient, (ii) more orderly marketing in the public interest, than would otherwise prevail, will be promoted by regulating the shipment of potatoes, in the manner set forth below, on and after the effective date of this amendment, (iii) compliance with this amendment will not require any preparation on the part of handlers which cannot be completed by the effective date, and (iv) information

regarding the committee's recommendations has been made available to producers and handlers in the production area.

Order as amended. The provisions of § 959.309 (b) (4) and (5) (FEDERAL REGISTER, August 29, October 22, and November 10, 1953, 18 F. R. 5163, 6697, 7055), are hereby amended to read as follows:

(4) The limitations set forth in subparagraph (1) of this paragraph shall not be applicable to shipments of potatoes for the following purposes: (i) Grading or storing in the production area, (ii) seed, (iii) export, (iv) canning, freezing, dehydration, or manufacture or conversion into starch, flour and alcohol, (v) charity, and (vi) livestock feed within the production area.

(5) Each handler making shipments of potatoes pursuant to subparagraph (4) of this paragraph shall (except for shipments of potatoes for grading or storing in the production area, and shipments of potatoes for livestock feed) (i) file an application with the committee pursuant to § 959.130 for permission to make such shipments, (ii) pay assessments on such shipments pursuant to § 959.41, and (iii) have such shipments (except shipments of seed potatoes) inspected pursuant to § 959.60, and for each shipment made pursuant to subdivisions (iv) and (v) of subparagraph (4) of this paragraph shall furnish a record of shipment applicable thereto to the committee: *Provided*, That each application to ship potatoes made pursuant to subdivisions (iv) and (v) of subparagraph (4) of this paragraph shall be accompanied by the applicant handler's certification and buyer's certification that the potatoes to be shipped are to be used for the purpose stated in the application: *Provided further*, That each handler agrees in his application to furnish a copy of the bill of lading on each such shipment and to bill each such shipment directly to the applicable processor: *And provided further*, That each handler making shipments of potatoes to export, pursuant to subdivision (iii) of subparagraph (4) of this paragraph, shall include in his application applicable thereto, the export license number and shall enter such number on the Federal-State Inspection Certificate and Bill of Lading applicable to each such shipment, or in the event that no export license is required on such shipment, the handler thereof shall furnish the committee with a copy of the Department of Commerce Export Declaration Form No. 7525-V applicable to such shipment.

(Sec. 5, 49 Stat. 753, as amended; 7 U. S. C. and Sup. 608c)

Done at Washington, D. C., this 1st day of December 1953, to become effective 12:01 a. m., P. s. t., December 4, 1953.

[SEAL] S. R. SMITH,
Director,
Fruit and Vegetable Branch.

[F. R. Doc. 53-10191; Filed, Dec. 4, 1953;
8:47 a. m.]

TITLE 21—FOOD AND DRUGS

Chapter I—Food and Drug Administration, Department of Health, Education, and Welfare

PART 141—TESTS AND METHODS OF ASSAY FOR ANTIBIOTIC AND ANTIBIOTIC-CONTAINING DRUGS

PART 146—CERTIFICATION OF BATCHES OF ANTIBIOTIC AND ANTIBIOTIC-CONTAINING DRUGS

MISCELLANEOUS AMENDMENTS

By virtue of the authority vested in the Secretary by the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 507, 59 Stat. 463, as amended by 61 Stat. 11, 63 Stat. 409, 67 Stat. 389; sec. 701, 52 Stat. 1055; 21 U. S. C. 357, 371; 67 Stat. 18), the regulations for tests and methods of assay for antibiotic and antibiotic-containing drugs (21 CFR, 1952 Supp., Part 141) and certification of batches of antibiotic and antibiotic-containing drugs (21 CFR, 1952 Supp., Part 146; 18 F. R. 352, 1207, 4376, 4950) are amended as indicated below:

1. Part 141 is amended by adding the following new section:

§ 141.420 *Bacitracin - tyrothricin - neomycin troches; potency and moisture.* Proceed as directed in § 141.410 (a).

2. In § 146.77 *Dibenzylethylenediamine dipenicillin G for aqueous injection* subparagraph (1) (iii) of paragraph (c) *Labeling* is amended by changing the period at the end thereof to a comma and adding the following clause: "except that the blank may be filled in with the date which is 24 months after the month during which the batch was certified, if the person who requests certification has submitted to the Commissioner results of tests and assays showing that after having been stored for such period of time such drug as prepared by him complies with the standards prescribed by paragraph (a) of this section."

3. In § 146.114 *Streptomycin sulfate oral veterinary* subparagraph (3) of paragraph (c) *Labeling* is amended by changing the figure "24" to "36".

4. In § 146.115 *Streptomycin sulfate powder oral veterinary* * * * subparagraph (1) (iii) of paragraph (c) *Labeling* is amended by changing the figure "18" to "36".

5. Section 146.304 *Chloramphenicol ophthalmic* is amended as follows:

a. Paragraph (a) *Standards of identity* * * * is amended by changing the second, third, and fourth sentences to read: "It may contain cortisone acetate. It is sterile. The chloramphenicol is of such quantity that when prepared as directed in its labeling the potency of such solution or suspension is not less than 1.0 milligram per milliliter and maintains its labeled potency after it has been kept for 10 days at room temperature. Such solution or suspension has a pH of 7.3 ± 0.2."

b. In paragraph (b) *Packaging*, fourth sentence, delete the words "shall contain not less than 25 milligrams and each".

c. In paragraph (c) *Labeling*, subparagraph (1) (v) is amended by inserting between the words "contains" and "preservatives" the words "cortisone acetate or".

d. Paragraph (c) *Labeling* is further amended by adding the following new subparagraph:

(4) On the label and labeling, if it contains cortisone acetate, after the name "Chloramphenicol ophthalmic," wherever it appears, the words "with cortisone acetate," in juxtaposition with such name.

e. In paragraph (d) *Request for certification; samples*, subparagraph (2) (i) is amended by inserting between the words "solution" and "prepared" the words "or suspension".

f. In paragraph (d) *Request for certification; samples*, subparagraph (3) (iii) is amended by changing the period at the end thereof to a comma and adding the following clause: "except if cortisone acetate is used, such package shall contain approximately 100 milligrams."

6. Section 146.403 (3) (iii) is amended to read:

§ 146.403 *Bacitracin tablets* * * *

(d) *Request for certification; samples* * * *

(iii) In case of an initial request for certification, each other substance used in making the batch; 1 package of each containing approximately 5 grams.

7. Part 146 is amended by adding the following new section:

§ 146.420 *Bacitracin-tyrothricin-neomycin troches*. Bacitracin-tyrothricin-neomycin troches conform to all requirements, and are subject to all procedures, prescribed by § 146.413 for bacitracin-neomycin troches, except that:

(a) Each troche contains not less than 50 units of bacitracin.

(b) Each troche contains not less than 1 milligram of tyrothricin.

(c) In addition to the labeling prescribed for bacitracin-neomycin troches, each package shall bear on the outside wrapper or container and the immediate container the number of milligrams of tyrothricin in each troche of the batch.

Notice and public procedure are not necessary prerequisites to the promulgation of this order, and I so find, since it was drawn in collaboration with interested members of the affected industry and since it would be against public interest to delay providing for the amendments set forth above.

This order shall become effective upon publication in the FEDERAL REGISTER, since both the public and the affected industry will benefit by the earliest effective date, and I so find.

(Sec. 701, 52 Stat. 1055; 2 U. S. C. 371)

Dated: December 1, 1953.

[SEAL] OVETA CULP HOBBY,
Secretary.

[F. R. Doc. 53-10187; Filed, Dec. 4, 1953; 8:46 a. m.]

TITLE 39—POSTAL SERVICE

Chapter I—Post Office Department

PART 58—REGISTRATION OF DOMESTIC MAIL MATTER

REGISTRY RECEIPTS

In § 58.10, *Registry receipts*, amend paragraph (b) as follows:

a. Insert "(1)" after "(b) Full value to be declared at time of mailing."

b. Add new subparagraph (2) to read as follows:

(2) The following standards are furnished merely as a guide in determining the value to be declared on representative types of matter presented for registration:

(i) Currency—full value.
(ii) Negotiable securities—market value on the date of mailing.

(iii) Jewelry and precious stones—full value.

(iv) Merchandise of all kinds—full value.

(v) Internal Revenue Documentary stamps and postage stamps—full value (in cases of stamps having philatelic value, the cost of replacement should be declared).

(vi) Nonnegotiable securities (including certificates of stock)—no intrinsic value. (If registry indemnity is desired, the sender may pay a fee higher than the minimum to provide for indemnification for the cost of duplication.)

(vii) Warehouse receipts—no intrinsic value. (If registry indemnity is desired, the sender may pay a fee higher than the minimum for indemnification for the cost of duplication.)

(viii) Valuable papers, such as checks, drafts, deeds, wills, abstracts, and the like—no value.

(R. S. 161, 396, secs. 304, 309, 42 Stat. 24, 25, sec. 3, 45 Stat. 469, as amended; 5 U. S. C. 22, 369, 39 U. S. C. 381a)

[SEAL]

ROSS RIZLEY,
Solicitor.

[F. R. Doc. 53-10186; Filed, Dec. 4, 1953; 8:46 a. m.]

TITLE 43—PUBLIC LANDS: INTERIOR

Chapter I—Bureau of Land Management, Department of the Interior

Subchapter S—Rights-of-Way

[Circular 1864]

PART 244—RIGHTS-OF-WAY OTHER THAN FOR RAILROAD PURPOSES AND FOR LOGGING ROADS ON THE OREGON AND CALIFORNIA AND COOS BAY REVESTED LANDS

DOCUMENTARY EVIDENCE OF WATER RIGHT

Paragraph (b) of § 244.6 is amended to read as follows:

§ 244.6 *Documents which must accompany application*. * * *

(b) *Evidence of water right*. If the project involves the storage, diversion, or conveyance of water, the applicant must file a statement of the proper State official, or other evidence, showing that he has a right to the use of the water. Where the State official requires an applicant to obtain a right-of-way as a prerequisite to the issuance of evidence of a water right, if all else be regular,

a right-of-way may be granted conditioned only upon the applicant's filing the required evidence of water right from the State official within a specified reasonable time. The conditional right-of-way will terminate at the expiration of the time allowed.

(R. S. 161, 453, 2478; 5 U. S. C. 22, 43 U. S. C. 2, 1201)

ORME LEWIS,
Acting Secretary of the Interior.

DECEMBER 1, 1953.

[F. R. Doc. 53-10189; Filed, Dec. 4, 1953; 8:47 a. m.]

TITLE 49—TRANSPORTATION

Chapter I—Interstate Commerce Commission

Subchapter A—General Rules and Regulations

PART 120—ANNUAL, SPECIAL OR PERIODICAL REPORTS

PERSONS FURNISHING CARS OR PROTECTIVE SERVICE; ANNUAL REPORT FORM B-1

At a session of the Interstate Commerce Commission, Division 1, held at its office in Washington, D. C., on the 18th day of November A. D. 1953.

The Matter of Annual Reports from Persons Furnishing Cars or Protective Service being under consideration, and it appearing that the changes in existing regulations to be effectuated by this order are only minor changes with respect to the data to be furnished, and that public rule-making procedures are unnecessary;

It is ordered, That the order dated December 10, 1952, in the Matter of Annual Reports from Persons Furnishing Cars or Protective Service (49 CFR 120.70) be, and it is hereby modified with respect to annual reports for the year ended December 31, 1953, and subsequent years, as follows:

§ 120.70 *Form prescribed for persons furnishing cars or protective service and owning 1,000 cars or more*. All persons furnishing cars or protective service to or on behalf of carriers by railroad or express companies within the scope of section 20 of Part I of the Interstate Commerce Act as amended, and owning 1,000 cars or more, are hereby required to file annual reports for the year ended December 31, 1953, and for each succeeding year until further order, in accordance with Annual Report Form B-1, which is hereby approved and made a part of this order. The annual report shall be filed, in duplicate, in the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, Washington 25, D. C., on or before March 31, of the year following the one to which it relates.

(Sec. 12, 24 Stat. 383, as amended, sec. 201, 54 Stat. 933; 49 U. S. C. 12, 904. Interprets or applies sec. 20, 24 Stat. 386, as amended; 49 U. S. C. 20)

By the Commission, Division 1.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10204; Filed, Dec. 4, 1953; 8:50 a. m.]

¹ Form filed as part of the original document.

TITLE 46—SHIPPING

Chapter I—Coast Guard, Department of the Treasury

[CGFR 53-25]

MISCELLANEOUS AMENDMENTS TO CHAPTER

Notices regarding proposed changes in the rules and regulations governing vessel inspection were published in the *FEDERAL REGISTER* dated February 13, 1953, 18 F. R. 880-883, as Items II to XI, inclusive, and Item XIX, and in the *FEDERAL REGISTER* dated March 7, 1953, 18 F. R. 1334, as Item XX on the agenda to be considered by the Merchant Marine Council, and a public hearing was held by the Merchant Marine Council on March 24, 1953, in Washington, D. C. All comments submitted were considered and where practicable were incorporated into the regulations.

The various amendments to the rules and regulations for tank vessels in 46 CFR Parts 32, 33, and 34 (Subchapter D) are based on Item XX of the agenda considered by the Merchant Marine Council. The amendment to 46 CFR 32.01-10 (a) eliminates the requirements for rails on unmanned tank barges. The amendments to 46 CFR 33.35-1 and 33.35-5 require additional life preservers for personnel on watch in the engine room and pilothouse which shall be stowed in locations readily accessible to such personnel. The amendment to 46 CFR 33.55-10 (a) revises the requirement regarding equipment for the impulse-projected rocket type line-throwing appliance. The amendment to 46 CFR 34.20-1 (c) and (d) revises the requirements for oil fuel units or settling tanks. The amendment to 46 CFR 34.22-5 (d) will allow a minimum nominal diameter of $\frac{3}{4}$ inch for steam extinguishing pipe used in fixed fire extinguishing systems for lamp and paint rooms and similar spaces on tank ships constructed or converted on or after November 19, 1952.

The purpose of the amendment to 46 CFR 43.40-10 is to correct a typographical error in the "International Load Line certificate" (Form A-2). The purpose for amending 46 CFR 44.05-10 (b), 44.05-30, and 44.05-35, regarding load line markings and load line certificates for steam colliers, tugs, barges, and self-propelled barges when engaged in special services or coastwise and inter-island voyages, is to permit the use of the load line mark "MS" for those vessels operating on the Great Lakes when authorized under 46 CFR 45.01-15 and 45.01-17. These changes are based on Item XIX on the agenda considered by the Merchant Marine Council.

The purpose for amending 46 CFR 52.20-15, 55.07-15, 55.10-25 (c) (2), and 55.10-30, is to clarify various requirements regarding shell joints of boilers and unfired pressure vessels, bilge and ballast piping, and bilge pumps.

The various amendments to 46 CFR 56.01-10 (d) and (m), 56.05-3, and 56.05-5, deal with test procedures for qualified welders, radiography of welds and radiographic test procedures and use of magnetic particle testing of welds.

These changes are based on Item II of the agenda.

The purpose for adding 46 CFR 57.01-15, regarding fuel oil for boilers, is that this requirement was inadvertently omitted when the regulations were revised and republished on October 18, 1952. The amendment to 46 CFR 61.20-20 (a) revises the requirements of inspection of boiler mountings and attachments to agree with the regulations which were in effect prior to November 19, 1952, since it was not intended that the inspections be changed.

The purpose for amending 46 CFR 67.01-30 (d) is to clarify the requirements regarding repairs, replacements, or alterations of boilers built and installed prior to July 1, 1935. The purpose for amending 46 CFR 67.10-10 (c) is to add requirements regarding riveted shell joints which were inadvertently omitted when the regulations were revised and published October 18, 1952.

The purpose for amending 46 CFR 71.20-15 (a), 71.25-10 (a), 72.40-1 (a), and 73.35-25 (b), regarding scope of initial inspection, scope of annual inspection, requirements for rails and guards, and door indicators and warning signals for class 3 watertight doors, is editorial in nature and clarifies the requirements which were published on October 18, 1952.

The amendments to 46 CFR 75.20-15 (kk) and 75.20-15 (n) establish requirements regarding emergency drinking water for lifeboats and life rafts. These amendments are based on Item III on the agenda.

The amendment to 46 CFR 75.45-15 revises the requirement regarding the length of service line for impulse-projected rocket type line-throwing appliance. This amendment is based on Item IV on the agenda.

The amendment to Table 76.05-1 (a) in 46 CFR 76.05-1 (a) revises the requirements regarding fire detecting systems in machinery spaces containing oil fuel units or settling tanks. This amendment is based on Item V of the agenda.

The purpose for amending 46 CFR 76.50-15 (a), (c) regarding spare charges for hand portable fire extinguishers, 77.13-1 (a), regarding radiotelegraph and radiotelephone, and 78.13-20, regarding manning of lifeboats and life rafts, is to clarify the requirements and to indicate applicability to motorboats carrying passengers for hire.

The purpose for adding 46 CFR 78.17-70, regarding radio apparatus for lifeboats, 78.17-75, regarding requirements for fuel oil, 78.33-20, regarding breaking of safety valve seal, and 78.37-5 (a) (12), regarding fuel oil data required to be logged, is to add requirements which were inadvertently omitted in the revision of the regulations published October 18, 1952. The purpose for amending 46 CFR 78.55-1 (a) is to clarify the master's and chief engineer's responsibility with respect to steam pressure of boilers.

The purpose for amending 46 CFR 91.20-15, regarding scope of initial inspection, and 91.25-10, regarding scope of annual inspection, is to clarify the regulations published October 18, 1952. The amendments to 46 CFR 94.20-15 (ii)

and 94.20-25 (n) revise requirements regarding drinking water for lifeboats and life rafts. These amendments are based on Item III of the agenda.

The amendment to 46 CFR 94.45-15 (a) (3) revises the requirements regarding the service line for impulse-projected rocket type line-throwing appliance. This amendment is based on Item IV of the agenda.

The purpose for deleting 46 CFR 94.90-5 (b) is to remove from the regulations a duplicate requirement regarding daylight signalling lamp. The applicable requirements are in Subpart 113.60 of Subchapter J—Electrical Engineering of this chapter.

The amendment to 46 CFR 95.05-10 (a) (3) revises the requirements regarding fixed fire extinguishing systems in the engine room where oil fuel units or settling tanks are used. This amendment is based on Item V of the agenda.

The purpose for amending 46 CFR 95.50-15 (a) and (c), regarding spare charges for fire extinguishers, 96.13-1, regarding radiotelegraph and radiotelephone, 97.13-25 (a) and (c), regarding manning of lifeboats and life rafts, is to clarify the requirements which were previously published October 18, 1952.

The purpose for adding 46 CFR 97.15-50, regarding radio apparatus for lifeboats, 97.15-55, regarding requirements for fuel oil, 97.30-20, regarding breaking of safety valve seal, and 97.35-5 (a) (8), regarding fuel oil data required to be logged, is to add requirements which were inadvertently omitted when the regulations were revised and published October 18, 1952.

The purpose for amending 46 CFR 97.37-37 (d), regarding markings for emergency equipment, and 97.45-1 (a), regarding the master's and chief engineer's responsibility relating to steam pressure of boilers, is to clarify the requirements which were revised and published October 18, 1952.

The purpose for amending 46 CFR 112.55-1 (a) is to correct the general requirements regarding storage batteries which were published October 18, 1952.

The purpose for amending 46 CFR 157.20-35, regarding the minimum number of engineers necessary for the safe navigation of a vessel, is to correct the regulation to agree with the provisions of R. S. 4463, as amended (46 U. S. C. 222), and R. S. 4426, as amended (46 U. S. C. 404).

The amendments to 46 CFR 160.002-1 to 160.002-7, inclusive, revise and bring up to date the specification requirements for kapok life preservers. These amendments are based on Item VI of the agenda.

The amendments to 46 CFR 160.003-1 to 160.003-7, inclusive, revise and bring up to date the specification requirements for cork life preservers. These amendments are based on Item VII of the agenda.

The amendments to 46 CFR 160.004-1 to 160.004-7, inclusive, revise and bring up to date the specification requirements for balsa wood life preservers. These amendments are based on Item VII of the agenda.

The amendments to 46 CFR 160.005-1 to 160.005-7, inclusive, revise and bring

up to date the specification requirements for fibrous glass life preservers. These amendments are based on Item VI of the agenda.

The deletion of 46 CFR 160.006-3 and the change in title for Subpart 160.006 cancel the specification requirements for re-covering of life preservers. This deletion is based on Item VII of the agenda.

The addition of 46 CFR 160.026-1 to 160.026-7, inclusive, as a new Subpart 160.026 establishes specification requirements regarding emergency drinking water in hermetically sealed containers. This new specification is based on Item III of the agenda.

The amendments to 46 CFR 160.035-1 to 160.035-11, inclusive, revise and bring up to date the specification requirements for lifeboats. These amendments are based on Item VIII of the agenda.

The amendment to 46 CFR 160.040-4 (c) revises the requirements for service lines for the impulse-projected rocket type line-throwing appliance. This amendment is based on Item IV of the agenda.

The addition of 46 CFR 162.027-1 to 162.027-6, inclusive, establishes specification requirements for combination solid stream and water spray fire hose nozzles as a new Subpart 162.027. This specification is based on Item IX of the agenda.

The amendments to 46 CFR 164.006-1 to 164.006-5, inclusive, revise and bring up to date the specification requirements for deck coverings for merchant vessels. These amendments are based on Item X of the agenda.

The amendments to 46 CFR 164.008-1 to 164.008-4, inclusive, revise and bring up to date the specification requirements for bulkhead panels for merchant vessels. These amendments are based on Item XI of the agenda.

The proposed amendments regarding the specification for incombustible materials considered as Item XII of the agenda were not approved and will be given further consideration and placed on a future agenda of the Merchant Marine Council.

By virtue of the authority vested in me as Commandant, United States Coast Guard, by Treasury Department Order No. 120, dated July 31, 1950 (15 F. R. 6521), to promulgate rules and regulations in accordance with the statutes cited with the regulations below the following amendments to the regulations are prescribed which shall become effective on and after January 1, 1954, unless otherwise indicated within the amendment itself:

Subchapter D—Tank Vessels

PART 32—SPECIAL EQUIPMENT, MACHINERY, AND HULL REQUIREMENTS

SUBPART 32.01—SAFETY REQUIREMENTS

Section 32.01-10 (a) is amended to read as follows:

§ 32.01-10 *Rails—TB/ALL.* (a) All tank vessels, except unmanned tank barges, the construction or conversion of which is started on or after July 1, 1951, shall be fitted with fixed or portable rails on decks and bridges. All rails shall be in at least two courses, including the top, and shall be at least 36 inches high. Rails shall consist of solid or tubular sec-

tions or chains or wire rope or a combination thereof.

(R. S. 4405, as amended, 4417a, as amended, 4462, as amended; 46 U. S. C. 375, 391a, 416. Interpret or apply sec. 5, 55 Stat. 244, 245, as amended; 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 33—LIFESAVING APPLIANCES

SUBPART 33.35—LIFE PRESERVERS

1. Section 33.35-1 is amended to read as follows:

§ 33.35-1 *Number required—TB/ALL.* All tank vessels shall be provided with one approved life preserver for each person carried. An additional number of life preservers shall be provided for personnel on watch in the engine room and pilothouse.

2. Section 33.35-5 is amended to read as follows:

§ 33.35-5 *Distribution and stowage—TB/ALL.* Life preservers shall be distributed throughout the cabins, state-rooms, berths, and other places convenient for each person on such tank vessels. The stowage of the additional number of life preservers shall be such that they are readily accessible to personnel on watch in the engine room and pilothouse.

(R. S. 4405, as amended, 4417a, as amended, 4462, as amended; 46 U. S. C. 375, 391a, 416. Interpret or apply sec. 5, 55 Stat. 244, 245, as amended; 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

SUBPART 33.35—LINE-THROWING APPLIANCES

Section 33.55-10 (a) is amended to read as follows:

§ 33.55-10 *Equipment for line-throwing appliances—T/OC.* * * *

(a) *Impulse-projected rocket type.* Four rockets (2 of which shall be of the buoyant type), 4 primer-ejector cartridges, 4 service lines (each of a length not less than that specified in the approval of the appliance carried, of $\frac{7}{32}$ -inch to $\frac{9}{32}$ -inch diameter, of flax or manila, and having a breaking strength of at least 500 pounds, to be kept in faking boxes or on reels), 1 auxiliary line (1,500 feet of 3-inch circumference manila), 1 can of oil, 1 cleaning brush, 12 wiping patches, and 1 set of instructions furnished by the manufacturer, all in a suitable case or box with the appliance, except that the service lines and the auxiliary line may be stowed in an accessible location nearby.

(R. S. 4405, as amended, 4417a, as amended, 4462, as amended; 46 U. S. C. 375, 391a, 416. Interpret or apply sec. 5, 55 Stat. 244, 245, as amended; 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 34—FIRE-FIGHTING EQUIPMENT

SUBPART 34.20—BOILER ROOM AND MACHINERY SPACES ON TANK VESSELS

Section 34.20-1 is amended by revising paragraphs (c) and (d) to read as follows:

§ 34.20-1 *Fixed fire extinguishing systems for boiler rooms and machinery spaces—T/ALL.* * * *

(c) All steam propelled tank ships using oil for fuel, construction or con-

version of which is started on or after November 19, 1952, shall be fitted with a fixed carbon dioxide or foam fire extinguishing system in all spaces containing oil fired boilers, whether main or auxiliary, their fuel oil service pumps and/or such fuel oil units as the heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pumps.

(d) All tank ships propelled by internal combustion machinery and having auxiliary boilers using oil for fuel, construction or conversion of which is started on or after November 19, 1952, shall be fitted with a fixed carbon dioxide or foam fire extinguishing system in all spaces containing such boilers, their fuel oil service pumps and/or such fuel oil units as heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pumps.

SUBPART 34.22—LAMP AND PAINT ROOMS AND SIMILAR COMPARTMENTS ON TANK SHIPS

Section 34.22-5 (d) is amended to read as follows:

§ 34.22-5 *Fixed fire extinguishing systems for lamp and paint rooms and similar spaces on tank ships constructed or converted on or after November 19, 1952—T/ALL.* * * *

(d) When a steam system is installed it shall meet the general requirements of § 34.15-15, except that the minimum nominal diameter of any steam fire extinguishing pipe shall be $\frac{3}{4}$ of an inch.

(R. S. 4405, as amended, 4417a, as amended, 4462, as amended; 46 U. S. C. 375, 391a, 416. Interpret or apply sec. 5, 55 Stat. 244, 245, as amended; 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter E—Load Lines

PART 43—FOREIGN OR COASTWISE VOYAGE

SUBPART 43.40—ZONES AND SEASONAL AREAS AND MISCELLANEOUS REQUIREMENTS

Section 43.40-10 *Form of load line certificates* is amended by correcting the "International Load Line Certificate" (Form A2) by changing the phrase describing the "Load Line," opposite "Freeboards From Deck Line" for "Tropical, Summer, Winter," from "Upper edge of line below center of disk" to "Upper edge of line through center of disk."

(Sec. 2, 45 Stat. 1493, as amended, sec. 2, 49 Stat. 888, as amended; 46 U. S. C. 85a, 88a)

PART 44—VARIANCE FOR STEAM COLLIERIES, TUGS, BARGES, AND SELF-PROPELLED BARGES (WHEN ENGAGED IN SPECIAL SERVICES OR COASTWISE AND INTER-ISLAND VOYAGES)

1. Section 44.05-10 (b) (including Figure 44.05-10 (b)) is amended to read as follows:

§ 44.05-10 *Load line markings.* * * *

(b) In the case of vessels which engage in special services on coastwise voyages and voyages on the Great Lakes, the marks on the vessel's sides are to be in accordance with figure 44.05-10 (b), except that the line marked "MS" shall be used only where applicable to vessels defined in §§ 45.01-15 and 45.01-17 of this subchapter.

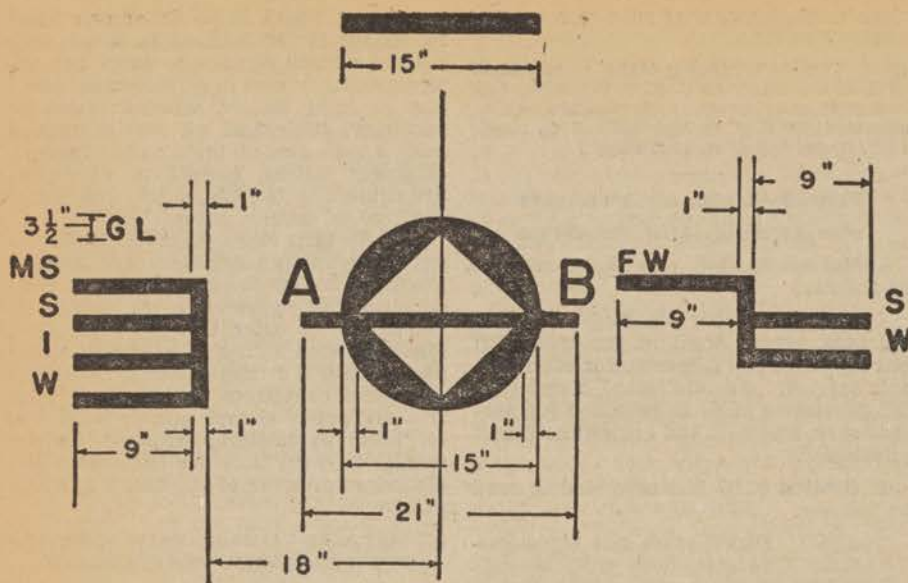


FIGURE 44.05-10 (b).

NOTE: The line marked "MS" shall be used only where applicable to vessels defined in §§ 45.01-15 and 45.01-17 of this subchapter.

2. Section 44.05-30 is amended to read as follows:

§ 44.05-30 *Load line certificate.* (a) The load line certificates for a special service coastwise or special inter-island voyage shall be issued in addition to any other applicable load line certificates and shall be on the form shown in § 44.05-35.

3. Section 44.05-35 is amended to read as follows:

§ 44.05-35 *Form of load line certificate.* (a) Where no other Load Line certificate is issued:

LOAD LINE CERTIFICATE FOR A SPECIAL SERVICE COASTWISE OR INTER-ISLAND VOYAGE

Issued under the authority of the Commandant, U. S. Coast Guard, United States of America, under the provisions of the Coastwise Load Line Act of August 27, 1935, as amended.

[SEAL]

Issued by _____
Certificate No. _____

This certificate is valid only for coastwise or inter-island voyages that are between the limits of _____ and _____ provided the vessel is engaged solely in the trade stated herein.

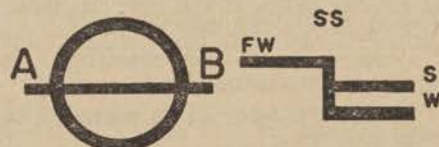
Ship _____ Official No. _____
Port of registry _____ Trade of vessel _____
Gross tonnage _____

FREEBOARD FROM DECK	LINE	LOAD LINE
Tropical _____	(T)	_____ Above (S)
Summer _____	(S)	_____ Upper edge of line through center of disk.
Winter _____	(W)	_____ Below (S)

* Allowance for fresh water for all freeboards (except on the Great Lakes) _____

The upper edge of the deck line from which these freeboards are measured is _____ inches above the top of the _____ deck at side.

* Where seagoing steamers navigate a river or inland water, deeper loading is permitted corresponding to the weight of fuel, etc., required for consumption between the point of departure and the open sea.



This is to certify that this ship has been surveyed and the freeboards and load lines shown above have been found to be correctly marked upon the vessel in manner and location as provided by the Load Line Regulations of the Commandant, U. S. Coast Guard, applicable to vessels engaged on this special service voyage.

** This certificate remains in force until _____ Issued at _____ on the _____ day of _____, 19_____.
(Here follows the signature or seal and description of the assigning authority)

NOTE: In accordance with the Load Line Regulations the disc or diamond and the lines must be permanently marked by center punch marks or cutting.

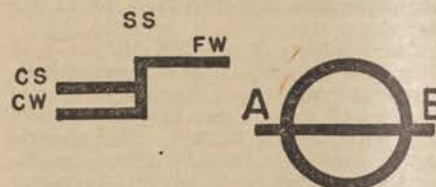
(On the reverse side of the load line certificate, the provision for annual inspection endorsement and for renewal of the certificate is to be the same as for vessels engaged in the foreign trade.)

** Upon the expiration of the certificate renewal must be obtained as provided by the Load Line Regulations and the certificate so endorsed. Endorsement should also be made in the spaces provided on the occasion of each annual inspection required by the Load Line Regulations.

(b) Where the Special Service Load Line Certificate is issued in addition to a Great Lakes Load Line Certificate, the wording of the Special Service Load Line Certificate is to be identical to that given in paragraph (a) of this section, but the markings indicated in the form shall be replaced by the following markings:



(c) Where the Special Service Load Line Certificate is issued in addition to an Unlimited Coastwise or International Load Line Certificate, the wording of the Special Service Load Line Certificate is to be identical to that given in paragraph (a) of this section, but the markings indicated in the form shall be replaced by the following markings:



(Sec. 2, 49 Stat. 888, as amended; 46 U. S. C. 88a)

Subchapter F—Marine Engineering

PART 52—CONSTRUCTION

Section 52.20-15 is amended by correcting the phrase "outside diameters" to "inside diameters" in the first sentence of paragraph (a) and in paragraph (e) so that these paragraphs read as follows:

§ 52.20-15 *Detail requirements.* (a) Where the radius R to which a dished head is formed is less than 80 percent of the inside diameter of the shell, the thickness of a head with a flanged-in manhole opening shall be not less than the value found by making R , in Formulas (1) and (2) in § 52.20-10, equal to 80 percent of the inside diameter of the shell and with the added thickness for the manhole. The thickness calculated shall be the minimum thickness of a head with a flanged-in manhole opening for any form of head and the maximum allowable stress shall not exceed 80 percent of the values given in Table 52.05-10 (a) or 54.03-10 (c) in Part 54 of this subchapter.

(e) If a flanged-in manhole which meets the requirement of § 52.20-20 is placed in a full-hemispherical head or ellipsoidal head, the thickness of the head shall be the same as for a head dished to a segment of a sphere, with the radius of dish equal to eight-tenths of the inside diameter of the shell and with the added thickness for the manhole as specified in paragraph (d) of this section.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S.

4399, 4400, 4417, 4417a, 4418, 4421, 4426-4431, 4433, 4434, 4453, 4491, as amended, sec. 14, 29 Stat. 690, 41 Stat. 305, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 391a, 392, 399, 404-409, 411, 412, 435, 489, 366, 363, 367, 526p, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 55—PIPING SYSTEMS, PUMPS, REFRIGERATION MACHINERY, AND FUEL TANKS

SUBPART 55.07—DETAIL REQUIREMENTS

1. Section 55.07-15 *Joint and flange connections* is amended by deleting the explanatory note "(For maximum steam service pressure at a temperature of 500° F.)" just below the heading in Table 55.07-15 (e5), and by deleting the explanatory note "(For maximum steam service pressure at a temperature of 750°)" just below the headings in Tables 55.07-15 (e6) through 55.07-15 (e11), inclusive, which are all titled "Steel flanged fittings and companion flanges."

2. Section 55.10-25 (c) (2) is amended to read as follows:

§ 55.10-25 *Bilge and ballast piping.* * * *

(c) * * *

(2) Passenger vessels engaged on international voyages shall have the bilge manifolds arranged for remote control so that in the event of flooding, one of the bilge pumps can take suction from any compartment. If a bilge system common to all pumps is installed, the necessary valves for controlling the bilge suction shall be operable from above the bulkhead deck. If, in addition to the main bilge pumping system, an emergency bilge pumping system is installed, it shall be so arranged that the emergency bilge pump may take suction from any flooded compartment.

3. Section 55.10-30 (e) is amended to read as follows:

§ 55.10-30 *Bilge pumps.* * * *

(e) *Location.* If the engines and boilers are in two or more watertight compartments, the bilge pumps shall be distributed throughout these compartments. When the location of bilge pumps in separate watertight compartments is not possible, the Commandant will consider alternate arrangements of the bilge pumps.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4417a, 4418, 4421, 4426-4431, 4433, 4434, 4453, 4491, as amended, sec. 14, 29 Stat. 690, 41 Stat. 305, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 391a, 392, 399, 404-409, 411, 412, 435, 489, 366, 363, 367, 526p, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 56—ARC WELDING, GAS WELDING, AND BRAZING

SUBPART 56.01—ARC WELDING AND GAS WELDING

1. Section 56.01-10 (d) is amended by revising the text of the paragraph, but not the Figures 56.01-10 (d1) to 56.01-10 (d6), inclusive, and by adding a Table 56.01-10 (d), to read as follows:

§ 56.01-10 *Qualification of welders.*

(d) (1) Tests required for qualification in the various positions for different materials and thicknesses are given in Table 56.01-10 (a). They are designated as Test No. 1 through Test No. 6 for which specimens shall be prepared in accordance with Figures 56.01-10 (d1) through 56.01-10 (d6), respectively, and physically tested if this method of welder qualification is used. Alternatively, if so desired, a welder may be qualified by the use of radiography provided the radiographic procedure is qualified as required in § 56.05-3. The radiographs of the weld test plates shall indicate that the weld(s) are acceptable for the group covering the fabrication classification as specified in Table 56.01-10 (d). Test specimens shall be prepared in position of material and thicknesses as indicated

in Table 56.01-10 (a) for either physical tests or radiographic examination.

(2) The test plate welds shall comply with the radiographic standards of Group 1 or 2 classification, a copy of which is on file with each Officer in Charge, Marine Inspection covering the welding for which the welder is being qualified.

TABLE 56.01-10 (d)—RADIOGRAPHIC WELDER QUALIFICATION TESTS

Group	Classification
1.....	Class I piping.
1.....	Class I and class II welded pressure vessels.
2.....	Class II piping.
2.....	Class III welded pressure vessels.

2. Section 56.01-10 (m) is amended by revising Figure 56.01-10 (m) to read as follows:

(m) * * *

RECORD CARD OF WELDER'S QUALIFICATION TESTS

Name: _____
 Employer: _____
 Approved for: _____

Test No.	Process	Base metal	Positions	Diameter of electrode	Date of test	Group limitations	Type of test ¹	Signature of inspector	Agency

¹ P = Physical tests. R = Radiographic tests.

Form CG-965

[Face of Card]

Date of birth: _____ Place of birth: _____ Symbol for marking work: _____ Employed as a welder under: _____			(Photograph)
Test No.	From—	To—	
Welder's signature: _____			

[Back of Card]

FIGURE 56.01-10 (m)—RECORD CARD OF WELDER'S QUALIFICATION TESTS

SUBPART 56.05—TESTS AND INSPECTION

1. Part 56 is amended by adding a new § 56.05-3 reading as follows:

§ 56.05-3 *Qualification of radiographic test procedure.* (a) Prior to the use of radiography by fabricators or commercial radiographic laboratories, the radiographic procedure proposed for use in the nondestructive tests of welds shall be qualified to demonstrate that the procedure will produce radiographs of acceptable standard.

NOTE: An additional procedure qualification test will not be required provided proof is furnished that the radiographic procedure test has been accepted by the Bureau of Ships of the Department of the Navy.

(b) After exposure and processing, the procedure qualification films shall be forwarded to the Commandant through the Officer in Charge, Marine Inspection, for interpretation.

(c) The procedure qualification shall be representative of the radiography to be used in examining production welds or welder qualification tests. If both plate and welded pipe joints are to be tested by radiography, a procedure qualification test shall be conducted for each type of fabrication involved.

2. Section 56.05-5 is amended to read as follows:

§ 56.05-5 *Nondestructive tests.* (a) (1) All longitudinal and circumferential

RULES AND REGULATIONS

welded butt-joints of Class I welded pressure vessels shall be examined throughout their entire length, except as specifically exempted in other sections of this subchapter, by means of radiography, preferably by X-ray.

(2) Each welded butt-joint of Class II welded pressure vessels shall be examined throughout its entire length by means of radiography, preferably by X-ray, when the plate thickness at the welded joint exceeds $1\frac{1}{2}$ inches, or when such pressure vessels are constructed of steel plate complying with Subpart 51.04 in Part 51 of this subchapter for Grades C, D, E, F, and G, having plate thicknesses at the joint exceeding 1 inch. (See § 54.03-1 of this subchapter and Table 56.01-25.)

(b) (1) All butt-welded joints of Class I piping, unless exempted by § 56.01-80, shall be nondestructively tested. Radiography shall be used for diameters or thicknesses as follows:

(i) Carbon steel when the pipe wall thickness exceeds $\frac{3}{8}$ inch.

(ii) Alloy steel when the diameter is 4 inches or larger.

(2) Butt-welded joints of Class I piping of thicknesses and sizes not exceeding that specified in subparagraph (1) of this paragraph may be examined by means of magnetic particle testing. The surfaces to be inspected shall be clean, dry, and free from oil, excessive rust, slag, and scale accumulation. All surface irregularities such as undercuts, overlaps, ripples, rough welds, etc., which may make interpretation of the magnetic indications difficult, shall be made smooth by grinding, chipping, or sandblasting.

(c) Welded joints of pressure vessels to be radiographed shall be prepared as follows:

(1) The welded joints shall be representative of the completed weld to be placed in service.

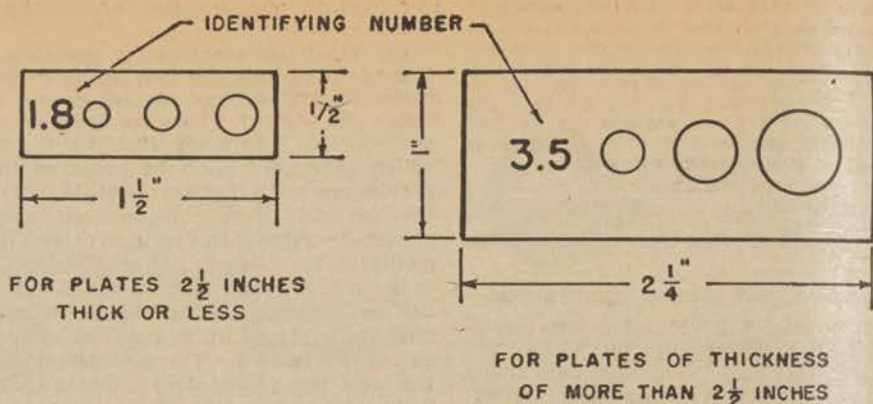
(2) The weld ripples or weld surface irregularities, on both inside and outside, shall be removed by any suitable mechanical process to a degree such that the resulting radiographic contrast due to any remaining irregularities cannot mark or be confused with that of any objectionable defect.

(3) The finished surface of the reinforcement may have a crown of approximately uniform amount not to exceed the following:

Material thickness (inches):	Maximum thickness of reinforcement (inches)
$\frac{1}{2}$ and below	$\frac{1}{16}$
Over $\frac{1}{2}$ to 1, inclusive	$\frac{3}{32}$
Over 1	$\frac{1}{8}$

(4) Single-welded butt-joints made the equivalent of double-welded butt-joints in accordance with § 56.01-55 may be radiographed without removal of the backing strip provided the backing strip image will not interfere with the interpretation of resultant radiographs.

(d) Radiographic examination shall be performed with a technique that will indicate the presence of defects having depths of 2 percent of the thickness of the material, or widths of 4 percent of the thickness of the material being ex-



DIAMETER OF HOLES 2, 3, AND 4 TIMES THE THICKNESS OF PENETRATOR BUT NOT LESS THAN $1/16$ INCH

FIGURE 56.05-5 (e)—Details of penetrameters.

amined. Penetrators made of material having radiographic density approximately the same as that of the material being radiographed shall be used to determine the sensitivity of the radiographic technique being employed.

(e) Penetrators of the type as shown in Figure 56.05-5 (e) shall be used, and shall be placed on the energy source side of the object being radiographed. All radiographs shall show the image of the penetrator.

(f) Each penetrator shall have three holes of diameters equal respectively to two, three and four times the penetrator thickness, but in no case less than $1/16$ inch, except when gamma rays are used as a source of radiation, the minimum hole need not be less than $3/32$ inch. The smallest hole shall be distinguishable on the radiograph.

(g) Each penetrator shall carry an identifying number representing, to two significant figures, the minimum thickness of plate for which it may be used. The images of the identifying numbers shall appear clearly on the radiographs.

(h) The thickness of the penetrator shall be not more than 2 percent of the thickness of the material being examined. When the weld reinforcement and/or backing strip is not removed, a shim shall be placed under the penetrator, such that the total thickness being radiographed under the penetrator is the same as the total thickness through the weld, including backing strip when not removed.

(i) For metals of uniform thickness, each radiograph taken of welds shall have visible penetrators and identification markers as follows:

(1) When the dimension of the film in the direction of the weld is 6 inches or less, one penetrator is required.

(2) When the dimension of the film in the direction of the weld is over 6 inches, 2 penetrators are required.

(3) When a gammagraph is made with the source of energy on the inside of the pipe, one penetrator is required.

(4) For assembly welds, at least 2 identification markers are required. The distance between any two adjacent identification markers shall be not more than 6 inches.

(j) (1) Where the thickness of the metal is not uniform but does not vary over the area covered by a single radiograph (6 inches maximum length) by more than 50 percent of the maximum thickness or by more than $1/2$ inch in thickness, whichever is the lesser, one penetrator shall be used which shall be located at a point of mean thickness. The penetrator shall be placed at the end of maximum angularity when there is a difference in angularity of radiation at the two ends.

(2) If the thickness of metal covered by a single radiograph varies by more than 50 percent of the maximum thickness or by more than $1/2$ inch, whichever is the lesser, suitable penetrators shall be placed at the thinnest and thickest portion of the material being radiographed.

(3) The penetrator shall be positioned so as to give the maximum sensitivity of image.

(k) Radiographic film shall be of fine grain and used with lead screens unless other type of film and screens are used in the procedure qualification. All radiographs shall be free from excessive mechanical processing defects which would interfere with the proper interpretation of the radiograph.

(l) (1) The film during exposure shall be as close to the surface of the weld as practicable. If possible this distance shall be not greater than 1 inch. Except as provided for below, under any condition the following ratio shall be at least 7 to 1:

Distance from source of radiation to weld surface toward radiation
Distance from weld surface toward radiation to film

(2) In radiographing a pipe weld or a casting by placing a radium or cobalt capsule inside the object, the penetrators may be placed on the film side of the surface provided the inspector is

satisfied that the radiographic technique followed has been proved satisfactory.

(m) Identification markers, the image of which is to appear on the film, shall be placed adjacent to the weld and their

locations accurately and permanently marked near the weld on the outer surface of the plate or pipe, so that a defect appearing on the radiograph may be accurately located on the actual weld.

(n) (1) When radiographing a circumferential pipe joint by placing a radium or cobalt capsule inside the pipe, the penetrameters may be placed on the film side of the circumferential joint provided the manufacturer satisfies the inspector that the technique followed in doing the work is known to be adequate.

Note: A suggested method for proving the adequacy of the radium or cobalt capsule method of radiography is as follows:

A preliminary radiograph should be made with a piece of pipe or casting with penetrameters on both the inside and outside. The diameter of the pipe employed in making this proof radiograph should be substantially the same as that of the job to be performed, and its wall thickness the practical equivalent of the over-all thickness of the joint to be radiographed, including both backing ring and reinforcement if these are present in the joint to be examined. The radium or cobalt capsule employed in making this proof radiograph, together with all other items of technique, such as the location of the capsule and the time of the exposure, should be the same as employed on the actual job. Each penetrometer should be provided with a marker which will show up clearly on the film and which will indicate the side of the joint on which it is located; F for the film side, and R for the radiation side.

(2) When the radium or cobalt capsule is placed on the axis of the joint and the complete circumference radiographed with a single exposure, four penetrameters uniformly spaced, shall be employed.

(o) The radiographs shall be submitted to the inspector with data as follows:

(1) The thickness of the base metal.

(2) The distance of the film from the surface of the weld.

(3) The distance of the film from the source of radiation.

(p) A complete set of radiographs for each job shall be submitted for examination to, and be retained for a period of ten years by, the Officer in Charge, Marine Inspection, in the zone where the fabrication is done.

(q) The acceptability of welds examined by radiography shall be judged by the following standards:

(1) Welds in which the radiographs show elongated slag inclusions or cavities are unacceptable if the length of any such imperfection is greater than $\frac{1}{2}T$ where T is the thickness of the thinner plate welded. If several imperfections within the above limitations exist in line, the welds shall be judged acceptable if the sum of the longest dimensions of all such imperfections is not more than T in a length of $12T$ and if the defects are separated by at least $6L$ of acceptable weld metal, where L is the length of the longest imperfection. The maximum length of acceptable inclusion for any plate thickness shall be $\frac{3}{4}$ inch. Any slag inclusion shorter than $\frac{1}{4}$ inch shall be acceptable for any plate thickness.

(2) Welds in which the radiographs show any type of crack or zones of incomplete penetration shall be unacceptable. Incomplete penetration appears as elongated darkened lines of varying

length and width in any part of the welding groove.

(3) Welds in which the radiographs show porosity shall be judged as acceptable or unacceptable by comparison with a standard set of radiographs, copies of which are on file at Coast Guard Headquarters, with the Coast Guard District Commanders, and with the Officers in Charge, Marine Inspection.

(R. S. 4405, 4417a, as amended, sec. 14, 29 Stat. 690, as amended, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 375, 391a, 366, 367, 1333, 50 U. S. C. App. 1275. Interpret or apply R. S. 4418, 4426, 4427, 4429, 4430, 4433, 4434, 4453, as amended; 46 U. S. C. 392, 404, 405, 407, 408, 409, 411, 412, 435; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 57—MAIN AND AUXILIARY MACHINERY

SUBPART 57.01—GENERAL REQUIREMENTS

Part 57 is amended by adding a new section 57.01-15 reading as follows:

§ 57.01-15 *Fuel oil for boilers.* Oil to be used as fuel to be burned under boilers on vessels subject to inspection by the Coast Guard shall have a flash point of not less than 150 degrees F. (Closed cup test.)

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4417a, 4418, 4426-4431, 4433, 4434, 4453, 4491, as amended; sec. 14, 29 Stat. 690, sec. 10, 35 Stat. 428, 41 Stat. 305, secs. 1 and 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 391a, 392, 404-409, 411, 412, 435, 489, 366, 367, 526p, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 61—INSTALLATIONS, TESTS, INSPECTIONS, MARKINGS, AND OFFICIAL FORMS

SUBPART 61.20—TESTS AND INSPECTION OF BOILERS

Section 61.20-20 (a) is amended to read as follows:

§ 61.20-20 *Boiler mountings and attachments.* (a) All valves and other boiler mountings and attachments shall be opened up and examined by the inspector after each four years of service, and such valves, boiler mountings, and attachments shall be removed from the boilers after each eight years of service for examination of the studs or bolts connecting them to the boiler and to permit examination of those parts of the valves, boiler mountings and attachments which are not susceptible to examination by simply opening up the valves. The Officer in Charge, Marine Inspection, may require the examinations prescribed by this section to be made at more frequent intervals, if in his opinion such action is necessary to be assured of the safety of the boiler.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4417a, 4418, 4426-4431, 4433, 4434, 4453, 4491, as amended; sec. 14, 29 Stat. 690, sec. 10, 35 Stat. 428, 41 Stat. 305, secs. 1 and 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 391a, 392, 404-409, 411, 412, 435, 489, 366, 367, 526p, 1333, 463a, 50 U. S. C. App.

1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter G—Marine Engineering Installations Contracted for Prior to July 1, 1935

PART 67—CONSTRUCTION

SUBPART 67.01—PROCEDURE AND GENERAL REQUIREMENTS

Section 67.01-30 (b) is amended to read as follows:

§ 67.01-30 *Repairs, replacements, or alterations.* * * *

(b) Boilers built and installed prior to July 1, 1935, may be repaired with materials and in the same manner specified in this subchapter, except that the use of cast iron valves, mountings, or attachments for repairs, replacements, or alterations on existing boilers operating at pressures exceeding 30 pounds per square inch is prohibited. Emergency repairs, replacements, or alterations shall be reported as soon as practicable to the Officer in Charge, Marine Inspection, at or nearest the first port where the vessel may call after such repairs are made.

SUBPART 67.10—SHELL JOINTS

Section 67.10-10 (c) is amended to read as follows:

§ 67.10-10 *Riveted joints.* * * *
(c) (1) To determine the pitch for iron plates and iron rivets:

$$p = \frac{d^2 \times 0.7854 \times n}{T} + d \quad (1)$$

(2) To determine the pitch for steel plates and steel rivets:

$$p = \frac{23 \times d^2 \times 0.7854 \times n}{28 \times T} + d \quad (1a)$$

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4417a, 4418, 4426-4431, 4433, 4434, 4453, 4491, as amended; sec. 14, 29 Stat. 690, sec. 10, 35 Stat. 428, 41 Stat. 305, secs. 1 and 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 391a, 392, 404-409, 411, 412, 435, 489, 366, 367, 526p, 1333, 463a 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter H—Passenger Vessels

PART 71—INSPECTION AND CERTIFICATION

SUBPART 71.20—INITIAL INSPECTION

Section 71.20-15 (a) is amended to read as follows:

§ 71.20-15 *Scope of inspections.* (a) The initial inspection, which may consist of a series of inspections during the construction of a vessel, shall include a complete inspection of the structure, machinery, and equipment, including the outside of the vessel's bottom, and the outside, and where possible the inside, of the boilers. The inspection shall be such as to insure that the arrangements, materials, and scantlings of the structure, boilers and their appurtenances, piping, main and auxiliary machinery, electrical installations, lifesaving appliances, fire detecting and extinguishing equipment, and other equipment fully comply with the applicable regulations for such vessel and are in accordance with approved plans, and that the radio installations, including fixed and port-

able radios for lifeboats, are in accordance with the requirements of the Federal Communications Commission. The inspection shall also be such as to insure that the workmanship of all parts of the vessel and its equipment is in all respects satisfactory.

SUBPART 71.25—ANNUAL INSPECTION

Section 71.25-10 (a) is amended to read as follows:

§ 71.25-10 *Scope of inspection.* (a) The annual inspection shall include an inspection of the structure, boilers, machinery, and equipment. The inspection shall be such as to insure that the vessel, as regards the structure, boilers and their appurtenances, piping, main and auxiliary machinery, electrical installations, lifesaving appliances, fire detecting and extinguishing equipment, and other equipment is in satisfactory condition and fit for the service for which it is intended, and that it complies with the applicable regulations for such vessel, and that the radio installations, including fixed and portable radios for lifeboats, are in compliance with the requirements of the Federal Communications Commission.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4418, 4421, 4423, 4426, 4428-4430, 4433, 4434, 4453, as amended, sec. 14, 29 Stat. 690, secs. 10, 11, 35 Stat. 428, 41 Stat. 305, 49 Stat. 1544, 1935, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 392, 399, 400, 404, 406-408, 411, 412, 435, 366, 395, 396, 363, 367, 660a, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 72—CONSTRUCTION AND ARRANGEMENT

SUBPART 72.40—RAILS AND GUARDS

Section 72.40-1 (a) is amended to read as follows:

§ 72.40-1 *Application.* (a) The provisions of this subpart, with the exception of § 72.40-90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to November 19, 1952, shall meet the requirements of § 72.40-90.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4490, as amended, sec. 3, 24 Stat. 129, 41 Stat. 305, sec. 5, 49 Stat. 1384, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 482, 483, 363, 369, 367, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 73—WATERTIGHT SUBDIVISION

SUBPART 73.35—WATERTIGHT BULKHEADS DOORS

Section 73.35-25 (b) is amended to read as follows:

§ 73.35-25 *Door indicators and warning signals.* * * *

(b) For Class 3 watertight doors, provision shall be made to give warning signal by electric horn or howler when the door is about to be closed; the signal shall precede the movement of the door by a safe interval.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4490, as amended, sec. 3, 24 Stat. 129, 41 Stat. 305, sec. 2, 45 Stat. 1493, sec. 2, 49 Stat. 888, sec. 5, 49 Stat. 1384, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 482, 483, 363, 85a, 88a, 369, 367, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 75—LIFESAVING EQUIPMENT

SUBPART 75.20—EQUIPMENT FOR LIFEBOATS, LIFE RAFTS, LIFE FLOATS, AND BUOYANT APPARATUS

1. Section 75.20-15 (kk) is amended to read as follows:

§ 75.20-15 *Description of equipment for lifeboats.* * * *

(kk) *Water.* (1) For each person the lifeboat is certified to carry, there shall be provided three quarts of drinking water consisting of 9 approved hermetically sealed containers per person constructed and filled in accordance with Subpart 160.026 of Subchapter Q (Specifications) of this chapter. The service life of this equipment shall be limited to 5 years from date of packing, and replacement of outdated containers shall be made at the first annual inspection of the vessel after the date of expiration.

(2) The drinking water containers shall be stowed in drinking water tanks, lockers, or other compartments providing suitable protection.

(3) This regulation shall become effective January 1, 1954, but approved drinking water containers already in use on that date may be continued in use, if otherwise in good and serviceable condition, until the first annual inspection of the vessel following 5 years from the date of packing, whereupon they shall be replaced with containers of the type specified in subparagraph (1) of this paragraph.

2. Section 75.20-25 (n) is amended to read as follows:

§ 75.20-25 *Description of equipment of life rafts.* * * *

(n) *Water.* (1) For each person the life raft is certified to carry, there shall be provided one quart of drinking water consisting of 3 approved hermetically sealed containers per person constructed and filled in accordance with Subpart 160.026 of Subchapter Q (Specifications) of this chapter. The service life of this equipment shall be limited to five years from date of packing, and replacement of outdated containers shall be made at the first annual inspection of the vessel after the date of expiration.

(2) The drinking water containers shall be stowed in compartments providing suitable protection.

(3) This regulation shall become effective January 1, 1954, but approved drinking water containers already in use on that date may be continued in use, if otherwise in good and serviceable condition, until the first annual inspection of the vessel following 5 years from the date of packing, whereupon they shall be replaced with containers of the type specified in subparagraph (1) of this paragraph.

SUBPART 75.45—LINE-THROWING APPLIANCES

Section 75.45-15 (a) (3) is amended to read as follows:

§ 75.45-15 *Equipment for line-throwing appliances.* (a) * * *

(3) Four service lines, each of a length not less than that specified in the approval of the appliance carried, of $\frac{7}{32}$ -inch to $\frac{1}{2}$ -inch diameter, of flax or manila, and having a breaking strength of at least 500 pounds, to be kept in faking boxes or on reels. These lines may be kept either in the box or case with the remainder of the equipment, or be stowed in an accessible location nearby.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4481, 4482, 4488, 4491, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 474, 475, 481, 489, 367, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 76—FIRE PROTECTION EQUIPMENT

SUBPART 76.05—FIRE DETECTING AND EXTINGUISHING EQUIPMENT, WHERE REQUIRED

Section 76.05-1 (a) is amended by changing in Table 76.05-1 (a) the requirements for "oil fired boilers" under "machinery spaces" to read as follows:

§ 76.05-1 *Fire detecting systems.* (a) * * *

TABLE 76.05-1 (a)

Space	Detecting systems	Fixed extinguishing systems
<i>Machinery spaces</i>		
Oil fired boilers: Spaces containing oil fired boilers either main or auxiliary, their fuel oil service pumps, and/or such other fuel oil units as the heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pumps, together with adjacent spaces to which oil can drain.	None required.	Carbon dioxide, foam, or water spray.

* Protection of auxiliary boilers, fuel oil units, valves, and manifolds not required on vessels contracted for prior to Nov. 19, 1952.

SUBPART 76.50—HAND PORTABLE FIRE EXTINGUISHERS AND SEMI-PORTABLE FIRE EXTINGUISHING SYSTEMS, ARRANGEMENTS, AND DETAILS

Section 76.50-15 is amended by revising paragraphs (a) and (c) to read as follows:

§ 76.50-15 *Spare charges.* (a) For all vessels other than motorboats, spare charges shall be carried for at least 50 percent of each size and each variety, i. e. foam, soda-acid, carbon dioxide, etc., of hand portable fire extinguisher required by § 76.50-10 (a). However, if the unit is of such variety that it cannot be readily recharged by the vessel's personnel, one spare unit of the same classification shall be carried in lieu of spare charges for all such units of the same size and variety.

(c) For all vessels other than motorboats, extra safety valve units shall be carried on board for at least 50 percent of all foam type hand portable fire extinguishers and semiportable fire extinguishing systems.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4470, 4471, 4477, 4479, 4483, as amended, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 463, 464, 470, 472, 476, 367, 526p, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917, 3 CFR, 1952 Supp.)

PART 77—VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT

SUBPART 77.13—RADIOTELEGRAPH AND RADIOTELEPHONE

1. The center heading title for Subpart 77.13 is amended to read as set forth above.

2. Section 77.13-1 (a) is amended to read as follows:

§ 77.13-1 *Required by Federal Communications Commission.* (a) Radiotelegraph and radiotelephone installations are required on certain vessels. Details of the application of this requirement as well as details of the installation shall be as required by the statutes and regulations under the jurisdiction of the Federal Communications Commission.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245; 46 U. S. C. 391, 392, 404, 367, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 78—OPERATIONS

SUBPART 78.13—STATION BILLS

Section 78.13-20 is amended to read as follows:

§ 78.13-20 *Manning of lifeboats and life rafts.* (a) The provisions of this section shall apply to all vessels other than motorboats and to all motorboats carrying more than 12 passengers on an international voyage with the exception that the lifeboat or life raft may be placed in the charge of a licensed motorboat operator.

(b) There shall be for each lifeboat or life raft a number of certificated lifeboatmen equal to that specified in Table 78.13-20 (b).

Table 78.13-20 (b)

Prescribed complement of lifeboat or life raft		Minimum number of lifeboatmen	
Over	Not over	Ocean service	All services other than ocean ¹
---	25	2	1
25	40	2	2
40	60	3	3
60	85	4	4
85	110	5	5
110	---	6	6

¹ Certificated lifeboatmen not required in river service.

(c) The allocation of the certificated lifeboatmen to each lifeboat shall be at the discretion of the master according to the circumstances.

(d) For ocean service, the master shall appoint a first and second in command of each lifeboat and life raft who shall be either a licensed deck officer, an able seaman, or a certificated lifeboatman. For vessels in other services, the master shall appoint a person in command of each lifeboat and life raft, and except for river service, this person shall be either a licensed deck officer or an able seaman, except that life rafts for 15 persons or less in Great Lakes and lakes, bays, and sounds service may be placed in the charge of a certificated lifeboatman. The person in charge of each lifeboat or life raft shall have a list of its crew, and shall see that the persons under his orders are acquainted with their several duties.

(e) The master shall assign to each motor-propelled lifeboat a man capable of working the motor.

(f) The master shall assign to each lifeboat carrying a wireless and searchlight a man capable of operating such equipment.

SUBPART 78.17—TESTS, DRILLS, AND INSPECTIONS

Part 78 is amended by adding new §§ 78.17-70 and 78.17-75, reading as follows:

§ 78.17-70 *Radio apparatus for lifeboats.* (a) It shall be the duty of the master to require that all batteries for all fixed and portable radio apparatus for lifeboats are brought up to full charge weekly if the batteries are of a type which require recharging.

(b) In any case, the transmitter shall be tested weekly using a suitable artificial aerial.

§ 78.17-75 *Requirements for fuel oil.* (a) It shall be the duty of the chief engineer to cause an entry in the log be made of each supply of fuel oil received on board, stating the quantity received, the name of the vendor, the name of the oil producer, and the flash point (closed cup test) for which it is certified by the producer.

(b) It shall be the further duty of the chief engineer to cause to be drawn and sealed and suitably labeled at the time the supply is received on board, a half-pint sample of each lot of fuel oil. These samples shall be preserved until the particular supply of oil is exhausted.

SUBPART 78.33—REPORTS OF ACCIDENTS, REPAIRS, AND UNSAFE EQUIPMENT

Part 78 is amended by adding a new § 78.33-20, reading as follows:

§ 78.33-20 *Breaking of safety valve seal.* (a) If at any time it is necessary to break the seal on a safety valve for any purpose, the chief engineer shall advise the Officer in Charge, Marine Inspection, at the next port of call, giving the reason for breaking the seal and requesting that the valve be examined and adjusted by an inspector.

SUBPART 78.37—LOG BOOK ENTRIES

Section 78.37-5 (a) is amended by adding a new subparagraph reading as follows:

§ 78.37-5 *Actions required to be logged.* (a) * * *

(12) Fuel oil data: Upon receipt of fuel oil on board. See § 78.17-75.

SUBPART 78.55—CARRYING OF EXCESS STEAM

Section 78.55-1 is amended to read as follows:

§ 78.55-1 *Master and chief engineer responsible.* (a) It shall be the duty of the master and the engineer in charge of the boilers of any vessel to require that a steam pressure is not carried in excess of that allowed by the certificate of inspection, and to require that the safety valves, once set and sealed by the inspector, are in no way tampered with or made inoperative except as provided in § 78.33-20.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4453, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 435, 367, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter I—Cargo and Miscellaneous Vessels

PART 91—INSPECTION AND CERTIFICATION

SUBPART 91.20—INITIAL INSPECTION

Section 91.20-15 is amended to read as follows:

§ 91.20-15 *Scope of inspection.* (a) The initial inspection, which may consist of a series of inspections during the construction of a vessel, shall include a complete inspection of the structure, machinery, and equipment, including the outside of the vessel's bottom, and the outside, and where possible the inside, of the boilers. The inspection shall be such as to insure that the arrangements, materials, and scantlings of the structure, boilers and their appurtenances, piping, main and auxiliary machinery, electrical installations, lifesaving appliances, fire detecting and extinguishing equipment, and other equipment fully comply with the applicable regulations for such vessel and are in accordance with approved plans, and that the radio installations, including fixed and portable radios for lifeboats, are in accordance with the requirements of the Federal Communications Commission. The inspection shall also be such as to insure that the workmanship of all parts of the vessel and its equipment is in all respects satisfactory.

(b) When equipment is installed which is not required by applicable regulations in this subchapter, that equipment shall be inspected and tested as required for such equipment by applicable regulations in Subchapter H (Passenger Vessels) of this chapter. For example, fire-detecting systems shall be inspected and tested as required by Subpart 71.20 of Subchapter H (Passenger Vessels) of this chapter.

SUBPART 91.25—ANNUAL INSPECTION

Section 91.25-10 is amended to read as follows:

§ 91.25-10 *Scope of inspection.* (a) The annual inspection shall include an inspection of the structure, boilers, machinery, and equipment. The inspection shall be such as to insure that the vessel, as regards the structure, boilers and their appurtenances, piping, main and auxiliary machinery, electrical installations, lifesaving appliances, fire-detecting and extinguishing equipment, and other equipment is in satisfactory condition and fit for the service for which it is intended, and that it complies with the applicable regulations for such vessel, and that the radio installations, including fixed and portable radios for lifeboats, are in compliance with the requirements of the Federal Communications Commission.

(b) When equipment is installed which is not required by applicable regulations in this subchapter, that equipment shall be inspected and tested as required for such equipment by applicable regulations in Subchapter H (Passenger Vessels) of this chapter. For example, fire-detecting systems shall be inspected and tested as required by Subpart 71.25 of Subchapter H (Passenger Vessels) of this chapter.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4399, 4400, 4417, 4418, 4421, 4423, 4426-4431, 4433, 4434, 4453, as amended, sec. 14, 29 Stat. 690, secs. 10, 11, 35 Stat. 428, 41 Stat. 305, 49 Stat. 1544, 1935, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 392, 399, 400, 404-409, 411, 412, 435, 366, 395, 396, 363, 367, 660a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 94—LIFESAVING EQUIPMENT

SUBPART 94.20—EQUIPMENT FOR LIFEBOATS AND LIFE RAFTS

1. Section 94.20-15 (ii) is amended to read as follows:

§ 94.20-15 *Description of equipment for lifeboats.* * * *

(ii) *Water.* (1) For each person the lifeboat is certified to carry, there shall be provided three quarts of drinking water consisting of 9 approved hermetically sealed containers per person constructed and filled in accordance with Subpart 160.026 of Subchapter Q (Specifications) of this chapter. The service life of this equipment shall be limited to 5 years from date of packing, and replacement of outdated containers shall be made at the first annual inspection of the vessel after the date of expiration.

(2) The drinking water containers shall be stowed in drinking water tanks, lockers, or other compartments providing suitable protection.

(3) This regulation shall become effective January 1, 1954, but approved drinking water containers already in use on that date may be continued in use, if otherwise in good and serviceable condition, until the first annual inspection of the vessel following 5 years from the date of packing, whereupon they shall be replaced with containers of the type specified in subparagraph (1) of this paragraph.

2. Section 94.20-25 (n) is amended to read as follows:

§ 94.20-25 *Description of equipment for life rafts.* * * *

(n) *Water.* (1) For each person the life raft is certified to carry, there shall be provided one quart of drinking water consisting of 3 approved hermetically sealed containers per person constructed and filled in accordance with Subpart 160.026 of Subchapter Q (Specifications) of this chapter. The service life of this equipment shall be limited to 5 years from date of packing, and replacement of outdated containers shall be made at the first annual inspection of the vessel after the date of expiration.

(2) The drinking water containers shall be stowed in compartments providing suitable protection.

(3) This regulation shall become effective January 1, 1954, but approved drinking water containers already in use on that date may be continued in use, if otherwise in good and serviceable condition, until the first annual inspection of the vessel following 5 years from the date of packing, whereupon they shall be replaced with containers of the type specified in subparagraph (1) of this paragraph.

SUBPART 94.45—LINE-THROWING APPLIANCE

Section 94.45-15 (a) (3) is amended to read as follows:

§ 94.45-15 *Equipment for line-throwing appliances.* (a) * * *

(3) Four service lines, each of a length not less than that specified in the approval of the appliance carried, of 7/32-inch to 9/32-inch diameter, of flax or manila, and having a breaking strength of at least 500 pounds, to be kept in faking boxes or on reels. These lines may be kept either in the box or case with the remainder of the equipment, or be stowed in an accessible location nearby.

SUBPART 94.90—SHIP'S DISTRESS SIGNALS

Section 94.90-5 *Vessels in ocean or coastwise service* is amended by deleting paragraph (b). (The applicable requirements are in Subpart 113.60 of Subchapter J—Electrical Engineering.)

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4481, 4482, 4483, 4491, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 5, 55 Stat. 244, 245; as amended; 46 U. S. C. 391, 392, 404, 484, 475, 481, 489, 367, 526p, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 95—FIRE PROTECTION EQUIPMENT

SUBPART 95.05—FIRE DETECTING AND EXTINGUISHING EQUIPMENT WHERE REQUIRED

Section 95.05-10 (a) (3) is amended to read as follows:

§ 95.05-10 *Fixed fire extinguishing systems.* (a) * * *

(3) On vessels of 1,000 gross tons and over, contracted for on or after November 19, 1952, or where conversion from coal to oil is contracted for on or after November 19, 1952, a fixed carbon dioxide, foam or water spray system shall be

installed in all spaces containing oil fired boilers, either main or auxiliary, their fuel oil service, pumps, and/or such fuel oil units as the heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pump.

SUBPART 95.50—HAND PORTABLE FIRE EXTINGUISHERS AND SEMI-PORTABLE FIRE EXTINGUISHING SYSTEMS, ARRANGEMENTS, AND DETAILS

Section 95.50-15 is amended by revising paragraphs (a) and (c) to read as follows:

§ 95.50-15 *Spare charges.* (a) For all vessels other than motorboats spare charges shall be carried for at least 50 percent of each size and each variety, i. e. foam, soda-acid, carbon dioxide, etc., of hand portable fire extinguisher required by § 95.50-10 (a). However, if the unit is of such variety that it cannot be readily recharged by the vessel's personnel, one spare unit of the same classification shall be carried in lieu of spare charges for all such units of the same size and variety.

(c) For all vessels other than motorboats extra safety valve units shall be carried on board for at least 50 percent of all foam type hand portable fire extinguishers and semiportable fire extinguishing systems.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4470, 4471, 4477, 4479, 4483, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 463, 464, 470, 472, 476, 367, 526p, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 96—VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT

SUBPART 96.13—RADIOTELEGRAPH AND RADIOTELEPHONE

1. The center heading title for Subpart 96.13-1 is amended to read as set forth above.

2. Section 96.13-1 (a) is amended to read as follows:

§ 96.13-1 *Required by Federal Communications Commission.* (a) Radiotelegraph and radiotelephone installations are required on certain vessels. Details of the application of this requirement as well as details of the installation shall be as required by the statutes and regulations under the jurisdiction of the Federal Communications Commission.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 5, 55 Stat. 244, 245; 46 U. S. C. 391, 392, 404, 367, 526p, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 97—OPERATIONS

SUBPART 97.13—STATION BILLS

Section 97.13-25 is amended by revising paragraphs (a) and (c) to read as follows:

§ 97.13-25 *Manning of lifeboats and life rafts.* (a) There shall be for each

lifeboat and life raft a number of certificated lifeboatmen equal to that specified in Table 97.13-25 (a).

TABLE 97.13-25 (a)

Prescribed complement of lifeboat or life raft		Minimum number of lifeboatmen	
Over	Not over	Ocean service	All services other than ocean ¹
----	25	2	1
25	40	2	2
40	60	3	3
60	85	4	4
85	110	5	5
110	----	6	6

¹ Certificated lifeboatmen not required in river service.

(c) For ocean service, the master shall appoint a first and second in command of each lifeboat and life raft who shall be either a licensed deck officer, an able seaman, or a certificated lifeboatman. For vessels in other services, the master shall appoint a person in command of each lifeboat and life raft, and except for river service, this person shall be either a licensed deck officer or an able seaman, except that life rafts for 15 persons or less in Great Lakes and lakes, bays and sounds service may be placed in the charge of a certificated lifeboatman. The person in charge of each lifeboat or life raft shall have a list of its crew, and shall see that the persons under his orders are acquainted with their several duties.

SUBPART 97.15—TESTS, DRILLS, AND INSPECTIONS

Part 97 is amended by adding new §§ 97.15-50 and 97.15-55, reading as follows:

§ 97.15-50 *Radio apparatus for lifeboats.* (a) It shall be the duty of the master to require that all batteries for all fixed and portable radio apparatus for lifeboats are brought up to full charge weekly if the batteries are of a type which require recharging.

(b) In any case, the transmitter shall be tested weekly using a suitable artificial aerial.

§ 97.15-55 *Requirements for fuel oil.* (a) It shall be the duty of the chief engineer to cause an entry in the log to be made of each supply of fuel oil received on board, stating the quantity received, the name of the vendor, the name of the oil producer, and the flash point (closed cup test) for which it is certified by the producer.

(b) It shall be the further duty of the chief engineer to cause to be drawn and sealed and suitably labeled at the time the supply is received on board, a half-pint sample of each lot of fuel oil. These samples shall be preserved until the particular supply of oil is exhausted.

SUBPART 97.30—REPORTS OF ACCIDENTS, REPAIRS, AND UNSAFE EQUIPMENT

Part 97 is amended by adding a new § 97.30-20, reading as follows:

§ 97.30-20 *Breaking of safety valve seal.* (a) If at any time it is necessary

to break the seal on a safety valve for any purpose, the chief engineer shall advise the Officer in Charge, Marine Inspection, at the next port of call, giving the reason for breaking the seal and requesting that the valve be examined and adjusted by an inspector.

SUBPART 97.35—LOG BOOK ENTRIES

Section 97.35-5 (a) is amended by adding a new subparagraph reading as follows:

§ 97.35-5 *Actions required to be logged.* (a) * * *

(8) Fuel oil data: Upon receipt of fuel oil on board. See § 97.15-55.

SUBPART 97.37—MARKING FOR FIRE AND EMERGENCY EQUIPMENT, ETC.

Section 97.37-37 (d) is amended to read as follows:

§ 97.37-37 *Lifeboats.* * * *

(d) All oars shall be conspicuously marked with the vessel's name.

SUBPART 97.45—CARRYING OF EXCESS STEAM

Section 97.45-1 (a) is amended to read as follows:

§ 97.45-1 *Master and chief engineer responsible.* (a) It shall be the duty of the master and the engineer in charge of the boilers of any vessel to require that a steam pressure is not carried in excess of that allowed by the certificate of inspection, and to require that the safety valves, once set and sealed by the inspector, are in no way tampered with or made inoperative except as provided in § 97.30-20.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4418, 4426, 4453, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 392, 404, 435, 367, 526p, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter J—Electrical Engineering

PART 112—EMERGENCY LIGHTING AND POWER SYSTEM

SUBPART 112.55—STORAGE BATTERY INSTALLATION

Section 112.55-1 (a) is corrected to read as follows:

§ 112.55-1 *General requirements.* (a) Storage batteries shall be of a design and construction proven successful in merchant marine service, and capable of withstanding the roll and pitch of a vessel and exposure to salt air. Positive plates of lead-acid batteries shall be at least 0.25 inch thick, and the specific gravity of the electrolyte when fully charged shall be 1.210 to 1.220, both inclusive, at 25 degrees C., except that thin positive plate construction (0.125 inch thick) may be used for engine cranking batteries. The fully charged specific gravity of the electrolyte of engine cranking batteries shall not exceed 1.260 at 25 degrees C. for high watering space type batteries or 1.285 at 25 degrees C. for normal watering space type batteries.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S.

4399, 4400, 4417, 4418, 4421, 4426, 4427, 4433, 4453, as amended, sec. 14, 29 Stat. 690, sec. 10, 35 Stat. 428, 41 Stat. 305, 49 Stat. 1384, 1544, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 361, 362, 391, 392, 399, 404, 405, 411, 435, 366, 395, 363, 369, 367, 463a, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter P—Manning of Vessels

PART 157—MANNING REQUIREMENTS

SUBPART 157.20—COMPUTATIONS

Section 157.20-35 is amended to read as follows:

§ 157.20-35 *Engineers.* (a) On any vessel subject to inspection, the Officer in Charge, Marine Inspection, shall determine the minimum number of engineers necessary for the safe navigation of a vessel.

(R. S. 4438, as amended, 4463, as amended; 46 U. S. C. 224, 222)

(b) The provisions of R. S. 4426, as amended (46 U. S. C. 404), require a licensed engineer on every ferryboat, canal boat, yacht, or other small craft of like character propelled by steam, except for a motorboat subject to the Act of April 25, 1940, as amended (54 Stat. 164-167; 46 U. S. C. 526-526t).

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply E. O. 10402, Oct. 30, 1952, 17 F. R. 9917; 3 CFR, 1952 Supp.)

Subchapter Q—Specifications

PART 160—LIFESAVING EQUIPMENT

1. Subpart 160.002, consisting of §§ 160.002-1 to 160.002-7, inclusive, is amended to read as follows:

SUBPART 160.002—LIFE PRESERVERS, KAPOK, ADULT AND CHILD (JACKET TYPE), MODELS 2, 3, 5 AND 6

Sec.

160.002-1 Applicable specifications and plans.
160.002-2 Types and models.
160.002-3 Materials.
160.002-4 Construction.
160.002-5 Inspections and tests.
160.002-6 Marking.
160.002-7 Procedure for approval.

AUTHORITY: §§ 160.002-1 to 160.002-7 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417a, 4426, 4481, 4482, 4488, 4491, 4492, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, secs. 6, 17, 54 Stat. 164, 166, sec. 3, 54 Stat. 346, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404, 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 160.002-1 *Applicable specifications and plans.*—(a) *Specifications.* The following specifications, of the issue in effect on the date life preservers are manufactured, form part of this subpart:

(1) *Military specifications:*

JAN-C-299—Cloth, Cotton, Print.
MIL-C-300—Cloth, Cotton, Drill (Fully shrunk).
JAN-W-530—Webbing, Cotton, Natural, or in Colors.
MIL-L-3129—Life Preservers, Jacket Type, Fibrous Glass.

MIL-T-2448—Twine, Cotton, Mattress, Polished for use in Tufting Machines.

(2) Federal specifications:

V-T-276—Thread, Cotton.

CCC-T-191—Textile Test Methods.

DDD-S-751—Stitches; Seams; and Stitching.

(3) Coast Guard Specification:

164.003—Kapok, processed.

(b) *Plans.* The following plans, of the issue in effect on the date life preservers are manufactured, form a part of this specification:

Dwg. No. F-49-6-1:

(Sheet 1) Cutting Pattern and General Arrangement (adult).

(Sheet 1A) Alternate stitching of tapes and webbing (adult and child).

(Sheet 2) Pad Detail (adult).

Dwg. No. F-49-6-5:

(Sheet 1) Cutting Pattern and General Arrangement (child).

(Sheet 2) Pad Detail (child).

(c) *Copies on file.* Copies of the specifications and plans referred to in this section shall be kept on file by the manufacturer, together with the certificate of approval. The Coast Guard specification and plans may be obtained upon request from the Commandant, United States Coast Guard, Washington 25, D. C. The Federal Specifications may be purchased from the Business Service Center, General Services Administration, Washington 25, D. C. The Military Specifications may be obtained from the Bureau of Supplies and Accounts, Department of the Navy, Washington 25, D. C.

§ 160.002-2 *Types and models.* (a) Life preservers specified by this subpart shall be of the following types:

Type A—Adult:

Model 2—Adult, 24 ounces kapok, removable pads not enclosed within vinyl film outer pad covering.

Model 3—Adult, 24 ounces kapok, removable pads enclosed within vinyl film outer pad covering.

Type B—Child:

Model 5—Child, 16 ounces kapok, removable pads enclosed within vinyl film outer pad covering.

Model 6—Child, 16 ounces kapok, removable pads not enclosed within vinyl film outer pad covering.

§ 160.002-3 *Materials.*—(a) *Kapok.* The kapok shall comply with Subpart 164.003 of this subchapter and shall be properly processed.

(b) *Envelope.* The life preserver envelope, or cover, shall be made of cotton drill. The color shall be Indian Orange, Cable No. 70072, Standard Color Card of America, Ninth Edition, issued by the Textile Color Association of the United States, Inc., 200 Madison Avenue, New York, N. Y. The drill shall be evenly dyed, and the fastness of the color to laundering, water, and light shall be rated "good" when tested in accordance with Federal Specification CCC-T-191, Methods 5610, 5630; and 5660. After dyeing, the drill shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section. The finished goods shall contain not more than 2 percent residual sizing or other non-fibrous material, shall weigh not less than 6.5 ounces per square yard, shall

have a thread count of not less than 72 in the warp and 54 in the filling, and shall have a breaking strength (grab method) of not less than 105 pounds in the warp and 70 pounds in the filling. Properly mildew-inhibited drills meeting the physical requirements of specification MIL-C-300 for Type II, Class A drill will be acceptable. If it is proposed to treat the fabric with a fire-retardant substance, full details shall be submitted to the Commandant for determination as to what samples will be needed for testing.

(c) *Tunnel strip.* The tunnel strip shall be made of cotton drill conforming to the requirements for the envelope cover.

(d) *Pad covering.* The covering for the kapok pads shall be any cotton sheeting or print cloth which possesses not less strength than unbleached cotton print cloth known commercially as 38½ inch, 64 x 56, 5.50 yards, having a minimum breaking strength of 36 pounds in the warp and 22 pounds in the filling. Cotton print cloths meeting the requirements of Type I, Class B, of specification JAN-C-299 are acceptable. The pad covering shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(e) *Outer pad covering.* The outer covering for the kapok pads of Models 3 and 5 life preservers shall be a vinyl resin film complying with the applicable requirements of Section 3 of specification MIL-L-3129, and shall have a maximum of two pinholes per square yard under a 20 percent linear elongation.

(f) *Tie tapes and drawstrings.* The tie tapes at the neck and the lower drawstring shall be made of 1¼-inch cotton tape weighing not less than 0.3 ounce per linear yard, and having a minimum breaking strength of 200 pounds. The tie tapes and drawstrings shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(g) *Body strap.* The body strap shall be made of one-inch cotton webbing having a minimum breaking strength of 400 pounds. One-inch cotton webbing meeting the requirements of specification JAN-W-530 is acceptable. The complete body strap assembly shall have a minimum breaking strength of 360 pounds. The body strap shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(h) *Dee rings and snap hook.* The Dee rings and snap hook shall be brass, bronze, or stainless steel, and of the approximate size indicated by Dwg. F-49-6-1, Sheet 1. The snap hook spring shall be phosphor bronze or other suitable corrosion-resistant material. Dee ring ends shall be welded to form a continuous ring. The webbing opening of the snap hook shall be a continuous ring.

(i) *Reinforcing tape.* The reinforcing tape shall be made of ¾-inch cotton tape weighing not less than 0.18 ounce per linear yard and having a minimum breaking strength of 120 pounds, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(j) *Thread.* The thread shall be Type IB, No. 20, 4-ply cotton thread, conform-

ing to the requirements of Federal Specification V-T-276, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(k) *Tufting twine.* The tufting twine shall be in compliance with specification MIL-T-2448, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(l) *Mildew-inhibitor.* The mildew-inhibitor shall be dihydroxydichlorodiphenylmethane, known commercially as Compound G-4, applied by the aqueous method. The amount of inhibitor deposited shall be not more than 1.50 percent and not less than 1.00 percent of the dry weight of the finished goods.

§ 160.002-4 *Construction.*—(a) *General.* This specification covers life preservers which essentially consist of a vest-cut envelope containing pockets in which are enclosed pads of buoyant material, the life preserver being fitted with tapes and webbing to provide complete reversibility, proper adjustment for close fit to the bodies of various size wearers, and proper flotation characteristics to hold the wearer in an upright backward position with head and face out of water.

(b) *Envelope.* The envelope shall be of not more than two pieces, one piece for either side, cut to the pattern shown on Dwg. No. F-49-6-1, Sheet 1, for adult size, and Dwg. No. F-49-6-5, Sheet 1, for child size, joined by seams and stitching as shown on the drawing. A drawstring tunnel shall be formed by stitching a strip of the tunnel strip material as shown by the drawing. The ends of the tunnel strip shall be tucked under the reinforcing tape stitched around the end openings so there is no direct access to the pads from the outside. Three pockets shall be formed for insertion of the kapok pads. The two front pads shall be removable from the envelope when portions of the lower longitudinal seam are opened, and the back pad shall be removable when a portion of one armhole seam is opened. The pads shall be well inserted into the pockets of the envelope, in no case more than one inch from the top seam of the pocket.

(c) *Pad inserts.* (1) The kapok pads shall be formed from two pieces of material cut to the pattern shown by Dwg. No. F-49-6-1, Sheet 2, for adult size, and Dwg. No. F-49-6-5, Sheet 2, for child size, with seams as indicated on the drawing, and filled with kapok distributed as follows:

TABLE 160.002-4 (c) (1)—DISTRIBUTION OF KAPOK IN PAD INSERTS

	Models 2 and 3 life preservers		Models 5 and 6 life preservers	
	Ounces		Ounces	
Kapok, minimum.....	24		16	
Front pad (2):				
Lower section.....	5¼		3¼	
Upper section.....	3¼		2¼	
Back pad.....	6		4	

(2) For Models 3 and 5 life preservers, the kapok pads shall be enclosed in the outer pad covering specified by § 160.002-3 (e), which shall be heat-sealed tight. The heat-sealed pad seams shall show an adhesion of not less than 8 pounds when

tested in accordance with paragraph 4.4.5 of specification MIL-L-3129, and the volume of the finished individual heat-sealed pads shall be such as to provide buoyancy as set forth in the following table when tested in accordance with the method set forth in § 160.002-5 (d), except that the period of submergence shall be only long enough to determine the displacement of the pads:

TABLE 160.002-4 (c) (2)—VOLUME DISPLACEMENT OF SEALED PADS FOR MODELS 3 AND 5 LIFE PRESERVERS

	Model 3 life preservers	Model 5 life preservers
Front pad.....	12½ lb. each ± ¼ lb.	7½ lb. each ± ½ lb.
Back pad.....	8 lb. each ± ½ lb.	5 lb. each ± ½ lb.

(d) *Tie tapes.* The tie tapes at the neck shall extend not less than 14 inches from the edge of the adult life preserver and not less than 12 inches from the edge of the child life preserver. They shall be stitched through both thicknesses of the envelope as shown by Dwg. No. F-49-6-1, Sheet 1, for adult size, and Dwg. No. F-49-6-5, Sheet 1, for child size, or by the alternate stitching shown on Sheet 1A. The free ends shall be doubled over and stitched in accordance with Section G-G of Sheet 1.

(e) *Drawstrings.* The drawstrings at the waist shall extend not less than 8 inches from the edge of the life preserver and shall be secured in the drawstring tunnel as shown by Dwg. No. F-49-6-1, Sheet 1, for adult size, and Dwg. No. F-49-6-5, Sheet 1, for child size, or by the alternate stitching shown on Sheet 1A. The free ends shall be doubled over and stitched in accordance with Section G-G of Sheet 1.

(f) *Body strap.* The body strap shall be fitted with a single Dee ring on one end with the arrangement of a snap hook and pre-threaded double Dee rings as shown on Dwg. No. F-49-6-1, Sheet 1, on the other. The body strap shall be stitched as shown on the drawings, and the edge of the single Dee ring shall be 20 inches from the center line for adult size and 15 inches for child size.

(g) *Reinforcing tape.* Binding tape shall be stitched approximately 15 inches for adult jackets and 12 inches for child jackets around the back of the neck, and also around the openings of the drawstring tunnel and around the bottom of the armholes, as indicated by the drawings.

(h) *Stitching.* All stitching shall be a short lock stitch conforming to Stitch Type 301 of Federal Specification DDD-S-751 and there shall be not less than 7, nor more than 9 stitches to the inch.

(i) *Tufting.* The pad inserts shall be tufted in the locations shown on Dwg. No. F-49-6-1, Sheet 2, for adult size, and Dwg. No. F-49-6-5, Sheet 2, for child size, except the alternate method provided by § 160.002-4 (j) may be employed for certain tufts in the case of Models 2 and 6 life preservers.

(j) *Securing pad inserts in envelope pockets.* The removable pad inserts shall be secured in the pockets of the envelopes of Models 2 and 6 life preservers, in no case more than one inch

from the top seam of the pocket, by a row of stitching, approximately 1¼ inches long near the upper edge of each pocket, which stitching shall extend through both envelope covers and the pad cover fabric. The alternate method of securing the pad inserts in the pockets of the envelopes of Models 2 and 6 life preservers, in no case more than one inch from the top seam of the pocket, shall be by extending the tufts in the upper section of the front pads, and the tuft in the back pad, through the envelope covers and the pads. The removable pad inserts, which are contained in vinyl film outer pad covering, shall not be stitched or tufted to the envelopes of Models 3 and 5 life preservers.

(k) *Workmanship.* Life preservers shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

§ 160.002-5 *Sampling, tests, and inspections.*—(a) *General.* When production is to commence on life preservers or kapok pad inserts for use in life preservers, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located in sufficient time for him to assign a Coast Guard marine inspector to the plant to observe production methods and to conduct any inspections or tests which may be deemed advisable. Manufacturers of approved life preservers shall maintain quality control of the materials used in manufacturing operations, and the finished product so as to meet the requirements of this specification. When a lot of life preservers is presented for Coast Guard inspection, it is expected that the manufacturer will previously have taken all ordinary precautions to assure himself that the life preservers are in full compliance with the requirements of this specification. The Coast Guard inspections and tests are not intended to replace, or be a substitute for, full inspections and tests by the manufacturer to maintain the quality of his product. The Coast Guard marine inspector shall be admitted to any place in the factory where work is done on the life preservers or on component materials or parts. Samples of materials entering into construction may be taken by the inspector and tests made for compliance with the applicable requirements.

(b) *Lot size and sampling.* (1) A lot shall consist of not more than 500 life preservers. A new lot shall be started with any change or modification in materials used or manufacturing methods employed. When a lot of life preservers is ready for inspection, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located, who will assign a marine inspector to the plant for the purpose of making the necessary tests and inspections. From each lot of life preservers the marine inspector shall select samples in accordance with the following table to be tested for buoyancy in accordance with paragraph (d) of this section:

TABLE 160.002-5 (b) (1)—SAMPLING FOR BUOYANCY TESTS

Lot size:	Number of life preservers in sample
100 and under.....	1
101 to 200.....	2
201 to 300.....	3
301 to 500.....	4

(2) For a lot next succeeding one from which any sample life preserver failed the buoyancy test, the sample shall consist of not less than ten specimen life preservers to be tested for buoyancy in accordance with paragraph (d) of this section.

(c) *Test facilities.* The manufacturer shall provide a suitable place and the necessary apparatus for the use of the inspector in conducting tests to determine compliance of life preservers with this specification. The apparatus shall include accurate spring scales of adequate capacity, weighted wire mesh baskets, and a test tank or tanks which can be locked or sealed in such manner as to preclude disturbance of life preservers undergoing test or change in water level.

(d) *Buoyancy test.* (1) Securely attach the accurate spring scale in a position directly over the test tank. Suspend the weighted wire basket from the scale in such a manner that the basket is weighed while it is completely under water. In order to measure the actual buoyancy provided by the life preserver, the underwater weight of the empty basket should exceed the buoyancy of the life preserver. To obtain the buoyancy of the life preserver, proceed as follows:

(i) Weigh the empty wire basket under water.

(ii) Place the life preserver inside the basket and submerge it so that the top of the basket is at least 2 inches below the surface of the water for 48 hours. The tank shall be locked or sealed during this 48 hour submergence period. It is important that after the life preserver has once been submerged it shall remain submerged for the duration of the test, and at no time during the course of the test shall it be removed from the tank or otherwise exposed to air.

(iii) After the 48 hour submergence period unlock or unseal the tank and weigh the weighted wire basket with the life preserver inside while both are still under water.

(iv) The buoyancy is computed as (i) minus (iii).

(2) A Model 2 or 6 life preserver may be tested as a unit. For a Model 3 or 5 life preserver, the pads shall be separated from the preserver. The vinyl film outer pad covering shall then be removed from the pads, and the pads placed in the wire basket and tested for buoyancy as described above.

(e) *Buoyancy required.* Models 2 and 3 adult life preservers are required to provide not less than 16½ pounds buoyancy, and Models 5 and 6 child life preservers are required to provide not less than 11 pounds buoyancy.

(f) *Lot inspection.* If the sample life preserver or preservers meet the buoy-

any requirement, the inspector shall carefully inspect individually each of the life preservers in the lot, making such examination and tests as are necessary to satisfy himself that the life preservers have been manufactured according to this specification. Non-conforming units shall be eliminated. The manufacturer shall provide a well lighted place equipped with a suitable smooth top table for use by the inspector and shall provide labor for all handling of life preservers requisite to lot inspection.

(g) *Lot acceptance.* When the inspector has satisfied himself that the life preservers in the lot are of a type officially approved in the name of the company, and that such life preservers meet the requirements of this specification, they shall be plainly marked in waterproof ink with the words, "Inspected and Passed, (Date), (Port), (Inspector's initials), USCG."

(h) *Lot rejection.* If any sample life preserver fails the buoyancy test, ten additional specimen life preservers shall be selected from the lot and tested for buoyancy. If all the ten additional specimen life preservers pass the buoyancy test, the lot shall be considered for lot inspection as set forth in paragraph (f) of this section. If any one of the ten additional specimen life preservers fails the buoyancy test, the lot shall be rejected. If, in the lot inspection, three or more non-conforming units are eliminated for the same kind of defect, lot inspection shall be discontinued until such time as the manufacturer has inspected the remainder of the lot and eliminated or corrected additional units having the same kind of defect. Non-conforming units which have been eliminated in the lot inspection may be re-submitted for inspection, provided that all defects have been corrected to the satisfaction of the inspector. When permitted by the Commander of the Coast Guard District, rejected lots may be re-worked by the manufacturer to correct the deficiency for which they were rejected and to eliminate all non-conforming units, following which the remainder of the lot may be re-submitted for official testing and inspection. Life preservers from rejected lots may not, unless subsequently accepted, be sold or offered for sale under representation as being in compliance with this specification or as being approved for use on merchant vessels or motorboats.

§ 160.002-6 *Marking*—(a) *General.* Each life preserver shall be plainly marked in waterproof ink on a front compartment in letters not less than $\frac{3}{4}$ inch in height with the word, "ADULT" or "CHILD", as the case may be, and in letters $\frac{1}{4}$ inch to $\frac{3}{8}$ inch in height with, "Model No. _____, Kapok (Manufacturer's name and address), U. S. C. G. Approval No. _____."

§ 160.002-7 *Procedure for approval*—(a) *General.* Life preservers for use on merchant vessels or motorboats are approved only by the Commandant, U. S. Coast Guard, Washington, D. C. Each model life preserver is considered separately. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of

the Coast Guard District in which the factory is located. The Commander of the Coast Guard District will detail a marine inspector to the factory to observe the production facilities and manufacturing methods and to select, from not less than ten life preservers already manufactured, not less than three life preservers for test in accordance with § 160.002-5 (d). A copy of the marine inspector's report, together with a fourth specimen life preserver and one set of pad inserts selected from those already manufactured, will be forwarded to the Commandant for examination, and if satisfactory an official approval number will be assigned to the manufacturer for the model life preserver submitted.

2. Subpart 160.003, consisting of §§ 160.003-1 to 160.003-7, inclusive, is amended to read as follows:

SUBPART 160.003—LIFE PRESERVERS, CORK (JACKET TYPE), MODELS 32 AND 36

- Sec.
160.003-1 Applicable specifications and plans.
160.003-2 Types and models.
160.003-3 Materials.
160.003-4 Construction.
160.003-5 Inspections and tests.
160.003-6 Marking.
160.003-7 Procedure for approval.

AUTHORITY: §§ 160.003-1 to 160.003-7 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417a, 4426, 4481, 4482, 4488, 4491, 4492, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, secs. 6, 17, 54 Stat. 164, 166, sec. 3, 54 Stat. 346, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 160.003-1 *Applicable specifications and plans*—(a) *Specifications.* The following specifications, of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

(1) *Military specifications:*

MIL-C-300—Cloth, Cotton, Drill (Fully Shrunken).

(2) *Federal specifications:*

C-G-496—Glue, Urea, resin-type (liquid and powder).

V-T-276—Thread; cotton.

CCC-T-191—Textile Test Methods.

DDD-S-751—Stitches; seams; and stitching.

(3) *Coast Guard specification:*

164.001—Cork, Sheet.

(b) *Plans.* The following plans of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

Dwg. No. 160.003-1 (b), Sheet 1—Life Preserver, Cork and Balsa Wood, Models 32 and 42 Cutting Pattern and General Arrangement (Adult).

Dwg. No. 160.003-1 (b), Sheet 2—Life Preserver, Cork and Balsa Wood, Models 36 and 46, Cutting Pattern and General Arrangement (Child).

(c) *Copies on file.* Copies of the specifications and plans referred to in this section shall be kept on file by the manufacturer, together with the certificate of approval. The Coast Guard specifications and plans may be obtained upon request from the Commandant, United

States Coast Guard, Washington 25, D. C. The Federal Specifications may be purchased from the Business Service Center, General Services Administration, Washington 25, D. C. The Military Specifications may be obtained from the Bureau of Supplies and Accounts, Department of the Navy, Washington 25, D. C.

§ 160.003-2 *Types and models.* (a) Life preservers specified by this subpart shall be of the following types and models:

Type A—Adult:

Model 32—Adult cork life preserver (Jacket type).

Type B—Child:

Model 36—Child cork life preserver (Jacket type).

§ 160.003-3 *Materials*—(a) *Cork.* The cork shall be of new material and shall comply with the requirements of specification Subpart 164.001 of this subchapter. Re-use of cork blocks from life preservers is permitted, but if such blocks are utilized they shall be of sound structure and shall comply with the requirements for size, forming, and quality as specified in this subpart for new blocks.

(b) *Envelope.* The life preserver envelope, or cover, shall be made of cotton drill. The color shall be Indian Orange Cable No. 70072, Standard Color Card of America, Ninth Edition, issued by the Textile Color Association of the United States, Inc., 200 Madison Ave., New York, N. Y. The drill shall be evenly dyed, and the fastness of the color to laundering, water, and light shall be rated "good" when tested in accordance with Federal Specification CCC-T-191, Methods 5610, 5630, and 5660. After dyeing, the drill shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section. The finished goods shall contain not more than 2 percent residual sizing or other non-fibrous material, shall weigh not less than 6.5 ounces per square yard, shall have a thread count of not less than 72 in the warp and 54 in the filling, and shall have a breaking strength (grab method) of not less than 105 pounds in the warp and 70 pounds in the filling. Properly mildew-inhibited drills meeting the physical requirements of specification MIL-C-300 for Type II, Class A drill will be acceptable. If it is proposed to treat the fabric with a fire-retardant substance, full details shall be submitted to the Commandant for determination as to what samples will be needed for testing.

(c) *Tie tapes and body straps.* The tie tapes at the neck and the lower body straps shall be $\frac{1}{4}$ -inch cotton tape, weighing not less than 0.3 ounce per linear yard, and having a minimum breaking strength of 200 pounds. Tie tapes and body straps shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section.

(d) *Thread.* The thread shall be heavy cotton thread, Type IIIB, designation 10/3, complying with Table IV of Federal Specification V-T-276, and shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section. Alternate threads will be given special consideration.

(e) **Reinforcing tape.** The reinforcing tape shall be $\frac{3}{4}$ -inch cotton tape weighing not less than 0.18 ounce per lineal yard and having a minimum breaking strength of 120 pounds, and shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section.

(f) **Mildew inhibitor.** The mildew-inhibitor shall be dihydroxydichlorodiphenylmethane, known commercially as Compound G-4, applied by the aqueous method. The amount of inhibitor deposited shall be not more than 1.50 percent and not less than 1 percent of the dry weight of the finished goods.

(g) **Glue.** The glue shall be a waterproof urea resin type complying with Federal Specification C-G-496.

§ 160.003-4 **Construction**—(a) **General.** This specification covers life preservers which essentially consist of a vest-cut envelope containing pockets in which are enclosed blocks of buoyant material, the life preserver being secured with tapes to provide reversibility and adjustment for fitting it to the body.

(b) **Envelope.** The envelope shall be of not more than two pieces, one piece for either side, cut to the pattern shown on Dwg. No. 160.003-1 (b), Sheet 1, for adult size, and Sheet 2, for child size; joined by seams and stitching as shown on the drawing.

(c) **Buoyant material.** The life preservers covered by this specification shall each be filled with 8 blocks of cork as specified below:

(1) **Dimensions.** The dimensions of the finished cork blocks shall be as follows, except that a tolerance of plus or minus $\frac{1}{8}$ inch in length, breadth, and thickness will be permitted:

Model 32—Adult:

4 blocks—12" x 5" x $1\frac{1}{8}$ ".

4 blocks—7" x 5" x $1\frac{1}{8}$ ".

Model 36—Child:

4 blocks—11" x $3\frac{1}{2}$ " x $1\frac{1}{8}$ ".

4 blocks—7" x $3\frac{1}{2}$ " x $1\frac{1}{8}$ ".

(2) **Forming.** The corners and edges of the blocks shall be slightly rounded or beveled. The surfaces, edges, and corners of the blocks shall be of such smoothness as will prevent undue destruction of the covering and present a smooth surface to provide a suitable backing for legible stenciling or stamping of the required marking on the cover. If blocks are of more than one piece, the joining pieces shall be milled to a fair surface and shall be fitted and secured together by waterproof glue or by dowel pins or skewers, or by a combination of waterproof glue and dowel pins or skewers. The finished blocks shall be free of protruding dowel pins or skewers.

(d) **Tie tapes and body straps.** The tie tapes at the neck and the two body straps (one body strap is located on each side of the life preserver) shall be secured by stitching through both thicknesses of the envelope as indicated on the drawings, and the free ends shall extend not less than 12 inches from the edges of the life preserver after being doubled over and stitched as shown on the drawings.

(e) **Stitching.** All machine stitching shall be short lock stitch, conforming to Stitch Type 301 of Federal Specification DDD-S-751, with not less than 7 nor

more than 9 stitches to the inch. The lower longitudinal edge of the jacket shall be turned to a roll and rope stitched will double thread, not less than $2\frac{1}{2}$ stitches to the inch, or it may be machine sewn.

(f) **Reinforcing tape.** Reinforcing tape shall be stitched approximately 18 inches for adult jackets and 14 inches for child jackets around the back of the neck.

(g) **Workmanship.** Life preservers shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

§ 160.003-5 **Sampling, tests, and inspections**—(a) **General.** When production is to commence on life preservers, or cork blocks for use in life preservers, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located in sufficient time for him to assign a Coast Guard Marine Inspector to the plant to observe production methods and to conduct any inspections or tests which may be deemed advisable. Manufacturers of approved life preservers shall maintain quality control of the materials used, manufacturing operations, and the finished product so as to meet the requirements of this specification. When a lot of life preservers is presented for Coast Guard inspection, it is expected that the manufacturer will previously have taken all ordinary precautions to assure himself that the life preservers are in full compliance with the requirements of this specification. The Coast Guard inspections and tests are not intended to replace, or be a substitute for, full inspections and tests by the manufacturer to maintain the quality of his product. The Coast Guard Marine Inspector shall be admitted to any place in the factory where work is done on the life preservers or on component materials or parts. Samples of materials entering into construction may be taken by the marine inspector and tests made for compliance with the applicable requirements.

(b) **Lot size and sampling.** (1) A lot shall consist of not more than 500 life preservers. A new lot shall be started with any change or modification in materials used or manufacturing methods employed. When a lot of life preservers is ready for inspection, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located, who will assign a marine inspector to the plant for the purpose of making the necessary tests and inspections. From each lot of life preservers the marine inspector shall select samples in accordance with the following table to be tested for buoyancy in accordance with paragraph (d) of this section:

TABLE 160.003-5 (b)—SAMPLING FOR BUOYANCY TESTS

Lot size:	Number of life preservers in sample
100 and under.....	1
101 to 200.....	2
201 to 300.....	3
301 to 500.....	4

(2) For a lot next succeeding one from which any sample life preserver failed the buoyancy test, the sample shall consist of not less than ten specimen life preservers to be tested for buoyancy in accordance with paragraph (d) of this section.

(c) **Test facilities.** The manufacturer shall provide a suitable place and necessary apparatus for the use of the inspector in conducting tests to determine compliance of life preservers with this specification. The apparatus shall include accurate spring scales of adequate capacity, weighted wire mesh baskets, and a test tank or tanks which can be locked or sealed in such manner as to preclude disturbance of life preservers undergoing test or change in water level.

(d) **Buoyancy test.** Securely attach the accurate spring scale in a position directly over the test tank. Suspend the weighted wire basket from the scale in such a manner that the basket is weighed while it is completely under water. In order to measure the actual buoyancy provided by the life preserver, the underwater weight of the empty basket should exceed the buoyancy of the life preserver. To obtain the buoyancy of the life preserver, proceed as follows:

(1) Weigh the empty wire basket under water.

(2) Place the life preserver inside the basket and submerge it so that the top of the basket is at least 2 inches below the surface of the water for 48 hours. The tank shall be locked or sealed during this 48-hour submergence period. It is important that after the life preserver has once been submerged it shall remain submerged for the duration of the test, and at no time during the course of the test shall it be removed from the tank or otherwise be exposed to air.

(3) After the 48-hour submergence period, unlock or unseal the tank and weigh the weighted wire basket with the life preserver inside while both are still under water.

(4) The buoyancy is computed as (1) minus (3).

(e) **Buoyancy required.** A Type A adult life preserver is required to provide not less than $16\frac{1}{2}$ pounds buoyancy, and a Type B child life preserver is required to provide not less than 11 pounds buoyancy.

(f) **Lot inspection.** If the sample life preserver or preservers meet the buoyancy requirement, the marine inspector shall carefully inspect individually each of the life preservers in the lot, making such examinations and tests as are necessary to satisfy himself that the life preservers have been manufactured according to this specification. Nonconforming units shall be eliminated. The manufacturer shall provide a well-lighted place equipped with a suitable smooth top table for use by the marine inspector and shall provide labor for all handling of life preservers requisite to lot inspection.

(g) **Lot acceptance.** When the marine inspector has satisfied himself that the life preservers in the lot are of a type officially approved in the name of the company, and that such life preservers meet the requirements of this specification, they shall be plainly marked in waterproof ink with the words,

"Inspected and Passed, (Date), (Port), (Inspector's initials), USCG".

(h) *Lot rejection.* If any sample life preserver fails the buoyancy test, ten additional specimen life preservers shall be selected from the lot and tested for buoyancy. If all the ten additional specimen life preservers pass the buoyancy test, the lot shall be considered for inspection as set forth in paragraph (f) of this section. If any one of the ten additional specimen life preservers fails the buoyancy test, the lot shall be rejected. If, in the lot inspection, three or more non-conforming units are eliminated for the same kind of defect, lot inspection shall be discontinued until such time as the manufacturer has inspected the remainder of the lot and eliminated or corrected additional units having the same kind of defect. Non-conforming units which have been eliminated in the lot inspection may be re-submitted for inspection: *Provided*, That all defects have been corrected to the satisfaction of the inspector. When permitted by the Commander of the Coast Guard District, rejected lots may be re-worked by the manufacturer to correct the deficiency for which they were rejected and to eliminate all non-conforming units, following which the remainder of the lot may be re-submitted for official testing and inspection. Life preservers from rejected lots may not, unless subsequently accepted, be sold or offered for sale under representation as being in compliance with this specification or as being approved for use on merchant vessels or motorboats.

§ 160.003-6 *Marking*—(a) *General.* Each life preserver shall be plainly marked in waterproof ink on a front compartment in letters not less than $\frac{3}{4}$ inch in height with the word, "ADULT" or "CHILD", as the case may be, and in letters $\frac{1}{4}$ inch to $\frac{3}{8}$ inch in height with, "Model No. ----, Cork, (Manufacturer's name and address), U. S. C. G. Approval No. ----."

§ 160.003-7 *Procedure for approval*—(a) *General.* Life preservers for use on merchant vessels and motorboats are approved only by the Commandant, U. S. Coast Guard, Washington, D. C. Each model life preserver is considered separately. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of the Coast Guard District in which the factory is located. The Commander of the Coast Guard District will detail a marine inspector to the factory to observe the production facilities and manufacturing methods and to select, from not less than ten life preservers already manufactured, not less than three life preservers for test in accordance with § 160.003-5 (d). A copy of the marine inspector's report, together with a fourth specimen life preserver selected from those already manufactured, will be forwarded to the Commandant for examination and, if satisfactory, an official approval number will be assigned to the manufacturer for the model life preserver submitted.

3. Subpart 160.004, consisting of §§ 160.004-1 to 160.004-7, inclusive, is amended to read as follows:

SUBPART 160.004—LIFE PRESERVERS, Balsa Wood (JACKET TYPE), MODELS 42 AND 46

- Sec.
160.004-1 Applicable specifications and plans.
160.004-2 Type and models.
160.004-3 Materials.
160.004-4 Construction.
160.004-5 Sampling, tests, and inspections.
160.004-6 Marking.
160.004-7 Procedure for approval.

AUTHORITY: §§ 160.004-1 to 160.004-7 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417a, 4426, 4481, 4482, 4488, 4491, 4492, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, secs. 6, 17, 54 Stat. 164, 166, sec. 3, 54 Stat. 346, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404, 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 160.004-1 *Applicable specifications and plans*—(a) *Specifications.* The following specifications, of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

(1) Military specifications:

MIL-C-300—Cloth, Cotton, Drill (Fully Shrunken).

(2) Federal specifications:

C-G-496—Glue; Urea, Resin-Type (Liquid and Powder).
V-T-276—Thread; Cotton.
CCC-T-191—Textile Test Methods.
DDD-S-751—Stitches; Seams; and Stitching.

(3) Coast Guard specification:

164.002—Balsa Wood.

(b) *Plans.* The following plans, of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

Dwg. No. 160.003-1(b): Sheet 1—Life preserver, Cork and Balsa Wood, Models 31 and 41, Cutting Pattern and General Arrangement (Adult).

Dwg. No. 160.003-1(b): Sheet 2—Life preserver, Cork and Balsa Wood, Models 35 and 45, Pattern and General Arrangement (Child).

(c) *Copies on file.* Copies of the specifications and plans referred to in this section shall be kept on file by the manufacturer, together with the certificate of approval. The Coast Guard specification and plan may be obtained upon request from the Commandant, United States Coast Guard, Washington 25, D. C. The Federal Specifications may be purchased from the Business Service Center, General Services Administration, Washington 25, D. C. The Military Specifications may be obtained from the Bureau of Supply and Accounts, Department of the Navy, Washington 25, D. C.

§ 160.004-2 *Types and models.* (a) Life preservers specified by this subpart shall be of the following types and models:

- Type A—Adult:
Model 42—Adult balsa wood life preserver (jacket type).
Type B—Child:
Model 46—Child balsa wood life preserver (jacket type).

§ 160.004-3 *Materials*—(a) *Balsa wood.* Balsa wood blocks shall be new wood complying with Subpart 164.002 of this subchapter of a density to meet the

requirements for "Density B". Re-use of balsa wood blocks from old life preservers or other devices is not permitted.

(b) *Envelope.* The life preserver envelope, or cover, shall be made of cotton drill. The color shall be Indian Orange Cable No. 70072, Standard Color Card of America, Ninth Edition, issued by the Textile Color Association of the United States, Inc., 200 Madison Ave., New York, N. Y. The drill shall be evenly dyed, and the fastness of the color to laundering, water, and light shall be rated "good" when tested in accordance with Federal Specification CCC-T-191, Methods 5610, 5630, and 5660. After dyeing, the drill shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section. The finished goods shall contain not more than 2 percent residual sizing or other non-fibrous material, shall weigh not less than 6.5 ounces per square yard, shall have a thread count of not less than 72 in the warp and 54 in the filling, and shall have a breaking strength (grab method) of not less than 105 pounds in the warp and 70 pounds in the filling. Properly mildew-inhibited drills meeting the physical requirements of specification MIL-C-300 for Type II, Class A drill will be acceptable. If it is proposed to treat the fabric with a fire-retardant substance, full details shall be submitted to the Commandant for determination as to what samples will be needed for testing.

(c) *Tie tapes and body straps.* The tie tapes at the neck and the lower body straps shall be $\frac{1}{4}$ -inch cotton tape, weighing not less than 0.3 ounce per linear yard, and having a minimum breaking strength of 200 pounds. The tapes and body straps shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section.

(d) *Thread.* The thread shall be heavy cotton thread, Type IIIB, designation 10/3, complying with Table IV of Federal Specification V-T-276, and shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section. Alternate threads will be given special consideration.

(e) *Reinforcing tape.* The reinforcing tape shall be $\frac{3}{4}$ -inch cotton tape, weighing not less than 0.18 ounce per linear yard and having a minimum breaking strength of 120 pounds, and shall be treated with a mildew-inhibitor of the type specified in paragraph (f) of this section.

(f) *Mildew-inhibitor.* The mildew-inhibitor shall be dihydroxydichlorodiphenylmethane, known commercially as Compound G-4, applied by the aqueous method. The amount of inhibitor deposited shall be not more than 1.50 percent and not less than 1.00 percent of the dry weight of the finished goods.

(g) *Glue.* The glue shall be a waterproof urea resin type complying with Federal Specification C-G-496.

(h) *Coating.* Coating for the balsa wood blocks shall be a suitable waterproofing substance, such as "Hydrotuf", "Synthetic Plasoform", "Balsa Wood Coating", or other substance of equal quality and effectiveness.

§ 160.004-4 *Construction*—(a) *General.* This specification covers life pre-

servers which essentially consist of a vest-cut envelope containing pockets in which are enclosed blocks of buoyant material, the life preserver being secured with tapes to provide reversibility and adjustment for fitting it to the body.

(b) *Envelope.* The envelope shall be of not more than two pieces, one piece for either side, cut to the pattern shown on Dwg. No. 160.003-1 (b), Sheet 1, for adult size, and Sheet 2, for child size; joined by seams and stitching as shown on the drawings.

(c) *Buoyant material.* The life preservers covered by this specification shall each be filled with 8 blocks of balsa wood as specified below:

(1) *Dimensions.* The dimensions of the finished balsa wood blocks shall be as follows, except that a tolerance of plus or minus $\frac{1}{8}$ inch in length, breadth, and thickness will be permitted:

Model 42—Adult:

4 blocks—12" x 5" x 1 $\frac{1}{8}$ ".

4 blocks—7" x 5" x 1 $\frac{1}{8}$ ".

Model 46—Child:

4 blocks—11" x 3 $\frac{1}{2}$ " x 1 $\frac{1}{8}$ ".

4 blocks—7" x 3 $\frac{1}{2}$ " x 1 $\frac{1}{8}$ ".

(2) *Forming.* The balsa wood blocks shall be of one piece or shall be cut from glued up panels made from balsa wood lumber of the same length and thickness. The blocks shall be formed so as to present minimum end grain, and the corners and edges shall be slightly rounded or beveled. The surfaces, edges, and corners of the blocks shall be of such smoothness as will prevent undue destruction of the covering and present a smooth surface to provide a suitable backing for legible stenciling or stamping of the required marking on the cover.

(3) *Coating.* The balsa wood blocks shall be given a copious coating with a waterproof coating material which is in accordance with § 160.004-3 (g) and be allowed to dry thoroughly before being inserted in the pockets of the envelope.

(d) *Tie tapes and body straps.* The tie tapes at the neck and the two body straps (One body strap is located on each side of the life preserver) shall be secured by stitching through both thicknesses of the envelope as indicated on the drawings, and the free ends shall extend not less than 12 inches from the edges of the life preserver after being doubled over and stitched as shown on the drawings.

(e) *Stitching.* All machine stitching shall be short lock stitch, conforming to Stitch Type 301 of Federal Specification DDD-S-751, with not less than 7 nor more than 9 stitches to the inch. The lower longitudinal edge of the jacket shall be turned to a roll and rope stitched with double thread, not less than 2 $\frac{1}{2}$ stitches to the inch, or it may be machine sewn.

(f) *Reinforcing tape.* Reinforcing tape shall be stitched approximately 18 inches for adult jackets and 14 inches for child jackets around the back of the neck.

(g) *Workmanship.* Life preservers shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

§ 160.004-5 *Sampling, tests and inspections—(a) General.* When produc-

tion is to commence on life preservers or balsa wood blocks for use in life preservers, the manufacturer shall notify the Officer in Charge, U. S. Coast Guard, of the inspection zone in which the factory is located in sufficient time for him to assign a Coast Guard Marine Inspector to the plant to observe production methods and to conduct any inspections or tests which may be deemed advisable. Manufacturers of approved life preservers shall maintain quality control of the materials used, manufacturing operations, and the finished product so as to meet the requirements of this specification. When a lot of life preservers is presented for Coast Guard inspection, it is expected that the manufacturer will previously have taken all ordinary precautions to assure himself that the life preservers are in full compliance with the requirements of this specification. The Coast Guard inspections and tests are not intended to replace, or be a substitute for, full inspections and tests by the manufacturer to maintain the quality of his product. The Coast Guard Marine Inspector shall be admitted to any place in the factory where work is done on the life preservers or on component materials or parts. Samples of materials entering into construction may be taken by the marine inspector and tests made for compliance with the applicable requirements.

(b) *Lot size and sampling.* (1) A lot shall consist of not more than 500 life preservers. A new lot shall be started with any change or modification in materials used or manufacturing methods employed. When a lot of life preservers is ready for inspection, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located, who will assign a marine inspector to the plant for the purpose of making the necessary tests and inspections. From each lot of life preservers the marine inspector shall select samples in accordance with the following table to be tested for buoyancy in accordance with paragraph (d) of this section:

TABLE 160.004-5 (b) (1)—SAMPLING FOR BUOYANCY TESTS

Lot size:	Number of life preservers in sample
100 and under	1
101 to 200	2
201 to 300	3
301 to 500	4

(2) For a lot next succeeding one from which any sample life preserver failed the buoyancy test, the sample shall consist of not less than ten specimen life preservers to be tested for buoyancy in accordance with paragraph (d) of this section.

(c) *Test facilities.* The manufacturer shall provide a suitable place and the necessary apparatus for the use of the marine inspector in conducting tests to determine compliance of life preservers with this specification. The apparatus shall include accurate spring scales of adequate capacity, weighted wire mesh baskets, and a test tank or tanks which can be locked or sealed in such manner as to preclude disturbance of life pre-

servers undergoing test or change in water level.

(d) *Buoyancy test.* Securely attach the accurate spring scale in a position directly over the test tank. Suspend the weighted wire basket from the scale in such a manner that the basket is weighed while it is completely under water. In order to measure the actual buoyancy provided by the life preserver, the under water weight of the empty basket should exceed the buoyancy of the life preserver. To obtain the buoyancy of the life preserver, proceed as follows:

(1) Weigh the empty wire basket under water.

(2) Place the life preserver inside the basket and submerge it so that the top of the basket is at least 2 inches below the surface of the water for 48 hours. The tank shall be locked or sealed during this 48-hour submergence period. It is important that after the life preserver has once been submerged it shall remain submerged for the duration of the test, and at no time during the course of the test shall it be removed from the tank or otherwise be exposed to air.

(3) After the 48-hour submergence period unlock or unseal the tank and weigh the weighted wire basket with the life preserver inside while both are still under water.

(4) The buoyancy is computed as (1) minus (3).

(e) *Buoyancy required.* A Type A adult life preserver is required to provide not less than 16 $\frac{1}{2}$ pounds buoyancy, and a Type B child life preserver is required to provide not less than 11 pounds buoyancy.

(f) *Lot inspection.* If the sample life preserver or preservers meet the buoyancy requirement, the Marine inspector shall carefully inspect individually each of the life preservers in the lot, making such examination and tests as are necessary to satisfy himself that the life preservers have been manufactured according to this specification. Non-conforming units shall be eliminated. The manufacturer shall provide a well lighted place equipped with a suitable smooth top table for use by the Marine inspector and shall provide labor for all handling of life preservers requisite to lot inspection.

(g) *Lot acceptance.* When the Marine inspector has satisfied himself that the life preservers in the lot are of a type officially approved in the name of the company, and that such life preservers meet the requirements of this specification, they shall be plainly marked in waterproof ink with the words, "Inspected and Passed, (Date), (Port), (Inspector's initials), USCG."

(h) *Lot rejection.* If any sample life preserver fails the buoyancy test ten additional specimen life preservers shall be selected from the lot and tested for buoyancy. If all the ten additional specimen life preservers pass the buoyancy test, the lot shall be considered for lot inspection as set forth in paragraph (f) of this section. If any one of the ten additional specimen life preservers fails the buoyancy test, the lot shall be rejected. If, in the lot inspection, three or

more non-conforming units are eliminated for the same kind of defect, lot inspection shall be discontinued until such time as the manufacturer has inspected the remainder of the lot and eliminated or corrected additional units having the same kind of defect. Non-conforming units which have been eliminated in the lot inspection may be re-submitted for inspection, provided that all defects have been corrected to the satisfaction of the marine inspector. When permitted by the Commander of the Coast Guard District, rejected lots may be re-worked by the manufacturer to correct the deficiency for which they were rejected and to eliminate all non-conforming units, following which the remainder of the lot may be re-submitted for official testing and inspection. Life preservers from rejected lots may not, unless subsequently accepted, be sold or offered for sale under representation as being in compliance with this specification or as being approved for use on merchant vessels or motorboats.

§ 160.004-6 Marking—(a) General. Each life preserver shall be plainly marked in waterproof ink on a front compartment in letters not less than $\frac{3}{4}$ inch in height with the word, "ADULT" or "CHILD", as the case may be, and in letters $\frac{1}{4}$ inch to $\frac{3}{8}$ inch in height with, "Model No. ----, Balsa Wood (Manufacturer's name and address), U. S. C. G. Approval No. ----."

§ 160.004-7 Procedure for approval—(a) General. Life preservers for use on merchant vessels and motorboats are approved only by the Commandant, U. S. Coast Guard, Washington, D. C. Each model life preserver is considered separately. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of the Coast Guard District in which the factory is located. The Commander of the Coast Guard District will detail a marine inspector to the factory to observe the production facilities and manufacturing methods and to select, from not less than ten life preservers already manufactured, not less than three life preservers for test in accordance with § 160.004-5 (d). A copy of the inspector's report, together with a fourth specimen life preserver selected from those already manufactured, will be forwarded to the Commandant for examination and, if satisfactory, an official approval number will be assigned to the manufacturer for the model life preserver submitted.

4. Subpart 160.005, consisting of §§ 160.005-1 to 160.005-7, inclusive, is amended to read as follows:

SUBPART 160.005—LIFE PRESERVERS, FIBROUS GLASS, ADULT AND CHILD (JACKET TYPE), MODELS 51, 52, 55, AND 56

Sec.
160.005-1 Applicable specifications and plans.
160.005-2 Types and models.
160.005-3 Materials.
160.005-4 Construction.
160.005-5 Inspections and tests.
160.005-6 Marking.
160.005-7 Procedure for approval.

AUTHORITY: §§ 160.005-1 to 160.005-7 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or

apply R. S. 4417a, 4426, 4481, 4482, 4488, 4491, 4492, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, secs. 6, 17, 54 Stat. 164, 166, sec. 3, 54 Stat. 346, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404, 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 160.005-1 Applicable specifications and plans—(a) Specifications. The following specifications, of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

(1) Federal specifications:

V-T-276—Thread, Cotton.
CCC-T-191—Textile Test Methods.
DDD-S-751—Stitches; Seams; and Stitching.

(2) Military specifications:

JAN-C-299—Cloth, Cotton, Print.
MIL-C-300—Cloth, Cotton Drill (Fully Shrink).
JAN-W-530—Webbing, Cotton, Natural or in Colors.
MIL-T-2448—Twine, Cotton, Mattress, Polished, for use in Tufting Machines.
MIL-G-2766—Glass, Fibrous (For Life Preservers).
MIL-L-3129—Life Preservers, Jacket Type, Fibrous Glass.

(b) Plans. The following plans, of the issue in effect on the date life preservers are manufactured, form a part of this subpart:

Dwg. No. 160.005-1:
(Sheet 1) Cutting Pattern and General Arrangement (Adult).
(Sheet 2) Alternate Stitching of Tapes and Webbing (Adult and Child).
(Sheet 3) Pad Detail (Adult).
(Sheet 4) Cutting Pattern and General Arrangement (Child).
(Sheet 5) Pad Detail (Child).

(c) Copies on file. Copies of the specifications and plans referred to in this section shall be kept on file by the manufacturer, together with the certificate of approval. The Coast Guard plans may be obtained upon request from the Commandant, United States Coast Guard, Washington 25, D. C. The Federal Specifications may be purchased from the Business Service Center, General Services Administration, Washington 25, D. C. The Military Specifications may be obtained from the Bureau of Supplies and Accounts, Department of the Navy, Washington 25, D. C.

§ 160.005-2 Types and models. (a) Life preservers specified by this subpart shall be of the following types:

Type A—Adult:
Model 51—Adult, removable pads not enclosed within vinyl film outer pad covering.
Model 52—Adult, removable pads enclosed within vinyl film outer pad covering.
Type B—Child:
Model 55—Child, removable pads not enclosed within vinyl film outer pad covering.
Model 56—Child, removable pad enclosed within vinyl film outer pad covering.

§ 160.005-3 Materials—(a) Fibrous glass. The fibrous glass shall comply with the requirements of specification MIL-G-2766.

(b) Envelope. The life preserver envelope, or cover, shall be made of cotton drill. The color shall be Indian Orange Cable No. 70072, Standard Color Card

of America, Ninth Edition, issued by the Textile Color Association of the United States, Inc., 200 Madison Ave., New York, N. Y. The drill shall be evenly dyed, and the fastness of the color to laundering, water, and light shall be rated "good" when tested in accordance with Federal Specification CCC-T-191, Methods 5610, 5630, and 5660. After dyeing, the drill shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section. The finished goods shall contain not more than 2 percent residual sizing or other non-fibrous material, shall weigh not less than 6.5 ounces per square yard, shall have a thread count of not less than 72 in the warp and 54 in the filling, and shall have a breaking strength (grab method) of not less than 105 pounds in the warp and 70 pounds in the filling. Properly mildew-inhibited drills meeting the physical requirements of specification MIL-C-300 for Type II, Class A drill will be acceptable. If it is proposed to treat the fabric with a fire-retardant substance, full details shall be submitted to the Commandant for determination as to what samples will be needed for testing.

(c) Tunnel strip. The tunnel strip shall be made of cotton drill conforming to the requirements for the envelope cover.

(d) Pad covering. The covering for the fibrous glass pads shall be any cotton sheeting or print cloth which possesses not less strength than unbleached cotton print cloth known commercially as 38½-inch, 64 x 56, 5.50 yards, having a minimum breaking strength of 36 pounds in the warp and 22 pounds in the filling. Cotton print cloths meeting the requirements of Type I, Class B, of specification JAN-C-299, are acceptable. The pad covering shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(e) Outer pad covering. The outer covering for the fibrous glass pads for Models 52 and 56 life preservers shall be a vinyl resin film complying with the applicable requirements of Section 3 of specification MIL-L-3129, and shall have a maximum of two pinholes per square yard under a 20 percent elongation.

(f) Tie tapes and drawstrings. The tie tapes at the neck and the lower drawstrings shall be made of 1¼-inch cotton tape weighing not less than 0.3 ounce per linear yard, and having a minimum breaking strength of 200 pounds. Tie tapes and drawstrings shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(g) Body strap. The body strap shall be made of one-inch cotton webbing having a minimum breaking strength of 400 pounds. One-inch cotton webbing meeting the requirements for Types IIb, III, or V, of specification JAN-W-530, are acceptable. The complete body strap assembly shall have a minimum breaking strength of 360 pounds. The body strap shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(h) Dee rings and snap hook. The dee rings and snap hook shall be brass, bronze, or stainless steel, and of the approximate size indicated by Dwg. No.

160.005-1, Sheet 1. The snap hook spring shall be phosphor bronze or other suitable corrosion-resistant material. Dee ring ends shall be welded to form a continuous ring. The webbing opening of the snap hook shall be a continuous ring.

(i) *Reinforcing tape.* The reinforcing tape shall be $\frac{3}{4}$ -inch cotton tape weighing not less than 0.18 ounce per linear yard and having a minimum breaking strength of 120 pounds, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(j) *Thread.* The thread shall be Type IB, No. 20, 4-ply cotton thread, conforming to the requirements of Federal Specification V-T-276, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(k) *Tufting twine.* The tufting twine shall be in compliance with specification MIL-T-2448, and shall be treated with a mildew-inhibitor of the type specified in paragraph (1) of this section.

(l) *Mildew-inhibitor.* The mildew-inhibitor shall be dihydroxydichlorodiphenylmethane, known commercially as Compound G-4, applied by the aqueous method. The amount of inhibitor deposited shall be not more than 1.50 percent and not less than 1.00 percent of the dry weight of the finished goods.

§ 160.005-4 Construction—(a) General. This specification covers life preservers which essentially consist of a vest-cut envelope containing pockets in which are enclosed pads of buoyant material, the life preserver being fitted with tapes and webbing to provide complete reversibility, proper adjustment for close fit to the bodies of various size wearers, and proper flotation characteristics to hold the wearer in an upright backward position with head and face out of water.

(b) *Envelope.* The envelope shall be of not more than two pieces, one piece for either side, cut to the pattern shown on Dwg. No. 160.005-1, Sheet 1, for adult size, and Dwg. No. 160.005-1, Sheet 4, for child size; joined by seams and stitching as shown on the drawing. A drawstring tunnel shall be formed by stitching a strip of the tunnel strip material as shown by the drawing. The ends of the tunnel strip shall be tucked under the reinforcing tape stitched around the end openings so there is no direct access to the pads from the outside. Three pockets shall be formed for insertion of the pads. The two front pads shall be removable from the envelope when portions of the lower longitudinal seam are opened, and the back pad shall be removable when a portion of one armhole seam is opened. The pads shall be well inserted into the pockets of the envelope, in no case more than one inch from the top seam of the pocket.

(c) *Pad inserts.* (1) The fibrous glass pads shall be formed from two pieces of material each cut to the patterns shown by Dwg. No. 160.005-1, Sheet 3, for adult size, and Sheet 5, for child size, with seams as indicated on the drawing, and filled with buoyant fibrous glass distributed as follows:

TABLE 160.005-4 (c) (1)—DISTRIBUTION OF FIBROUS GLASS IN PAD INSERTS

	Models 51 and 52 (minimum)	Models 55 and 56 (minimum)
Fibrous glass, minimum.....	Ounces 46.0	Ounces 30.0
Front pad (2):		
Lower section.....	10.0	6.5
Upper section.....	7.25	4.75
Back pad.....	11.5	6.5

(2) For Models 52 and 56 life preservers, the fibrous glass pads shall be enclosed in the outer pad covering specified by § 160.005-3 (e), which shall be heat-sealed tight. The heat-sealed pad seams shall show an adhesion of not less than 8 pounds when tested in accordance with paragraph 4.4.5 of specification MIL-L-3129, and the volume of the finished individual heat-sealed pads shall be such as to provide buoyancy as set forth in the following table when tested in accordance with the method set forth in § 160.005-5 (d), except that the period of submergence shall be only long enough to determine the displacement of the pads:

TABLE 160.005-4 (c) (2)—VOLUME DISPLACEMENT OF SEALED PADS FOR MODELS 52 AND 56 LIFE PRESERVERS

	Model 52 life preservers	Model 56 life preservers
Front pad.....	12 lb. each $\pm \frac{3}{4}$ lb.	7 $\frac{1}{2}$ lb. each $\pm \frac{1}{4}$ lb.
Back pad.....	8 lb. each $\pm \frac{1}{4}$ lb.	5 lb. each $\pm \frac{1}{4}$ lb.

(d) *Tie tapes.* The tie tapes at the neck shall extend not less than 14 inches from the edge of the adult life preserver and not less than 12 inches from the edge of the child life preserver. They shall be stitched through both thicknesses of the envelope as shown by Dwg. No. 160.005-1, Sheet 1, for adult size, and Sheet 4, for child size, or by the alternate stitching shown on Sheet 2. The free ends shall be doubled over and stitched in accordance with Section E-E of Sheet 1.

(e) *Drawstrings.* The drawstrings at the waist shall extend not less than 8 inches from the edge of the life preserver and shall be secured in the drawstring tunnel as shown by Dwg. No. 160.005-1, Sheet 1, for adult size, and Sheet 4, for child size, or by the alternate stitching shown on Sheet 2. The free ends shall be doubled over and stitched in accordance with Section E-E of Sheet 1.

(f) *Body strap.* The body strap shall be fitted with a single dee ring on one end and with the arrangement of a snap hook and prethreaded double dee rings as shown on Dwg. No. 160.005-1, Sheet 1, on the other. The body strap shall be stitched as shown on the drawings, and the edge of the single dee ring shall be 20 inches from the center line for adult size and 15 inches for child size.

(g) *Reinforcing tape.* Binding tape shall be stitched approximately 15 inches for adult life preservers and 12 inches for child life preservers around the back of the neck, and also around the openings of the drawstring tunnel and around the bottom of the arm holes as indicated by the drawings.

(h) *Stitching.* All stitching shall be a short lock stitch conforming to Stitch Type 301 of Federal Specification DDD-S-751, and there shall be not less than 7, nor more than 9 stitches to the inch.

(i) *Tufting.* The pad inserts shall be tufted in the locations shown on Dwg. No. 160.005-1, Sheet 3, for adult size, and Sheet 5, for child size, except the alternate method provided by paragraph (j) of this section may be employed for certain tufts in the case of Models 51 and 55 life preservers.

(j) *Securing pad inserts in envelope pockets.* The removable pad inserts shall be secured in the pockets of the envelopes of Models 51 and 55 life preservers, in no case more than one inch from the top seam of the pocket, by a row of stitching, approximately $1\frac{1}{4}$ inches long near the upper edge of each pocket, which stitching shall extend through both envelope covers and the pad cover fabric. The alternate method of securing the pad inserts in the pockets of the envelopes of Models 51 and 55 life preservers, in no case more than one inch from the top seam of the pocket, shall be by extending the tufts in the upper section of the front pads, and the tuft in the back pad, through the envelope covers and the pads. The removable pad inserts, which are contained in a vinyl film outer pad covering, shall not be stitched or tufted to the envelopes of Models 52 and 56 life preservers.

(k) *Workmanship.* Life preservers shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

§ 160.005-5 Sampling, tests, and inspections—(a) General. When production is to commence on life preservers or fibrous glass pad inserts for use in life preservers, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard of the inspection zone in which the factory is located in sufficient time for him to assign a Coast Guard Marine Inspector to the plant to observe production methods and to conduct any inspections or tests which may be deemed advisable. Manufacturers of approved life preservers shall maintain quality control of the materials used, manufacturing operations, and the finished product so as to meet the requirements of this specification. When a lot of life preservers is presented for Coast Guard inspection, it is expected that the manufacturer will previously have taken all ordinary precautions to assure himself that the life preservers are in full compliance with the requirements of this specification. The Coast Guard inspections and tests are not intended to replace, or be a substitute for, full inspections and tests by the manufacturer to maintain the quality of his product. The Coast Guard Marine Inspector shall be admitted to any place in the factory where work is done on the life preservers or on component materials or parts. Samples of materials entering into construction may be taken by the marine inspector and tests made for compliance with the applicable requirements.

(b) *Lot size and sampling.* (1) A lot shall consist of not more than 500 life preservers. A new lot shall be started with any change or modification in materials used or manufacturing methods employed. When a lot of life preservers is ready for inspection, the manufacturer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the factory is located, who will assign a marine inspector to the plant for the purpose of making the necessary tests and inspections. From each lot of life preservers the marine inspector shall select samples in accordance with the following table to be tested for buoyancy in accordance with paragraph (d) of this section:

TABLE 160.005 (b) (1)—SAMPLING FOR BUOYANCY TESTS

Lot size:	Number of life preservers in sample
100 and under	1
101 and 200	2
201 to 300	3
301 to 500	4

(2) For a lot next succeeding one from which any sample life preserver failed the buoyancy test, the sample shall consist of not less than ten specimen life preservers to be tested for buoyancy in accordance with paragraph (d) of this section.

(c) *Test facilities.* The manufacturer shall provide a suitable place and the necessary apparatus for the use of the inspector in conducting tests to determine compliance of life preservers with this specification. The apparatus shall include accurate spring scales of adequate capacity, weighted wire mesh baskets, and a test tank or tanks which can be locked or sealed in such manner as to preclude disturbance of life preservers undergoing test or change in water level.

(d) *Buoyancy test.* (1) Securely attach the accurate spring scale in a position directly over the test tank. Suspend the weighted wire basket from the scale in such a manner that the basket is weighed while it is completely under water. In order to measure the actual buoyancy provided by the life preserver, the underwater weight of the empty basket should exceed the buoyancy of the life preserver. To obtain the buoyancy of the life preserver, proceed as follows:

(i) Weigh the empty wire basket under water.

(ii) Place the life preserver inside the basket and submerge it so that the top of the basket is at least 2 inches below the surface of the water for 48 hours. The tank shall be locked or sealed during this 48 hour submergence period. It is important that after the life preserver has once been submerged it shall remain submerged for the duration of the test, and at no time during the course of the test shall it be removed from the tank or otherwise be exposed to air.

(iii) After the 48 hour submergence period unlock or unseal the tank and weigh the weighted wire basket with the life preserver inside while both are still under water.

(iv) The buoyancy is computed as (i) minus (iii).

(2) A Model 51 or 55 life preserver may be tested as a unit. For a Model 52 or 56 life preserver the pads shall be separated from the preserver. The vinyl film outer pad covering shall then be removed from the pads, and the pads placed in the wire basket and tested for buoyancy as described above.

(e) *Buoyancy required.* Models 51 and 52 adult life preservers are required to provide not less than 16½ pounds buoyancy, and Models 55 and 56 child life preservers are required to provide not less than 11 pounds buoyancy.

(f) *Lot inspection.* If the sample life preserver or preservers meet the buoyancy requirement, the marine inspector shall carefully inspect individually each of the life preservers in the lot, making such examination and tests as are necessary to satisfy himself that the life preservers have been manufactured according to this specification. Non-conforming units shall be eliminated. The manufacturer shall provide a well lighted place equipped with a suitable smooth top table for use by the marine inspector and shall provide labor for all handling of life preservers requisite to lot inspection.

(g) *Lot acceptance.* When the marine inspector has satisfied himself that the life preservers in the lot are of a type officially approved in the name of the company, and that such life preservers meet the requirements of this specification, they shall be plainly marked in waterproof ink with the words, "Inspected and Passed, (Date), (Port), (Inspector's initials), USCG."

(h) *Lot rejection.* If any sample life preserver fails the buoyancy test ten additional specimen life preservers shall be selected from the lot and tested for buoyancy. If all the ten additional specimen life preservers pass the buoyancy test, the lot shall be considered for lot inspection as set forth in paragraph (f) of this section. If any one of the ten additional specimen life preservers fails the buoyancy test, the lot shall be rejected. If in the lot inspection, three or more non-conforming units are eliminated for the same kind of defect, lot inspection shall be discontinued until such time as the manufacturer has inspected the remainder of the lot and eliminated or corrected additional units having the same kind of defect. Non-conforming units which have been eliminated in the lot inspection may be re-submitted for inspection, provided that all defects have been corrected to the satisfaction of the marine inspector. When permitted by the Commander of the Coast Guard District, rejected lots may be re-worked by the manufacturer to correct the deficiency for which they were rejected and to eliminate all non-conforming units, following which the remainder of the lot may be re-submitted for official testing and inspection. Life preservers from rejected lots may not, unless subsequently accepted, be sold or offered for sale under representation as being in compliance with this specification or as being approved for use on merchant vessels or motorboats.

§ 160.005-6 *Marking*—(a) *General.* Each life preserver shall be plainly marked in waterproof ink on a front

compartment in letters not less than ¾ inch in height with the word, "ADULT" or "CHILD", as the case may be, and in letters ¼ inch to ⅜ inch in height with, "Model No. ----, Fibrous Glass, (Manufacturer's name and address), U. S. C. G. Approval No. ----."

§ 160.005-7 *Procedure for approval*—

(a) *General.* Life preservers for use on merchant vessels and motorboats are approved only by the Commandant, U. S. Coast Guard, Washington, D. C. Each model life preserver is considered separately. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of the Coast Guard District in which the factory is located. The Commander of the Coast Guard District will detail a marine inspector to the factory to observe the production facilities and manufacturing methods and to select, from not less than ten life preservers already manufactured, not less than three life preservers for test in accordance with § 160.005-5 (d). A copy of the marine inspector's report, together with a fourth specimen life preserver and one set of pad inserts selected from those already manufactured, will be forwarded to the Commandant for examination and, if satisfactory, an official approval number will be assigned to the manufacturer for the model life preserver submitted.

SUBPART 160.006—LIFE PRESERVERS; REPAIRING AND CLEANING

5. The heading for Subpart 160.006 is changed from "Subpart 160.006—Life Preservers; Repairing, Re-Covering and Cleaning" to "Subpart 160.006—Life Preservers; Repairing and Cleaning."

6. Section 160.006-3 Re-covering is deleted.

(R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417a, 4426, 4481, 4482, 4488, 4491, 4492, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, secs. 6, 17, 54 Stat. 164, 166, sec. 3, 54 Stat. 346, and sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391a, 404, 474, 475, 481, 489, 490, 396, 367, 526e, 526p, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

7. Part 160 is amended by adding a new Subpart 160.026, consisting of §§ 160.026-1 to 160.026-7, inclusive, reading as follows:

SUBPART 160.026—WATER, EMERGENCY DRINKING (IN HERMETICALLY SEALED CONTAINERS), FOR MERCHANT VESSELS

Sec.
160.026-1 Applicable specifications.
160.026-2 Type.
160.026-3 Container.
160.026-4 Water.
160.026-5 Marking.
160.026-6 Sampling, inspection, and tests of production lots.
160.026-7 Procedure for approval.

AUTHORITY: §§ 160.026-1 to 160.026-7 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4417a, 4418, 4426, 4488, 4491, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended, 46 U. S. C. 391, 391a, 392, 404, 481, 489, 396, 367, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 160.026-1 *Applicable specifications*—(a) *General*. The following specifications, of the issue in effect on the date emergency drinking water is packed, form a part of this subpart:

(1) *Military specifications*:

MIL-L-7178—Lacquer; Cellulose Nitrate, Gloss for Aircraft Use.
MIL-E-15090—Enamel, Equipment, Light-Gray (Formula No. 111).
MIL-W-15117A—Water, Emergency Drinking (In Sealed Cans).

(b) *Copies on file*. Copies of the above specifications shall be kept on file by the packer, together with the approved plans and certificate of approval issued by the Coast Guard. The military specifications may be obtained from the Bureau of Supplies and Accounts, Department of the Navy, Washington 25, D. C.

§ 160.026-2 *Type*. (a) *Emergency drinking water for lifeboats and life rafts* and its hermetically sealed container shall be as specified herein, but alternate containers will be given special consideration.

§ 160.026-3 *Container*—(a) *General*. The emergency drinking water container shall be a sanitary type can, approximately 2 1/8" in diameter by 4 7/8" in height. The top and bottom of the can shall be double-seamed and compound-lined. The side seam shall be of a locked type, soldered on the outside. The can shall be made of 1.25-pound coating coke tin-plate throughout, with not less than 100-pound plate for the body and 85-pound plate for the ends.

(b) *Interior and exterior coatings*. The interior of the container shall be uncoated, except for the tin-plating required by paragraph (a) of this section. In addition to the tin-plating, the exterior surfaces of the container, including the ends, but excluding the side seam, shall be lithographed a gray enamel conforming to Type I or II, Class 2 of Specification MIL-E-15090, with the marking as provided by § 160.026-5 lithographed in black print. After filling, sealing, autoclaving, and marking, the container shall be dip-coated with one coat of clear base lacquer conforming to Specification MIL-L-7178.

(c) *Plant sanitation, sterilizing and filling*. The plant and equipment in which the water is canned shall be maintained in a clean and sanitary condition at all times, and standard aseptic procedures shall be followed throughout in filling the cans. The container shall be free from all foreign materials, and shall be filled with approximately 10 2/3 oz. of water meeting the requirements of § 160.026-4. After filling, it shall be hermetically sealed under vacuum, and after sealing, it shall be autoclaved at a temperature of not less than 250° F. for not less than 15 minutes.

§ 160.026-4 *Water*. (a) Only clear, potable water which has been suitably inhibited to protect the container against corrosion shall be used. After treatment and packing, the water shall be free from organic matter and have a

pH between 7.0 and 9.0 as determined by means of a standard pH meter using glass electrodes. The water shall be completely sterile, having a coliform bacteria count of zero, and shall not exceed the maxima in mineral salt as shown in Table 160.026-4 (a) below:

TABLE 160.026-4 (a)—MINERAL SALT CONTENT

Constituent	Parts per million (maximum)
Lead (Pb).....	0.1
Copper (Cu).....	.2
Zinc (Zn).....	5.0
Sulfate (SO ₄).....	250.0
Magnesium (Mg).....	100.0
Chlorides (Cl).....	250.0
Iron (Fe).....	.3
Residue on Evaporation.....	1,000.0
Sulfide (S).....	None

§ 160.026-5 *Marking*—(a) *General*. The month and year of packing and the lot number shall be embossed on the top of the container. The container shall also be lithographed on one side in accordance with § 160.026-3 (b) with the following:

"U. S. Coast Guard
Approval No."
(Not less than 3/32" in height)
"Contents
Approx. 10 2/3 oz."
(Not less than 3/32" in height)
"EMERGENCY
DRINKING
WATER"
(Not less than 3/8" in height)

(Name and address of packer)
(Not less than 3/8" in height)

(b) *Other marking*. In addition to any other marking placed on the smallest packing carton or box in which emergency drinking water containers are placed prior to shipment, each carton or box shall be plainly and permanently marked with the name and address of the packer, the month and year of packing, and the lot number.

§ 160.026-6 *Sampling, inspection, and tests of production lots*—(a) *General*. When packing of approved emergency drinking water for lifeboats and life rafts is to commence, the packer shall notify the Officer in Charge, Marine Inspection, U. S. Coast Guard, of the inspection zone in which the plant is located in sufficient time for him to assign a marine inspector to the plant to observe production methods, select samples from production, and conduct the inspections and tests required by this subpart.

(b) *Lots*. For purposes of sampling the production of approved emergency drinking water for lifeboats and life rafts, a lot shall consist of all cans of water to be offered for inspection at one time. Lots shall be numbered serially by the packer, and a new lot shall be started with any change or modification in materials or production methods.

(c) *Visual inspection of containers*. The marine inspector shall select at random from each lot the number of sample

filled containers indicated in Table 160.026-6 (c), which shall be examined visually for marking, exterior coating, and general compliance with the requirements of this subpart and the packer's approved drawings. If the number of defective cans exceeds the acceptance number shown in the table for the sample selected, the lot shall be rejected.

TABLE 160.026-6 (c)—SAMPLING FOR VISUAL INSPECTION OF CONTAINERS

Lot size	Number of cans in sample	Acceptance number
800 and under.....	35	0
801 to 1,300.....	50	1
1,301 to 3,200.....	75	2
3,201 to 8,000.....	110	3
8,001 and over.....	150	4

(d) *Laboratory tests of containers and water*. The marine inspector shall select at random from each lot the number of sets of 11 filled sample containers indicated in Table 160.026-6 (d1), which shall be forwarded to a recognized testing laboratory for the tests outlined in Table 160.026-6 (d2), all costs of which shall be payable by the packer. If any sample is found to be non-conforming in any of these tests, the lot shall be rejected.

TABLE 160.026-6 (d1)—SAMPLING FOR LABORATORY TESTS

Lot size	Number of sets of samples to be selected
3,200 and under.....	1 set of 11 containers each.
3,201 and over.....	2 sets of 11 containers each.

TABLE 160.026-6 (d2)—DESCRIPTION OF LABORATORY TESTS

Number of containers per set of samples to be tested	Type of test	Reference specification for test procedure to be followed
1.....	Coliform organisms.....	Sec. 4.5.2, Spec. MIL-W-15117A.
1.....	Interior corrosion.....	Sec. 4.5.1, Spec. MIL-W-15117A.
9.....	Salt content.....	Sec. 4.5.3, Spec. MIL-W-15117A.

(e) *Packer's tests for retention of vacuum*. All filled containers in the lot shall be held in storage by the packer for a period of two weeks from the date of filling. At the end of this two weeks storage period, the packer shall subject each container to slap tests as follows: Strike the end of the can against a firm but well padded surface to deaden any noise of impact other than the water slap which will occur if the required vacuum is present in the can. The water slap is distinguished by a sharp metallic click and is caused by the absence of air to cushion the impact of the water against the can. All cans found not to have the required vacuum shall be removed from the lot.

(f) *Additional tests by marine inspector*. Upon receiving a certified copy of the laboratory test report showing

satisfactory results in the tests described in paragraph (d) of this section, and notification from the packer of completion of the tests for retention of vacuum described in paragraph (e) for the lot offered for inspection, the marine inspector shall select at random from the lot the number of filled sample containers indicated in Table 160.026-6 (f). The test for retention of vacuum previously conducted by the packer shall be repeated by the inspector with the samples selected, and if any container is found not to have the required vacuum, the lot shall be rejected. If satisfactory in tests for retention of vacuum, the sample containers selected shall then be opened, and the water checked for clearness, potability and pH value. An accurately calibrated meter for use by the marine inspector in determining pH value shall be provided by the packer. If any cloudiness, discoloration, bad taste or odor, or a pH value of less than 7.0 or more than 9.0 is observed, the lot shall be rejected.

TABLE 160.026-6 (f)—SAMPLING FOR ADDITIONAL TESTS BY MARINE INSPECTOR

Lot size:	Number of cans in sample
500 and under	5
501 to 3,200	7
3,201 and over	10

(g) *Lot acceptance.* When the marine inspector has satisfied himself that the emergency drinking water in the lot is of a type officially approved in the name of the packer and meets the requirements of this subpart and the packer's approved drawings, the lot shall be accepted, and each of the smallest packing cartons or boxes in which the containers are sealed prior to shipment shall be plainly marked with the words, "Inspected and Passed (date), (port), Inspector's Initials, uscc." When permitted by the inspector, rejected lots may be resubmitted for official inspection, provided all containers in the lot have been re-worked by the packer, and all defective units removed. Emergency drinking water from rejected lots may not, unless subsequently accepted, be sold or offered for sale under representation as being in compliance with this subpart or as being approved for use on merchant vessels.

§ 160.026-7 *Procedure for approval*—(a) *General.* Emergency drinking water for lifeboats and life rafts on merchant vessels is approved only by the Commandant, U. S. Coast Guard, Washington 25, D. C. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of the Coast Guard District in which the plant is located.

(b) *Pre-approval samples and plans.* Packers who desire to pack approved emergency drinking water shall make application for approval to the Commander of the Coast Guard District who will detail a marine inspector to the factory to observe production facilities and

manufacturing methods and to select a pre-approval sample of at least 24 containers made up as for service use, together with four prints of fully-dimensioned descriptive drawings showing the construction and arrangement of the container, all materials and finishes used, marking, source of water supply, and kind and amount of corrosion inhibitor used. The Commander of the Coast Guard District will forward the sample containers and drawings to the Commandant to determine compliance with this specification and suitability of the emergency drinking water for type or brand approval for use in lifeboats and life rafts on merchant vessels.

8. Subpart 160.035, consisting of §§ 160.035-1 to 160.035-11, is amended to read as follows:

SUBPART 160.035—LIFEBOATS FOR MERCHANT VESSELS

Sec.	
160.035-1	Applicable specifications.
160.035-2	General requirements for lifeboats.
160.035-3	Construction of steel oar-propelled lifeboats.
160.035-4	Construction of steel hand-propelled lifeboats.
160.035-5	Construction of steel motor-propelled lifeboats, with and without radio cabin.
160.035-6	Construction of aluminum oar-, hand-, and motor-propelled lifeboats.
160.035-7	Construction of wood oar-, hand-, and motor-propelled lifeboats.
160.035-8	Cubic capacity of lifeboats.
160.035-9	Number of persons allowed in lifeboats.
160.035-10	Inspection and testing of lifeboats.
160.035-11	Procedure for approval of lifeboats.

AUTHORITY: §§ 160.035-1 to 160.035-11 issued under R. S. 4405, as amended 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4417a, 4418, 4426, 4481, 4482, 4488, 4491, 4492, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 391a, 392, 404, 474, 475, 481, 489, 490, 396, 367, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917, 3 CFR, 1952 Supp.

§ 160.035-1 *Applicable specifications*—(a) *Specifications.* The following specifications, of the issue in effect on the date lifeboats are manufactured, form a part of this subpart:

(1) A. S. T. M. Standard specifications:

A93—Standard Specification for Zinc Coated Iron or Steel Sheets, Class D or E.
A7—Standard Specification for Steel for Bridges and Buildings.

(2) Military specification:

MIL-P-66A—Plywood, Flat-panel.

(3) Federal Communications Commission:

Rules Governing Stations on Shipboard in the Maritime Services.

(4) United States Coast Guard specifications:

160.033—Mechanical Disengaging Apparatus (For Lifeboats).

160.034—Hand Propelling Gear (For Lifeboats).

161.006—Searchlights, Motor Lifeboat.

162.015—Flame Arresters, Back-fire (For Carburetors) For Merchant Vessels and Motorboats.

(b) *Copies on file.* Copies of the specifications and rules referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. The Coast Guard Specifications may be obtained upon request from the Commandant, United States Coast Guard Headquarters, Washington 25, D. C. The A. S. T. M. Standard Specifications may be purchased from the American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pennsylvania. The Military Specifications may be obtained from the Bureau of Supply and Accounts, Department of the Navy, Washington 25, D. C. The Federal Communications Commission's Rules and Regulations may be obtained from the Federal Communications Commission, Washington 25, D. C.

§ 160.035-2 *General requirements for lifeboats.* (a) The requirements of this subpart apply to all new construction. Lifeboats approved and in use prior to the regulations in this subpart may be continued in service if in satisfactory condition.

(b) All lifeboats must be properly constructed and shall be of such form and proportions that they shall be readily maneuverable, have ample stability in a seaway, and sufficient freeboard when fully loaded with their full complement of persons and equipment. All lifeboats must be open boats with rigid sides having internal buoyancy only.

(c) Lifeboats may be constructed of steel, aluminum, wood or other materials receiving specific approval: *Provided,* That, the weight of the fully equipped and loaded lifeboat shall not exceed 44,800 pounds.

(d) For the purpose of calculations and conducting tests, the weight of the persons shall be taken at 165 pounds each.

§ 160.035-3 *Construction of steel oar-propelled lifeboats*—(a) *Type.* Lifeboats shall have rigid sides and be fitted with internal buoyancy so arranged that the boats will float in the flooded condition when fully loaded with persons and equipment. The capacity of an oar-propelled lifeboat is limited to a maximum of 59 persons. Lifeboats designed to carry 60 or more persons shall be either hand-propelled or motor-propelled.

(b) *Specifications.* The following specifications and schedule of lifeboat material, including Table 160.035-3, shall be complied with unless other arrangements in matters of construction details, design, strength, equivalent in safety and efficiency are approved by the Commandant.

TABLE 160.035-3

Length of boat, not over (feet)	Bar keel, stem, and sternpost (inches)	Gunwales		Shell plating		Thwarts		Stanchions (inches)	Painter shackles (nominal size)	Rudder thickness (inches)
		Angle bar (inches)	Flanged flat bar (inches)	Side (USSG)	Bottom (USSG)	Number required	Distance from top of thwart to top of gunwale (inches)			
12.0	2 1/2 x 3/4	2 x 1 1/2 x 1/4	3 1/2 x 1/4	18	18	4	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1
14.0	2 1/2 x 3/4	2 x 1 1/2 x 1/4	3 1/2 x 1/4	18	18	4	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1
16.0	2 1/2 x 3/4	2 x 1 1/2 x 1/4	3 1/2 x 1/4	18	18	4	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1
18.0	2 1/2 x 3/4	2 x 2 x 1/4	4 x 1/4	18	18	4	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1
20.0	2 1/2 x 3/4	2 x 2 x 1/4	4 x 1/4	16	16	5	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1
22.0	2 1/2 x 3/4	2 x 2 x 1/4	4 x 1/4	16	14	5	9	1 1/2 x 7 1/2	1 1/2 x 3 1/2	1 1/4
24.0	3 x 3/4	2 1/2 x 2 x 1/4	4 1/2 x 1/4	16	14	5	10	1 3/4 x 9 1/2	1 3/4 x 5 1/2	1 1/4
26.0	3 x 3/4	2 1/2 x 2 x 1/4	4 1/2 x 1/4	14	13	6	10	1 3/4 x 9 1/2	1 3/4 x 5 1/2	1 1/4
28.0	3 1/2 x 3/4	2 1/2 x 2 1/2 x 1/4	5 x 1/4	13	12	6	10	1 3/4 x 9 1/2	1 3/4 x 5 1/2	1 1/4
30.0	3 1/2 x 3/4	2 1/2 x 2 1/2 x 1/4	5 x 1/4	13	12	7	11	1 3/4 x 9 1/2	1 3/4 x 5 1/2	1 1/4
32.0	4 x 3/4	2 1/2 x 2 1/2 x 1/4	5 x 1/4	13	12	7	11	1 3/4 x 11 1/2	1 3/4 x 5 1/2	1 1/4
34.0	4 x 3/4	2 1/2 x 2 1/2 x 1/4	5 x 1/4	12	12	8	11	1 3/4 x 11 1/2	1 3/4 x 5 1/2	1 1/4
36.0	4 x 1	2 1/2 x 2 1/2 x 1/4	5 x 1/4	12	12	8	11	1 3/4 x 11 1/2	1 3/4 x 5 1/2	1 1/4

NOTE: Hoisting shackles, if provided, shall have a factor of safety of six based on the lowering weight of the fully loaded lifeboat.

(c) **Material.** (1) Plating for shell, floors, air tanks, etc., shall be made by the openhearth or electric furnace process in accordance with A. S. T. M. Standard Specification A93 Class D or E. The bend tests required by these specifications shall be made after the galvanizing or other anti-corrosive treatment has been applied.

(2) Rolled or extruded shapes such as keel, stem, sternpost, gunwales, etc., and rivets shall be made by the openhearth or electric furnace process in accordance with A. S. T. M. Standard Specification A7. Consideration will be given to the use of other steels having equivalent strength where longitudinal cold forming is necessary.

(d) **Riveting.** (1) Where riveting is employed in the construction of the shell, double riveting shall be used. The centers of the rivets in the row nearest the edge of the sheet shall be not less than 3/4 inch nor more than 1/2 inch from the edge. Rivets shall be staggered with not less than 18 rivets to the foot and shall have countersunk heads. The diameter of the rivets shall be not less than that shown in the Table 160.035-3 (d) (1).

TABLE 160.035-3 (d) (1)

Plating thickness:	Rivet diameter (inch)
18 USSG	3/8
16 USSG	1/8
14 USSG	5/32
13 USSG	5/32
12 USSG	3/16

(2) Riveting of the shell plating to the keel, stem, and sternpost shall be button head rivets, staggered with not less than 12 rivets to the foot. The distance from the edge of the plate to the centers of the rivets in the nearest row shall be not less than 1/2 inch nor more than 3/4 inch. Rivets connecting the shell to the gunwale shall be spaced not more than 3 inches on centers. The size of the rivets for connecting the shell plating to the keel, stem, sternpost, and gunwale shall be 1/4-inch diameter for boats 28 feet and under, and 5/16-inch diameter for boats over 28 feet.

(3) The connection of the floors to the shell shall be by a single row of rivets not

less than 3/16 inch in diameter and spaced not more than 3 inches on centers.

(e) **Welding.** (1) Welding may be substituted for riveting in any location. It shall be performed by welders certified by the U. S. Coast Guard, American Bureau of Shipping, or U. S. Navy Department, and only approved electrodes shall be used. Details of the joints shall be indicated on the construction drawings submitted for approval.

(f) **Keel, stem and sternpost.** (1) Dimensions shall be not less than those shown in Table 160.035-3.

(2) The keel, stem, and sternpost shall be in not more than two lengths except in the case of a lifeboat of stern frame construction where three lengths may be used. The scarf shall have a length of nine times the thickness of the keel and shall be strapped and riveted. A double Vee butt weld may be used without straps.

(g) **Shell plating.** (1) The gage of the shell plating shall be not less than that shown in Table 160.035-3.

(2) Where increased thickness of bottom plating is called for by Table 160.035-3, the thicker plating shall be fitted to approximately the turn of the bilge.

(3) Doubling plates of suitable size shall be fitted on all lifeboats where the shell is liable to damage, wear, or corrosion from contact with chocks. Doublers shall be not less than the thickness of the bottom plating.

(4) All seam and butt laps shall be at least 1 1/4 inches.

(5) The laps of joints on keel, stem, and sternpost shall be at least 2 inches.

(6) All seam and butt laps, laps of plating on keel, stem, and sternpost, shall be made over felt laid in wet red lead. Other methods will be given separate consideration.

(h) **Floors.** (1) Floors shall be fitted in lifeboats 24 feet in length and over.

(2) Floors shall be of a thickness not less than that of the bottom plating and shall be at least 6 inches deep at the centerline of the lifeboat and shall be flanged 1 1/2 inches top and bottom. The

floors shall extend to approximately the turn of the bilge.

(3) The maximum floor spacing for boats 28 feet and under shall be 36 inches, and for boats over 28 feet but not exceeding 36 feet shall be 30 inches.

(4) Limber holes shall be cut in the floors and so located as to provide efficient drainage. The limber holes shall be so arranged that the load on the floors is taken by the keel as well as by the shell plating.

(i) **Gunwales.** (1) Dimensions of angular gunwales shall be not less than that shown in Table 160.035-3.

(2) The gunwales on each side of the lifeboat shall be in not more than two pieces. If the gunwales are fitted in two lengths, the joint shall be placed at approximately one-third of the length from the stem or stern of the boat and at opposite ends of the boat. The joint may be riveted or welded, and if riveted, the backing-up piece shall be angular in section of the thickness of the gunwale, and the length shall be not less than eight times the depth of the gunwale. A suitable butt weld may be used without backing-up bar.

(3) Flanged plates made from flat bars, dimensions of which shall be not less than that shown in Table 160.035-3, may be substituted for angle gunwales. The legs of the angles shall be approximately equal and the inside radius of the bend shall be not less than 1/2 inch nor more than 3/4 inch. The vertical leg shall be outside of the sheer strake.

(4) Wood gunwales when installed in metal lifeboats shall be of clear grained oak or teak. They shall be of a size as listed in the table below. When in two lengths the scarf shall be located as outlined in subparagraph (2) of this paragraph. Scarfs shall be of a good long bevel type stiffened on the under side by a piece of the same size and material as the gunwale and at least 2 feet in length. The lap of the wooden gunwale to the sheer strake shall be made over felt laid in wet red lead and the gunwale shall be secured to the sheer strake with fastenings placed on 3-inch centers.

TABLE 160.035-3 (i) (4)

Length of lifeboat	Depth of gunwale		Width of gunwale
	Inches	Inches	
12 feet and not over 18 feet	1 1/2	1 1/2	2 1/4
Over 18 and not over 20 feet	1 3/4	1 3/4	2 1/4
Over 20 and not over 22 feet	2	2	2 1/4
Over 22 and not over 24 feet	2 1/4	2 1/4	2 1/4
Over 24 and not over 26 feet	2 1/2	2 1/2	2 1/4
Over 26 and not over 28 feet	2 3/4	2 3/4	2 1/4

(j) **Nosings.** (1) The outside of the gunwale angle shall have a nosing fitted to the gunwale of hollow steel, half round, 2 inches by 1/4 inch. If a flanged plate gunwale is used, a nosing will not be required.

(2) The outside of a wooden gunwale shall have a nosing of clear grain oak or teak, secured to the sheer strake and the gunwale by fastenings spaced on 6-inch centers which fastenings may be substituted for alternate fastenings between the gunwale and sheer strake. On boats not over 20 feet long, the flat side of the nosing shall be not less than 1 1/2-inch

wide and $\frac{3}{8}$ -inch thick, on boats not over 24 feet in length it shall be not less than $1\frac{1}{8}$ -inch wide by 1-inch thick, on all boats over 24 feet in length it shall be not less than $2\frac{1}{4}$ -inch wide by 1-inch thick.

(k) *Gunwale braces.* (1) The brace shall be bent outboard at the thwart so that the bolts and nuts do not obstruct the seating space. The gunwales shall be secured to the thwarts by steel braces, bolts and rivets as follows:

TABLE 160.035-3 (k) (1)

Length of lifeboat	Brace size	Bolts and rivets
	Inches	Diameter (inch)
22 feet and under.....	3 x $\frac{3}{4}$	$\frac{5}{16}$
Over 22 feet and not over 28 ft.....	3 x $\frac{5}{16}$	$\frac{3}{8}$
Over 28 feet.....	3 x $\frac{3}{8}$	$\frac{7}{16}$

(2) The gunwale braces shall be bolted to the thwarts with at least two carriage bolts of a size not less than that noted in the table above and riveted or welded to the gunwales. Where riveted to the gunwale, at least two rivets of a size not less than that noted in the table above shall be used.

(3) Bracket type gunwale braces will be given special consideration.

(l) *Breast plates.* (1) Breast plates shall be fitted to the stem and stern post. The thickness of the breast plates shall not be less than the thickness of the leg of the gunwale and the depth of the throat of the plate shall not be less than twice the depth of the gunwale.

(2) Breast hooks for wooden gunwales shall be of the strap type, not less than $1\frac{1}{2}$ -inch wide, nor less than $\frac{1}{4}$ -inch thick. The length of each leg of the breast hook shall be not less than 5 times the width of the gunwale. The inside strap shall be continuous and the outside strap may be in two pieces provided they are through riveted to the stem or stern post. The inner and outer straps shall be through riveted or bolted to each other through the gunwale and sheer strake by not less than 3 rivets or bolts on each side.

(m) *Seats.* (1) The thwarts, side benches, and end benches shall be of fir, yellow pine, or approved equivalent.

(2) The dimensions of the thwarts shall be not less than that shown in Table 160.035-3. The mast thwart, if cut out in way of the mast, shall be suitably increased in width so that the width in way of the mast is not less than that required for other thwarts.

(3) The number of thwarts shall not be less than that set forth in Table 160.035-3.

(4) The distance from the top of the thwarts to the top of the gunwale shall be not less than that shown in Table 160.035-3.

(5) The thwart ends shall be fitted between flanges, or may be installed on top of both flanges, of a thickness not less than the bottom shell plating and secured to the thwart by two bolts in addition to the bolts through the gunwale braces. Each flange shall be riveted to the shell with rivets of the same size as used to connect the side and bottom plating and spaced not less than ten to the foot. The flanges shall extend in-

board to take the brace bolts and shall be one inch in width less than the thwart. The ends of the thwart shall be not less than $\frac{3}{8}$ inch and not more than $\frac{3}{4}$ inch from the shell.

(6) The edges of all thwarts, side, and end benches shall be well rounded.

(7) Suitable foot rests shall be furnished at a distance of between 17 inches to 20 inches below the thwarts and side benches. This may be accomplished by raising the footings from the bottom of the boat.

(8) Side and end benches shall be solid or close planked, not less than the following thicknesses:

TABLE 160.035-3 (m) (8)

Length of lifeboat	Fir or pine	Plywood ¹
	Inch	Inch
Up to 24 feet.....	$\frac{3}{4}$	$\frac{5}{8}$
24 feet to and including 36 feet.....	1	$\frac{3}{4}$

¹ Plywood, if used, shall be at least equal to Military Specification MIL-P-66A, Boat Hull Plywood, Type I or Type II.

(n) *Stretchers.* (1) Stretchers of sufficient size and strength shall be fitted in suitable positions for rowing.

(o) *Stanchions.* (1) Fir or yellow pine stanchions of a size not less than that shown in Table 160.035-3 shall be fitted in all lifeboats where the unsupported length of the thwarts exceeds 4 feet.

(p) *Footings.* (1) Fir, pine, or plywood footings, of a thickness not less than that shown in subparagraph (m) (8) of this section, shall cover the bottom of the lifeboat between the side tanks. If fir or pine footings are used, they shall be not less than $7\frac{1}{2}$ inches wide or more than $9\frac{1}{2}$ inches wide and they shall be spaced not more than 2 inches apart.

(2) The footings shall be made readily detachable and so arranged that the plugs are at all times directly accessible without removing the footings.

(q) *Disengaging apparatus.* (1) Connections for the disengaging apparatus shall have a minimum factor of safety of six.

(2) For construction and capacity of disengaging apparatus, see Subpart 160.033 of this subchapter.

(r) *Plugs.* (1) Each lifeboat shall be fitted with an automatic plug so designed and installed as to insure complete drainage at all times when the boat is out of the water. The automatic plug shall be provided with a cap attached to the lifeboat by a suitable chain.

(s) *Protection against corrosion.* (1) All steel or iron entering into the construction of lifeboats shall be galvanized by the hot dipped process. Other methods of corrosion prevention will be given special consideration.

(2) Where welded construction is employed, the material shall be galvanized after welding unless impractical to do so in which case consideration will be given to equivalent protection.

(3) Provisions shall be made to obtain a satisfactory bond between the metal and the paint.

(t) *Rudders.* (1) Each lifeboat for vessels in ocean, coastwise, and Great Lakes service shall be fitted with a rudder and tiller. The rudder shall be constructed of clear straight grained oak, properly strengthened with drifts or straps, of a thickness not less than that shown in Table 160.035-3. The thickness may be reduced $\frac{1}{8}$ inch if cheek pieces are fitted extending beyond the lower pintle connection. The rudder shall be stiffened across the bottom edge by a piece of wood of the same character or by a metal shoe. Consideration will be given to the use of hollow metal rudders provided they are designed to float. Plywood rudders will be given special consideration. The rudder shall be fitted with a $\frac{1}{2}$ -inch diameter manila lanyard of such length as to permit the rudder to be shipped without untying the lanyard.

(2) The lower attachment of the rudder to the sternpost shall be by a gudgeon and pintle. The upper attachment shall be of the triple or double gudgeon drop pin type. Where the double gudgeon type is used, the pin shall be attached to the rudder by a chain.

(3) A suitable hinged or pivoted tiller shall be provided.

(4) Rudder stops shall be provided to limit the rudder angle to approximately 45 degrees each side of the centerline.

(u) *Air tanks.* (1) There shall be supplied at least one cubic foot of air tankage for each person permitted in the boat in addition to sufficient air tankage to float the boat when filled with water and open to the sea.

(2) At least 50 percent of the air tankage shall be located along the sides of the boat and it shall be so located that the boat will be on even keel when flooded.

(3) The tops of the air tanks shall be protected by the side benches or other suitable means. The construction shall be such that water will not collect on the tops of the tanks.

(4) The cubical contents shall be stamped on the air tanks in such a location as to be visible from within the boat. The cubic capacity of the air tanks shall be determined by the formula contained in § 160.035-8 (c) except that the areas at the ends of the tanks cannot be neglected.

(5) Each air tank shall be fitted with a standard one-quarter inch pipe-size testing nipple with hexagonal cap. Cap to be of corrosion resistant material.

(6) Air tanks shall be double riveted and caulked, hook jointed and soldered, or welded so as to withstand a test pressure of one pound per square inch.

(7) *Independent air tanks.* (i) Independent air tanks shall be securely fastened in such a manner that they may be temporarily removed for inspection purposes. Fastenings shall not pierce the air tanks.

(ii) The material for the air tanks shall be of a thickness not less than that noted below:

Capacity (cubic feet):	USSG
Not over 6.....	22
Over 6, not over 15.....	20
Over 15.....	18

(8) *Built-in air tanks.* (i) A bolted inspection plate shall be provided in such a location that all portions of the tank

will be accessible for inspection and repair.

(ii) The tops and sides of all built-in air tanks shall be not less than 14 USSG, except that 16 USSG may be used at the ends if severe forming is necessary. All bulkheads of built-in air tanks shall be not less than 16 USSG.

(iii) Each compartment shall be fitted with a standard 1/4-inch pipe size test nipple and hexagonal cap so located as to be convenient for inspection purposes. In addition, a similar fitting shall be installed as near the bottom as possible for the purpose of draining water that may enter the tank.

(v) *Equipment stowage.* (1) Provision lockers, water tanks, and special equipment lockers shall be watertight and so designed and located as to fit under the side benches, end benches, or footings without projecting into the accommodation spaces of the lifeboat. In special cases, stowage under the thwarts will be permitted. Standard 1/4-inch pipe size testing nipples shall be fitted to all such lockers or tanks.

(2) Water tanks shall be constructed of at least 18 USSG material. An opening with a dogged type cover shall be provided for removal of water cans. This opening shall be at least 7" in diameter, but in any case shall be of sufficient size that all water cans can be removed. In addition, built-in water tanks shall have an opening at least 13 inches in diameter with a bolted cover for the purpose of inspection and maintenance. A 2-inch diameter fill cap shall be installed for the purpose of storing rain water. A standard 1/4-inch pipe size drainage nipple with hexagonal cap shall be fitted in the bottom of the tank in an accessible location and may be used for air testing the water tank.

(w) *Grab rails.* (1) Grab rails shall be substantially attached to each lifeboat below the turn of the bilge and shall extend approximately one-half of the length of the lifeboat on each side. The ends of the grab rails shall be faired to prevent fouling and all connections of the rails to the lifeboat shall be made by riveting the palms of the brackets to a small plate and riveting the plate to the shell. To prevent rupture of the shell if the grab rail is carried away, more rivets shall be used in attaching the plate to the shell than in fastening the bracket to the plate.

(x) *Hand rails.* (1) All lifeboats intended for use in ocean and coastwise service shall be fitted with hand rails approximately 18 inches in length, constructed and attached to the lifeboat in the same manner as the grab rails required by paragraph (w) of this section. The hand rails shall be located approximately parallel to and at both ends of the grab rails and spaced midway between the grab rail and the gunwale and midway between the grab rail and the keel on both sides of the lifeboat, provided that, when the distance from grab rail to the gunwale or to the keel exceeds 4 feet, two hand rails shall be fitted so as to provide equal spacing. In no case shall the hand rails project beyond the widest part of the boat. Recessed hand rails or other alternate arrangements will be given special consideration.

§ 160.035-4 Construction of steel hand-propelled lifeboats. (a) A hand-propelled lifeboat shall comply with all the requirements for an oar-propelled lifeboat, and in addition, shall have sufficient additional buoyancy to compensate for the weight of the hand-propelling gear.

(b) The hand-propelling gear shall be of an approved type and shall be substantially constructed and securely fitted in the lifeboat. The design shall be such that the lifeboat may be readily maneuvered from the ship's side after being launched and steering way maintained under adverse weather conditions. Provisions shall be made for going astern. The hand-propelling gear shall propel the lifeboat with only a normal amount of effort while maintaining an average speed of not less than 3 knots over a measured course of not less than 1,000 feet.

(c) The hand-propelling gear shall be so designed that it may be operated by persons untrained in its use, and shall be operable when the boat is flooded.

(d) For construction of hand-propelling gear, see Subpart 160.034 of this subchapter.

§ 160.035-5 Construction of steel motor-propelled lifeboats, with and without radio cabin—(a) General provisions applicable to all motor-propelled lifeboats.

(1) A motor-propelled lifeboat, carried as part of the lifesaving equipment of a vessel, whether required or not, shall comply with all the requirements for an oar-propelled lifeboat, and in addition, shall have sufficient additional buoyancy to compensate for the weight of the engine and other equipment.

(2) The engine shall be enclosed in a suitable engine box which shall be watertight with the exception of the top which may be weathertight. The top of the engine box shall be fitted with a screw-down mushroom vent. The engine box shall be fitted with a suitable drain.

(3) Fuel tanks shall be constructed of steel or other approved equivalent. The material for gasoline fuel tanks shall comply with A. S. T. M. Specification A93, and shall have a thickness of not less than 14 USSG. Diesel oil fuel tanks shall have a thickness of not less than 12 USSG and shall not be galvanized on the inside; however, the outside of such tanks shall be so treated as to obtain a corrosion resistance approximately equivalent to hot-dip galvanizing. Swash plates shall be fitted in tanks over 30 inches in length. Fuel tanks shall be adequately supported and securely fastened inside the lifeboat to prevent any movement. Fuel tanks shall have no openings in bottom, sides, or ends. Openings for fill, vent and feed pipes shall be on the top surface of the tanks. Fuel tanks shall be provided with a shut-off valve at the tank. Tanks shall be designed with a factor of safety of not less than 4, and shall be tested by a static head above the tank top of ten feet of water without showing leakage or permanent deformation.

(4) Propeller shafting shall be of bronze or other suitable corrosion resistant materials. Fittings, pipes, connections, etc., shall be of high standard

and good workmanship, and installed in accordance with good marine practice. The exhaust manifold shall be suitably insulated.

(5) All engines shall be permanently installed in the lifeboat and have an efficient hand starter. If starting batteries are fitted, in addition to the hand starter, they shall be installed in a lead lined box within the motor box. The battery box shall be so constructed as to retain the battery in position when the lifeboat is in a seaway. The battery box shall be one inch longer and one inch wider than the battery and shall be lined with 4 pound lead flashed up 3 inches on the sides and ends.

(6) The following tools to perform emergency repairs and ordinary servicing shall be provided:

- 1 12-oz. ball peen hammer.
- 1 screw driver with 6-inch blade.
- 1 pair of 8-inch slip joint pliers.
- 1 8-inch adjustable end wrench.

(b) *Steel motor-propelled lifeboats with radio cabin (Class A).*

(1) The engine shall be of a reliable, marine, compression-ignition type and shall be capable of propelling the fully equipped and loaded lifeboat at a sustained speed of not less than six knots through smooth water over a measured course. Provisions shall be made for going astern. Sufficient fuel for 24 hours continuous operation at six knots shall be provided. The engine shall be fitted with a marine type generator, insulated as required by A. I. E. E. rules for marine service, capable of charging the batteries used for the radio and searchlight as well as the starting battery, if fitted.

(2) The radio and source of power for the radio and the searchlight shall be housed and protected from the elements by a suitable radio cabin. The entire installation shall comply with the requirements of the Federal Communications Commission's Rules Governing Stations on Shipboard in the Maritime Services. The radio cabin shall be of a size to contain the radio and source of power for the radio and searchlight, and the operator of the equipment. The top and sides of the radio cabin shall be watertight with the exception of the door which need not be watertight but shall be at least weathertight. The installation of the radio cabin shall take into consideration the concentration of weight in this area.

(3) The searchlight shall be of an approved type constructed in accordance with specification Subpart 161.006 of this subchapter and shall be securely mounted on top of the radio cabin.

(4) The batteries shall be installed in a lead lined box securely fastened inside the radio cabin. The box shall be one inch longer and one inch wider than the battery and shall be lined with 4-pound lead flashed up 3 inches on the sides and ends.

(c) *Steel motor-propelled lifeboats without radio cabin (Class B).* (1) The engine shall be of a reliable, marine, compression-ignition or spark ignition type, capable of propelling the fully equipped and loaded lifeboat at a sustained speed of four knots through smooth water over a measured course. Provision shall be

made for going astern. Sufficient fuel for 24 hours continuous operation at four knots shall be provided. If a starting battery is supplied, the engine shall be fitted with a generator for charging the battery.

(2) All carburetors, except the down draft type, shall be fitted with an adequate drip collector covered with a flame screen. A backfire flame arrester of an approved type constructed in accordance with specification Subpart 162.015 of this subchapter shall be fitted and the air intakes shall be so directed that the backfire cannot blow down into the bilge. There shall be a strainer between the carburetor and the fuel tank.

§ 160.035-6 *Construction of aluminum oar, hand, and motor-propelled lifeboats.* (a) Lifeboats may be constructed of aluminum alloy. Special consideration of the materials, scantlings, and design will be given. In general, the strength of aluminum alloy lifeboats shall be equivalent to that of steel lifeboats the construction of which is noted in §§ 160.035-3, 160.035-4 and 160.035-5.

§ 160.035-7 *Construction of wood oar, hand, and motor-propelled lifeboats.* (a) Lifeboats may be constructed of wood or plywood. In either case, special consideration of the materials, scantlings, and design will be given. In general, the strength of wooden lifeboats shall be equivalent to that of steel lifeboats the construction of which is noted in §§ 160.035-3, 160.035-4 and 160.035-5.

§ 160.035-8 *Cubic capacity of lifeboats—(a) Definitions.* The following definitions apply to the measurement of a lifeboat to determine its cubic capacity:

(1) *Length (L).* The length is the distance in feet from the inside of the plating or planking at the stem to the corresponding position at the stern. In the case of a boat with a square stern, the after terminus is the inside of the transom.

(2) *Breadth (B).* The breadth is the distance in feet over the plating or planking at the point where the breadth of the boat is greatest.

(3) *Depth (D).* The depth is the distance in feet amidships inside the plating from the top of the keel to the level of the gunwale. The depth used for calculating purposes shall not exceed 45 percent of the breadth.

(4) *Sheer.* Lifeboats shall have a sheer at each end at least equal to 4 percent of the length, and a sheer at the quarter points of at least 1 percent of the length. If less sheer is provided, the depth used to determine the cubic capacity shall be assumed to be reduced so as to achieve this minimum sheer.

(b) *Formula.* The cubic capacity shall be determined by the following formula:

$$L \times B \times D \times 0.6$$

(c) *Owner's option.* (1) In all cases the owner or manufacturer has the right to require that the cubic capacity of the

lifeboat be determined by exact measurement as outlined in subparagraph (2) of this paragraph.

(2) To determine the cubic capacity of a lifeboat by exact measurement, the use of Stirling's (Simpson's) rule shall be employed. The capacity in cubic feet of a lifeboat, calculated by Stirling's rule, may be considered as given by the following formula:

$$\text{Capacity} = \frac{L}{12} (4A + 2B + 4C)$$

where A, B, and C denote, respectively, the areas of the cross sections at the quarter length forward, amidships, and the quarter length aft, which correspond to the three points obtained by dividing L into four equal parts. (The areas corresponding to the two ends of the boat are considered negligible.) The areas A, B, and C shall be deemed to be given in square feet by the successive application of the following formula to each of the three cross sections:

$$\text{Area} = \frac{h}{12} (a + 4b + 2c + 4d + e)$$

h being the depth in feet as determined by subparagraph (a) (3) of this section. a, b, c, d, and e, denote the horizontal breadths of the lifeboat measured in feet at the upper and lower points obtained by dividing h into four equal parts. (a and e being the breadths at the extreme points, and c the breadth at the middle point of h.) If the sheer of the gunwale measured at the two points situated at a quarter of the length of the boat from the ends exceeds 1 percent of the length of the lifeboat, the depth used in calculating the area of the cross sections A and/or C shall be deemed to be the depth amidships plus 1 percent of the length of the boat.

(d) *Hand-propelled lifeboat.* The cubic capacity of a hand-propelled lifeboat shall be determined in the same manner as an oar-propelled lifeboat.

(e) *Motor-propelled lifeboat.* The cubic capacity of a motor-propelled lifeboat shall be determined in the same manner as an oar-propelled lifeboat and then deducting from the gross volume, a volume equal to the engine box and accessories, and when carried, the radio cabin, searchlight, and their accessories. The volume of such equipment extending above the sheer line need not be deducted.

§ 160.035-9 *Number of persons allowed in lifeboats.* (a) The maximum number of persons for which the lifeboat may be rated is determined as noted in subparagraphs (1), (2), and (3) of this paragraph. The smallest number obtained is the number to be used.

(1) The number of persons permitted in the lifeboat shall not exceed $\frac{1}{10}$ the net cubic capacity as determined by § 160.035-8 (b) or at the owner's or manufacturer's option by § 160.035-8 (c).

(2) The number of persons permitted in the lifeboat shall not exceed the number for which seating space is provided as determined by drawing figures to scale of a size as noted below on an arrangement plan of the lifeboat:

Edge of seat not to extend beyond this point

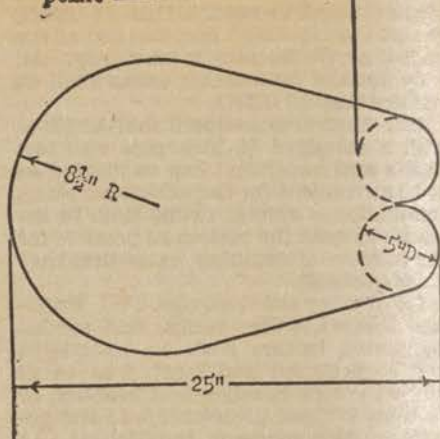


FIGURE 160.035-9 (a) (2).

(3) The number of persons permitted in the lifeboat shall not exceed the number of persons wearing life preservers which can be seated in the lifeboat without interfering with the use of the oars.

§ 160.035-10 *Inspection and testing of lifeboats.* (a) Lifeboats shall be inspected during the course of construction to determine that the arrangements and materials entering into the construction are in accordance with approved plans, and to insure that the workmanship is of good quality. All air tanks shall be tested to an air pressure of one pound per square inch and shall show no evidence of weakness.

(b) Before approval is granted to any design of lifeboat, the following tests shall be made by a marine inspector:

(1) *Strength test.* The light boat shall be suspended by shackles at the bow and stern, or by means of the releasing gear, and the length, beam, and depth shall be measured. Weights shall then be added to equal the weight of the equipment, food, water, etc., and persons for which the boat is to be approved, and the length, beam, and depth measured. Additional weight shall then be added so that the suspended load is 25 percent greater than the weight of the fully equipped and loaded lifeboat and the measurements repeated. All weights shall then be removed and the measurements rechecked. There shall be no appreciable set as a result of this test.

(2) *Flooding test.* Lifeboats shall be flooded to determine the amount of air tankage necessary to float the complete boat including releasing gear but with no equipment, provision lockers, water tanks, or fuel tanks aboard. If provision lockers, water tanks, and fuel tanks cannot be removed, they should be flooded or filled to the final waterline. Lifeboats fitted with watertight storage compartments to accommodate individual drinking water containers shall have these individual containers aboard and placed in the stowage compartments which shall be sealed watertight during the flooding test. Ballast of equivalent weight and density should be substituted

for the motor, shaft, propeller, radio, battery, searchlight, etc., if they are to be installed.

(i) *Boats with independent air tanks.* The estimated amount of air tankage to just float the boat in this condition should be fitted symmetrically aboard the lifeboat, and then the boat flooded. If the tops of the gunwales at their lowest point do not clear the surface of the water, the air tankage shall be increased as necessary. One cubic foot of air tankage for each person the lifeboat is permitted to carry shall be added to the amount thus determined to constitute the required air tankage for the lifeboat.

(ii) *Boats with built-in air tanks.* When flood testing lifeboats with built-in air tanks, weights shall be placed in the bottom of the lifeboat to counteract the buoyancy of air tankage provided for the persons to be carried. The amount of weight required per person carried shall be as follows:

Material:	Weight per person (pounds)
Iron or steel.....	72
Lead.....	69
Concrete.....	110

Other impervious material may be used if more convenient. The weight per person required is determined from the

formula $W = \frac{63d}{d-63}$ where d is the density

of material in pounds per cubic foot. (Sandbags should not be used for this purpose inasmuch as their weight under water is not readily predictable.) If the lifeboat weighted as above does not float with the gunwale at the lowest point just clear of the surface of the water, unit air tanks should be slipped beneath the thwarts until the gunwales do clear the surface of the water. The additional air tankage required shall be incorporated in the design of the lifeboat.

(3) *Seating capacity test.* The lifeboat shall be fully loaded with equipment, and in this condition the number of persons for which the lifeboat is to be approved shall be seated, in accordance with the seating plan required in § 160.035-11 (a). All persons shall wear an approved life preserver and it shall be demonstrated by actual test that there is sufficient room to row the boat without interference.

(4) *Freeboard test.* Freeboards shall be measured to the low point of the sheer with the lifeboat in light condition with neither equipment nor persons aboard, and in the loaded condition with full equipment and persons aboard.

(5) *Stability test.* Upon the conclusion of the seating test, all persons on one side of the centerline shall disembark. The remaining people on board should sit upright and not move from their original positions. (Not less than one-half the total number of persons should remain in the lifeboat.) Freeboard to the low point of sheer shall then be measured. This freeboard should, in general, be not less than 10 percent of the depth of the lifeboat.

(c) Motor-propelled lifeboats shall be subjected to the same tests as required for an oar-propelled lifeboat. In addition,

speed tests over a measured course and fuel consumption tests on a time basis shall be made to determine that the fully loaded lifeboat can maintain a speed of 6 knots for Class A motor-propelled lifeboats, and 4 knots for Class B motor-propelled lifeboats, and that there is sufficient fuel for at least 24 hours for each class of motor-propelled lifeboat at its respective speed. A 4-hour endurance trial shall be conducted with the fully loaded lifeboat at the RPM attained in the speed test in order to insure that there is no overheating, undue vibration, or other condition which would warrant the belief that the lifeboat could not maintain its proper speed for 24 hours. The time consumed in conducting the speed and fuel consumption tests may be counted toward the 4-hour endurance test. It shall be demonstrated that all engines installed in motor lifeboats can be started with the hand crank with no previous warming up period.

(d) Hand-propelled lifeboats shall be subjected to the same tests as required for an oar-propelled lifeboat. In addition, a test shall be made to assure that the lifeboat can be satisfactorily maneuvered with the hand-propelling gear. A speed of at least 3 knots shall be achieved in both light and load condition over a measured course of not less than 1,000 feet.

(e) *Testing and inspection after approval.* After the design of a lifeboat has been approved, subsequent lifeboats of the same design shall be individually inspected and tested as noted in paragraph (a) of this section. In addition, motors and hand-propelling gear when installed shall be operated in the "ahead", "neutral", and "astern" positions. If mechanical disengaging apparatus is fitted, it shall be tested by suspending the lifeboat in light condition and operating the mechanism to insure that the gear is properly installed: *Provided*, That, if in the opinion of the marine inspector, the installation is not entirely satisfactory, he may require the same test be conducted with the lifeboat fully loaded.

(f) A corrosion resistant name plate shall be affixed at the bow of each lifeboat on which is stamped the name of the manufacturer, serial number, approval number, dimensions of the lifeboat, cubic capacity, air tank capacity, the number of persons for which the lifeboat is approved, together with the inspector's initials, the date, and the letters U. S. C. G.

§ 160.035-11 *Procedure for approval of lifeboats.* (a) Before action is taken on any design of lifeboat, plans covering fully the arrangement and construction of the lifeboat, material specifications, together with a lines drawing, stowage arrangement, seating arrangement, and other details shall be submitted to the Commandant through the Commander of the Coast Guard District in which the lifeboat is built.

(b) If the drawings required in paragraph (a) of this section are satisfactory, the Commander of the Coast Guard District in which the lifeboat is to be built, shall be notified in writing when fabrication is to commence. A marine inspector

will be assigned to supervise the construction in accordance with the plans and upon completion, conduct the tests required by § 160.035-10.

(c) At the time that the tests are successfully completed, the manufacturer shall present to the marine inspector four corrected copies of the plans noted in paragraph (a) of this section, including any corrections, changes, or additions which may have been found necessary during construction or testing. If the manufacturer desires more than one set of approved plans, additional copies shall be submitted at that time.

(d) Upon receipt of corrected drawings and satisfactory test reports, the Commandant will issue a certificate of approval. No change shall be made in the design or construction without first receiving permission of the Commandant, via the Commander of the Coast Guard District in which the lifeboat is built.

SUBPART 160.040—LINE-THROWING APPLIANCE, IMPULSE-PROJECTED ROCKET TYPE (AND EQUIPMENT) FOR MERCHANT VESSELS

9. Section 160.040-4 (c) is amended by changing the first sentence to read as follows:

§ 160.040-4 *Equipment for impulse-projected rocket type line-throwing appliance.* * * *

(c) Four service lines, each $\frac{7}{32}$ -inch to $\frac{1}{2}$ -inch diameter, with not less than 500 pounds breaking strength, and in one continuous length not less than that specified in the approval of the appliance carried, without splice, knot, or other retarding or weakening features. The length of each service line will be assigned in the approval of the appliance as a round number approximately one-third in excess of the average distance the line is carried in the tests required by § 160.040-7 (c). * * *

(R. S. 4405, as amended, 4462, as amended, 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4417a, 4418, 4426, 4481, 4488, 4491, as amended, sec. 11, 35 Stat. 428, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 391a, 392, 404, 474, 481, 489, 396, 367, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.)

PART 162—ENGINEERING EQUIPMENT

Part 162 is amended by adding a new Subpart 162.027 reading as follows:

SUBPART 162.027—NOZZLES, FIRE HOSE, COMBINATION SOLID STREAM AND WATER SPRAY (1½-INCH AND 2½-INCH) FOR MERCHANT VESSELS

- Sec.
162.027-1 Applicable specifications.
162.027-2 Type and size.
162.027-3 Materials, construction, workmanship, and performance requirements.
162.027-4 Inspections and tests.
162.027-5 Marking.
162.027-6 Procedure for approval.

AUTHORITY: §§ 162.027-1 to 162.027-6 issued under R. S. 4405, as amended, 4462, as amended; 46 U. S. C. 375, 416. Interpret or apply R. S. 4417, 4417a, 4418, 4426, 4471, as amended, secs. 1, 2, 49 Stat. 1544, sec. 17, 54 Stat. 166, sec. 3, 54 Stat. 1333, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 391a, 392, 404, 471,

489, 396, 367, 526p, 463a, 1333, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917; 3 CFR, 1952 Supp.

§ 162.027-1 Applicable specifications.

(a) The following specifications, of the issue in effect on the date combination solid stream and water spray fire hose nozzles are manufactured, form a part of this subpart:

(1) Military specification:

MIL-B-16444, Bronze, Hydraulic (ounce metal); castings.

(2) Federal specification:

WW-C-621, Couplings; hose, cotton (rubber lined) and linen (unlined).

(b) *Copies on file.* Copies of the specifications referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. The Military Specification may be obtained from the Bureau of Supplies and Accounts, Department of the Navy, Washington 25, D. C. The Federal Specification may be purchased from the Business Service Center, General Services Administration, Washington 25, D. C.

§ 162.027-2 *Type and size*—(a) *Type.* Combination solid stream and water spray fire hose nozzles specified by this subpart shall consist essentially of a fire hose nozzle body with two discharge outlets, a valve for shut off and directing the flow of water to either outlet, a high-velocity water spray tip, and an applicator with a low-velocity water spray head. One discharge outlet shall be a straight stream orifice, and the other outlet shall be designed to accommodate either the high-velocity tip or the applicator with the low-velocity head, both of which must be capable of being removed or inserted readily without the use of tools. Combination nozzles shall be designed with a self-cleaning strainer in the body; or may omit the strainer if both the high-velocity spray tip and the low-velocity spray head are designed to pass material up to the size of a $\frac{3}{8}$ -inch diameter ball for the $1\frac{1}{2}$ -inch size, and up to a $\frac{1}{2}$ -inch diameter ball for the $2\frac{1}{2}$ -inch size. Nozzles permitting adjustment to obtain a range of spray patterns will not be considered as meeting the requirements of this subpart.

(b) *Size.* Combination solid stream and water spray fire hose nozzles shall be of two sizes: one for use on $1\frac{1}{2}$ -inch hose, and the other for use on $2\frac{1}{2}$ -inch hose.

§ 162.027-3 *Materials, construction, workmanship, and performance requirements*—(a) *Materials.* The materials shall comply with the requirements outlined in this paragraph. Alternate materials which meet the performance requirements of this subpart will be given special consideration.

(1) *Materials, general.* All materials used in the construction of combination solid stream and water spray fire hose nozzles shall be of good quality, suitable for the purpose intended, and shall conform to the requirements of this subpart. The use of dissimilar metal in combination shall be avoided if possible but, when such contacts are necessary,

provisions shall be made to prevent effects such as galvanic corrosion, freezing of moving parts, and loosening or tightening of joints due to differences in thermal expansion coefficients. Castings shall be free from blow holes, porosity, shrinkage defects, cracks, or other injurious defects.

(2) *Materials, specific.* The nozzle body, valve, valve control handle or lever, high-velocity tip, and low-velocity head shall be bronze, complying with Military Specification MIL-B-16444. Other component parts such as applicator tubes, valve seats, springs, gaskets, etc., shall not be limited with regard to materials except for the requirements of subparagraph (1) of this paragraph.

(b) *Construction.* The construction of combination nozzles manufactured in accordance with this subpart shall comply with the requirements outlined in this paragraph. Alternate arrangements which meet the performance requirements of this subpart will be given special consideration.

(1) *General.* The waterways and control valve shall be so arranged that the nozzle operates from shut-off to spray position and then to solid stream, so that it is not necessary to go through solid stream to obtain a spray. Each of the three positions shall have a positive stop or spring-loaded detent to hold the valve at the position while the pressure at the inlet is 100 p. s. i., and shall be clearly marked to indicate the proper location of the lever or handle for the desired use. The $1\frac{1}{2}$ -inch nozzle shall have not less than a $\frac{3}{8}$ -inch solid stream orifice, and the $2\frac{1}{2}$ -inch nozzle shall have not less than a $\frac{1}{2}$ -inch solid stream orifice. The high-velocity water spray tip shall be attached to the body of the nozzle by a short length of chain. The threads on the inlet end of the nozzle shall be American National Standard Fire-Hose Threads, i. e., 9 threads per inch for the $1\frac{1}{2}$ -inch size, and $7\frac{1}{2}$ threads per inch for the $2\frac{1}{2}$ -inch size.

(2) *Self-cleaning strainer.* The self-cleaning strainer contained within the body of the nozzle shall be so arranged as to prevent foreign material from entering the spray waterway and to effect complete cleaning of the strainer when the handle is moved to the solid stream position with the water flowing. The arrangement shall be such as to not permit any of the foreign material to be flushed into the spray waterway when the valve is in any position. The perforations in the strainer shall be of a diameter no larger than 60 percent of the diameter of the smallest orifice in the high-velocity spray tip, and the total free area of the strainer shall be at least 15 times the total area of the high-velocity spray tip orifices. The self-cleaning strainer may be omitted from the body of the nozzle if both the high-velocity tip and the applicator with low-velocity head are designed to pass material up to the size of a $\frac{3}{8}$ -inch diameter ball for the $1\frac{1}{2}$ -inch size, and up to a $\frac{1}{2}$ -inch diameter ball for the $2\frac{1}{2}$ -inch size.

(3) *Applicators.* The applicator for the $1\frac{1}{2}$ -inch nozzles shall be either 4

feet or 10 feet in length.¹ The 4-foot applicator shall have a bend approximately 12 inches from the discharge end, through an angle of 60 degrees; on a 6- to 8-inch radius. The discharge end of the 10-foot applicator shall be bent through an angle of 90 degrees, to a radius of 6 to 8 inches, so that the normal extension is 10 to 12 inches in length. The applicator for the $2\frac{1}{2}$ -inch nozzle shall be 12 feet in length, with the discharge end bent through an angle of 90 degrees, to a radius of 6 to 8 inches, so that the normal extension is 10 to 12 inches in length. The bends in the applicators shall be downward and in the vertical plane of the nozzle when the applicator is locked in place. The length specified for each applicator is the straight length of the pipe before bending, and a reasonable tolerance will be acceptable. The inlet end of the applicator shall have a bayonet or other positive but quick operating joint which shall be identical with that on the high-velocity water spray tip.

(4) *Additional strainer for low-velocity water spray head.* The low-velocity water spray head which is fitted on the end of the applicator shall be protected by an additional strainer which shall be readily removable for cleaning, this strainer to have perforations of a diameter no larger than 60 percent of the diameter of the smallest orifice in the low-velocity water spray head, and a total free area at least 15 times the total free area of the orifices in the low-velocity water spray head. The strainer may be omitted if the low-velocity water spray head is designed to pass material up to the size of a $\frac{3}{8}$ -inch diameter ball for the $1\frac{1}{2}$ -inch size, and up to a $\frac{1}{2}$ -inch diameter ball for the $2\frac{1}{2}$ -inch size.

(c) *Workmanship.* Combination nozzles manufactured in accordance with this subpart shall be of first class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

(d) *Performance requirements.* Combination nozzles manufactured in accordance with this subpart shall be capable of meeting the test requirements outlined in § 162.027-4.

§ 162.027-4 *Inspections and tests*—(a) *General.* Combination nozzles specified by this subpart are not inspected at regularly scheduled factory inspections by the Coast Guard; however, the Commander of the Coast Guard District may detail an inspector at any time to visit any place where combination nozzles are manufactured to check materials and manufacturing methods, and to conduct such tests and examinations as may be required to satisfy himself that combination nozzles are being manufactured in compliance with the requirements of this specification. The manufacturer shall provide a suitable place and the necessary equipment for the use of the inspector in conducting such tests or examinations at the place of manufacture.

¹ The 4-foot applicator is intended for $1\frac{1}{2}$ -inch size combination nozzles fitted in propulsion machinery spaces containing oil-fired boilers, internal combustion machinery, or oil fuel units.

(b) **Solid stream.** With the nozzle three feet above the ground, held at an angle to obtain maximum range, the valve in the solid stream position, and the water flowing at a gage pressure at the inlet to the nozzle of 100 pounds per square inch, the output and effective range of the solid stream orifice in still air shall comply with the requirements in Table 162.027-4 (b). The effective range is defined as the extreme limit at which the stream has not lost continuity by breaking into showers of spray, and appears to effectively carry through an opening of 4 feet diameter, as nearly as can be judged by visual observation.

TABLE 162.027-4 (b)

Nozzle size.....	1½-inch.....	2½-inch.....
Output, minimum.....	90 g. p. m.....	225 g. p. m.....
Effective range, minimum.....	55 feet.....	65 feet.....

(c) **High-velocity water spray tip.** With the high-velocity water spray tip in place, the nozzle about 3 feet above the ground, held level, the valve in the water spray position, and the water flowing at a gage pressure at the inlet to the nozzle of 100 pounds per square inch, the output and pattern in still air shall consist of finely divided particles uniformly distributed throughout the discharge cone, and shall comply with the requirements in Table 162.027-4 (c).

TABLE 162.027-4 (c)

Nozzle size.....	1½-inch.....	2½-inch.....
Output.....	50 g. p. m., -3, +5.	110 g. p. m., -7, +11.
Horizontal projection of spray pattern.....	20 feet, minimum.	25 feet, minimum.
Diameter of pattern at point of maximum spread.....	6 feet, minimum.	8 feet, minimum.

(d) **Low-velocity water spray head.** (1) With the applicator in place on the nozzle, the low-velocity water spray head in a vertical position pointing downward, about 8 feet above the ground, the valve in the water spray position, and the water flowing at a gage pressure at the inlet of the nozzle of 100 pounds per square inch, the output and pattern in still air shall consist of very finely divided particles uniformly distributed throughout the discharge cone, and shall comply with the requirements in Table 162.027-4 (d) (1).

TABLE 162.027-4 (d) (1)

Nozzle size.....	1½-inch.....	2½-inch.....
Output.....	50 g. p. m., -3, +5.	110 g. p. m., -7, +11.
Pattern diameter.....	16 feet, minimum.	22 feet, minimum.

(2) With the applicator in place on the nozzle, the water flowing at a gage pressure at the inlet of the nozzle of 100 pounds per square inch, bring the low-velocity spray head over the surface of kerosene or water in a tank and measure the distance when it is as close as possible without unduly disturbing the surface or scattering the liquid. The distance under these conditions shall not exceed 2 feet.

(3) **Fire test.** For the purpose of evaluating the effectiveness of the low-velocity water spray head, a fire test with the following set-up shall be used:

A cylindrical tank, having a minimum diameter of 15 feet and a height of approximately 2½ feet above the ground, shall be partially filled with water on which kerosene is floated to a depth of not less than 2½ inches. The surface of the kerosene shall be approximately 12 inches below the top rim of the tank. The kerosene shall be primed with about ½ gallon of gasoline. After ignition, the fire shall be allowed to burn approximately 2 minutes before being attacked. The approach shall be made from the windward side with the water flowing at a gage pressure at the nozzle inlet of 100 p. s. i. This test shall not be conducted out of doors when the wind velocity is greater than 5 miles per hour. The test fire shall be extinguished in not more than 2 minutes for the 1½-inch size and not more than 1 minute and 30 seconds for the 2½-inch size.

(e) **Self-cleaning strainer.** The self-cleaning strainer shall be tested by introducing foreign material into the water stream supplied to the nozzle, the foreign material to consist of sea weed, sand, and broken shells, no part of which shall be larger than the straight stream orifice of the nozzle being tested. With the high-velocity water spray tip in place, sufficient material shall be introduced to effect a nearly complete stoppage of the flow through the spray tip. With the flow nearly stopped, the control lever shall be moved to the solid stream position for a period not longer than 5 seconds to flush out the strainer. This test shall be performed with a gage pressure at the nozzle inlet of both 50 pounds per square inch and 100 pounds per square inch with the water flowing and the nozzle in the unclogged condition. The performance of the strainer following this test shall be such that the output and the spray pattern of the spray tip will comply with the requirements of paragraph (c) of this section for the size nozzle being tested.

(f) **Corrosion tests.** Measure the torque required to turn the valve control handle from the "Spray" position toward the "Solid Stream" position. With the high-velocity spray tip in place, and the valve control handle in the "Spray" position, expose the nozzle to a 20 percent salt water spray for 6 days at 95° F., following which again measure the torque in the same manner. With the high-velocity spray tip in place, submerge the nozzle in a 4 percent salt water solution for 5 minutes with the valve control handle in the "Solid Stream" position and 5 minutes in the "Spray" position, then drain it and set it aside for 2 days, following which again measure the torque in the same manner. The torque required to operate the valve control handle after each test shall be no greater than two pound-feet more than the torque required to operate it with the nozzle in the new condition.

(g) **Ruggedness tests.** With the high-velocity spray tip in place, the nozzle shall be dropped on a concrete floor or slab having a smooth surface from a height of 3 feet four times, as follows: In the first drop the nozzle shall be held vertically so as to land on its tip. In the second drop it shall be held vertically so as to land on the hose end. In the third

and fourth drops it shall be held with its axis approximately horizontal so as to land on opposite sides. The high-velocity spray tip shall then be removed and replaced by the applicator with low-velocity spray head, and this complete assembly shall be dropped from a height of 3 feet once, as follows: It shall be held with the axis of the assembly approximately horizontal and the bend of the applicator downward so as to land on the end of the low-velocity tip and bottom of the nozzle body approximately simultaneously. The nozzle body, valve control handle, high-velocity water spray tip, and applicator with low-velocity water spray head shall be sufficiently rugged so that following these drop tests they function properly and meet all the test requirements of this subpart.

§ 162.027-5 **Marking—(a) General.** Each combination nozzle shall be permanently and legibly marked with the manufacturer's name and model designation in addition to the marking of the valve positions required by § 162.027-3 (b) (1).

§ 162.027-6 **Procedure for approval—(a) General.** Combination solid stream and water spray fire hose nozzles for use on merchant vessels are approved only by the Commandant, U. S. Coast Guard, Washington, D. C. Correspondence pertaining to the subject matter of this specification shall be addressed to the Commander of the Coast Guard District in which the factory is located.

(b) **Manufacturer's plans and specifications.** In order to apply for approval of combination nozzles, the manufacturer shall submit 4 prints each of detailed plans and specifications, including a complete bill of materials, assembly drawing, and parts drawings descriptive of the arrangement and construction of the device, to the Commander of the Coast Guard District in which the factory is located. Each drawing shall have an identifying number, date, with alterations properly noted, and the model designation identifying the nozzle involved. These drawings and specifications will be forwarded to the Commandant for examination.

(c) **Pre-approval sample and tests.** After the drawings and specifications have been found to appear satisfactory, at the request of the manufacturer, a marine inspector will be detailed to the factory to observe the production facilities and manufacturing methods, and to examine a pre-approval sample, which will be forwarded to the Commandant for testing, in accordance with § 162.027-4, together with plans and specifications in quadruplicate, revised or corrected as may have been required. Cost of shipping and pre-approval testing shall be borne by the manufacturer.

(d) **Alternate pre-approval tests.** In order to avoid the duplication of tests which may have been done previously by some other recognized testing organization, such as a facility of the U. S. Navy or Underwriters' Laboratories, Inc., the Coast Guard will accept the test data of such organizations. Reports of such tests should be forwarded in quadruplicate by the manufacturer along with the plans and specifications indicated by paragraph (b) of this section, or arrange-

ments made for such organization to forward the reports directly to the Coast Guard. Such reports shall identify the nozzle by name and model designation and by specifications and drawings having revision dates corresponding to the drawings submitted in accordance with paragraph (b) of this section. Such reports shall indicate that the samples tested were compared with the manufacturer's plans and specifications and were found to be in conformance thereto, with any exceptions between the sample and the plans and specifications properly noted. In addition to the results of the various tests, such reports shall show the detailed data on each trial made to arrive at the average results, and the pertinent conditions of the test methods followed, instruments and methods used for measurements, and all arrangements and conditions surrounding the tests, in order to provide a clear presentation not only of the test results, but also of all pertinent facts necessary for a clear understanding and interpretation of such results.

PART 164—MATERIALS

1. Subpart 164.006, consisting of §§ 164.006-1 to 164.006-8, inclusive, is amended to read as follows:

SUBPART 164.006—DECK COVERINGS FOR MERCHANT VESSELS

Sec.	
164.006-1	Applicable specifications.
164.006-2	Grades.
164.006-3	Construction.
164.006-4	Inspection and testing.
164.006-5	Procedure for approval.

AUTHORITY: §§ 164.006-1 to 164.006-5 issued under R. S. 4405, as amended, 4462, as amended. Interpret or apply R. S. 4417, 4417a, 4418, 4426, as amended, sec. 5, 49 Stat. 1384, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 391a, 392, 404, 369, 367, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917, 3 CFR, 1952 Supp.

§ 164.006-1 *Applicable specifications.* (a) There are no other specifications applicable to this subpart.

§ 164.006-2 *Grades.* (a) Deck coverings shall be of but one grade as specified in this subpart, and shall be known as "an approved deck covering."

§ 164.006-3 *Construction, materials, and workmanship.* (a) It is the intent of this specification to obtain a deck covering made largely of incombustible materials with low heat transmission qualities which will produce a minimum of smoke when exposed to high temperatures.

(b) Deck coverings shall be of such a quality as to successfully pass all of the tests set forth in § 164.006-4.

§ 164.006-4 *Inspection and testing.* (a) All tests shall be conducted at the National Bureau of Standards or other laboratories designated by the Coast Guard.

(b) *Smoke tests.* (1) A sample of each thickness submitted shall be tested for smoke emission. Each sample shall be laid on a $\frac{1}{4}$ " x 12" x 27" steel plate. Normal protective coatings and deck attachments shall be incorporated in the samples. Each sample shall be heated

in a furnace whose temperature is limited to the standard decking curve reaching 1,325 degrees F. at the end of one hour. Smoke observations shall be made at intervals not greater than five minutes during the one-hour period of test.

(2) Instantaneous values of the percent of light transmission shall be calculated from the observations noted in subparagraph (1) of this paragraph. A plot of light transmission values shall be made using straight lines between instantaneous values.

(3) Any instantaneous value of 10 percent light transmission or less shall be considered sufficient cause for rejection of a deck covering.

(4) Average values of light transmission shall be calculated for 15, 30, and 60 minutes. Averages shall be an arithmetic mean with values taken at one minute intervals from the plotted curve noted in subparagraph (2) of this paragraph. If any of the three average values of light transmission is less than the values set forth below, it will be considered sufficient cause for rejection of a deck covering:

15 minutes—90 percent light transmission.
30 minutes—60 percent light transmission.
60 minutes—50 percent light transmission.

(c) *Fire resistance and integrity tests.*

(1) A sample of each thickness submitted shall be tested for fire resistance and integrity. Each sample shall be laid on a $\frac{1}{4}$ " x 12" x 27" steel plate. Normal protective coatings and deck attachments shall be incorporated in the samples. Each sample shall be heated in a furnace whose temperature is controlled according to the standard fire exposure curve reaching 1,700 degrees F. at the end of one hour. Temperature of the unexposed side as indicated by a thermocouple under a 0.40 inch asbestos pad shall be observed at intervals not greater than 5 minutes during the one-hour period of test.

(2) Data from these tests shall be analyzed to determine the thicknesses necessary to limit the average temperature rise on the unexposed surface to 250 degrees F. above the original temperature at the end of 15, 30, and 60 minutes.

(3) Excessive cracking, buckling, or disintegration may be considered cause for rejection.

(d) *Organic carbon content test.* (1) The organic carbon content shall be determined and shall not exceed 0.12 gram per cubic centimeter of the molded deck covering.

§ 164.006-5 *Procedure for approval.*

(a) If a manufacturer desires to have a deck covering approved, a request shall be presented to the Commandant of the Coast Guard, together with the following information:

(1) The trade name and designation of the deck covering.

(2) The range of thicknesses in which it is proposed to lay the deck covering together with any information the manufacturer may have as to maximum or minimum thicknesses.

(3) Description of method of attachment to or protection of the steel deck together with the trade name and designation of adhesive or protective coating if used.

(4) A sample of the molded deck covering at least 6 inches square and $\frac{1}{4}$ inch thick. This may or may not be attached to a backing material at the manufacturer's option.

(b) The material submitted will be examined and the manufacturer advised as to the number and thicknesses of samples to be submitted together with the estimated cost of the tests.

(c) If the deck covering is indicated as being suitable, the manufacturer shall then submit the following:

(1) Two samples of each thickness to be tested laid in the manner designated on a $\frac{1}{4}$ " x 12" x 27" steel plate for the purpose of the smoke test and fire resistance and integrity test noted in § 164.006-4 (b) and (c).

(2) Sufficient bulk material (unmixed) to lay a sample one inch thick on an area of 12" x 27". If an adhesive or protective coating is used, a liberal sample shall be supplied.

(3) If the manufacturer desires to witness the tests, he should so indicate at this time.

(4) A check in amount to cover the estimated cost of the test, made payable to Treasurer of the United States.

(d) The above material will be submitted to the National Bureau of Standards by the Coast Guard for testing. The tests noted in § 164.006-4 will be conducted and a report submitted to the Coast Guard.

(e) A copy of the test report will be forwarded to the manufacturer and he will be advised if his material is approved under this specification, and if approved, in what thicknesses it may be laid, and in what thicknesses it must be laid to meet the requirements for Class A-60 decks without the use of any other insulating material. If approved, this information will be published in the FEDERAL REGISTER.

2. Subpart 164.008, consisting of §§ 164.008-1 to 164.008-4, inclusive, is amended to read as follows:

SUBPART 164.008—BULKHEAD PANELS FOR MERCHANT VESSELS

Sec.	
164.008-1	Applicable specifications.
164.008-2	Material.
164.008-3	Inspection and testing.
164.008-4	Procedures for approval.

AUTHORITY: §§ 164.008-1 to 164.008-4 issued under R. S. 4405, as amended, 4462, as amended. Interpret or apply R. S. 4417, 4417a, 4418, 4426, as amended, sec. 5, 49 Stat. 1384, secs. 1, 2, 49 Stat. 1544, sec. 3, 54 Stat. 346, sec. 2, 54 Stat. 1028, sec. 5, 55 Stat. 244, 245, as amended; 46 U. S. C. 391, 391a, 392, 404, 369, 367, 1333, 463a, 50 U. S. C. App. 1275; E. O. 10402, 17 F. R. 9917, 3 CFR, 1952 Supp.

§ 164.008-1 *Applicable specifications.* (a) The following specifications, of the issue in effect on the date of manufacture of the bulkhead panel, shall form a part of this subpart where applicable:

(1) Coast Guard specification:

Subpart 164.009—Incombustible Materials for Merchant Vessels.

(2) American Society for Testing Materials specification:

ASTM E 119-50—Methods of Fire Tests of Building Construction and Materials.

(b) *Copies on file.* Copies of the specifications referred to in this section shall

be kept on file by the manufacturer, together with the certificate of approval. The Coast Guard specification may be obtained upon request from the Commandant, United States Coast Guard, Washington 25, D. C. The American Society for Testing Materials specification may be purchased from the American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pennsylvania.

§ 164.008-2 *Material.* (a) Bulkhead panel material shall be of such quality as to successfully meet the requirements for an Incombustible Material as set forth in Subpart 164.009 of this subchapter.

(b) Bulkhead panels used in Class B-15 construction and as a component in Class A-30 or Class A-15 construction shall meet the fire resistance requirements of § 164.008-3 (b) (2) for at least 15 minutes, and the integrity requirements of § 164.008-3 (b) (3) for at least 30 minutes.

(c) Bulkhead panels for use as a component in Class A-60 construction shall meet the first resistance requirements of § 164.008-3 (b) (2) for at least 15 minutes and the integrity requirements of § 164.008-3 (b) (3) for at least 60 minutes.

§ 164.008-3 *Inspection and testing—*
(a) *Tests.* All tests shall be conducted at the National Bureau of Standards or other laboratory designated by the Coast Guard.

(b) (1) A representative bulkhead panel, of a size as indicated in § 164.008-4 (c) (1), shall be installed in a furnace to form part of one wall. The furnace shall be heated and the temperature controlled according to the standard fire exposure curve reaching 1,550 degrees F. at the end of 30 minutes and 1,700 degrees F. at the end of one hour. The temperature of the non-fire exposed side, as indicated by 9 thermocouples under 0.40-inch asbestos pads (less than 9 thermocouples will be given special consideration by the Coast Guard), shall be observed at intervals not greater than 3 minutes during the test. The test shall be continued for at least 30 minutes to meet the requirements of § 164.008-2 (b) or at least 60 minutes to meet the requirements of § 164.008-2 (c). In either case, the test shall not be stopped before the maximum surface temperature rise values noted in subparagraph (2) of this section have been reached. Temperature recordings shall be taken in way of the joints for information purposes, but these temperatures will not be used to determine the average or maximum temperature rises of the panel.

(2) Data from this test shall be analyzed to determine the thickness necessary to limit the temperature rise at any thermocouple on the non-fire exposed surface to 250 degrees F. above the original temperature at the end of 15 minutes.

(3) This test shall determine the length of time, up to one hour, that the bulkhead panel, including the joint, can withstand the passage of flame.

(c) *Spot check tests.* After approval has been granted to a bulkhead panel, the Coast Guard reserves the right to

spot-check the material at any time by having any or all of the above tests conducted on any samples taken from stock or from the field. The manufacturer will incur no expense for such tests, but the results shall be binding upon the approval of his product. The manufacturer will be advised in advance of the time of testing of the samples selected and may witness the tests if he so desires.

§ 164.008-4 *Procedure for approval.*

(a) If a manufacturer desires to have a bulkhead panel approved, a request shall be presented to the Commandant of the Coast Guard together with the following:

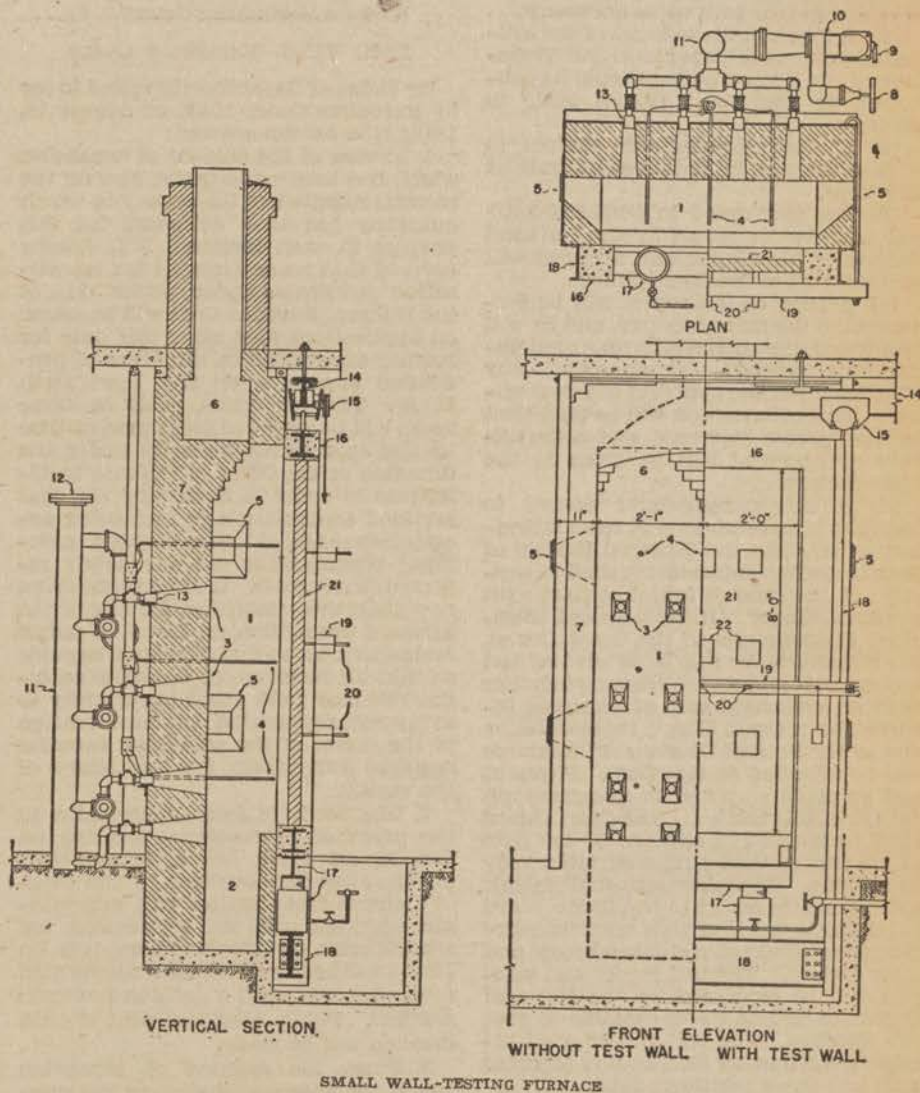
(1) If the material has already been approved as an "Incombustible Material" under Subpart 164.009 of this subchapter, the approval number of the material shall be indicated. If the material has not been approved as an "Incombustible

Material," the procedure set forth in Subpart 164.009 shall be followed; and such approval shall be obtained.

(2) The trade name of the bulkhead panel.

(3) The range of thicknesses and/or densities in which it is proposed to manufacture or use the material, together with any information or recommendations the manufacturer may have as to maximum or minimum thicknesses or densities.

(b) This information will be submitted by the Coast Guard to the National Bureau of Standards for consideration. After the material has been approved as an "Incombustible material," and if it is indicated that the material is in all other respects suitable, the manufacturer will be so advised. The recommended thickness of the panel for the fire resistance and integrity test



1, Furnace chamber; 2, pit for debris; 3, burner ports; 4, thermocouple protection tubes; 5, observation windows; 6, flue outlets; 7, fire brick furnace wall; 8, gas control valve; 9, air control valve; 10, air-gas mixer; 11, mixed fuel distributing manifold; 12, explosion valve; 13, selfpiloting burner tips; 14, track for moving test frames; 15, hand trolley for carrying test frames; 16, movable refractory concrete test frame; 17, loading jacks and beam; 18, loading frame; 19, bar for holding deflection scales and tying frame to furnace; 20, deflection scales; 21, test specimen; 22, asbestos pads covering thermocouples on unexposed surface of test specimen.

FIGURE NO. 164.008-4 (c) (1).

and the estimated cost of the tests will be specified at this time.

(c) If the material is indicated as being suitable, the manufacturer shall submit the samples required by subparagraph (1) of this paragraph to the Fire Protection Section of the National Bureau of Standards, Washington 25, D. C., and shall advise the Coast Guard of the shipment.

(1) One representative panel of the material 7.5 feet high and 4 feet wide containing at least one vertical joint, located at approximately $\frac{1}{3}$ panel width from one edge (16'-18'). A sketch of the furnace is shown in Figure 164.008-4 (c) (1). If the manufacturer desires to submit the panel in a thickness or size other than that recommended, prior approval shall be obtained from the Commandant. The manufacturer shall supply any labor required for fabrication of the panel and for attaching the panel to the frame for testing, as necessary.

(2) A check in the amount of the estimated cost made payable to the Treasurer of the United States should be submitted to the Coast Guard prior to testing.

(3) If the manufacturer desires to witness the test, he should so indicate at this time.

(d) The test noted in § 164.008-3 (b) will then be conducted by the National Bureau of Standards, and a report will be submitted to the Coast Guard.

(e) A copy of the report will be forwarded to the manufacturer, and he will be advised if his material is approved under this subpart. If approved, any stipulations of the approval will be specified. This information will be published in the FEDERAL REGISTER, and a Certificate of Approval will be given to the manufacturer.

(f) If the manufacturer desires to have the tests conducted at some laboratory other than the National Bureau of Standards, this information shall be supplied at the time of initial contact with the Coast Guard. If the proposed laboratory is acceptable to the Coast Guard, the manufacturer will be so advised and any special testing requirements together with an estimated cost of expenses incurred by a Coast Guard representative and by the National Bureau of Standards will be specified at this time. Payment will be made as noted in subparagraph (c) (2) of this section. The Coast Guard shall be notified in advance of the date of the test so that a representative may be present. The laboratory shall submit a detailed test report to the Coast Guard in triplicate together with representative samples of the material taken before and after testing. The test report and samples will be examined by the National Bureau of Standards for compliance with this subpart. The test report shall include the following information together with any other pertinent data:

(1) Description of the panel tested giving size, thickness, density, detail of joint and method of assembling in furnace.

(2) Complete time-temperature data consisting of a numerical time-temperature table for each furnace and panel thermocouple together with the initial temperature reading of each thermocouple.

(3) A log setting forth the observer's notes relative to deflections, cracking, smoke and gas emission, glow, flame emission, and any other important data. The time of each observation should be noted.

(4) Photographs of both sides of the panel before and after testing.

Dated: December 3, 1953.

[SEAL] A. C. RICHMOND,
Rear Admiral, U. S. Coast Guard,
Acting Commandant.

[F. R. Doc. 53-10230; Filed, Dec. 4, 1953;
8:52 a. m.]

TITLE 32A—NATIONAL DEFENSE, APPENDIX

Chapter I—Office of Defense Mobilization

[Defense Mobilization Order VII-6]

DMO VII-6—EXPANSION GOALS

By virtue of the authority vested in me by Executive Order 10480 of August 14, 1953; It is hereby ordered:

1. In view of the amount of expansion which has been undertaken, and on the recommendation of the agency to which authority has been delegated for this purpose in each instance, it is hereby ordered that no accelerated tax amortization certificates under section 124A of the Internal Revenue Code will be issued on applications filed after this date for further expansions in the areas of production appearing on List I set forth below. The expansion goals in these areas will be reviewed from time to time by the appropriate agencies under the direction of the Office of Defense Mobilization in order to determine (1) that certified expansion is in fact being accomplished and (2) that changes in defense requirements are adequately reflected in the goals. If after such review new goals are established for any of the areas of production on List I, a public announcement to that effect will be made so that all members of the affected industries may have equal opportunity to apply for accelerated tax amortization to the extent of the additional capacity required and within the limitations of the statute.

2. The need for further expansion in the areas of production appearing on List II set forth below, is currently under active consideration by the Office of Defense Mobilization with appropriate agencies and no accelerated tax amortization certificates in an area on List II will be issued on applications filed after this date until a decision has been reached. Public announcement of each decision will be made.

3. Since the amount of expansion which has been undertaken in the areas of production appearing on List III set forth below, is not adequate for defense purposes, the Office of Defense Mobilization will continue to issue accelerated tax amortization certificates for further expansions within such areas of production, up to the amount of the defense requirement.

4. This order shall take effect on December 3, 1953.

OFFICE OF DEFENSE
MOBILIZATION,
ARTHUR S. FLEMING,
Director.

List I

CLOSED

No.	Goal	Delegate agency
183	Acetic acid.....	Commerce.
158	Acetone.....	Commerce.
159A	Adipic acid.....	Commerce.
159B	Adiponitrile.....	Commerce.
79	Air preheaters, regenerative.....	Commerce.
23	Aniline.....	Commerce.
31	Anthraquinone vat dyes (single strength basis).....	Commerce.
210	Argon.....	Commerce.
182	Batteries, "AA" type, dry cell.....	Commerce.
53	Benzene hexachloride (lindane) 99 percent or more gamma isomer content.....	Commerce.
44	Benzene hexachloride (technical grade).....	Commerce.
195	Beryllium copper alloy mill products facilities.....	Commerce.
196	Beryllium copper master alloy producing facilities.....	Commerce.
5	Blast furnaces.....	Commerce.
188	Brass mill facilities.....	Commerce.
61	Butadiene.....	Commerce.
60	Calcium carbide.....	Commerce.
102	Carbon, activated (water purification and decolorizing grade).....	Commerce.
72	Carbon black.....	Commerce.
35	Carbon tetrachloride.....	Commerce.
167	Chemical manufacturing machinery.....	Commerce.
24	Chlorine.....	Commerce.
189	Copper foundry facilities.....	Commerce.
150	Copper wire mill facilities.....	Commerce.
164	Cotton compresses.....	Agriculture.
95	Cotton gins.....	Agriculture.
159C	Cyclohexane.....	Commerce.
37	DDT.....	Commerce.
137	Electrical connectors, Army-Navy type.....	Commerce.
166A	Electronic class envelopes (ribbon machine).....	Commerce.
166B	Electronic class envelopes (other than ribbon machine).....	Commerce.
194A	Ethylchloride.....	Commerce.
71	Ethylene glycol.....	Commerce.
70	Ethylene oxide.....	Commerce.
194B	Ethylene Dibromide.....	Commerce.
179	Ferro-alloys, blast furnace (ferromanganese, silico-manganese, spiegeleisen and silvery pig iron).....	Commerce.
180	Ferro-alloys, electric furnace.....	Commerce.
116A	Fibrous glass, continuous filament.....	Commerce.
116B	Fibrous glass, superfine.....	Commerce.
201	Filter aids—Calcined biatomite.....	GSA.
75	Generators, water wheel driven.....	Commerce.
202A	Glass tubing (lead and soda lime).....	Commerce.
202B	Glass tubing (soda-silicate).....	Commerce.
115	Graphite, artificial.....	Commerce.
117	Heat exchangers, tubular.....	Commerce.
107	Heavy metal tanks (special process and storage vessels).....	Commerce.
159D	Hexamethylenediamine.....	Commerce.
103	Industrial ethyl alcohol.....	Commerce.
42	Iron oxide, yellow (synthetic).....	Commerce.
169	Kraft fiber processing facilities.....	Commerce.
160	Ketone, methyl ethyl.....	Commerce.
161	Ketone, methyl isobutyl.....	Commerce.
170	Limestone and dolomite.....	GSA.
1	Lubricating oil.....	Interior.
36A	Lumber and wood products (except debarking and shipping facilities).....	Commerce.
13	Magnesium.....	Commerce.
43	Maleic anhydride.....	Commerce.
None	Marginally punched continuous forms.....	Commerce.
139	Materials handling equipment.....	Commerce.
184	Metal cans.....	Commerce.
38	Methyl chloride.....	Commerce.
89	Methylene chloride.....	Commerce.
86	Mining machinery.....	Commerce.
146	Motors, miniature electric.....	Commerce.
26	Naphthalene.....	Commerce.
2	Newsprint.....	Commerce.
173	Octyl alcohols.....	Interior.
69B	Oil (crude) refining capacity (foreign).....	Interior.
66C	Oil pipelines (foreign).....	Interior.
66D	Oil storage facilities (foreign).....	Interior.
65A	Oil wells drilled (domestic).....	Interior.
66A	Oil wells drilled (foreign).....	Interior.
136	Optical glass.....	Commerce.
155	Optics—Facilities for producing precision type.....	Commerce.
28	Oxygen, high-purity.....	Commerce.

LIST I—Continued

CLOSED—continued

No.	Goal	Delegate agency
49A	Paper	Commerce.
49B	Paperboard	Commerce.
52	Perchlorethylene	Commerce.
7	Phenol	Commerce.
138	Phosphate rock	GSA.
149A	Phosphatic fertilizers	Commerce.
149B	Phosphatic feed supplements	Commerce.
108	Phosphatizing of steel drums	Commerce.
8	Phthalic anhydride	Commerce.
46	Plastics materials	Commerce.
93	Plywood, exterior type, softwood	Commerce.
141	Potash	GSA.
67	Power crane and shovel industry	Commerce.
39	Quinoline	Commerce.
120	Railroad equipment (production facilities)	Commerce.
203	Reels and spools	Commerce.
192	Refractories, basic	Commerce.
190	Refractories, fire clay, super duty and high alumina bricks	Commerce.
154	Refractories, insulating fire brick	Commerce.
191	Refractories, ladle bricks	Commerce.
192	Refractories, pouring	Commerce.
193	Refractories, silica	Commerce.
40	Resorcinol	Commerce.
62	Rubber and rubber products	Commerce.
69	Scrap, ferrous and nonferrous	Commerce.
87	Sebacic acid	Commerce.
298	Sensitive electrical switches	Commerce.
110	Soda ash	Commerce.
50	Sodium cyanide	Commerce.
104	Special industrial services	Commerce.
6	Steel ingots	Commerce.
54	Storage batteries, electric	Commerce.
147	Strapping, steel	Commerce.
109	Styrene, monomer (including methyl styrenes)	Commerce.
17	Sulphur	GSA.
126	Synthetic fibers, noncellulose	Commerce.
144	Tape, acetate	Commerce.
145	Tape, filament	Commerce.
143	Teletype, domestic system	Commerce.
175	Tetraethyl lead	Interior.
51	Titanium dioxide pigment	Commerce.
41	Trichlorethylene	Commerce.
73	Turbines, hydraulic	Commerce.
45	Vulcanized fibre	Commerce.
48C	Wood pulp	Commerce.

LIST II

SUSPENDED

125	Abrasive products	Commerce.
85	Aircraft, military	Commerce.
58	Antifriction bearing industry	Commerce.
157	Benzene	Commerce.
57	Carbon electrodes	Commerce.
133	Coal, territory of Alaska	Interior.
77	Condensers	Commerce.
131	Continuous galvanized sheet and strip	Commerce.
48	Crawler-type tractor industry	Commerce.
128	Dies, jigs and fixtures	Commerce.
55	Electric power	Interior.
199	Elephant tools—Manufacturing facilities	Commerce.
36	Formaldehyde	Commerce.
97	Friction bearings	Commerce.
94	Gears and gear drives	Commerce.
82	Glycerine	Commerce.
172	Hexamethylenetetramine	Commerce.
32	Hose, horizontal wire braided	Commerce.
25	Hydrofluoric acid	Commerce.
30	Hydrogen peroxide	Commerce.
100	Lithium compound	Commerce.
96B	Lumber and wood products—Debarking and shipping facilities	Commerce.
123	Machine tools	Commerce.
106	Mechanical power transmission equipment	Commerce.
128	Medical supplies and equipment	Commerce.
197	Metal cutting tools	Commerce.
140	Metalworking equipment, miscellaneous	Commerce.
9	Methanol synthetic	Commerce.
299	Military canvas reclamation facilities	Commerce.
9	Nitrogen	Commerce.
129	Ordinance facilities	Commerce.
174	Penicillin	Commerce.
29	Pentaerythritol	Commerce.
80	Phosphorus, elemental	Commerce.
34	Photographic film and paper	Commerce.
105	Portland cement	Commerce.
124	Precision and large size fasteners	Commerce.
142	Presses and forging equipment	Commerce.
135	Pumping machinery	Commerce.
	Railroad terminal and road facilities	DTA.

LIST II—Continued

SUSPENDED—continued

No.	Goal	Delegate agency
101	Screw machine products, precision	Commerce.
162	Sodium bichromate	Commerce.
88	Sodium chlorate	Commerce.
111	Special components	Commerce.
200	Sulfuric acid	Commerce.
156	Toluene	Commerce.
168	Valves and fittings, industrial	Commerce.
47	Vehicles and engines (military)	Commerce.
None	Warehouse and storage facilities	DTA.

LIST III

OPEN

148	Aircraft, commercial	Commerce.
207	Alkylate	Interior.
63A	Alumina	GSA.
63	Aluminum, primary	GSA.
177B	Aluminum sheet and plate heat treating facilities	Commerce.
177A	Aluminum sheet and plate, producing facilities	Commerce.
205	Ammunition metal boxes, 30 and 50 caliber	Commerce.
112	Antimony	GSA.
151	Asbestos, chrysotile, strategic grades	GSA.
119	Barite	GSA.
92	Bauxite	GSA.
118	Beryl	GSA.
76	Boilers, steam	Commerce.
181	Casting, steel	Commerce.
20	Chromite (chemical grade)	GSA.
19	Chromite (metallurgical grade)	GSA.
21	Chromite (refractory grade)	GSA.
10	Cobalt	GSA.
4A	Coal, metallurgical for byproduct coke	Interior.
4	Coke—Byproduct	Interior.
11	Columbite and tantalite ores	GSA.
56	Copper	GSA.
83	Cryolite—Synthetic	GSA.
197	Cylinders, compressed gas	Commerce.
130	Electrolytic tin plate	Commerce.
84	Electronic products, military	Commerce.
165	Fluorspar, acid grade	GSA.
68	Freight cars	DTA.
171A	Gas pipe (large) lines laid	Interior.
171B	Gas pipe (small) lines laid	Interior.
204	Gray iron castings (over 3,000 pounds)	Commerce.
99	Heavy aluminum aircraft forgings	Commerce.
212	Heavy steel plate (over 20,000 pounds)	Commerce.
122	High voltage switchgear	Commerce.
98	Inland waterway vessels (specified types)	DTA.
132	Iron ore	GSA.
3	Iron ore (taconite)	GSA.
206	Laboratories, research and development	Commerce.
12	Lead	GSA.
152	Locomotives, Diesel	DTA.
187	Manganese ore, battery and chemical grades	GSA.
14	Manganese ore, metallurgical grade	GSA.
64	Mercury	GSA.
114	Metal can manufacture—Tin conservation	Commerce.
81	Military photographic equipment (motion and still)	Commerce.
15	Molybdenum	GSA.
65C	Natural gas liquids capacity	Interior.
16	Nickel	GSA.
65B	Oil (crude) refining capacity (domestic)	Interior.
65D	Oil pipelines (domestic)	Interior.
65E	Oil storage facilities (domestic)	Interior.
90	Ore carriers, Great Lakes	DTA.
113	Ore carriers, ocean-going	Commerce.
185	Rare earths	GSA.
163	Rutile	GSA.
176	Scientific instruments	Commerce.
178	Selenium	GSA.
211	Steel sheets, grain oriented	Commerce.
27	Structural shapes, wide flange	Commerce.
134	Tankers, ocean-going	Commerce.
33	Tapered aluminum sheet	Commerce.
121	Tires (specific types)	Commerce.
78	Titanium metal	GSA.
18	Transformers, distribution	Commerce.
74	Tungsten ore	GSA.
91	Turbines, steam	Commerce.
22	Welded aluminum tubing	Commerce.
	Zinc	GSA.

[P. R. Doc. 53-10167; Filed, Dec. 1, 1953; 3:45 p. m.]

NOTICES

DEPARTMENT OF THE INTERIOR

Office of the Secretary

WRIGHT BROTHERS NATIONAL MEMORIAL

ORDER REDESIGNATING AREA AND MONUMENT
FORMERLY KNOWN AS THE KILL DEVIL
HILL NATIONAL MEMORIAL

Whereas, on December 17, 1953, the United States will celebrate the fiftieth anniversary of the first successful human attempt in all history at power-driven airplane flight, achieved on December 17, 1903, by an American, Orville Wright, with the assistance of his brother Wilbur Wright;

Whereas, there has been established pursuant to the act of March 2, 1927 (44 Stat. 1264) a memorial area and monument, known as Kill Devil Hill National Memorial, at Kitty Hawk, North Carolina, in commemoration of such airplane flight;

Now, therefore, in furtherance of the object of the aforesaid act of March 2, 1927, in commemorating the historic achievement of the Wright brothers, and in recognition of the fiftieth anniversary of the historic flight achieved by Orville Wright, I, Orme Lewis, Acting Secretary of the Interior, pursuant to my authority and responsibility for the administration, protection, and development of the aforesaid area of the National Park System, do hereby designate as the "Wright Brothers National Memorial" the area heretofore known as the "Kill Devil Hill National Memorial."

Issued this 1st day of December 1953.

ORME LEWIS,

Acting Secretary of the Interior.

[P. R. Doc. 53-10190; Filed, Dec. 4, 1953; 8:47 a. m.]

DEPARTMENT OF AGRICULTURE

Production and Marketing
AdministrationMEMPHIS UNION STOCK YARDS, MEMPHIS,
TENNESSEE

DEPOSING OF STOCKYARD

It has been ascertained that the Memphis Union Stock Yards, Memphis, Tennessee, originally posted on November 1, 1921, as being subject to the Packers and Stockyards Act, 1921, as amended (7 U. S. C. 181 et seq.), no longer comes within the definition of a stockyard under said act for the reason that it is no longer being conducted or operated as a public livestock market. Therefore, notice is given to the owners of the stockyard and to the public that such livestock market is no longer subject to the provisions of the act.

Notice of public rule making has not preceded promulgation of the foregoing rule since it is found that the giving of such notice would prevent the due and timely administration of the Packers and Stockyards Act and would, therefore, be impractical. There is no legal warrant or justification for not depositing

NOTICES

promptly a stockyard which no longer is within the definition of that term contained in said act.

The foregoing is in the nature of a rule granting an exemption or relieving a restriction and, therefore, may be made effective in less than 30 days after publication thereof in the FEDERAL REGISTER.

(42 Stat. 159, as amended and supplemented; 7 U. S. C. 181 et seq)

Done at Washington, D. C., this 2d day of December 1953.

[SEAL]

H. E. REED,
Director, Livestock Branch, Pro-
duction and Marketing Ad-
ministration.

[F. R. Doc. 53-10207; Filed, Dec. 4, 1953;
8:51 a. m.]

DEPARTMENT OF COMMERCE

Office of the Secretary

[Dept. Order 128, Amended, Amdt. 2]

UNDER SECRETARY OF COMMERCE FOR
TRANSPORTATION

REVOCATION OF DELEGATION OF AUTHORITY
TO ACT PURSUANT TO CMP REG. 6

National Production Authority Delegation 14 was revoked effective July 1, 1953 (18 F. R. 4917). Accordingly, paragraph 4.04 of Department Order No. 128 (Amended) of February 13, 1953 (18 F. R. 1216), and Supplement 4 to Department Order No. 128, Revised August 3, 1951 (16 F. R. 10042), are hereby revoked.

This revocation does not affect the validity of any action taken pursuant to the above delegations prior to the effective date of the revocation.

[SEAL]

ROBERT B. MURRAY, Jr.,
Acting Secretary of Commerce.

[F. R. Doc. 53-10188; Filed, Dec. 4, 1953;
8:46 a. m.]

FEDERAL POWER COMMISSION

[Docket No. G-2098]

TEXAS ILLINOIS NATURAL GAS PIPELINE CO.

NOTICE OF EXTENSION OF TIME

NOVEMBER 30, 1953.

Upon consideration of the motion of Texas Illinois Natural Gas Pipeline Company filed November 27, 1953, for a further extension of time within which to undertake the operations, sale and service authorized by the Commission's order issued March 27, 1953, in the above-entitled matter;

Notice is hereby given that a further extension of time is granted to and including January 1, 1954, within which Texas Illinois Natural Gas Pipeline Company shall complete the construction of the facilities and sell and deliver storage gas to the Natural Gas Storage Company of Illinois, authorized by said order issued March 27, 1953. Paragraph (C) (1) of said order is further amended accordingly.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 53-10183; Filed Dec. 4, 1953;
8:45 a. m.]

[Docket No. G-2099]

NATURAL GAS PIPELINE CO. OF AMERICA

NOTICE OF EXTENSION OF TIME

NOVEMBER 30, 1953.

Upon consideration of the Motion of Natural Gas Pipeline Company of America filed November 27, 1953, for a further extension of time within which to undertake the operations, sale and service authorized by the Commission's order issued March 27, 1953, in the above-designated matter;

Notice is hereby given that a further extension of time is granted to and including January 1, 1954, within which Natural Gas Pipeline Company of America shall actually undertake and regularly perform the operations, sale, and service authorized by said order issued March 27, 1953. Paragraph (C) (1) of said order is further amended accordingly.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 53-10184; Filed, Dec. 4, 1953;
8:45 a. m.]

[Docket No. G-2284]

CENTRAL KENTUCKY NATURAL GAS CO.

NOTICE OF APPLICATION

DECEMBER 1, 1953.

Take notice that on October 20, 1953, Central Kentucky Natural Gas Company (Applicant), a Kentucky corporation, address, Charleston, West Virginia, filed an application for an order disclaiming jurisdiction with respect to the sale and delivery of natural gas by Applicant to Kentucky Creosoting Company (Creosoting), or, in the alternative an order issuing a certificate of public convenience and necessity pursuant to section 7 of the Natural Gas Act authorizing such sale and delivery of natural gas and authorizing the continued operation of certain existing facilities utilized to make such sale and delivery.

Applicant states that as a result of recent operations the perimeter of its Menifee Storage Pool in Kentucky was enlarged so that certain tracts of land from which Creosoting obtained natural gas under leasehold oil and gas estates which it owned or controlled in conjunction with various private individuals became included within the enlarged perimeter of the storage horizon of said storage pool. As a result of condemnation proceedings Applicant became assignee of the various leasehold oil and gas estates, wells and well and field lines of Creosoting, subject to a reservation of approximately 114,000 Mcf of natural gas to be extracted from the assigned premises by Creosoting and other assignors, and subject to Applicant's agreement that following such extraction, it would sell and deliver natural gas to Creosoting for the purpose of resale in the Town of Stanton, Kentucky, and its environs. Applicant states that in February, 1953 delivery of such reserved volumes to Creosoting was completed. Applicant now proposes to continue the operation of the necessary facilities, and the sale and delivery of natural gas to

Creosoting for resale which it commenced pursuant to its contractual obligations following final delivery of the reserved volumes in February, 1953. The estimated requirements of Creosoting for 1953 are approximately 43,168 Mcf, growing to approximately 55,867 Mcf in 1957. The 1953-1954 peak day requirements are estimated to be approximately 388 Mcf. Applicant proposes to continue the operation of existing well and field facilities located in Menifee Storage Pool at existing pool pressures for the proposed service, and no new or additional facilities are proposed for such purpose.

Protests or petitions to intervene may be filed with the Federal Power Commission, Washington 25, D. C., in accordance with the rules of practice and procedure (18 CFR 1.8 or 1.10) on or before the 21st day of December 1953. The application is on file with the Commission for public inspection.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 53-10185; Filed, Dec. 4, 1953;
8:45 a. m.]

SECURITIES AND EXCHANGE
COMMISSION

[File No. 70-3139]

STANDARD POWER AND LIGHT CORP.

SUPPLEMENTAL ORDER RELEASING JURISDICTION WITH RESPECT TO NEGOTIATED SALE OF COMMON STOCK OF SUBSIDIARY BY PARENT

NOVEMBER 30, 1953.

The Commission by order dated November 9, 1953, having permitted to become effective a declaration, as amended, of Standard Power and Light Corporation ("Standard Power"), a registered holding company, with respect to, among other things, a proposal to sell, by negotiation, from 10,000 to 15,000 shares of the 290,000 shares of Common Stock of Duquesne Light Company ("Duquesne"), a public utility company and a subsidiary of Standard Power, held by Standard Power; and

The Commission having reserved jurisdiction over, among other things, the sale of the Duquesne Common Stock; and

Standard Power having filed a further amendment to its declaration in which it is stated that, in accordance with the permission granted by said order of the Commission dated November 9, 1953, it offered 10,000 shares of Duquesne Common Stock to a limited group on a competitive basis and received bids for 8,500 shares of such Stock as follows:

Number of shares:	Price per share
2,100	\$29.75
900	29.50
5,500	29.35
8,500	

The amendment having further stated that Standard Power has accepted the bids as set forth above, and that it will attempt to sell an additional 1,500 shares prior to December 31, 1953; and

The Commission having examined said amendment, and having considered the record herein, and having found no

reason for the imposition of any further terms and conditions with respect to the sale of the said 8,500 shares of Common Stock and that jurisdiction with respect thereto should be released;

It is ordered, That jurisdiction heretofore reserved with respect to the results of the sale by Standard Power of the aforesaid 8,500 shares of Duquesne Common Stock be, and the same hereby is, released.

It is further ordered, That jurisdiction be, and the same hereby is, continued over the results of negotiation by Standard Power for the sale of the additional 1,500 shares of Duquesne Common Stock.

It is further ordered, That jurisdiction heretofore reserved over all other matters described in the Commission's order dated November 9, 1953, be, and the same hereby is, continued.

By the Commission.

[SEAL] NELLYE A. THORSEN,
Assistant Secretary.

[F. R. Doc. 53-10205; Filed, Dec. 4, 1953;
8:50 a. m.]

[File No. 70-3163].

ELECTRIC BOND AND SHARE CO.

NOTICE OF FILING REGARDING SALE BY PARENT OF SECURITIES OF SUBSIDIARY

Notice is hereby given that Electric Bond and Share Company ("Bond and Share"), a registered holding company, has filed a declaration pursuant to the Public Utility Holding Company Act of 1935 ("act"), and has designated section 12 (d) thereof and Rule U-44 (a) promulgated thereunder as being applicable to the proposed transaction which is summarized as follows:

Bond and Share heretofore filed with the Commission its Final Comprehensive Plan as finally amended July 7, 1953 (the "Plan") under section 11 (e) of the act. The Plan was approved by orders of the Commission dated February 20, 1953, and July 15, 1953, and by order of the United States District Court for the Southern District of New York dated July 16, 1953.

The Plan proposed, among other things, that Bond and Share would dispose of certain of its holdings of common stock of United Gas Corporation ("United Gas") by capital distribution, dividend distributions and rights offerings to the Bond and Share stockholders. Provision was also made that the remainder of the shares of United Gas stock to be disposed of under the Plan should be disposed of by Bond and Share in such manner and on such terms as it deemed appropriate within two years after the effective date of the Plan which was July 16, 1953. Bond and Share now holds 1,765,053 shares of United Gas common stock (being approximately 13.7 percent of the outstanding shares of such stock.) By the present declaration Bond and Share proposes to sell 100,000 shares of United Gas stock in the manner hereinafter set forth.

Bond and Share proposes to sell the foregoing 100,000 shares of United Gas common stock for cash upon the basis

of a negotiated private sale to a person or persons who will acquire such shares for investment and not for distribution under circumstances which will not involve any "public offering" as contemplated by the Securities Act of 1933. The terms under which and the price at which the shares of United Gas are proposed to be sold by Bond and Share have not yet been agreed upon but such terms and price, as well as other details involving the proposed sale, will be supplied by amendment to the present declaration as soon as they are available.

Declarant requests that the Commission exempt the proposed sale of 100,000 shares of United Gas stock from the provisions of Rule U-50 promulgated under the act on the basis of a finding to be made by the Commission as contemplated by subsection (a) (5) of such rule, that compliance with paragraphs (b) and (c) of the rule, relating to "competitive bidding" procedure, is not "necessary or appropriate in the public interest or for the protection of investors or consumers to assure the maintenance of competitive conditions, the receipt of adequate consideration or the reasonableness of any fees or commissions to be paid with respect" to the proposed sale.

Notice is further given that any interested person may, not later than December 11, 1953, at 12:30 p. m., e. s. t., request the Commission in writing that a hearing be held on such matter, stating the reasons for such request, the nature of his interest, and the issues of fact or law raised by said declaration which he desires to controvert, or may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, 425 Second Street NW., Washington 25, D. C. At any time thereafter, said declaration as filed, or as amended, may be granted and permitted to become effective as provided in Rule U-23 of the Rules and Regulations promulgated under the Act, or the Commission may exempt such transaction as provided in Rules U-20 (a) and U-100 thereof.

By the Commission.

[SEAL] NELLYE A. THORSEN,
Assistant Secretary.

[F. R. Doc. 53-10238; Filed, Dec. 4, 1953;
8:52 a. m.]

INTERSTATE COMMERCE COMMISSION

[4th Sec. Application 28709]

SULPHURIC ACID FROM SOUTHWEST TO LE
MOYNE, ALA.

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: F. C. Kratzmeir, Agent, for carriers parties to schedules listed below.

Commodities involved: Sulphuric acid, in tankcar loads.

From: Specified points in Arkansas, Louisiana, Oklahoma, and Texas.

To: Le Moyne, Ala.

Grounds for relief: Rail carriers, circuitry, market competition, to apply over rates constructed on the basis of the short line distance formula, and additional destination.

Schedules filed containing proposed rates: F. C. Kratzmeir, Agent, I. C. C. No. 3919, supp. 200; F. C. Kratzmeir, Agent, I. C. C. No. 3967, supp. 290; F. C. Kratzmeir, Agent, I. C. C. No. 3908, supp. 169; F. C. Kratzmeir, Agent, I. C. C. No. 3906, supp. 198.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10192; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28710]

MOTOR-RAIL RATES IN THE EAST; SUBSTITUTED SERVICE

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: The New York, New Haven and Hartford Railroad Company and Rand Express Freight Lines, Inc.

Commodities involved: Semi-trailers, loaded or empty, on flat cars.

Between: New Haven, Conn., and Harlem River, N. Y., also from Boston and Springfield, Mass., and Providence, R. I., to New Haven, Conn.

Grounds for relief: Competition with motor carriers.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters in-

volved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10193; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28711]

**MOTOR-RAIL RATES IN THE EAST;
SUBSTITUTED SERVICE**

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: The New York, New Haven and Hartford Railroad Company and Bradley's Express.

Commodities involved: Semi-trailers, loaded or empty, on flat cars.

Between: Boston, Mass., and New Haven, Conn., also between Hartford and New Haven, Conn., on the one hand, and Harlem River, N. Y., Elizabeth and Edgewater, N. J., on the other.

Grounds for relief: Competition with motor carriers.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10194; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28712]

LESS THAN CARLOAD TRAFFIC IN CONTAINERS FROM AND TO MISSOURI RIVER CITIES

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-

haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: The Missouri Pacific Railroad Company and Missouri Pacific Railroad Company of Nebraska.

Commodities involved: Less-than-carload shipments of freight in containers furnished by the carriers.

Between: Kansas City, Mo.-Kans., and St. Joseph, Mo., on the one hand, and stations in Kansas and Nebraska, on the other.

Grounds for relief: Competition with motor carriers.

Schedules filed containing proposed rates; Missouri Pacific Railroad Company, I. C. C. No. A-10406.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10195; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28713]

CANDY AND CONFECTIONERY FROM CHICAGO, ILL., TO KANSAS CITY, MO.-KANS.

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: W. J. Prueter, Agent, for carriers parties to schedule listed below.

Commodities involved: Candy and confectionery, carloads.

From: Chicago, Ill.

To: Kansas City, Mo.-Kans.

Grounds for relief: Competition with rail carriers, circuitry, and competition with motor carriers.

Schedules filed containing proposed rates; W. J. Prueter, Agent, I. C. C. No. A-3733, supp. 97.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with re-

spect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10196; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28714]

FRESH MEATS AND PACKING HOUSE PRODUCTS FROM FREMONT, NEBR., TO PAULINE AND TOPEKA, KANS.

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: W. J. Prueter, Agent, for carriers parties to schedule listed below.

Commodities involved: Fresh meats and packing house products, carloads. From: Fremont, Nebr.

To: Pauline and Topeka, Kans.

Grounds for relief: Competition with rail carriers and circuitous routes.

Schedules filed containing proposed rates; W. J. Prueter, Agent, I. C. C. No. A-3748, supp. 103.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10197; Filed, Dec. 4, 1953;
8:48 a. m.]

[4th Sec. Application 28715]

SCRAP PAPER FROM CHICAGO, ILL., TO KANSAS CITY, MO., AND OMAHA, NEBR.

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered applica-

tion for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: W. J. Prueter, Agent, for carriers parties to schedule listed below.

Commodities involved: Scrap or waste paper, carloads.

From: Chicago, Ill.

To: Kansas City, Mo., and Omaha, Nebr., and points taking same rates.

Grounds for relief: Competition with rail carriers and circuitous routes.

Schedules filed containing proposed rates: W. J. Prueter, Agent, I. C. C. No. A-3733, supp. 97.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10198; Filed, Dec. 4, 1953;
8:49 a. m.]

[4th Sec. Application 28716]

SUPERPHOSPHATE FROM STREATOR, ILL., TO
ARMOUR, IOWA

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: W. J. Prueter, Agent, for carriers parties to schedule listed below.

Commodities involved: Superphosphate (acid phosphate), in carloads.

From: Streator, Ill.

To: Armour, Iowa.

Grounds for relief: Competition with rail carriers and circuitous routes.

Schedules filed containing proposed rates: W. J. Prueter, Agent, I. C. C. No. A-3790, supp. 86.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the

application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10199; Filed, Dec. 4, 1953;
8:49 a. m.]

[4th Sec. Application 28717]

MURIATIC ACID FROM AND TO SOUTHWEST;
EXCEPTIONS TO UNIFORM CLASSIFICATION
RATING

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: F. C. Kratzmeir, Agent, for carriers parties to schedule listed below.

Commodities involved: Muriatic (hydrochloric) in tank-car loads, subject to class 22.5 rating in exceptions to uniform classification.

Between: Points in southwestern territory, on the one hand, and points in Illinois and western trunk-line territory, on the other.

Grounds for relief: Rail competition, circuitry, operation through higher-rated territory, and to maintain higher rates at intermediate points east of Mississippi River.

Schedules filed containing proposed rates: F. C. Kratzmeir, Agent, I. C. C. No. 4077, supp. 2.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10200; Filed, Dec. 4, 1953;
8:49 a. m.]

[4th Sec. Application 28718]

FRESH MEATS AND PACKING HOUSE PRODUCTS FROM RIO GRANDE CROSSINGS TO POINTS IN CENTRAL, MIDWEST AND SOUTHWEST TERRITORIES

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: F. C. Kratzmeir, Agent, for carriers parties to schedule listed below.

Commodities involved: Fresh meats and packing house products, carloads.

From: Brownsville, Eagle Pass, El Paso, Hidalgo, Laredo, and Presidio, Tex. (on traffic from Mexico).

To: Points in Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, and Wisconsin.

Grounds for relief: Competition with rail carriers, circuitous routes, and equalization of rates from Rio Grande River Crossings.

Schedules filed containing proposed rates: F. C. Kratzmeir, Agent, I. C. C. No. 3843, supp. 44.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL] GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10201; Filed, Dec. 4, 1953;
8:49 a. m.]

[4th Sec. Application 28719]

MOTOR-COMPETITIVE ALL-RAIL CLASS AND COMMODITY RATES BETWEEN LOUISIANA AND TEXAS

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the long-and-short-haul provision of section 4 (1) of the Interstate Commerce Act.

Filed by: The Texas and New Orleans Railroad Company for itself and on behalf of Texas-Mexican Railway Company.

Involving: Class and commodity rates over all-rail routes made the same as common carrier motor rates.

Between: Points in Louisiana and Texas.

Grounds for relief: Competition with motor carriers and to maintain grouping.

Schedules filed containing proposed rates: J. D. Hughett, Agent, MF-I. C. C. No. 205, supp. 3; J. D. Hughett, Agent, MF-I. C. C. No. 203, supp. 6; J. D. Hughett, Agent, MF-I. C. C. No. 178, supp. 42; J. D. Hughett, Agent, MF-I. C. C. No. 182, supp. 15; J. D. Hughett, Agent, MF-I. C. C. No. 200, supp. 9; J. D. Hughett, Agent, MF-I. C. C. No. 185, supp. 30.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing,

upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL]

GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10202; Filed, Dec. 4, 1953;
8:49 a. m.]

[4th Sec. Application 28720]

**MOTOR-COMPETITIVE ALL-RAIL CLASS AND
COMMODITY RATES BETWEEN LOUISIANA
AND TEXAS**

APPLICATION FOR RELIEF

DECEMBER 2, 1953.

The Commission is in receipt of the above-entitled and numbered application for relief from the (aggregate-of-intermediates) provision of section 4 (1) of the Interstate Commerce Act.

Filed by: The Texas and New Orleans Railroad Company for itself and on behalf of Texas-Mexican Railway Company.

Involving: Class and commodity rates over all-rail routes made the same as common carrier motor rates.

Between: Points in Louisiana and Texas.

Grounds for relief: Competition with motor carriers and to maintain grouping.

Schedules filed containing proposed rates: J. D. Hughett, Agent, MF-I. C. C. No. 205, supp. 3; J. D. Hughett, Agent, MF-I. C. C. No. 203, supp. 6; J. D. Hughett, Agent, MF-I. C. C. No. 178, supp. 42; J. D. Hughett, Agent, MF-I. C. C. No. 182, supp. 15; J. D. Hughett, Agent, MF-I. C. C. No. 200, supp. 9; J. D. Hughett, Agent, MF-I. C. C. No. 185, supp. 30.

Any interested person desiring the Commission to hold a hearing upon such application shall request the Commission in writing so to do within 15 days from the date of this notice. As provided by the general rules of practice of the Commission, Rule 73, persons other than applicants should fairly disclose their interest, and the position they intend to take at the hearing with respect to the application. Otherwise the Commission, in its discretion, may proceed to investigate and determine the matters involved in such application without further or formal hearing. If because of an emergency a grant of temporary relief is found to be necessary before the expiration of the 15-day period, a hearing, upon a request filed within that period, may be held subsequently.

By the Commission.

[SEAL]

GEORGE W. LAIRD,
Secretary.

[F. R. Doc. 53-10203; Filed, Dec. 4, 1953;
8:50 a. m.]