

THE LIBRARY OF PARLIAMENT

CANADA. DEPT. OF NATIONAL DEFENCE.
PARLIAMENTARY RETURNS OFFICE.

Index, Special Committee on Defence,
1963.

BIBLIOTHÈQUE PARLEMENT

J
103
H7
1963
D4
A1
Index

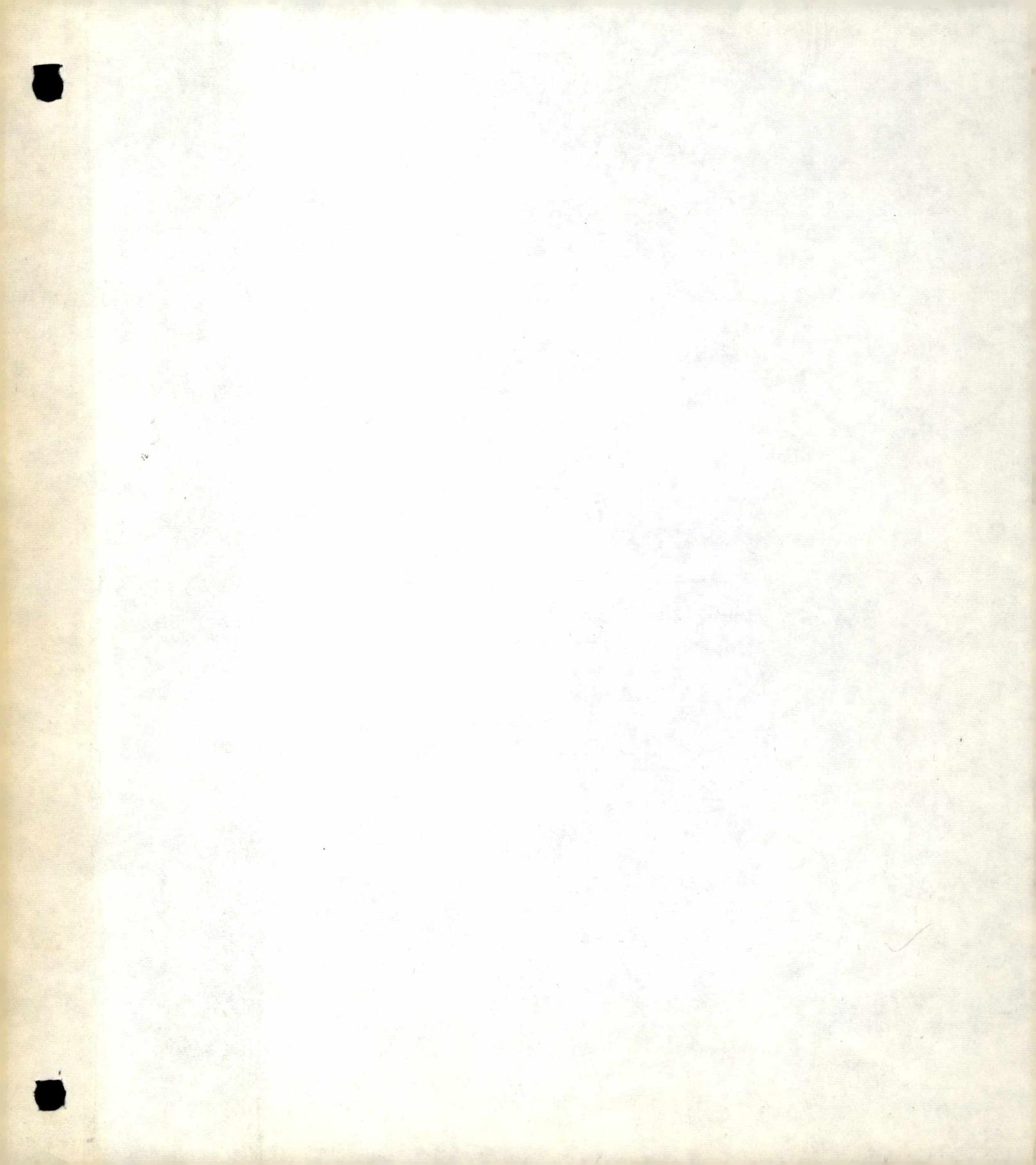
J
103
H7
1963
D4
A1
Index

INDEX

SPECIAL COMMITTEE ON DEFENCE

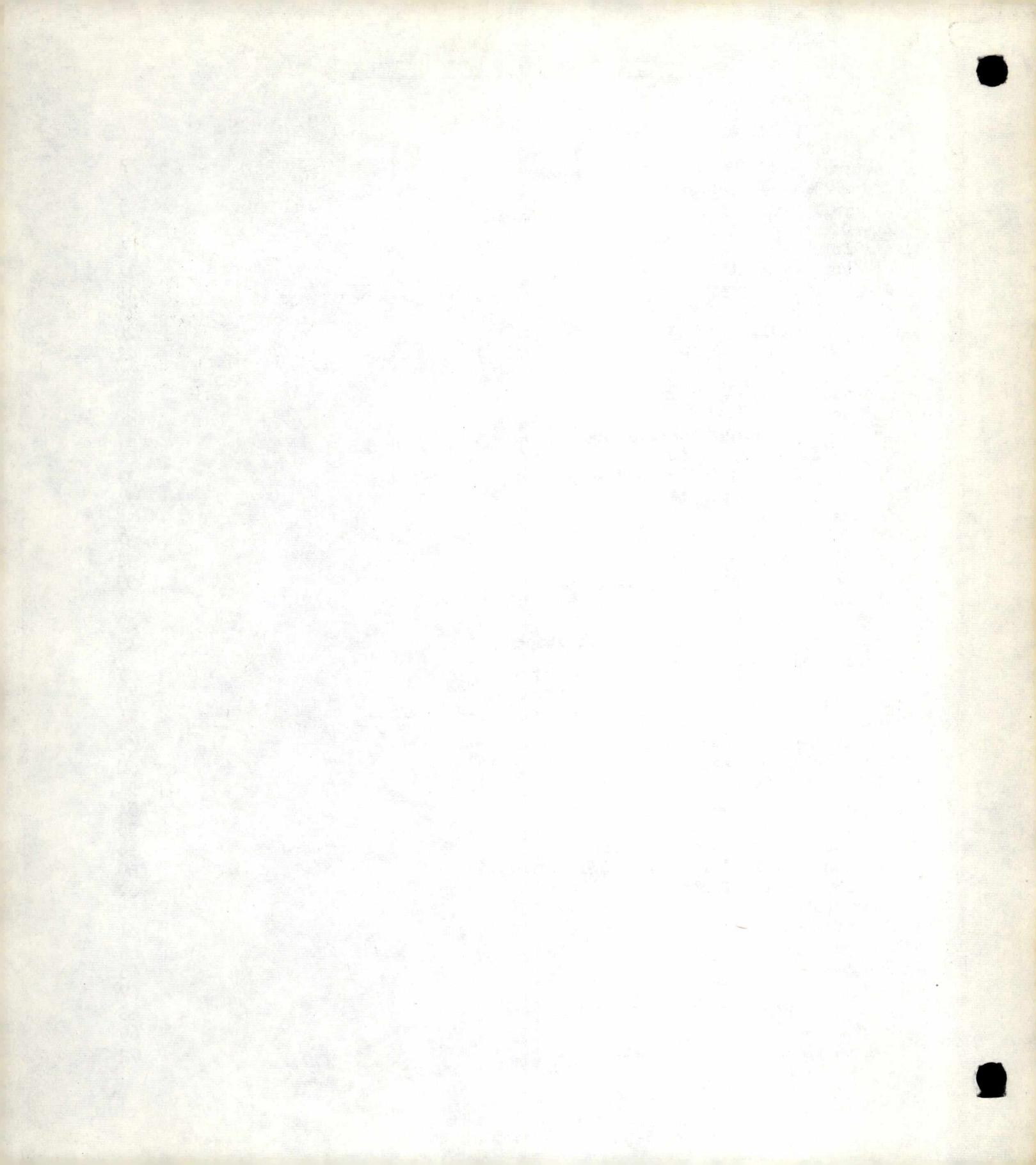
1963

Parliamentary Returns

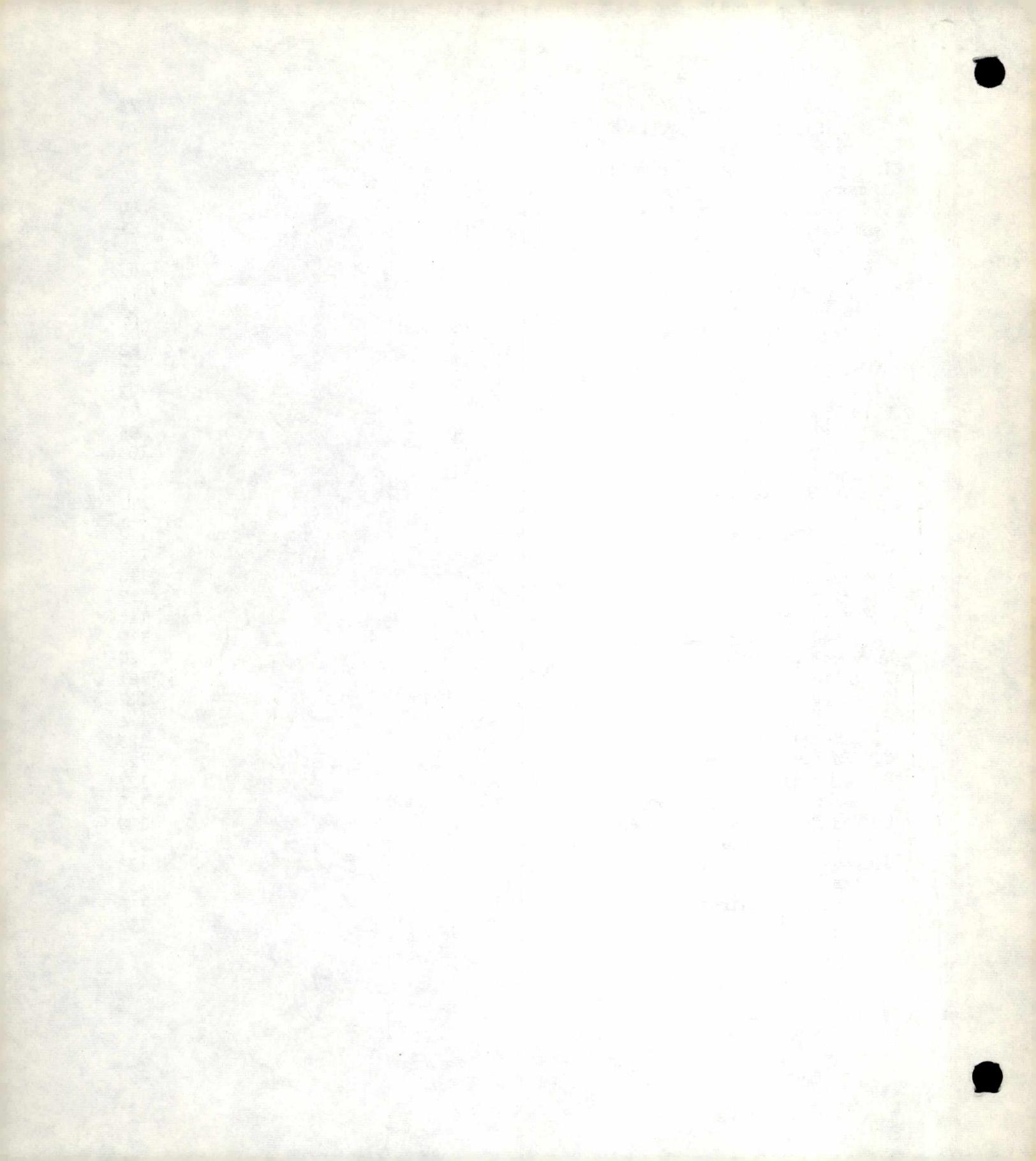


PRINCIPAL HEADINGS USED IN INDEX

<u>SUBJECT</u>	<u>PAGE</u>
Aircraft	1
Aircraft - Helicopters	3
Aircraft Production	4
Air Division - 1st	5
Air Force	8
Air Force - Auxiliary	14
Army	15
Army - Aircraft	19
Army - Militia	20
Awards	21
Bilingualism	22
Brigade, 4th	23
Cadets	26
Canada-Nato Production Sharing	27
Canada's Defence Policy	28
Canada's Defence Policy - Nato	31
Canada-U.K. Co-operation	34
Canada-U.S. Co-operation	35
Canada-U.S. Production Sharing	37
Canadian Services Colleges	38
Chaplain Services	39
Chiefs of Staff	40
Civilian Personnel	42
Clothing, Equipment and General Stores	43
Committees	44
Commonwealth	46
Communications	47
Communism	48
Continental Defence - General	49
Continental Defence - BMEWS	50
Continental Defence - Norad	51
Continental Defence - Radar Lines	54
Cuba	55
Defence Research and Development	56
Departmental Administration and Organization	60
Department of Defence Production	62
Dependents	63
Disarmament	64
Expenditures	65
Far East	66
Food	67
Glassco Report	68
Guided Missiles	69
Guided Missiles - Honest John	72



Guided Missiles - ICBM	73
Guided Missiles - Satellites	75
Highways, Defence	76
Irregularities and Incidents	77
Manpower	78
Manpower, Compulsory Military Training	80
Manpower, Recruiting	81
Manpower - Strengths	82
Maritime Command	83
Married Quarters	84
Medical Services	85
Movements and Transfers	86
NATO	88
NATO, Germany	92
NATO - Mutual Aid	93
NATO Production Sharing	94
Navy	95
Navy Shipbuilding	103
Nuclear Warfare	105
Pay and Allowances	110
Political	111
Public Relations	112
Russia	113
Search, Rescue & Emergencies	116
Security	117
Standardization	118
Statutes and Legal Affairs	119
Survival Operations	120
Training	121
Tri-Service	122
Truce Teams	124
U.K. Armed Forces	125
U.K. Defence Policy	126
United Nations	127
United Nations Congo Force	129
United Nations Emergency Force	130
U.S. Armed Forces	131
U.S. Defence Policy	133
Visits	135
Weapons and Equipment	136
Womens' Services	137



SPECIAL COMMITTEE ON DEFENCE

CHRONOLOGICAL SUBJECT INDEX

AIRCRAFT

July 9, 1963

Navy - helicopters - CNS - pp. 97, 101, 102
Navy - Tracker (CS2F) aircraft - CNS - p. 101

October 29, 1963

Cariboo, Hercules payload capacity - CGS - p. 613

October 31, 1963

Anti-submarine aircraft - Argus, Neptune - number - cost - CAS, Lessard,
Hellyer - p. 629

1 Air Div. - strike reconnaissance role - difficulty re sqdns. in France -
movement of sqdns. to Germany & Belgium - vulnerability of - radius of
CF104 - time for transfer & arming - exercise re for Cttee visit - Winch,
CAS, Hellyer, Smith, MacInnis - pp. 630-32

1 Air Div. - strike role - a/c configured for - modifications re - use of
air-to-surface missiles - change to conventional role in future - strike
role exclusively nuclear - possible use of nuclear weapons on purely
military targets - Lambert, CAS - pp. 632-35

Provision of a/c for conventional or limited nuclear war outside of Europe -
use of T33 and Lancaster - Smith, CAS - p. 637

Use of a/c for UN - Otter - Cariboo - need of more Cariboo - Smith, CAS -
pp. 637-38

Argus, Neptune & Sonobuoys - costs - number of sonobuoys used - CAS - p. 646

Load-carrying capacity of Yukon & Hercules a/c & C119 - comparison of -
MacLean, CAS - p. 647

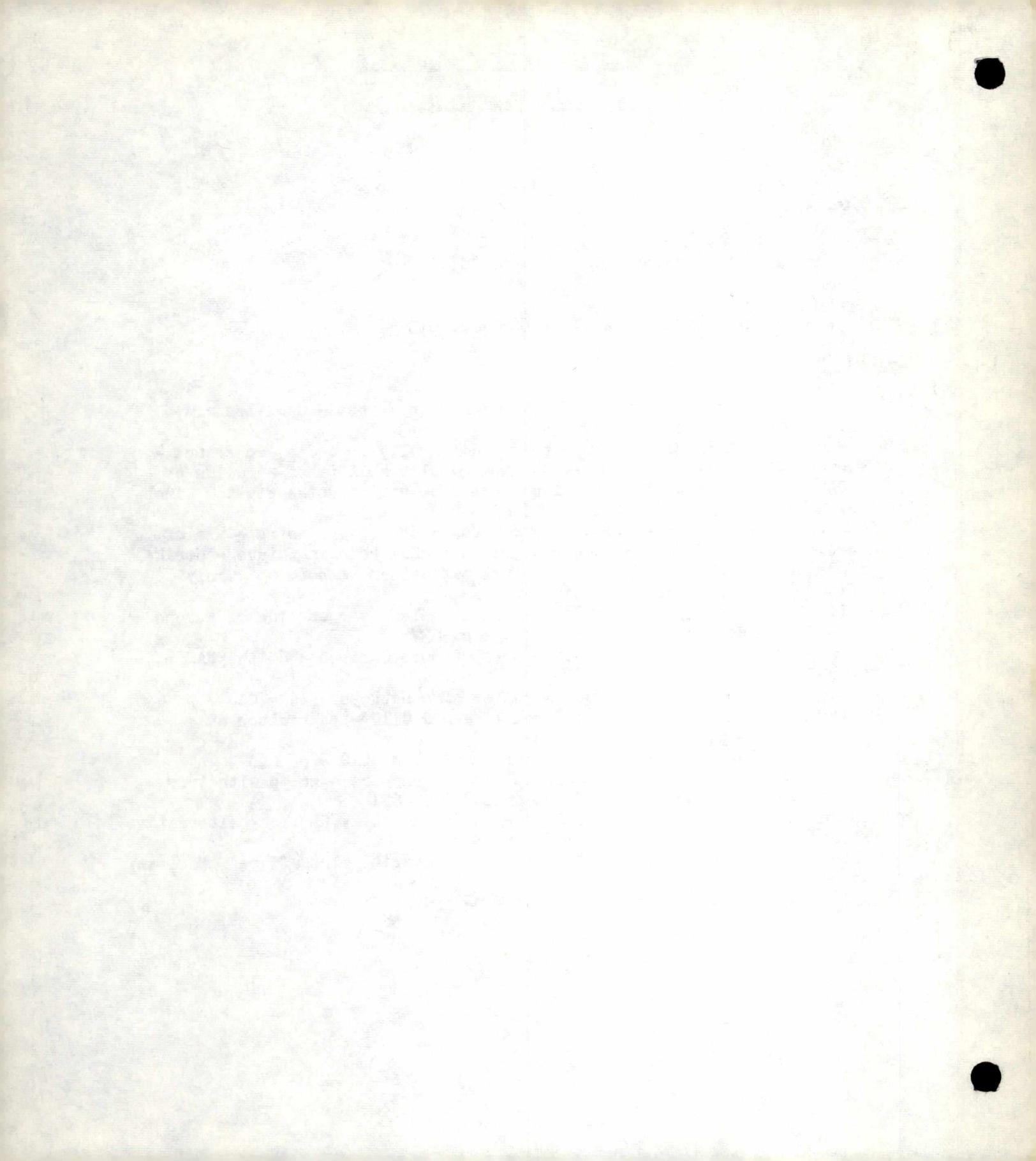
CF104 - manufacture of - spare parts for - McMillan, CAS - p. 648

Recce in Arctic - replacement of Lancaster - defence re - co-op with Army -
Soviet submarine threat in - Matheson, CAS - p. 651

Strike recce role - good one - in future undertaken by VTOL a/c - alternative
transport role - Matheson, CAS - pp. 651-52

Maritime Air Command commitment to SACLANT - number of aircraft re - MacLean,
CAS - pp. 660-61

Cosmopolitan aircraft - use - Hahn, CAS - p. 658



AIRCRAFT - (Cont'd)November 5, 1963

Canada-U.K. production sharing re reconnaissance drone - Hellyer - p. 666

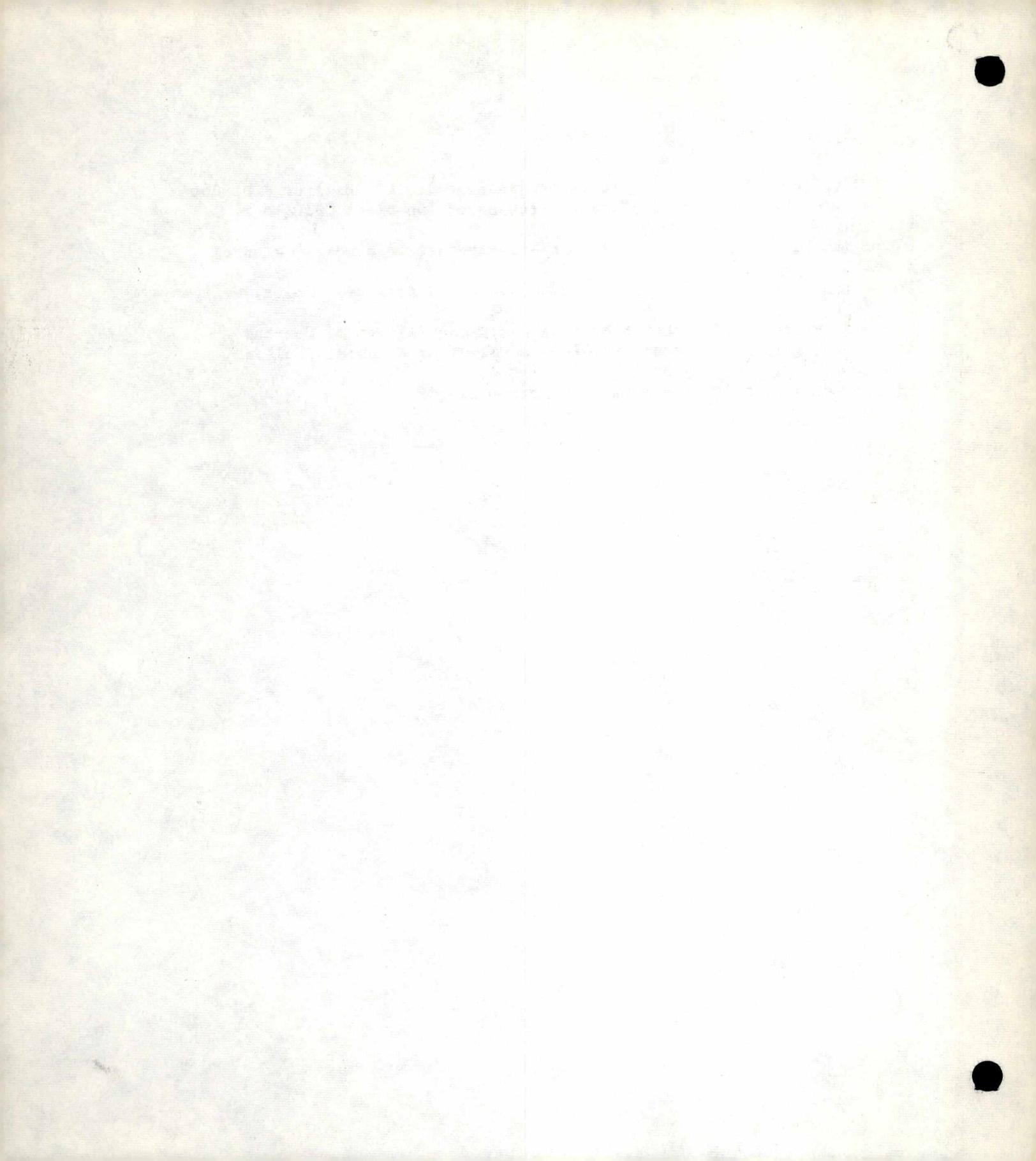
Cancellation of additional CF104's - purchase of two-place CF104's re training - Hellyer - p. 667

Non-purchase of additional CF101's - re-arrangement in number & size of sqdns. - Hellyer - p. 667

CF101 aircraft - production phased out - extent of service - Smith, Hellyer - p. 670

Future construction of submarines in Canada & acquisition of Oberons - production-sharing agreement re CI89 recce. drone - Laniel, Hellyer, MacInnis - pp. 685, 687-88

Missile armament of CF101 - Smith, Hellyer - p. 687 .



AIRCRAFT - HELICOPTERSOctober 10, 1963

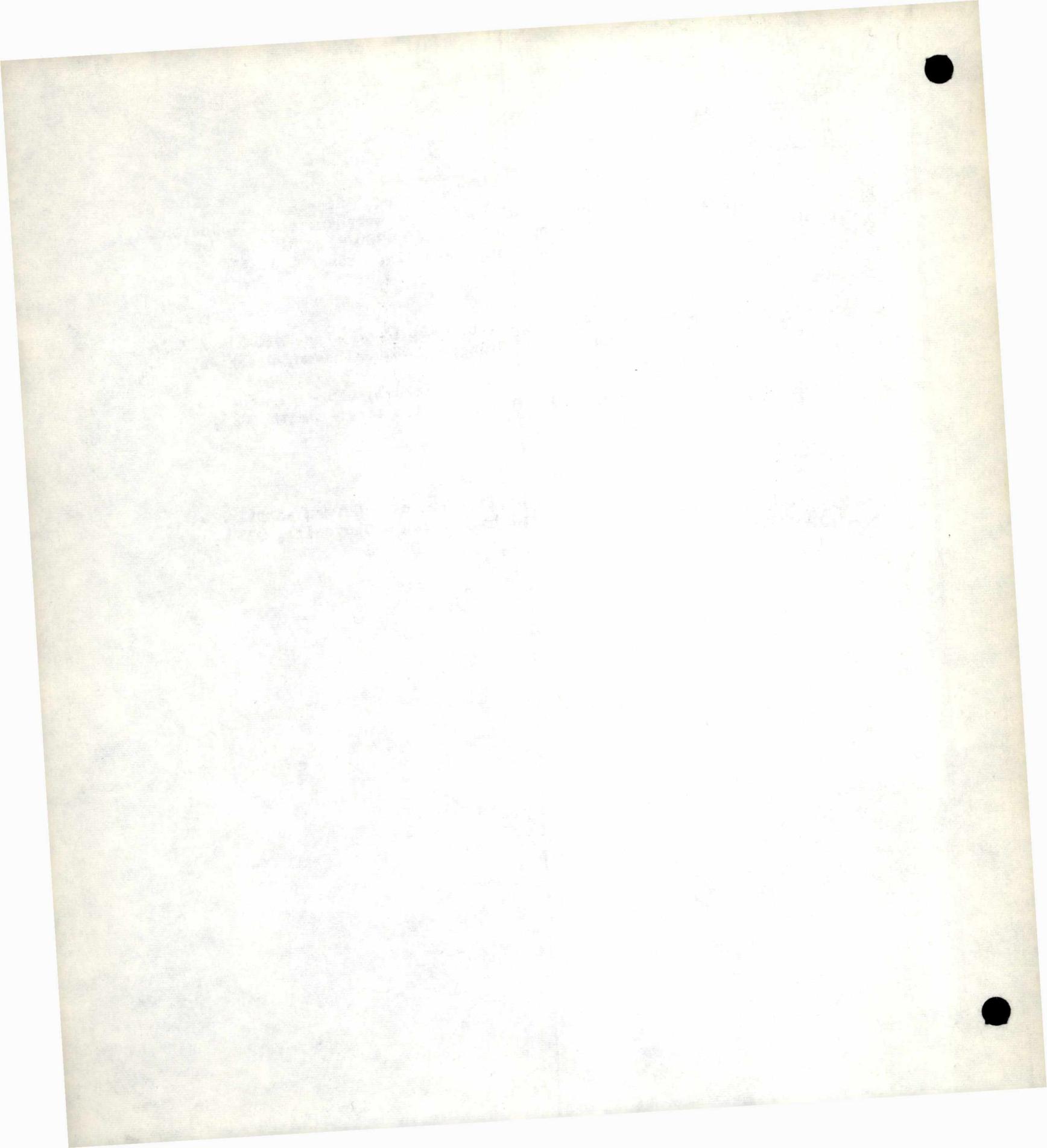
Helicopters - Brewin, Plomer, Asselin - pp. 355, 384, 386
Navy - utilization & role of subs & helicopters on merchant ships - Churchill,
Plomer, Lloyd, Smith, Asselin - pp. 357-58, 360, 380-81, 384.
Navy - aircraft carriers with helicopters - Asselin, Plomer - p. 386

October 15, 1963

Navy - frigates - helicopters for - Lambert, CNS, Lloyd - pp. 410-11, 415-16
- GP frigates - helicopters for - Granger, CNS, Matheson, Deachman,
Brewin - pp. 424, 431
- increased utilization of helicopters - Lambert, CNS - p. 426
- merchant troop carriers - fitted with helicopters - Smith, CNS,
MacInnis - p. 428

October 29, 1963

Close support air cover for Brigade - utilization of - German adoption -
helicopters for recce. re, development by British - Churchill, CGS -
pp. 612-13.



AIRCRAFT PRODUCTIONJuly 4, 1963

CF101 - termination of production - Smith, Hellyer - p. 77

July 30, 1963

DDP - aircraft production program - Drury - pp. 262, 264

October 22, 1963

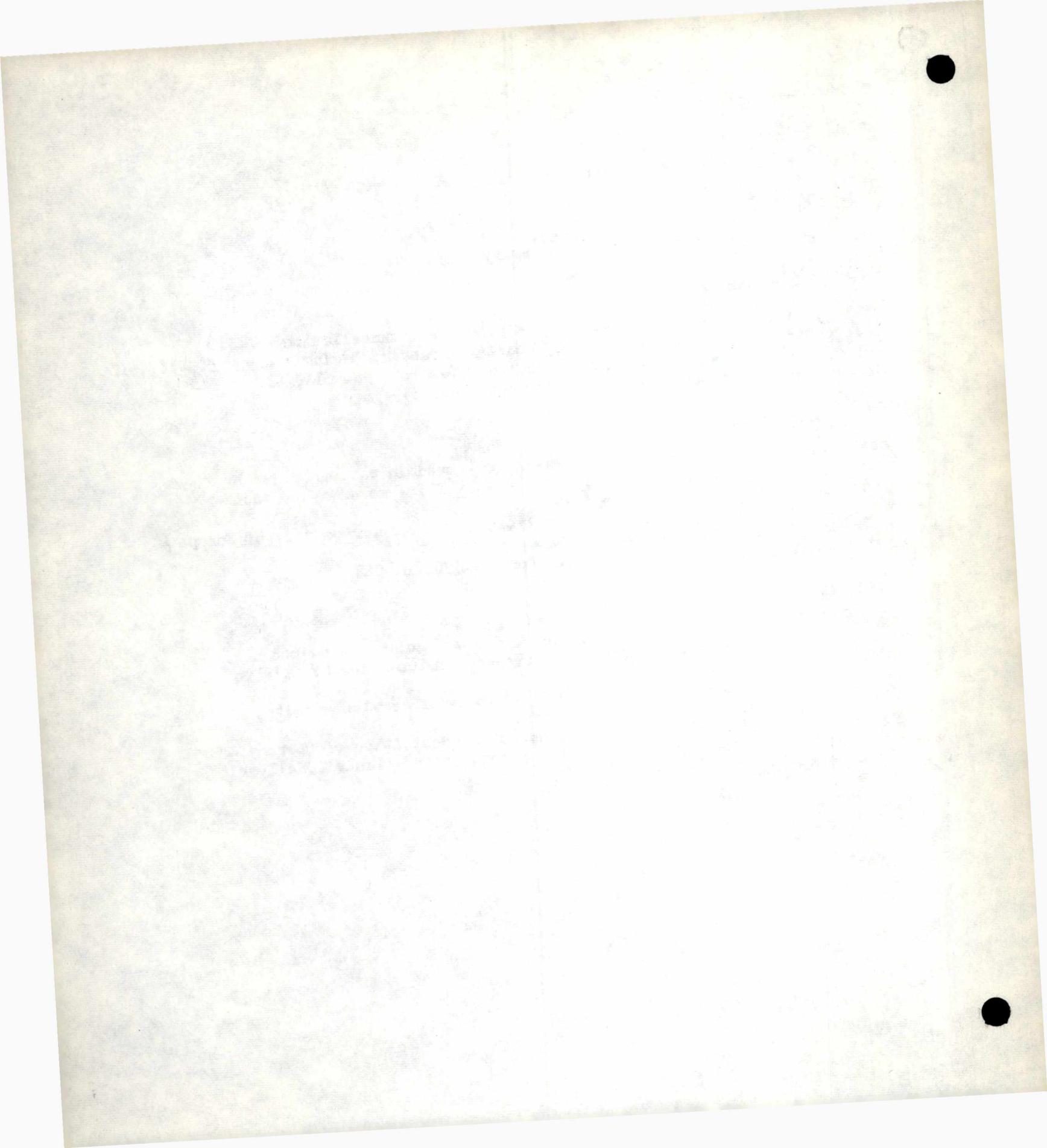
History of Arrow program development & subsequent cancellation - NORAD
 formation - decision re - MacRae, Foulkes, Granger, MacInnis - pp. 509-10, 511
 Decision re acquisition of CF104 - Foulkes, Temple - pp. 511, 518
 Use of Cariboo in Europe - Smith, Foulkes - pp. 535-36

October 31, 1963

CF104 still in production - replacement re - used in various roles by
 Germany - dual training re - replacement by TFX - movement to another
 theatre - Smith, CAS - pp. 635-37
 Provision of a/c for conventional or limited nuclear war outside of Europe -
 use of T33 & Lancaster - Smith, CAS - p. 637
 CF104 - manufacture of - spare parts for - McMillan, CAS - p. 648

November 5, 1963

Canada-U.K. production sharing re recce. drone - Hellyer - p. 666
 Cancellation of additional CF104's - purchase of two-place CF104's re
 training - Hellyer - p. 667
 CF101 aircraft - production phased out - extent of service - Smith,
 Hellyer - p. 670
 Future construction of submarines in Canada & acquisition of Oberons -
 production-sharing agreement re CI89 recce. drone - Laniel, Hellyer,
 MacInnis - pp. 685, 687-88



AIR DIVISION - 1stJune 27, 1963

Role change - drop of bombs on targets - Hellyer - pp. 14, 15
 Reduction of sqdns. - Hellyer - p. 14
 Atomic devices - use by - Hellyer - pp. 14, 15
 Nuclear bombs for - Hellyer - p. 15
 Review of acquisition of additional CF104's - Hellyer - p. 19
 Re-deployment of CF-104's in France - pp. 19-20
 Strike role defined - Lambert, Hellyer - p. 24

July 4, 1963

Value of sqdns. in France - CCOS, Winch - pp. 62-63
 Position of SACEUR re - CCOS, Winch - p. 63
 Delivery of warheads to - CCOS, Winch - p. 63
 Transfer of to Germany - CCOS, MacLean - p. 65
 French position re - CCOS, Lambert - pp. 65-66
 Limitation of air support by - CCOS, MacLean - p. 72
 Strike recce. atomic role - Lambert, CCOS, McMillan - p. 74

July 16, 1963

1 Air Div. - pp. 175-177 - CAS
 Role & location - CAS - pp. 175, 176, 177
 Nuclear weapons - small yield - CAS - pp. 176, 177
 Operational control - CAS - p. 176
 Training - CAS - pp. 176, 177
 Re-equipment with CF104 - CAS - p. 176
 Role of 1 Air Div. - Lambert, CAS - p. 187

July 18, 1963

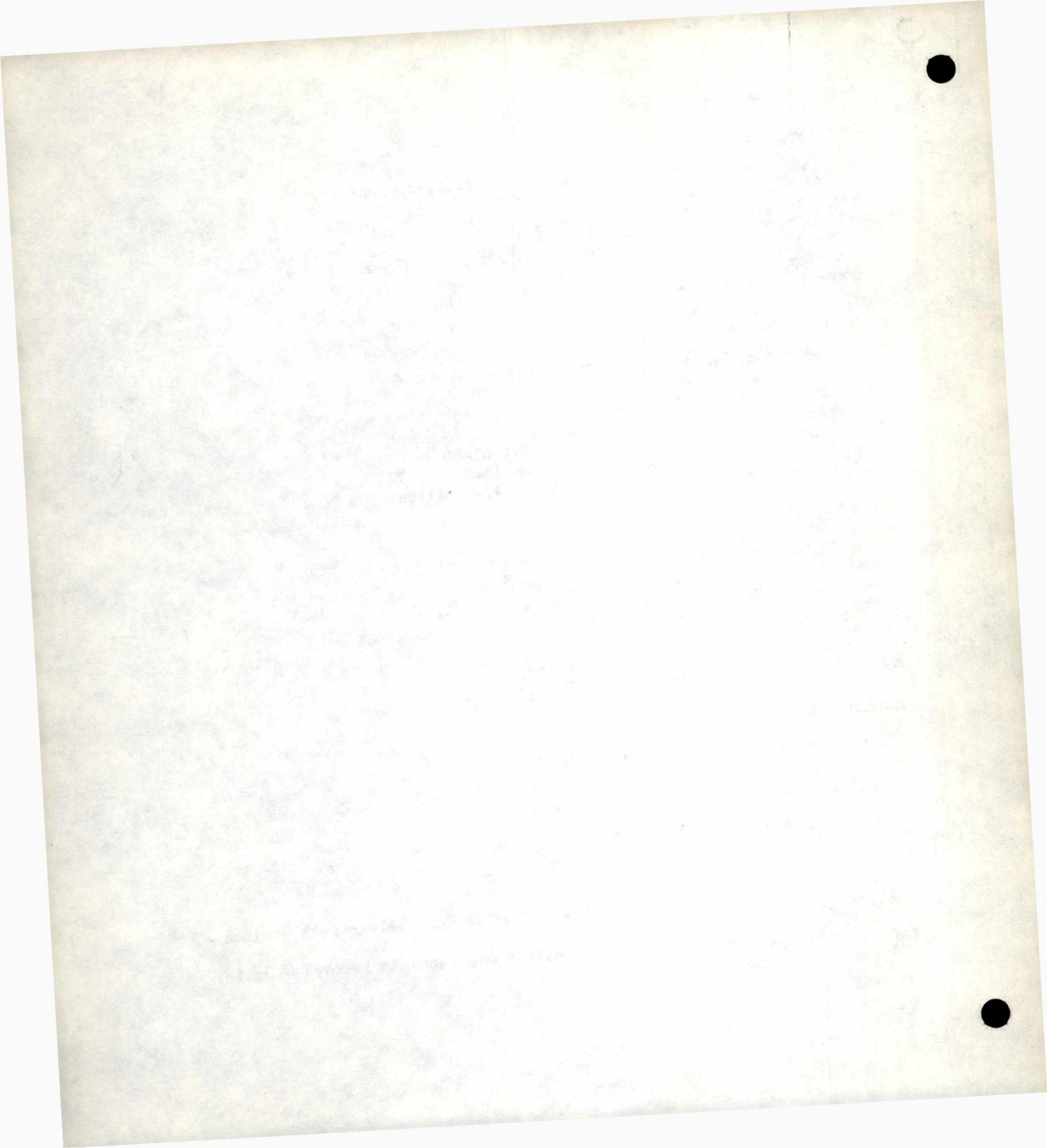
Scientists at 1 Air Div. - CDRB - p. 207

July 30, 1963

Food supply of Cdn. NATO forces - Drury - pp. 281-82

October 17, 1963

Switching half of strike force of 1 Air Div. to non-nuclear role - Winch -
 pp. 437-38
 Forces in Europe - shorter rotation periods - dependents removal - Smith,
 Simonds - p. 456



AIR DIVISION - 1st (Cont'd)October 22, 1963

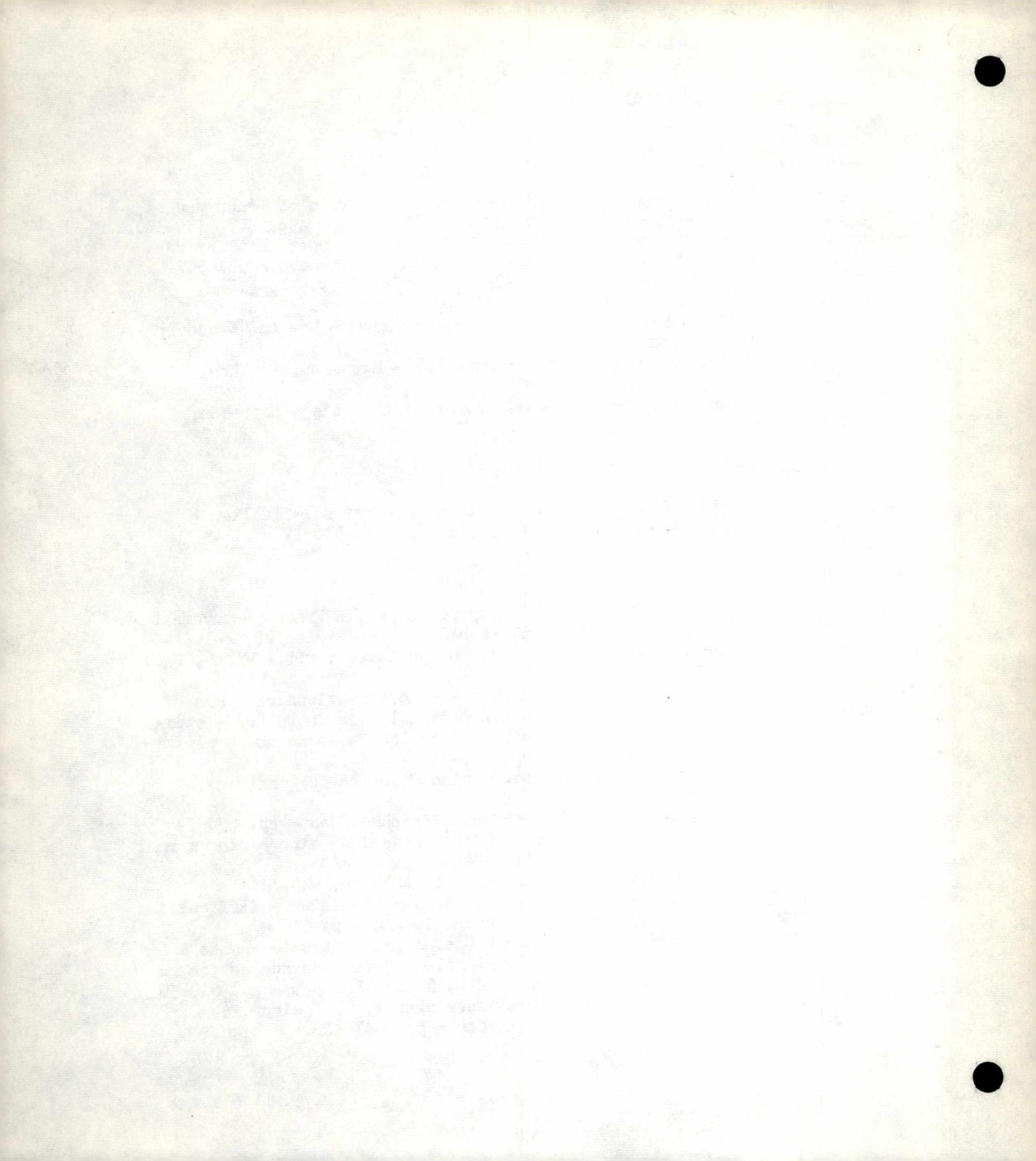
Aircraft of - additional lift capacity - strike recce role of - non-use of French air bases - nuclear weapons for - Foulkes - pp. 496, 497, 499-500.
 Relinquishment of strike role and reorganized into transport unit for Bde. Group - strike role becoming redundant - Foulkes, Matheson - pp. 507, 533
 Decision re acquisition of CF-104 - Foulkes, Temple - pp. 511, 518
 Revision of Air Div. task to transport role - Foulkes - p. 512
 Cdn. commitment to NATO - 1 Air Div. on US supply line - Bde on UK supply line - Foulkes, Lessard - p. 517
 Threat to 1 Air Div. bases by ballistic missiles - Matheson, Foulkes, Lambert - pp. 533, 540-41
 Gen. Norstad's request to have Air Div. assume strike role - Matheson, Foulkes, Smith - pp. 533-34, 536

October 24, 1963

Strike recce role for CF-104 mistake - tactical support role in lieu - Gellner, Lambert, Brewin - pp. 554-55, 561-62, 571, 576-77

October 31, 1963

1 Air Div. - strike recce role - difficulty re sqdns. in France - movement of sqdns. to Germany & Belgium - vulnerability of - radius of CF-104 - time for transfer and arming - exercise re for Cttee visit - Winch, CAS, Hellyer, Smith, MacInnis - pp. 630-32
 1 Air Div. - strike role - a/c configured for - modifications re - use of air-to-surface missiles - change to conventional role in future - strike role exclusively nuclear - possible use of nuclear weapons on purely military targets - Lambert, CAS - pp. 632-35
 Tour of duty for personnel in 1 Air Div. - time required for training - MacRae, CAS - pp. 638-39
 Strength of 1 Air Div. - number of dependents - MacRae, CAS - pp. 638-39
 1 Air Div. - movement of sqdns. out of France for arming - increasing normal alert to reinforced alert - Churchill, CAS - pp. 642-43
 Missile threat to 1 Air Div. bases - Churchill, CAS - pp. 643-44
 Shifting of 1 Air Div. bases from France to Germany & Belgium - difficulties re - Permissive Action Link (PAL) - Churchill, CAS - p. 644
 NATO determination re strike role - date - Cdn. commitment to - change & completion of - adoption of conventional role - Norstad's suggestion re strike role for 1 Air Div. - Matheson, CAS, Smith, Lambert - pp. 649-50
 Strike recce role - good one - in future undertaken by VTOL aircraft - alternative transport role - Matheson, CAS - pp. 651-52



AIR DIVISION - 1st - (Cont'd)

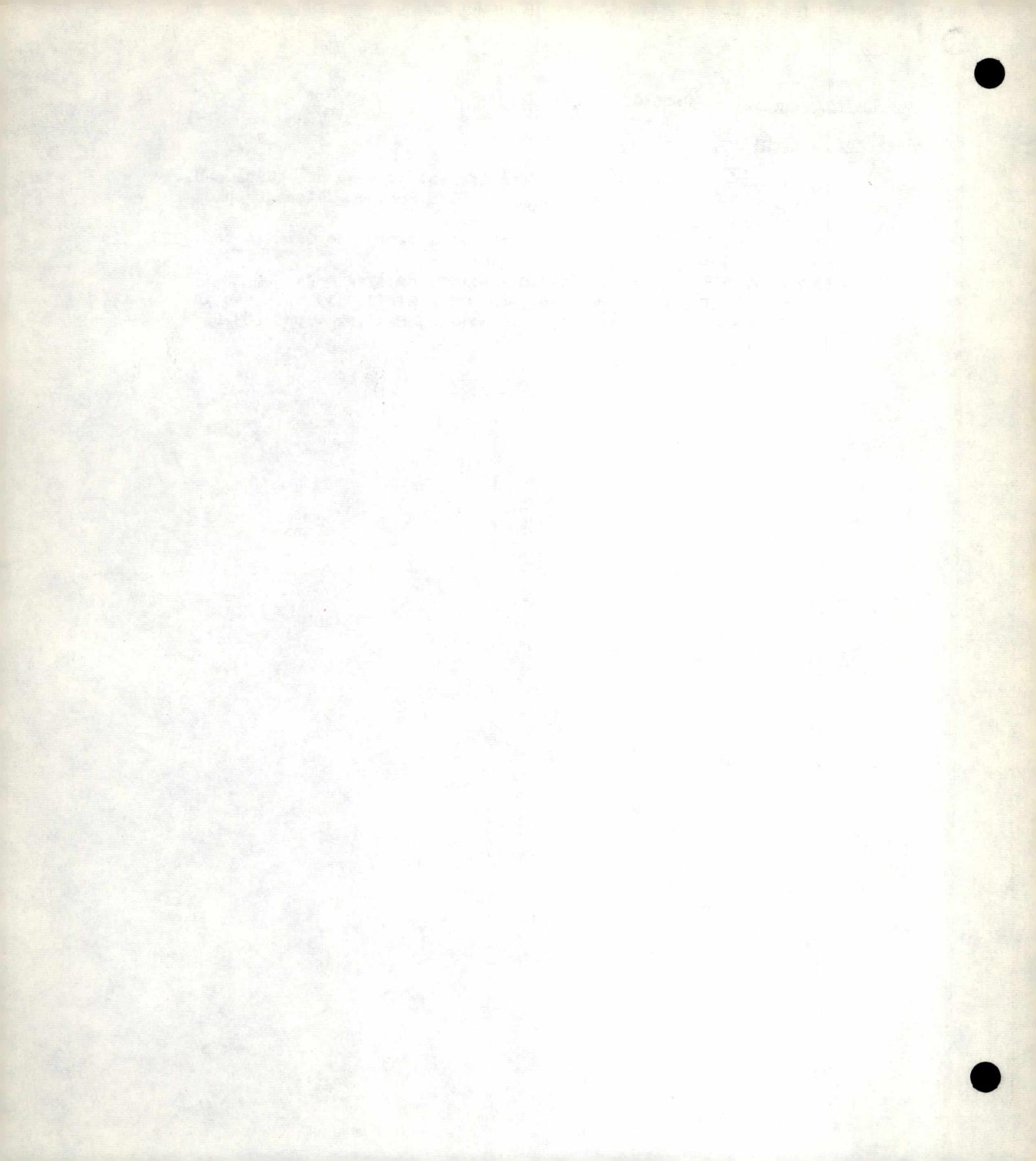
November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S. agreement re - for CF101, Honest John, CF104 & Bomarc - storage space for - Hellyer - p. 665

Cancellation of additional CF104's - purchase of two-place CF104's re training - Hellyer - p. 667

Difficulty re Air Div. sqdns. in France - Winch, Hellyer - p. 668

Need for dispersal of 1 Air Div. bases - nuclear difficulty re bases in France - re-examination of situation - Lessard, Hellyer - pp. 683-84



AIR FORCEJune 27, 1963

1 Air Div. - role change - drop of bombs on targets - Hellyer - pp. 14, 15
 Reduction of sqdns. - Hellyer - p. 14
 Atomic devices - use by - Hellyer - pp. 14, 15
 Cdn. contribution of Bomarc & CF101 - Hellyer - pp. 17, 18
 Bomarc moved north to protect Cdn. cities - Hellyer - p. 17
 Bomarc effective anti-bomber weapon - Hellyer - p. 17
 Bomarc development cost - p. 17 - Hellyer
 Bomarc armed with atomic warhead to be effective & cook bomb - Hellyer - p. 17
 Squadrons under NCRAD - Hellyer - p. 17
 CF101B - carry both conventional & nuclear (Genie & Falcon) weapons - Hellyer -
 p. 17
 CF101 use only high explosive warheads for training - Hellyer - p. 18
 Arrangements re nuclear weapons use by CF101 & Bomarc - Hellyer - p. 18
 RCAF airlift for UNCF - Hellyer - p. 18

July 2, 1963

Conventional vs nuclear equipped CF101 & relative effectiveness & location -
 Lambert, Hellyer, Temple, Deachman - pp. 43, 46-47
 CF101 equipped to carry Genie or Falcon - Deachman, Hellyer - p. 47

July 4, 1963

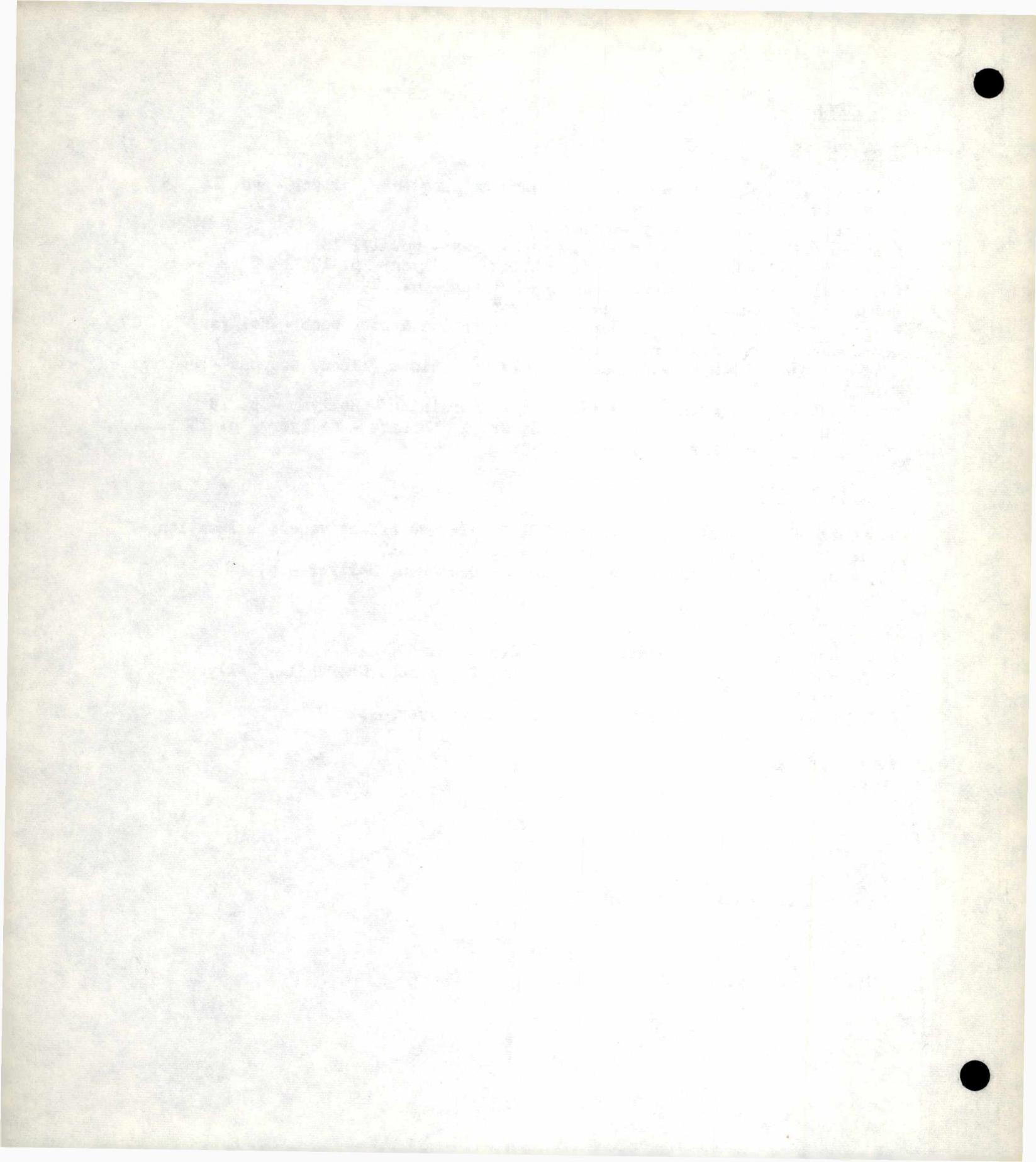
Appearance of A.F. representatives - CCOS - pp. 67, 74
 CF101 acquired from U.S. - type of armament - Winch, Churchill, Hellyer -
 pp. 75-76, 77, 78
 CF101 - termination of production - Smith, Hellyer - p. 77

July 9, 1963

Bomber threat - Churchill - p. 113

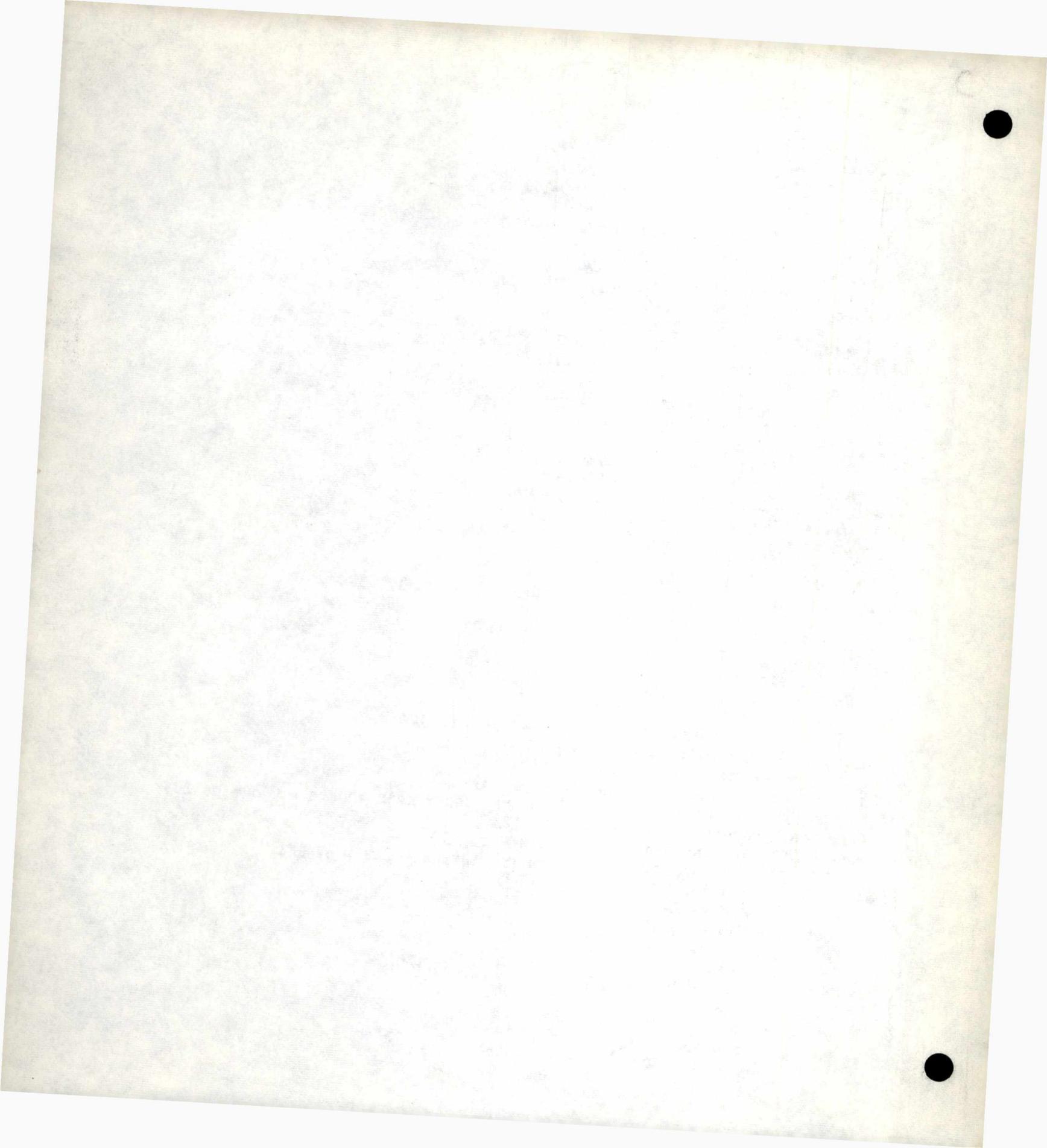
July 16, 1963

RCAF - CAS - pp. 162-63
 Roles & responsibilities of - CAS
 Organization - CAS
 Commands - CAS
 NCRAD
 CF101B & armament - CAS - p. 165



AIR FORCE (Cont'd)July 16, 1963

- Maritime Air Command - CAS - pp. 169-171
 - Role - CAS - p. 169
 - Operational control - CAS - pp. 169-170
 - Assignment to SACLANT - CAS - pp. 169, 171
 - Chain of Command - CAS - p. 170
 - Aircraft - location - CAS - pp. 170-171
 - Co-op with CINCPAC - CAS - p. 171
 - Training - CAS - p. 171
 - Anti-sub detection - CAS - p. 171
- Air Transport Command - CAS - pp. 172-173
 - Role - CAS - p. 172
 - Aircraft of - CAS - pp. 172-73
 - Unit location - CAS - p. 172
 - Training - CAS - p. 172
 - UN operations - CAS - pp. 172-73
 - Aid to civil authorities - CAS - p. 173
- Air Materiel Command - CAS - pp. 177-179
 - Role - CAS - pp. 177-178
 - Composition - CAS - p. 178
 - Use of IBM system - CAS - p. 178
 - Supply pipelines - CAS - p. 178
- Air Force Training - Training Command - CAS - pp. 179-180
 - Responsibility - CAS - p. 179
 - Unit location - CAS - pp. 179, 180
 - Types of Training - CAS - p. 179
 - NATO training - CAS - p. 179
 - Number aircrew trained - CAS - p. 179
 - Training of Nigerians - CAS p. 179
 - Procurement of Tutor jet trainer - CAS - p. 180
 - Tutor characteristics - CAS - p. 180
 - Groundcrew training - CAS - p. 180
- Budget & finance operations - CAS - p. 183
 - Percentage on capital outlays & operations & maintenance - CAS - p. 183
- Management practices - CAS - pp. 183-184
 - "PERT" management techniques - CAS - p. 184
 - Utilization of Glasco Commission suggestion - CAS - p. 184
- Aircraft - CAS - pp. 170-182
 - Argus - CAS - p. 170
 - Neptune - CAS - p. 171
 - Yukon - CAS - p. 173
 - Hercules - CAS - p. 174
 - Cosmopolitan - CAS - p. 174
 - Cariboo - CAS - p. 175
 - CF-104 - CAS - p. 177
 - Vertol helicopter - CAS - p. 181
 - Otter - CAS - p. 182



AIR FORCE (Cont'd)July 16, 1963

Deterrent role of RCAF - Churchill, Hellyer, Lambert, CAS - pp. 185, 186, 187
 Radio-controlled bomber development dropped - Lessard, CAS - p. 193
 Personnel strength in installations, staff colleges, etc. - MacLean, CAS -
 p. 186

July 18, 1963

Research - Intramural - basic & applied - defence against guided missiles
 & bombers - CDRB - p. 211

October 10, 1963

Navy - construction of subs - need - for training of Navy & RCAF - Smith,
 Plomer, Asselin - pp. 352, 386

October 17, 1963

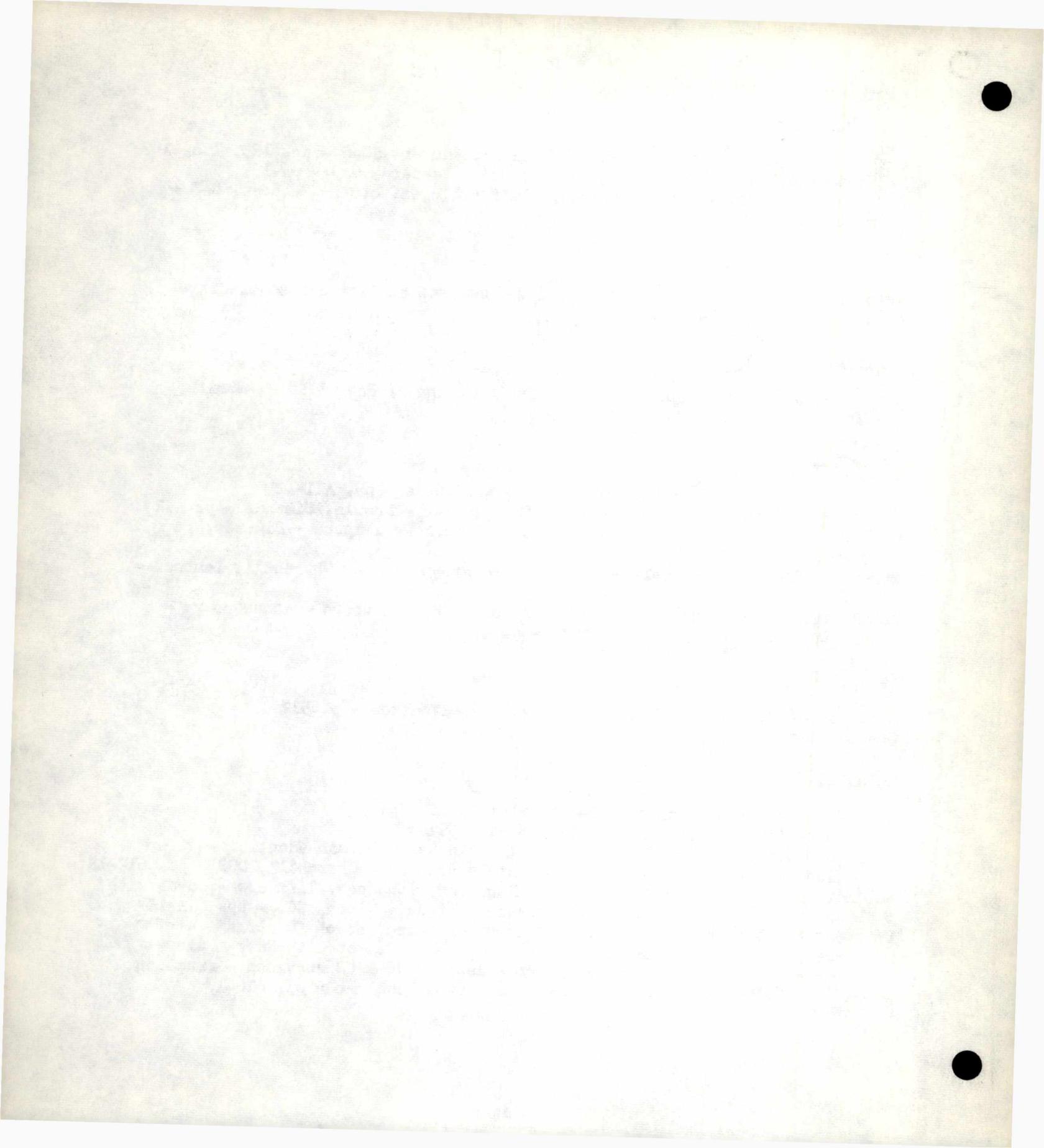
Disappearance of bomber and fighter role - Simonds - pp. 411-42
 Bomber threat unreal in reference to ICBM attack - Brewin, Simonds - p. 452
 Bomber advantage over fighter - threat with nuclear weapons - Simonds,
 Brewin - pp. 453-54
 Aircraft close support role - missile role re - Simonds, Churchill, Lambert -
 pp. 459-60
 Mobile force - composition - modeled after US Marine Corps - armament re -
 air transport of Temple, Simonds - p. 477

October 22, 1963

Revision of Air Div. task to transport role - Foulkes - p. 512
 Greater airlift capacity - Temple, Foulkes - p. 520

October 29, 1963

Bobcat transportable in Hercules aircraft - CGS - p. 592
 Cariboo lifting capacity - Smith, CGS - p. 592
 Close support air cover for Bde. - utilization of - German adoption -
 helicopters for recce re, development by British - Churchill, CGS - pp. 612-13
 Mobility of Army - ship transport to disappear with heavy lift a/c - co-op with
 RCAF - efficient if done on tri-service set-up - Winch, CGS - pp. 614-15
 Unification of ordnance & supply services - procurement of FC rifle - Air
 Force procurement of helicopters - food, etc. - co-op with Navy & Air
 Force - common supply service - comparison to UK & US services - function
 of DM & Scientific advisers re - Winch, CGS, Deachman - pp. 616-17



AIR FORCE (Cont'd)October 29, 1963

Converting Bde. to airborne role - supply set-up re - MacLean, CGS - p. 619

October 31, 1963

Movement of Bde. from North America to Europe - suitability of Hercules & Yukon - Temple, CAS - pp. 627-28

Comparison of Cariboo, Hercules & Yukon - Temple, CAS - pp. 627-28

Shift from bomber to missile threat - intelligence reports re - Hahn, CAS - p. 628

Anti-submarine aircraft - Argus, Neptune - number - cost - CAS, Lessard, Hellyer - p. 629

Anti-submarine surveillance - use of sonobuoys - range of detection - Lessard, CAS, McMillan, Laniel - pp. 629, 630

Soviet development of submarine ballistic missiles - CAS - p. 629

1 Air Div. - strike recce role - difficulty re sqdns. in France - movement of sqdns. to Germany & Belgium - vulnerability of - radius of CF-104 - time for transfer and arming - exercises re for Ottee visit - Winch, CAS, Hellyer, Smith, MacInnis - pp. 630-32

1 Air Div. - strike role - aircraft configured for - modifications re - use of air-to-surface missiles - change to conventional role in future - strike role exclusively nuclear - possible use of nuclear weapons on purely military targets - Lamberts, CAS - pp. 632-35

Limited use of nuclear weapons - escalation of - constraint re use - Lambert, CAS - pp. 634-35

CF-104 still in production - replacement re - used in various roles by Germany - dual training re - replacement by TFX - movement to another theatre - Smith, CAS - pp. 635-37

Provision of a/c for conventional or limited nuclear war outside of Europe - use of T33 and Lancaster - Smith, CAS - p. 637

Use of a/c for UN - Otter - Cariboo - need of more Cariboo - Smith, CAS - pp. 637-38

Nuclear missile-firing submarine threat - defence against difficult - MacRae, CAS - p. 638

Tour of duty for personnel in 1 Air Div. - time required for training - MacRae, CAS - pp. 638-39

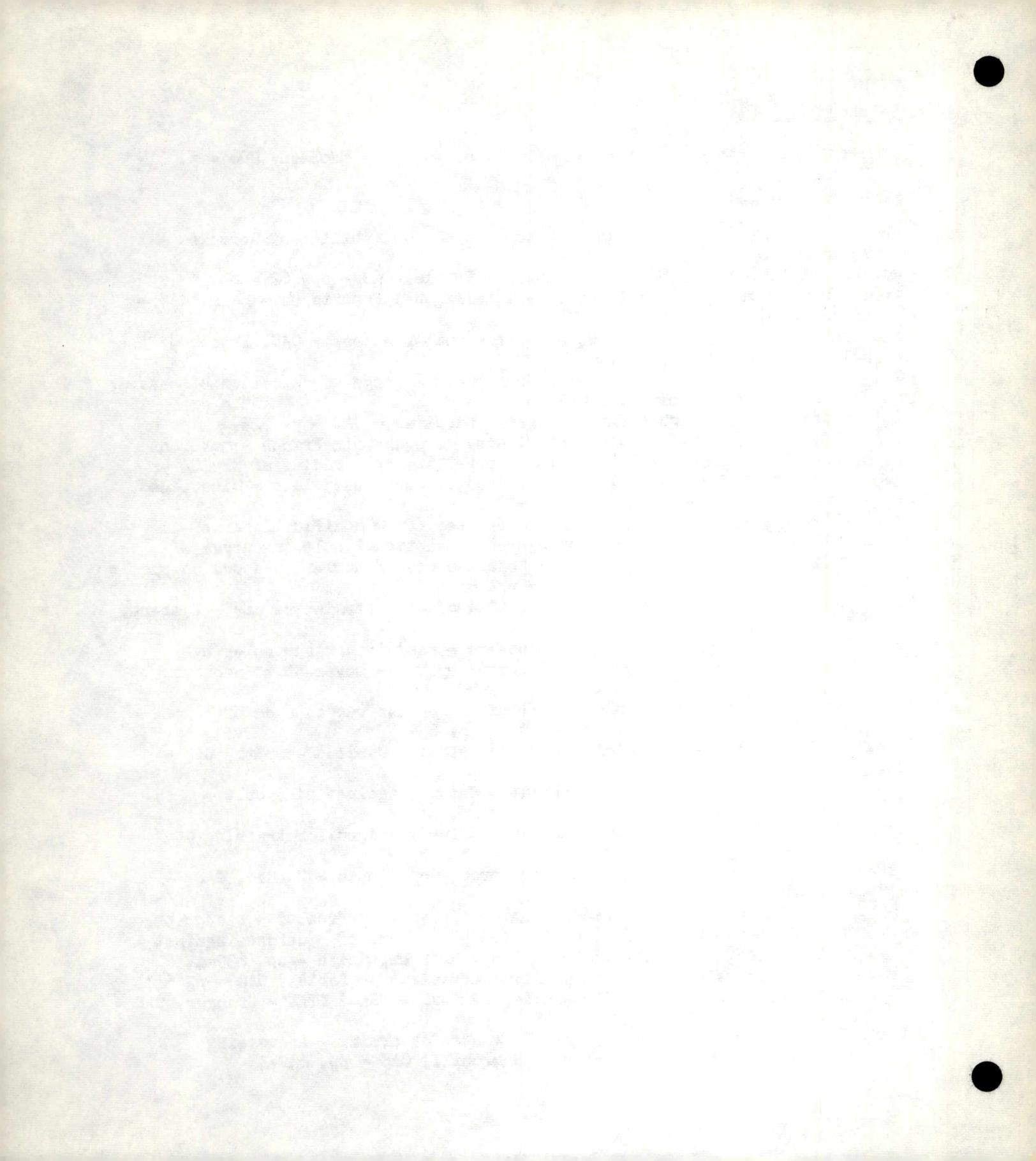
Strength of 1 Air Div. & 4th Bde. - number of dependents - MacRae, CAS - pp. 638-39

ICBM, ballistic missile submarine & bomber threats - degree of - statement by US Def. Sec. re - hardening of sites - accuracy of - defence against - Churchill, CAS, MacInnis, Lambert, Hahn, Granger, Smith - pp. 639-42

Reduction in number of air force sqdns. - efficiency - Laniel, CAS - p. 641

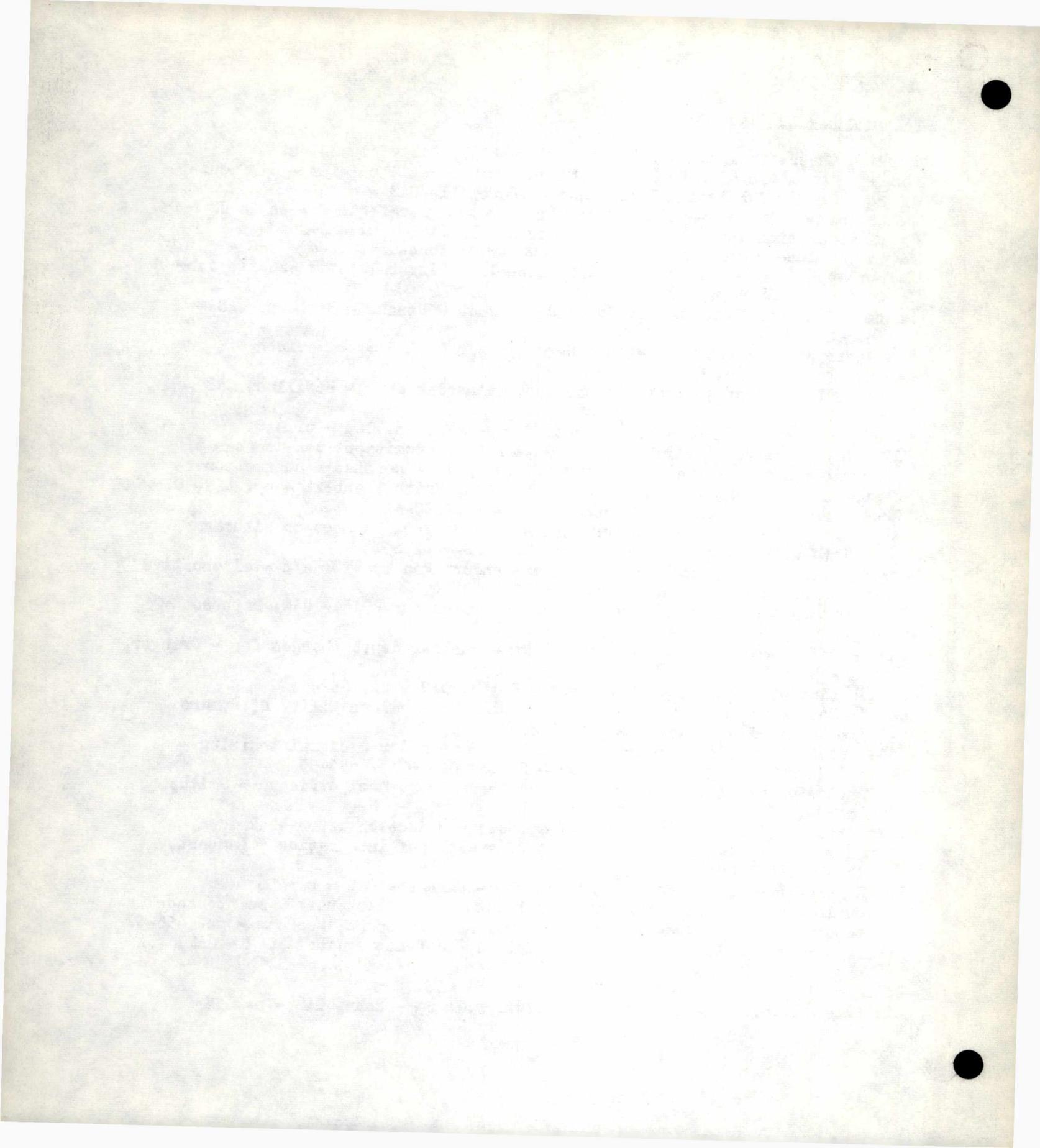
Supersonic bomber development in Russia, JS & UK - TSR-2 & TFX - Granger, CAS - pp. 641-42

1 Air Div. - movement of sqdns, out of France for arming - increasing normal alert to reinforced alert - Churchill, CAS - pp. 642-43



AIR FORCE (Cont'd)October 31, 1963

- Missile threat to 1 Air Div. bases - Churchill, CAS - pp. 643-44
- Shifting of 1 Air Div. bases from France to Germany & Belgium - difficulties re - Permissive Action Link (PAL) - Churchill, CAS - p. 644
- Deterrent - value of tactical forces in Europe & strategic forces in US & UK re escalation into nuclear war - Churchill, CAS - pp. 644-45
- Argus, Neptune & Sonobuoys - costs - number of sonobuoys used - CAS - p. 646
- Effective defence against Russian surface-launching ballistic missile submarines - CAS - p. 646
- Recce ability of Maritime Air Command & search & Rescue - MacLean, CAS - pp. 646-47
- Load-carrying capacity of Yukon & Hercules a/c & C119 - comparison of - MacLean, CAS - p. 647
- US tests re nuclear vs conventional anti-submarine arms - McMillan, CAS - p. 648
- CF-104 - manufacture of - spare parts for - McMillan, CAS - p. 648
- NATO determination re strike role - date - Cdn. commitment to - change & completion of - adoption of conventional role - Norstad's suggestion re strike role for 1 Air Div. - Matheson, CAS, Smith, Lambert - pp. 649-50
- NORAD - renegotiation of - Matheson, CAS - pp. 650-51
- Recce in Arctic - replacement of Lancaster - defence re - co-op with Army - Soviet submarine threat in - Matheson, CAS - p. 651
- Strike recce role - good one - in future undertaken by VTOL a/c - alternative transport role - Matheson, CAS - p. 651-52
- Transport role - northern recce & maritime roles for RCAF - CAS, Matheson - p. 652
- Aerial recce re submarines - research re - nuclear depth charges for - Granger, CAS - p. 652
- Utilization of civilian air carriers - Smith, CAS - pp. 652-53
- Use of Bomarc against aircraft-launched missile - vulnerability of Bomarc site to missile attack - Smith, CAS - p. 653
- Individual service training establishments - re dadar & signal training - business training specialization - Smith, CAS - pp. 653-55
- Separation of civilians employed in Services & personnel officers - Smith, CAS - p. 654
- Integration - increase of personnel & costs - reduction after shakedown, i.e., U.K. - studies re - joint staff example of integration - Lambert, CAS - pp. 655-656
- Tri-Service Equivalent Board - economy re - Lambert, CAS - p. 656
- Common logistics field - efforts to cut down pay & allowances & maintenance costs vs capital expenditure - Lambert, CAS, Matheson, MacLean - pp. 656-57
- Bomber threat & role of air force in future - defence against ICBM - CAS, Hahn - pp. 656-58
- Cosmopolitan aircraft - use - Hahn, CAS - p. 658
- Air Force Auxiliary - function - survival role re - Hahn, CAS - p. 658

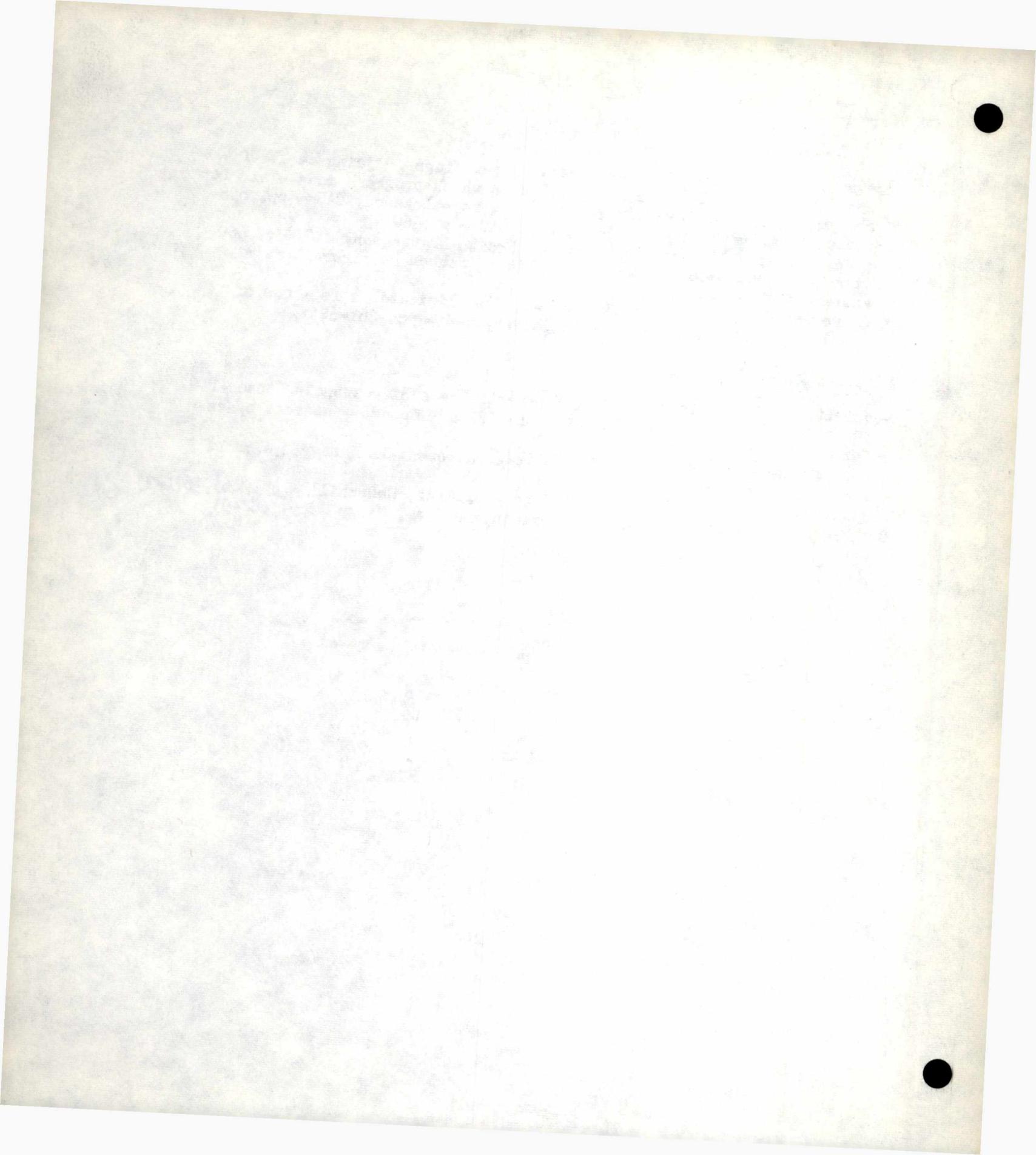


AIR FORCE (Cont'd)October 31, 1963

Integration of Services - advantages & disadvantages - joint HQ staff - present co-op of Services re - fields in which progress made - air force recommendations to Minister re - uniform re - Lessard, CAS - pp. 658-60
Summer uniforms without hat - Patterson, CAS - p. 660
Russian nuclear submarine capability & threat - Patterson, CAS - p. 660
Maritime Air Command commitment to SACLANT - number of aircraft re - MacLean, CAS - pp. 660-61
Roles re Canada-US region, NATO & UN - budget limitations re - use of obsolescent equipment, etc. - Patterson, CAS - pp. 661-62

November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S. agreement re - for CF101, Honest John, CF104 & Bomarc - storage space for - Hellyer - p. 665
Non-purchase of additional CF101's - re-arrangement in number & size of sqdns. re - Hellyer - p. 667
Availability of Genie rocket for Voodoo - Hellyer, Churchill - pp. 665, 674-75
Cdn. & NATO tactical air support - Brewin, Hellyer, Winch - pp. 682-83



AIR FORCE - AuxiliaryJuly 16, 1963

Air Auxiliary - pp. 181-82

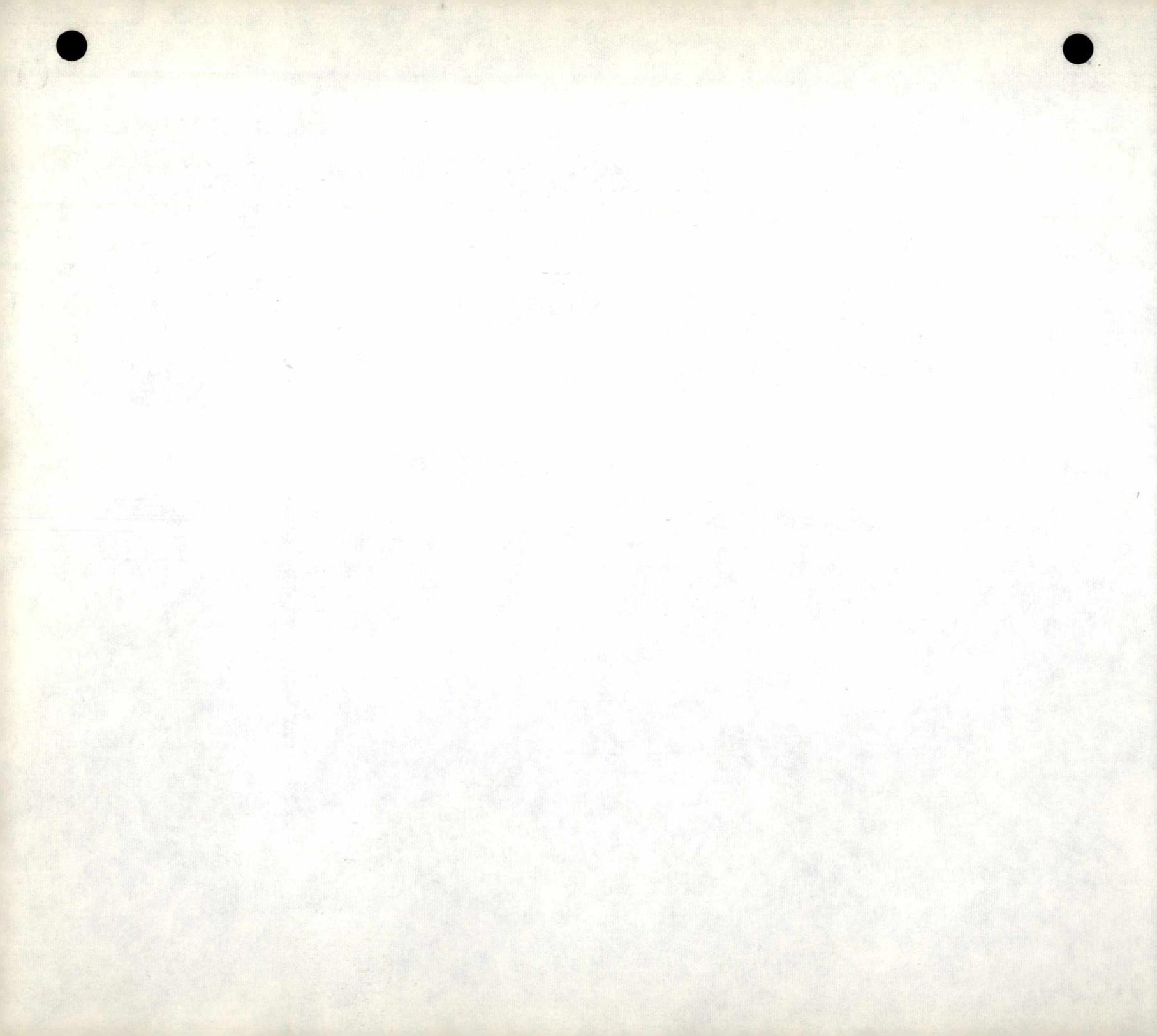
Composition & units of - CAS - p. 181

Aircraft of - CAS - p. 181

Role - CAS - p. 181

October 31, 1963

Air Force Auxiliary - function - survival role re - Hahn, CAS - p. 658



ARMYJune 27, 1963

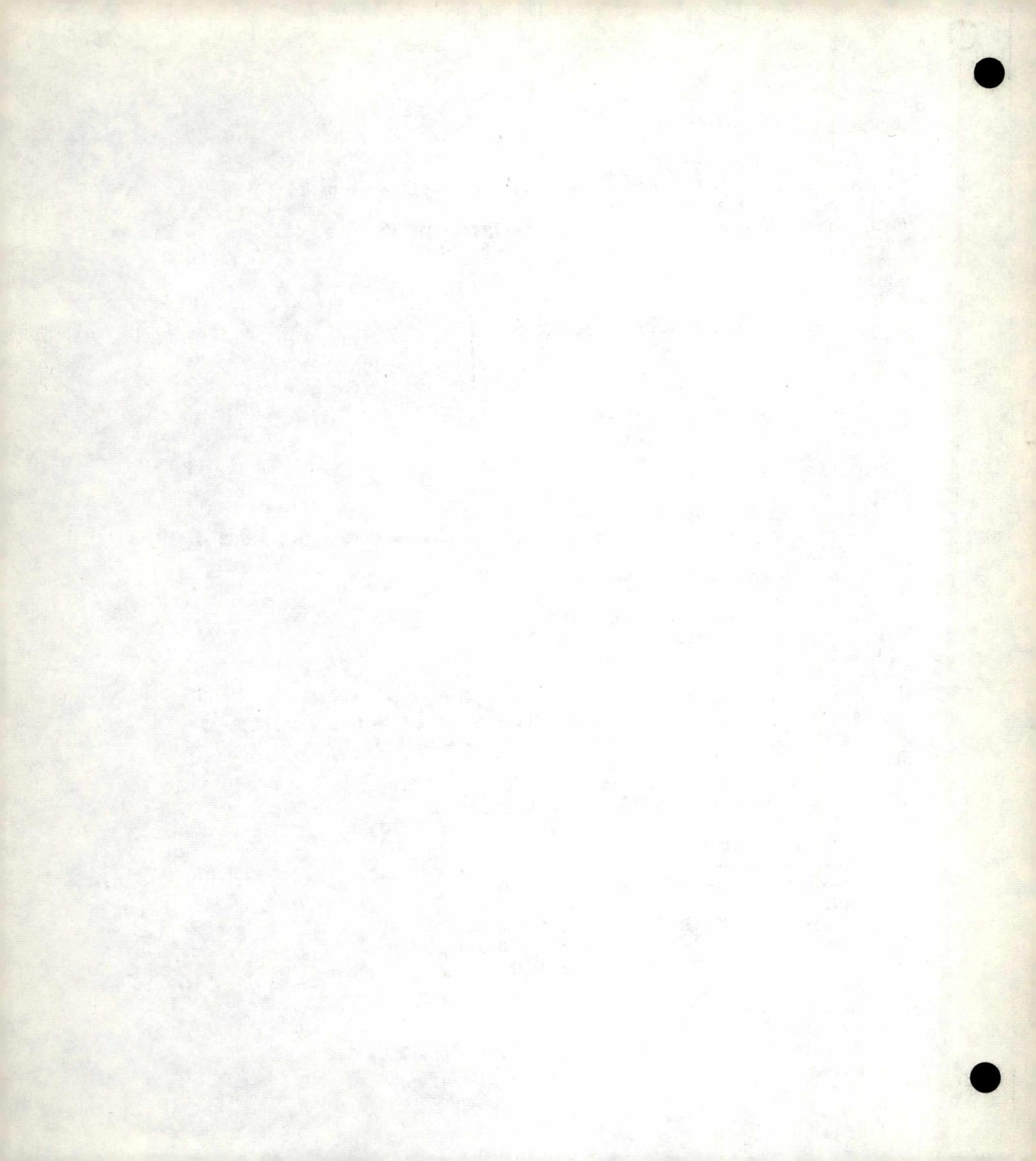
Brigade - Hellyer - p. 14
 Balance of Division in event of hostilities - Hellyer - p. 14
 Review of contribution - Hellyer - p. 14
 UNCF - contribution of signal unit - Hellyer - p. 18
 UN - battalion for in Canada - Hellyer - p. 19

July 9, 1963

Navy - support of Army - CNS - p. 90

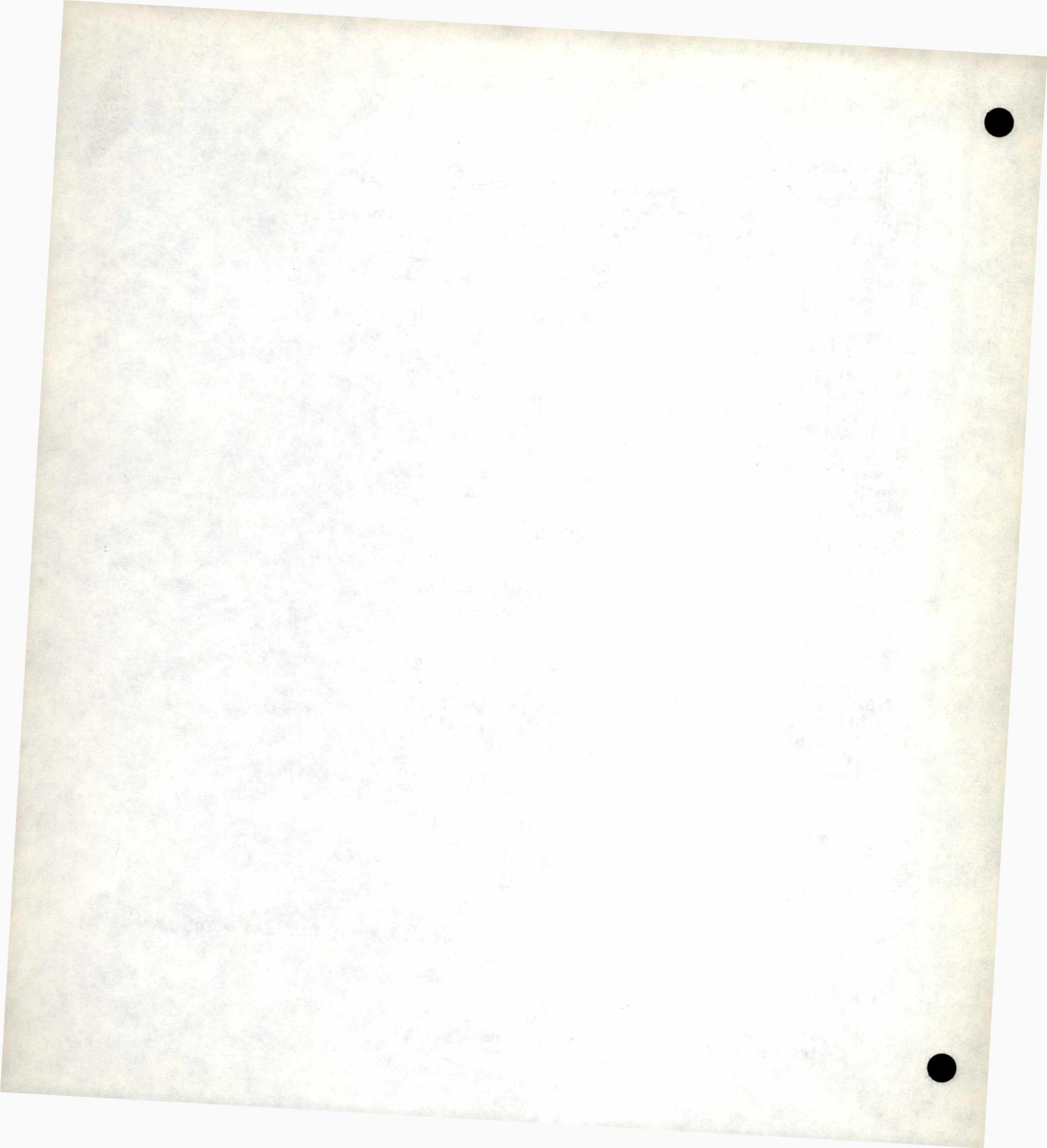
July 11, 1963

Commitments - CGS - pp. 129-131
 Strength - CGS - pp. 129-134
 4 CIB - CGS - pp. 130, 132, 133, 134
 Location - CGS - p. 130
 Mechanization of - CGS - p. 134
 Operational control of - CGS - p. 131
 Re-grouping, re-organization, forward strategy - force goal - CGS -
 pp. 133, 134
 Strength & equipment - CGS - pp. 133-34
 Organization - CGS - pp. 130-31
 Commands & areas - CGS - p. 130
 Brigade Groups - location - CGS - p. 131
 Commitments to NATO - CGS - p. 131
 Training - CGS - pp. 131, 133
 Logistic support - deficiencies - CGS - pp. 131, 135
 Division - strategic reserve availability to SACEUR - CGS - pp. 132-33
 Forward strategy & Northern Army Group - CGS - p. 133
 Helicopters for - CGS - p. 134
 Curtailment of survival ops - CGS - p. 134
 Divisional Headquarters - CGS - p. 134
 Administrative troops - CGS - p. 135
 Division re-inforcements
 Fielding - CGS - pp. 135, 136
 Movement to Europe - CGS - pp. 135-136
 Logistic support - CGS - p. 135
 In addition to 4 CIB - CGS - pp. 135, 136
 Stockpiling of equipment in Europe - CGS - p. 135
 Field force evolution - CGS - pp. 136-37
 Strategic forecasts - CGS - p. 136
 Organization - CGS - p. 136
 Co-op with NATO - CGS - p. 136
 War games and Operational research - CGS - pp. 136, 142
 NATO concept re European war - p. 137



ARMY (Cont'd)July 11, 1963

- Acquisition and testing of SSN & ENTAC - CGS - pp. 137, 138
- Signal eqpt. unsuitable - CGS - p. 137
- Reconnaissance helicopters & organization - CGS - pp. 139-40
- Mobility need - Bobcat development - CGS - pp. 140, 141
- Battlefield logistic support - pp. 140-41, 154 - CGS
- Tactics & Organization Board - function - CGS - p. 142
- NATO commitments - CGS - p. 142
- Defence of Canada Brigade (fire brigade) - CGS - pp. 142-44
 - Administration
 - Training & movement
 - Location
 - Rotation with and withdrawal from for 4 CIB
 - Re-inforcements for - p. 144
 - Radio equipment for - p. 144
 - Role of Militia re - p. 144
- Oversnow vehicle - CGS - pp. 143-44
- North American defence - ALCANUS - CGS - p. 144
 - Co-op with US - CGS - p. 144
- Survival Operations - CGS - pp. 145-46
 - Role of Army - CGS - pp. 145-46
 - Civil Defence Order 1959 - CGS - p. 145
 - Warning through NORAD & DEW Line - CGS - p. 145
 - Nuclear detonation reporting - CGS - p. 145
 - Re-entry operations - CGS - p. 146
 - Militia assistance - CGS - p. 146
 - Civilian Mobile Survival Columns - CGS - p. 146
- U.N. Operations - CGS - pp. 146-49
 - Utilization of specialists - CGS - pp. 146-47
 - Rotation & tours of personnel - CGS - p. 147
 - Standby battalion (R22eR) - CGS - p. 147
 - 3 CIB for - CGS - p. 147
 - UNEF - duties & composition - CGS - p. 147
 - UNCF (ONUC) - CGS - p. 147
 - Composition - CGS - p. 148
 - Reduction of - CGS - pp. 147-48
 - Viet Nam & Laos Truce Teams Composition - CGS - p. 149
 - Palestine - composition - CGS - p. 149
 - Kashmir - composition - CGS - p. 149
 - Korea - composition - CGS - p. 149
 - Training assistance to Armed Forces of Ghana, Nigeria, Trinidad & Tobago - CGS - p. 149
- Assistance to civil authorities - CGS - pp. 149-151
 - Provincial request - CGS - p. 149
 - Types of assistance - CGS - pp. 149, 151
 - Assistance to other gov't depts. - CGS - p. 149



ARMY (Cont'd)July 11, 1963

Penitentiary commitments - CGS - pp. 149-50, 151
 Avalanche control - CGS - pp. 150, 151
 De-activation of dangerous explosives - CGS - pp. 150-151
 Forest firefighting - CGS - pp. 149, 150-151
 Flooding - pp. 149, 151
 Logistic organization - CGS - p. 154
 Work measurement studies - CGS - p. 154
 Automatic data processing - CGS - p. 154
 Training - CGS - pp. 154-55
 Co-op with U.S. & U.K. - CGS - p. 155

October 17, 1963

Army mobility - use of fixed wing aircraft re - need for armoured personnel carrier - Churchill, Simonds - pp. 460-62.

October 22, 1963

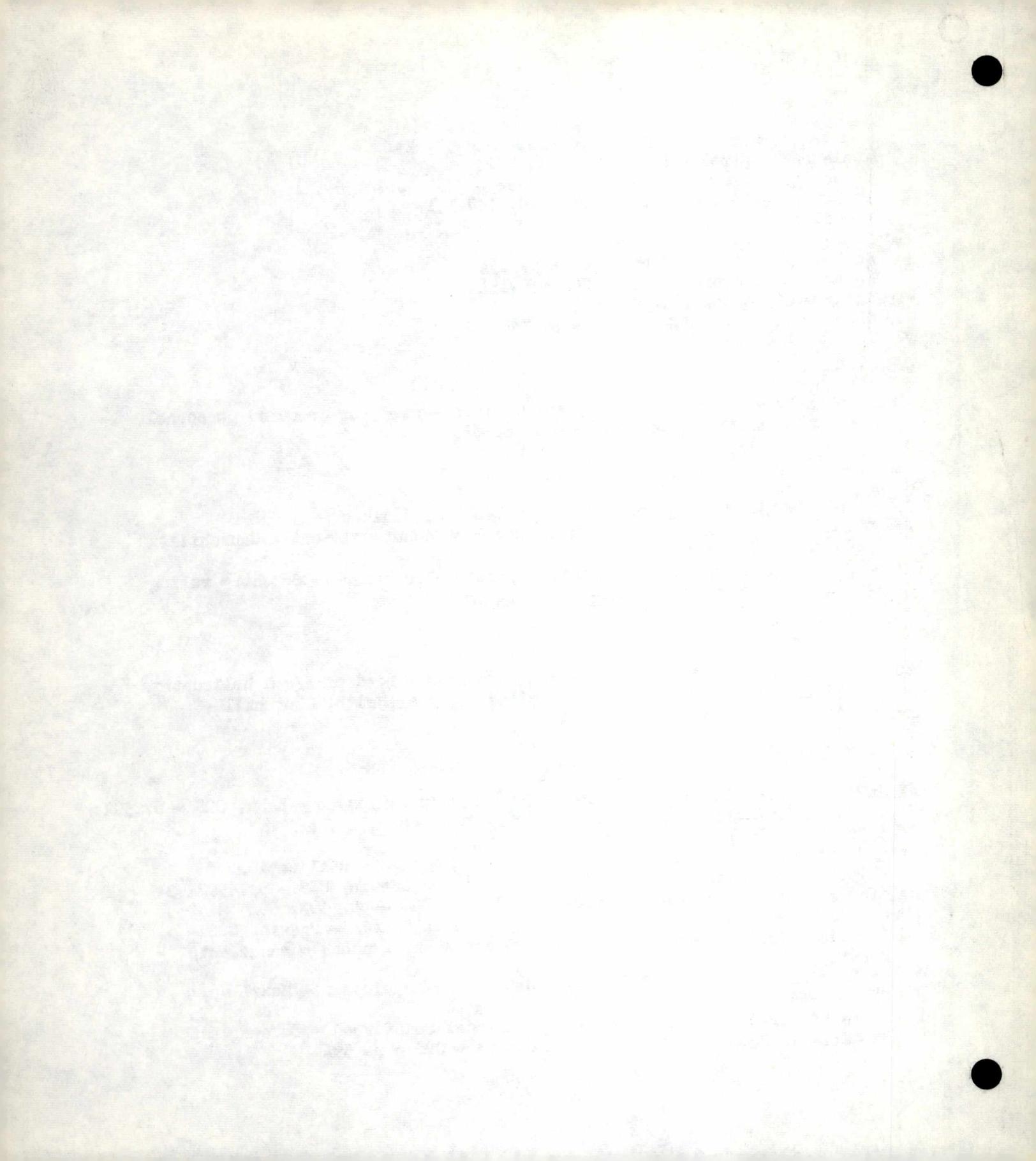
Offer of Queen's Own Regiment to UNEF - Lessard, Foulkes - p. 518
 Air portability of troops & use of Bobcat - parachute element - Churchill, Foulkes - pp. 529-30
 Mobility of infantry & use of armoured personnel carriers - Bobcat - ruling out heavy armour - Churchill, Foulkes - p. 530

October 24, 1963

Air space recce & monitoring submarine movements - need of a/c & helicopters and highly mobile ground force - Gellner, Groos, Smith, Churchill - pp. 559-60, 566, 568-69, 572, 586

October 29, 1963

Airlifting of mobile force with recce & artillery equipment - Hahn, CGS - p. 592
 Bobcat transportable in Hercules aircraft - CGS - p. 592
 Cariboo lifting capacity - Smith, CGS - p. 592
 Brigades in Canada for NATO - shipment to NATO - time - utilization of shipping - development of loading devices re - Brewin, CGS - pp. 592-93
 Reinforcements for 4th Bde. - Brewin, McMillan, CGS - pp. 593, 594
 Percentage of equipment for Army in Europe and in Canada - Brewin, CGS - p. 593
 SS11 guided missile weapon & medium-range anti-tank weapons - range, etc. - Brewin, CGS - pp. 593-94
 Strength of Army Regular & Militia, cadets & civ. employees - McMillan, CGS - p. 594
 Shortage of survival ops, personnel if 4th Bde. reinforced - forces assigned to UN taken from establishments in Canada - CGS - p. 594



ARMY (Cont'd)October 29, 1963

Monthly recruiting average - offsets wastage, etc. - McMillan, CGS - p. 594

NATO defence re Germany - Lessard, CGS - pp. 594-95

Possible reduction of Cdn. forces in Europe - Lessard, CGS, Hellyer -
pp. 594-95

Manpower required in support of 3 infantry battalions - wastage & attrition -
ratio, etc. - Temple, CGS, McMillan, Smith - pp. 595-96

Rotation of Bde. personnel - limitation to one year - despatch of single
units without dependents - Winch, CGS - p. 596

Housing accommodation - married quarters - CGS - p. 596

Evacuation of dependents in emergency - number of - no policy re - Winch,
CGS, Hellyer, McMillan, Lambert - pp. 596-97-98

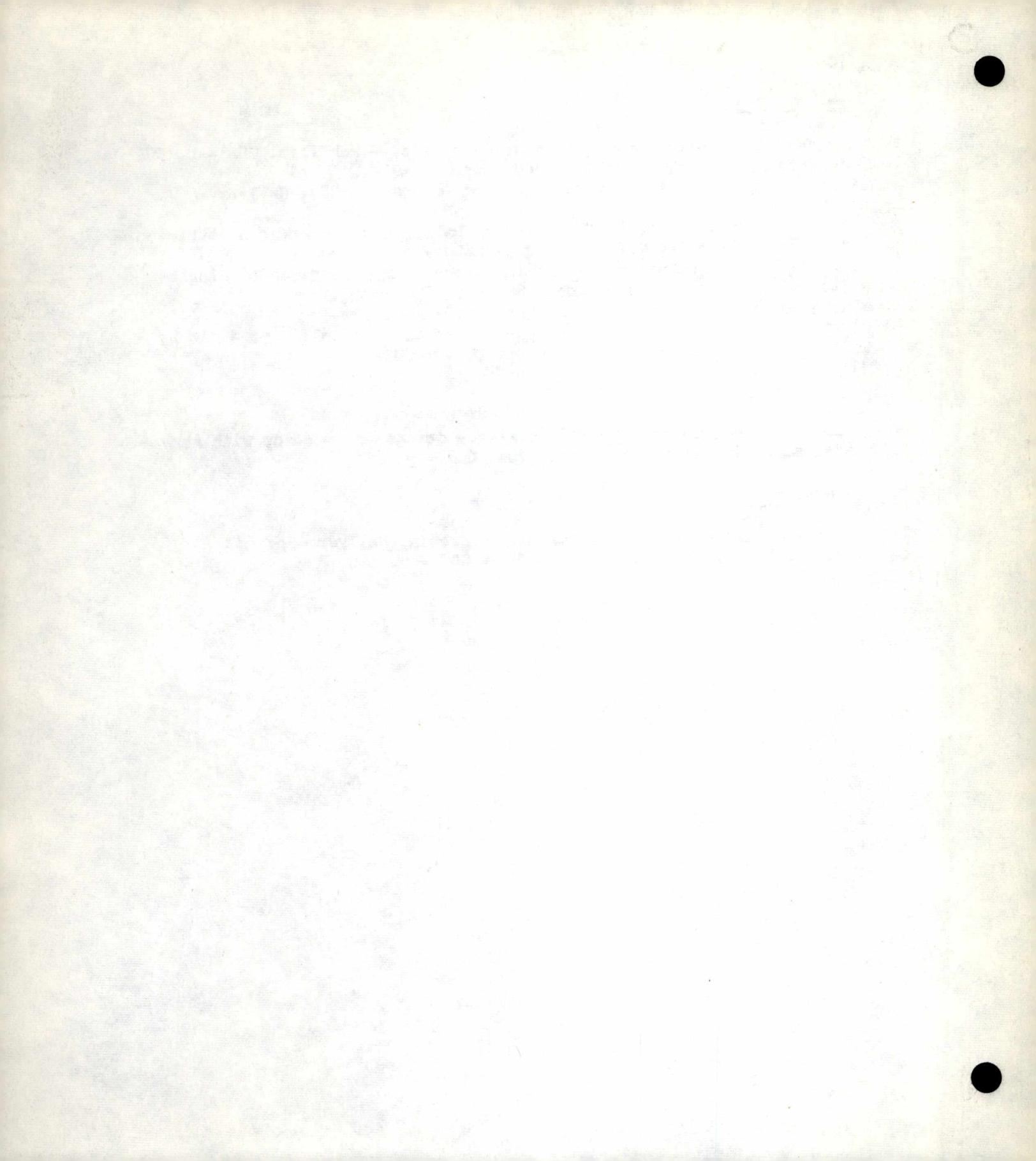
October 31, 1963

Recce in Arctic - replacement of Lancaster - defence re - co-op with Army -
Soviet submarine threat in - Matheson, CAS - p. 651

November 5, 1963

Armoured personnel carriers - deficiency - Brewin, Hellyer - p. 682

Civilian & military strengths at Army HQ - CGS - p. 690

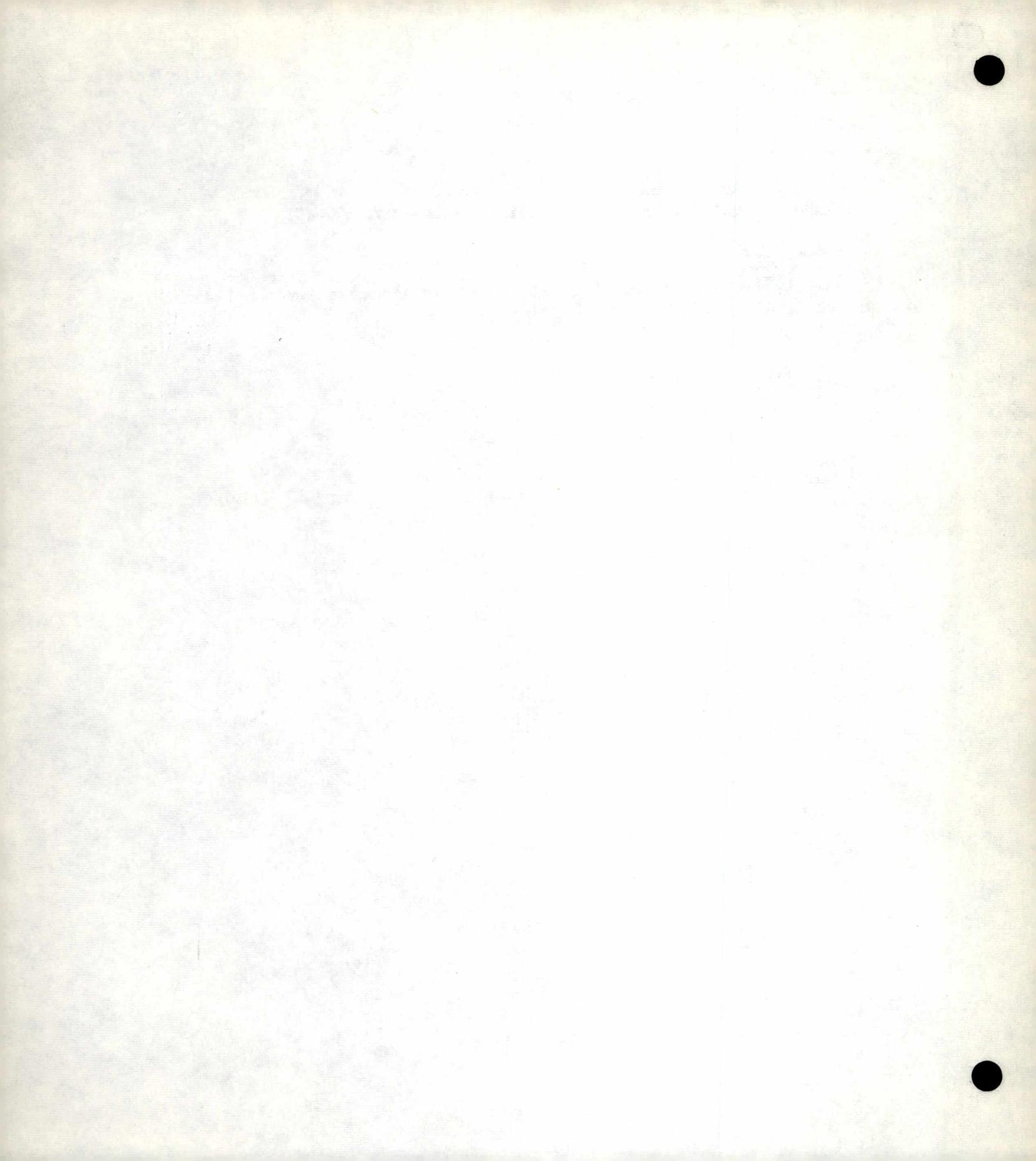


ARMY - AIRCRAFTJuly 11, 1963

Helicopters for Army - CGS - p. 134

Reconnaissance helicopters & organization - CGS - pp. 139-40

October 17, 1963Army mobility - use of fixed wing a/c - need for armoured personnel carrier -
Churchil, Simonds - pp. 460-62



ARMY - MilitiaJuly 11, 1963

Strength - CGS - p. 129

Re-entry operations - Militia assistance - CGS - p. 146

Army Militia - CGS - pp. 151-52

Primary role - p. 151

Survival Operations - CGS - p. 151

Aid to civil power - CGS - p. 151

Personnel for U.N. operations - CGS - p. 151

Role of CWAC - CGS - p. 151

Strengths & composition - CGS - pp. 151, 152

Replacement for regulars - CGS - p. 152

Support of RCMP for internment & security duties - CGS - p. 152

Training - CGS - p. 152

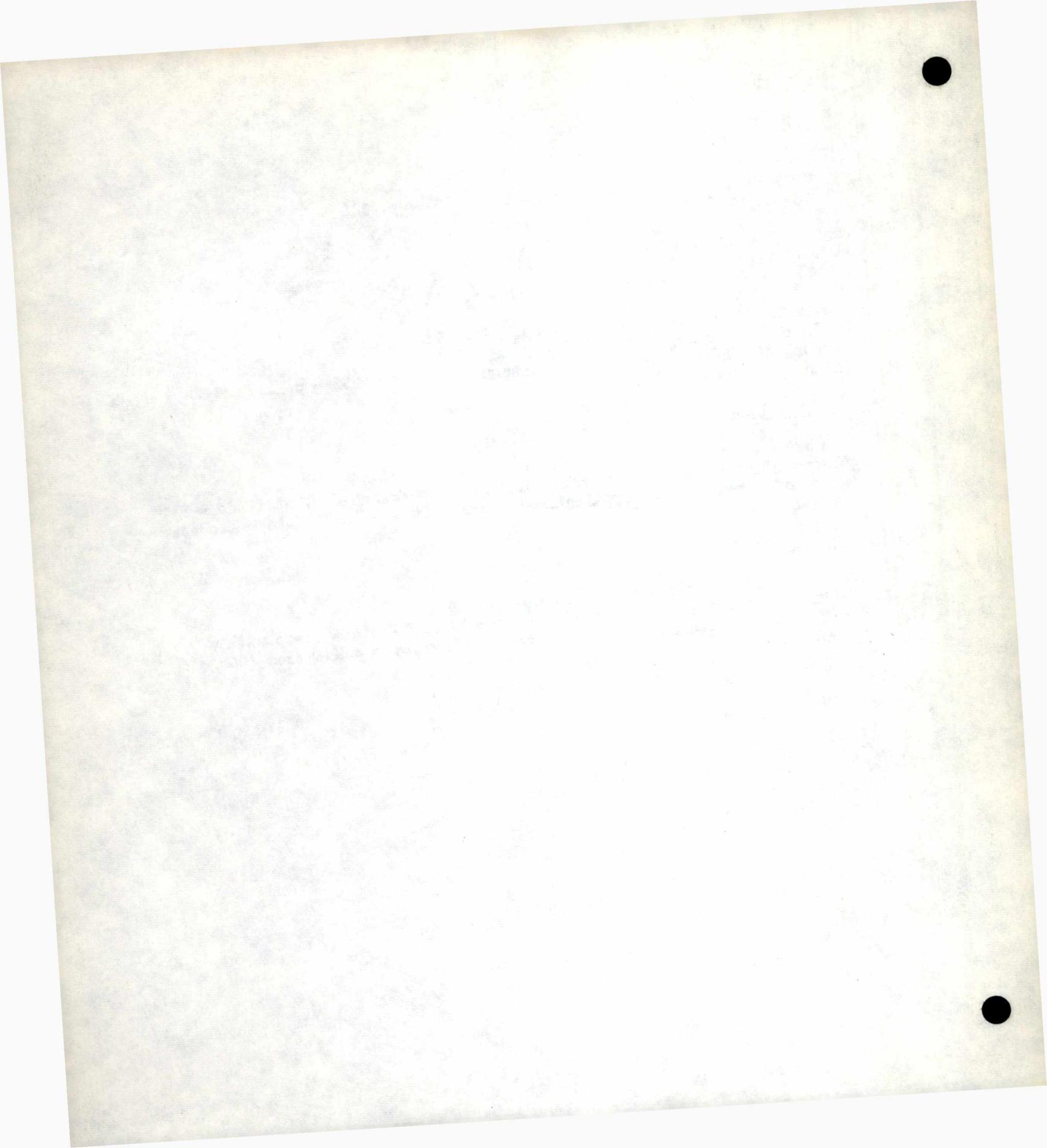
October 17, 1963

Militia role - survival - Matheson, Simonds - pp. 444-45

Compulsory military training & voluntary system - French-Cdn. attitude -
length of service - not applicable to senior NCO's - in Militia - MacRae,
Simonds - pp. 471-73October 29, 1963

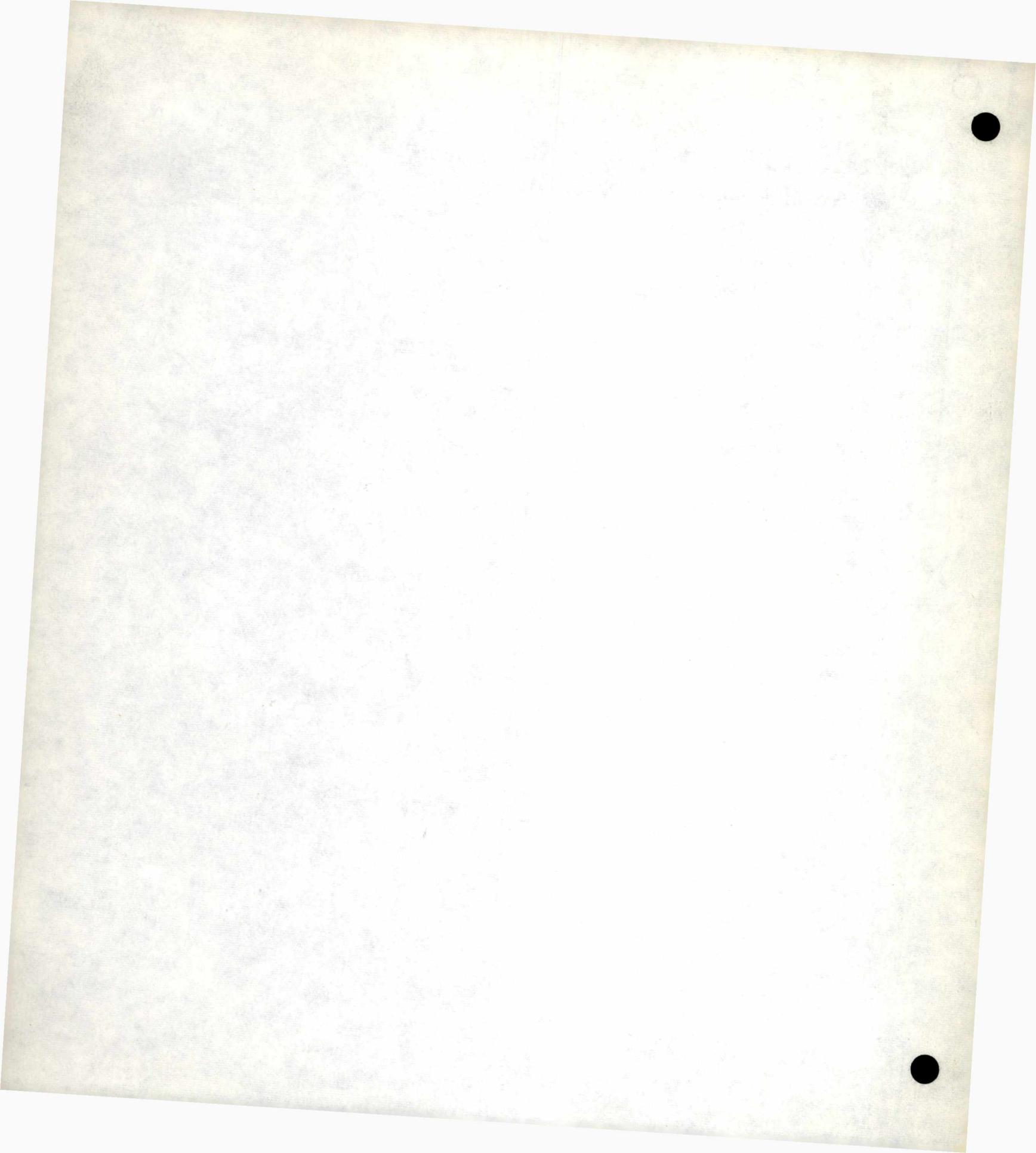
Strength of Army Militia - McMillan, CGS - p. 594

Army Militia - survival role - training in military field - co-op with
regular force - source of officers for regular force - Matheson, CGS -
pp. 609-11



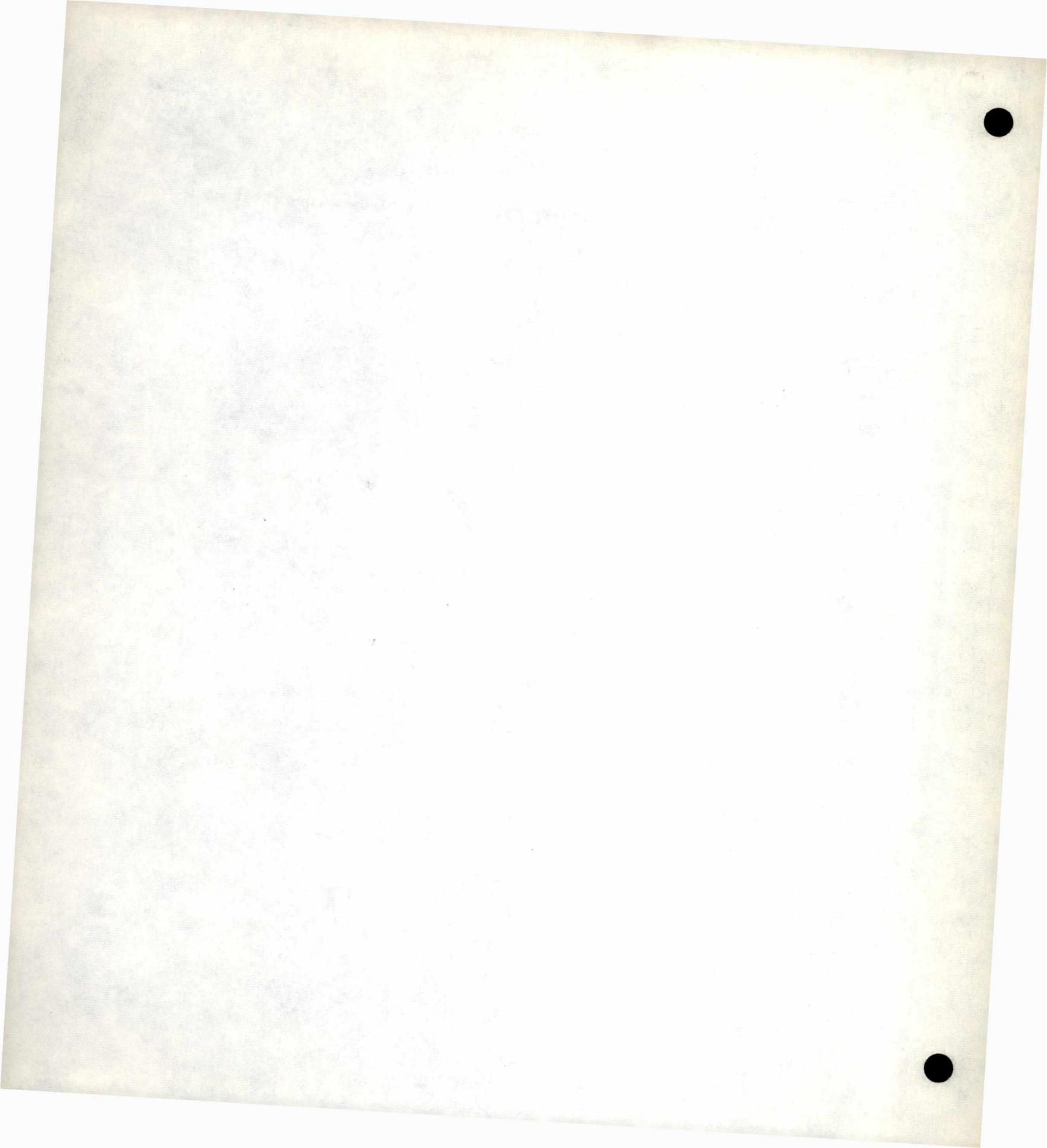
AWARDSOctober 15, 1963

Commendations re CDR Flomer - CNS, Brewin - p. 408



BILINGUALISMOctober 17, 1963

Compulsory military training & voluntary system - French-Canadian attitude -
MacRae, Simonds - pp. 471-73.



BRIGADE, 4thJune 27, 1963

Balance of Division in event of hostilities - Hellyer - p. 14
 Honest John - use of - not member of nuclear club - Hellyer - p. 15

July 4, 1963

Brigade raised to war strength during Berlin crisis - Deachman, CCOB - p. 80

July 11, 1963

4th CIB - CGS - pp. 130, 132, 133, 134

Location - CGS - p. 130

Mechanization of - CGS - p. 134

Operational control of - CGS - p. 131

Re-grouping, re-organization, forward strategy - force goal - CGS - pp. 133, 134

Strength & equipment - CGS - pp. 133-34

Army - Division re-inforcements - in addition to 4th CIB - CGS - pp. 135, 136

July 18, 1963

Scientists at 4th CIB - CDRB - p. 207

July 30, 1963

DDP - food supply of Cdn. NATO forces - Drury - pp. 281-82

October 17, 1963

Maintenance of Brigade in Europe - Smith, Simonds - p. 441

Cdn. contribution to NATO - storage of equipment for - Groos, Simonds - p. 445

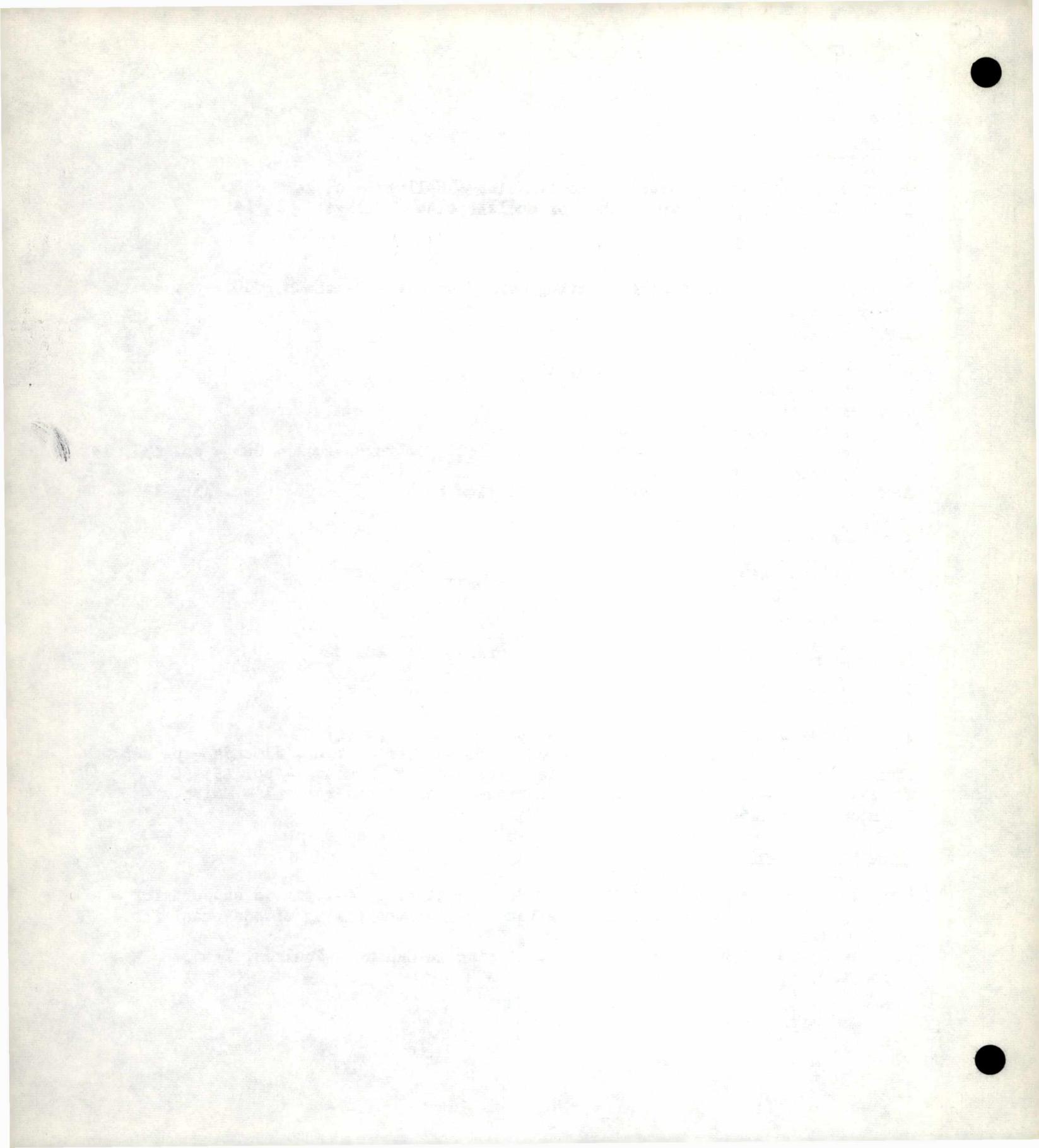
Brigade in Europe - decreasing morale value - Smith, Simonds - pp. 455-56

Forces in Europe - shorter rotation periods - dependents removal - Smith,
 Simonds - p. 456

October 22, 1963

Brigade Group - strengths - effect of forward strategy - logistic support for -
 air portable formation - buildup after D-Day - stockpiling of equipment for -
 withdrawal of - Foulkes - pp. 496-98, 507

Brigade cost - strategic reserve - stationing in Canada - Foulkes, Temple -
 pp. 502, 520, 521

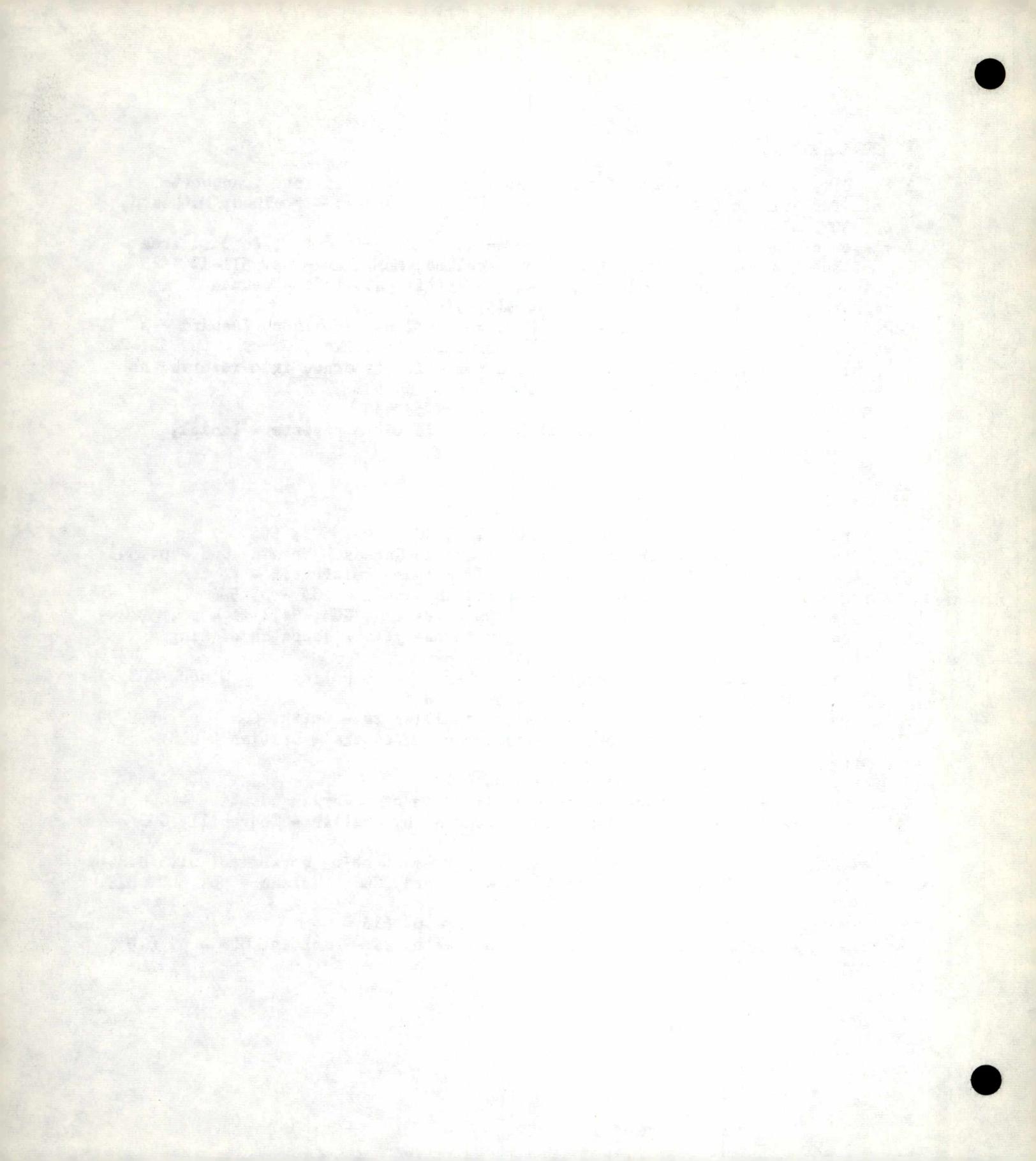


BRIGADE, 4th - (Cont'd)October 22, 1963

- 1 Air Div. - relinquishment of strike role and reorganized into transport unit for Brigade Group - strike role becoming redundant - Foulkes, Matheson, pp. 507, 533
- Revision of Cdn. NATO contribution - movement of Brigade out of forward area - position assumed by Germany - Lambert, Foulkes, McMillan - pp. 511-12, 528
- Withdrawal of Brigade to reserve position - British attitude - German acceptance - MacInnis, Foulkes - pp. 515, 516, 517
- Cdn. commitment to NATO - Brigade on U.K. supply line - Foulkes, Lessard - p. 517
- Withdrawing of Brigade - effect on NATO countries - Foulkes, Groos - pp. 521-22
- Brigade - armed with Honest John - reason for - if withdrawn into reserve, no need for nuclear weapons - McMillan, Foulkes - p. 528
- Use of Cariboo in Europe - Smith, Foulkes - pp. 535-36
- Trading of facilities with Germany if Brigade placed in reserve - Laniel, Foulkes - p. 537

October 29, 1963

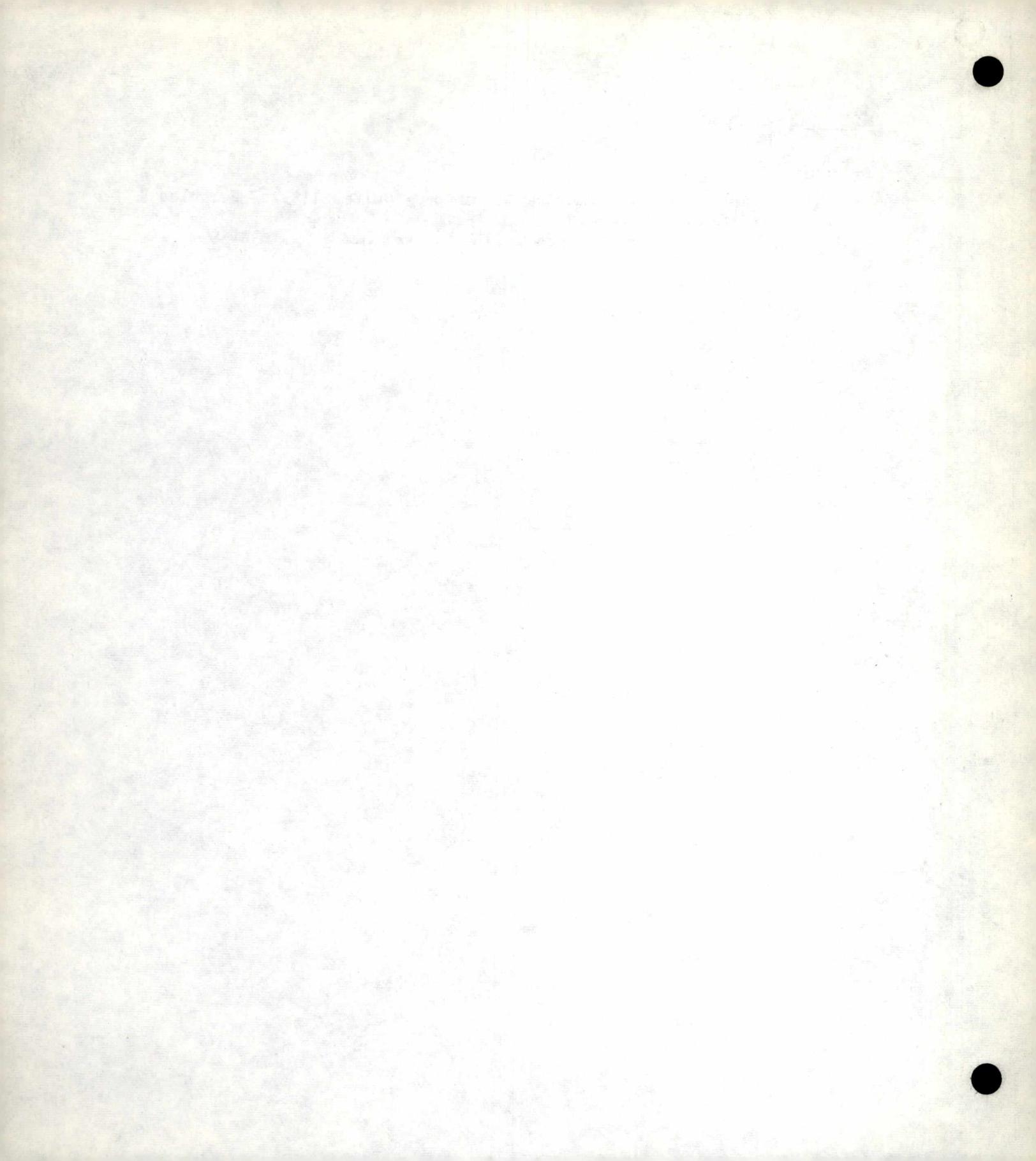
- Reinforcements for Brigade - Brewin, McMillan, CGS - pp. 593, 594
- Percentage of equipment for Army in Europe and in Canada - Brewin, CGS - p. 593
- Shortage of survival operations personnel if Brigade reinforced - forces assigned to U.N. taken from establishments in Canada - CGS - p. 594
- Possible reduction of Cdn. forces in Europe - Lessard, CGS, Hellyer - pp. 594-95
- Rotation of Brigade personnel - limitation to one year - despatch of single units without dependents - Winch, CGS - p. 596
- Evacuation of dependents in emergency - number of - no policy re - Winch, CGS, Hellyer, McMillan, Lambert - pp. 596, 597, 598
- Reinforcements for Brigade - in Canada - casualties re - Smith, CGS - pp. 598-99
- Forward strategy - supplies for - re-deployment of stocks - British & U.S. sources - Lambert, CGS - pp. 602-03
- Use of nuclear weapons - Lambert, CGS - p. 603
- Close support air cover for Brigade - utilization of - German adoption - helicopters for reconnaissance re, development by British - Churchill, CGS - pp. 612-13
- Honest John - authority to use - technical agreement being worked out with U.S. - function of - efficiency of Brigade re - Lessard, CGS, MacLean - pp. 600, 618, 619
- Food supply to Brigade - McMillan, Winch, CGS - p. 618
- Converting Brigade to airborne role - supply setup re - MacLean, CGS - p. 619



BRIGADE, 4th - (Cont'd)October 31, 1963

Movement of Brigade from North America to Europe - suitability of Hercules &
Yukon - Temple, CAS - pp. 627-28

Strength of Brigade - number of dependents - MacRae, CAS - pp. 638-39



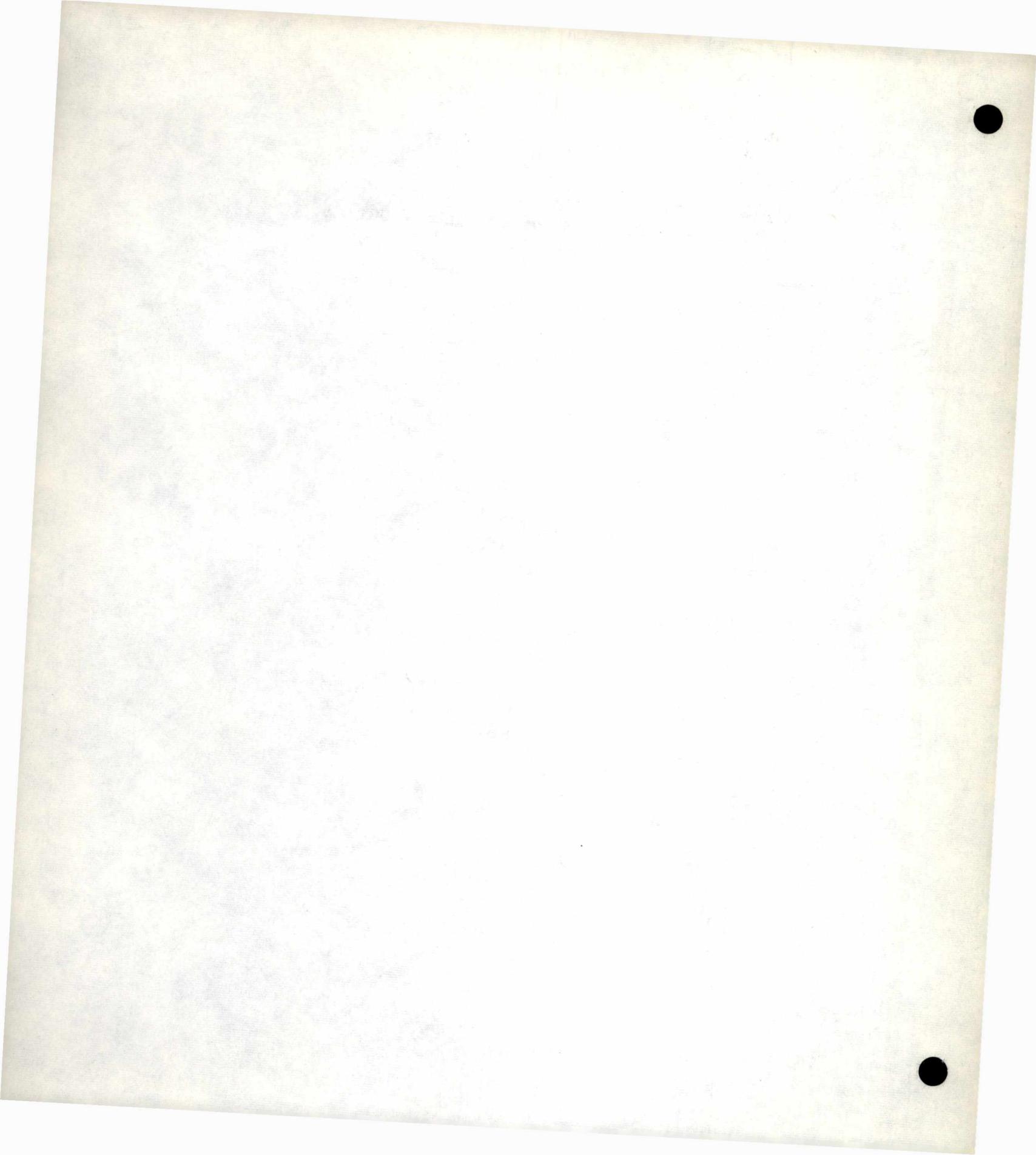
CADETSJuly 11, 1963

Army cadets - strength - CGS - p. 129

Army cadets - strengths - administration & training - CGS - p. 152

October 29, 1963

Strength of cadets - McMillan, CGS - p. 594



CANADA-NATO PRODUCTION SHARINGOctober 29, 1963

Lessons re Bobcat development & production - future design & development of equipment for sale to NATO countries - success in field - Deachman, Hellyer, Smith, Matheson, Churchill - pp. 608-09, 611.

November 5, 1963

Canada-U.K. production sharing re recce. drone - Hellyer - p. 666

Cost of new subs - Lessard, Hellyer, Smith - pp. 684, 687

Future construction of submarines in Canada & acquisition of Oberons - production-sharing agreement re CL89 recce. drone - Laniel, Hellyer, MacInnis - pp. 685, 687-88.

CANADA'S DEFENCE POLICYJune 27, 1963

Cdn. commitments to NATO - Hellyer - p. 13
 Pooling contributions with NATO, NORAD & U.N. - Hellyer - p. 19
 Contributions & commitments - Hellyer - p. 19
 Re-consideration of frigate program - Hellyer - p. 19
 Review of acquisition of additional CF104's - Hellyer - p. 19
 Re-deployment of CF104's in France - Hellyer - pp. 19-20
 DRB Operations Research re defence - Hellyer - p. 20
 Review of existing program followed by policy decisions - Hellyer - p. 20
 Consideration of Glassco recommendations - p. 20
 Consideration of relationship between Cdn. & allied forces - p. 20 - Hellyer
 U.S. Gen. Lemnitzer's visit to Canada - Hellyer - p. 20
 Review of NATO strategy - Hellyer - p. 20
 World problems can't be solved by force & provision of umbrella - Hellyer - p. 20

July 2, 1963

Cttee. - recommendation of policy - Groos, Hellyer - p. 53

July 4, 1963

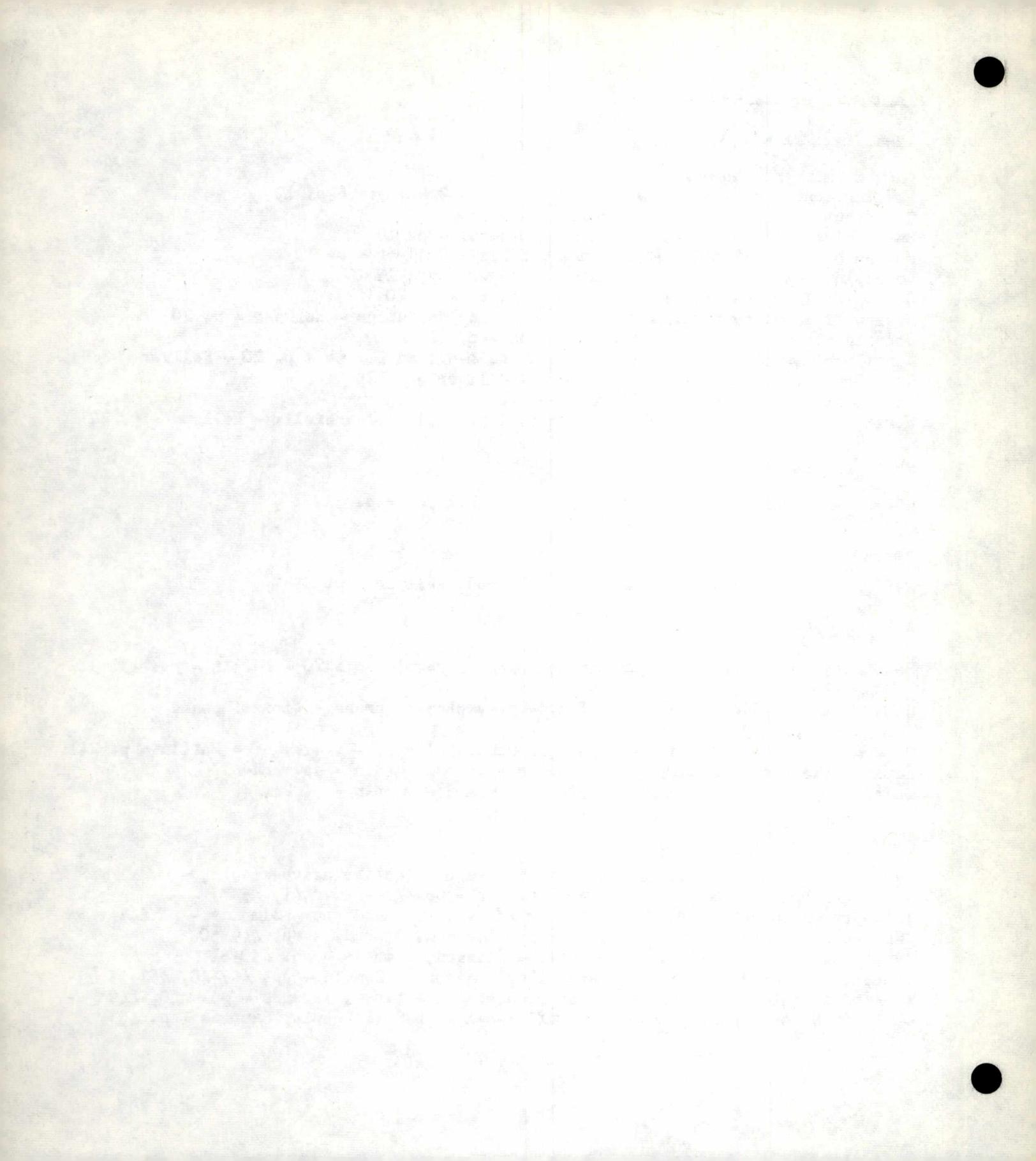
National responsibilities on defence - Groos, Hellyer - p. 83

July 25, 1963

Relationship of defence & foreign policies - example in NATO - Martin - pp. 231-32, 234, 235
 Cdn. foreign policy - defence policy - preventive - preservation of peace - Martin - pp. 231-32, 233
 Co-ordination of defence, foreign & economic policies - review of - Martin - p. 241
 Limited flexible response to aggression - Groos, Martin - pp. 242-43
 Defence, foreign & economic policies - Lessard - Martin - p. 244

October 17, 1963

Cdn. Armed Forces should be tri-service - main objective peace-keeping - integration of - Smith, Simonds, McMillan - pp. 439-440, 441, 453
 Tri-service co-ordinated force similar to U.S. Marine Corps - Simonds - p. 442
 Cdn. role re prevention of nuclear war - Lessard, Simonds - pp. 449-50
 Cdn. contribution to U.N. - Army role - Lessard, Simonds - pp. 450-51
 Conventional role for Cdn. forces - Lloyd, Simonds, Brewin - pp. 447-48, 452-53
 Lack of long-term policy - economic road blocks - Lloyd, Simonds - pp. 448, 449
 Canada's defence policy muddled - influenced by U.S. - Brewin, Simonds - p. 453



CANADA'S DEFENCE POLICY - (Cont'd)October 17, 1963

- Escalation into a nuclear war - nuclear weapons no place in defence role (NATO) - Hahn, Simonds - p. 458
- Deterrent - Cdn. role re - conventional role for NATO - phasing out of nuclear role for Canada - MacLean, Simonds, Matheson - pp. 474-76
- Defence policy - public & political indifference re - MacLean, Simonds - pp. 476-77
- Mobile force - composition - modeled after U.S. Marine Corps - armament re - air transport of - Temple, Simonds - p. 477
- Nuclear vs conventional forces - use of - Smith, Simonds - p. 478
- Cdn. defence role - possible re-negotiation of commitments - Matheson, Simonds - pp. 480-81

October 22, 1963

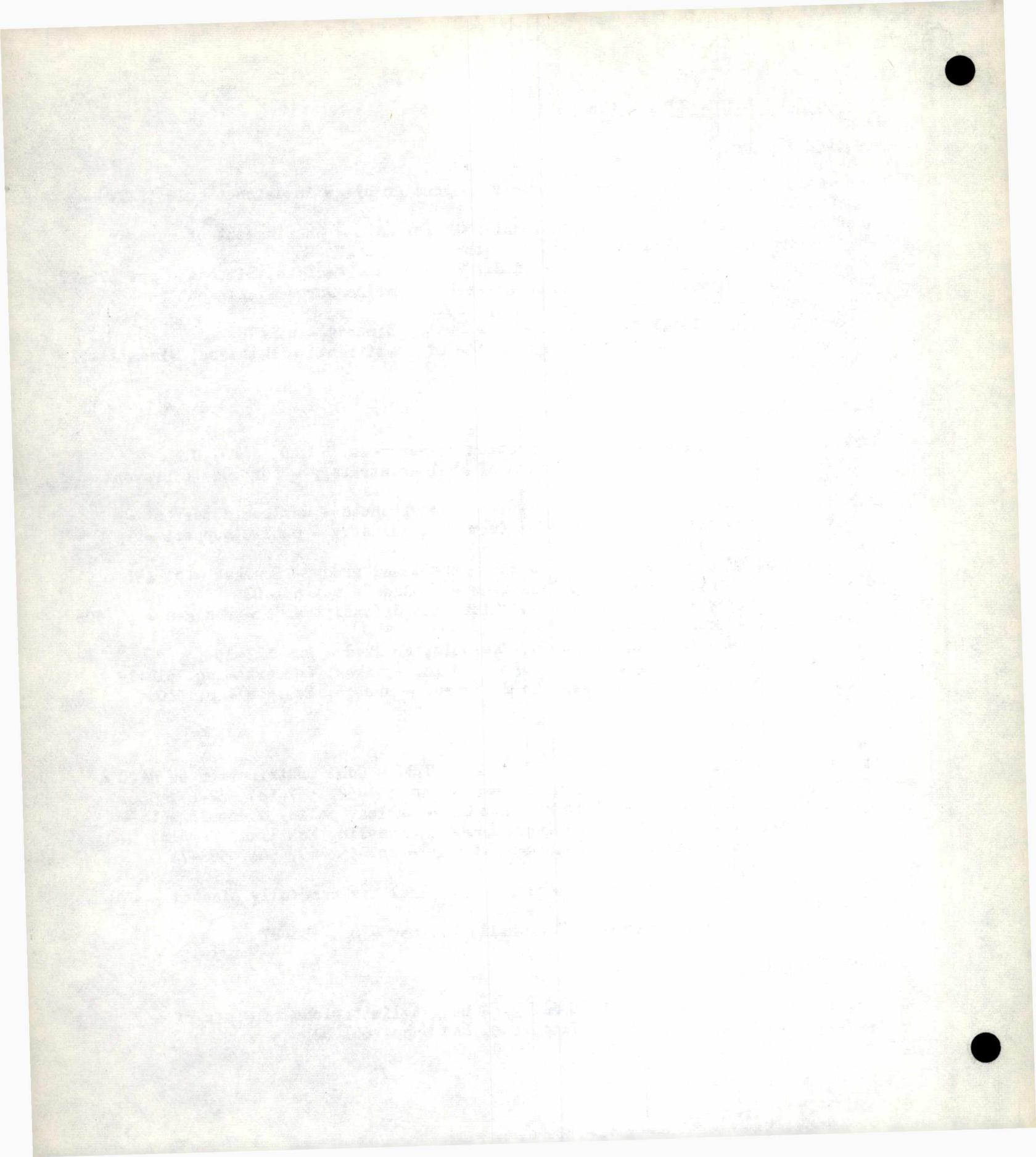
- Evolution of defence policy - amalgamation of Services, NORAD, NATO, U.N. operations in Korea and introduction of nuclear strategy - purpose to prevent major war - Foulkes - pp. 493-94
- Effective defence contributions to isolate disturbances - maximum deterrent - suited to Cdn. aptitudes - provided from Cdn. industry - public support - Foulkes - pp. 494-95
- Establishment of combined scientific and operational group - Foulkes - p. 496
- Defence developments - years for decisions - Foulkes - pp. 501-02
- Defence objectives - flexibility - political and defence trends - Foulkes - p. 506
- Withdraw Cdn. troops abroad - Foulkes - p. 507
- Nuclear vs conventional war - Brewin, MacInnis, Foulkes - pp. 513-15
- Emphasis on deterrent - composition of - Temple, Foulkes, Lambert - pp. 518-19
- Dealing with submarine threat adds to deterrent - Brewin, Foulkes - p. 540

October 24, 1963

- Cdn. defence effort auxiliary to NATO, U.K. & U.S. - Cdn. contribution to NATO - divergence of - Gellner, Asselin, Baldwin - pp. 551-52, 557-58, 562-63, 566.
- Defence policy objectives - military doctrine - nuclear policy & commitments - deterrents, etc. - re NATO - Gellner, Lambert, Asselin, McMillan, Temple, Groos, Churchill, Patterson, Deachman, MacRae - pp. 552-60, 564, 568-71, 573-74-76, 580, 584, 586
- Obsolescence of equipment not necessary if original use carefully planned - Gellner - pp. 574-75
- Size of force to be maintained - Churchill, Gellner - pp. 586-87

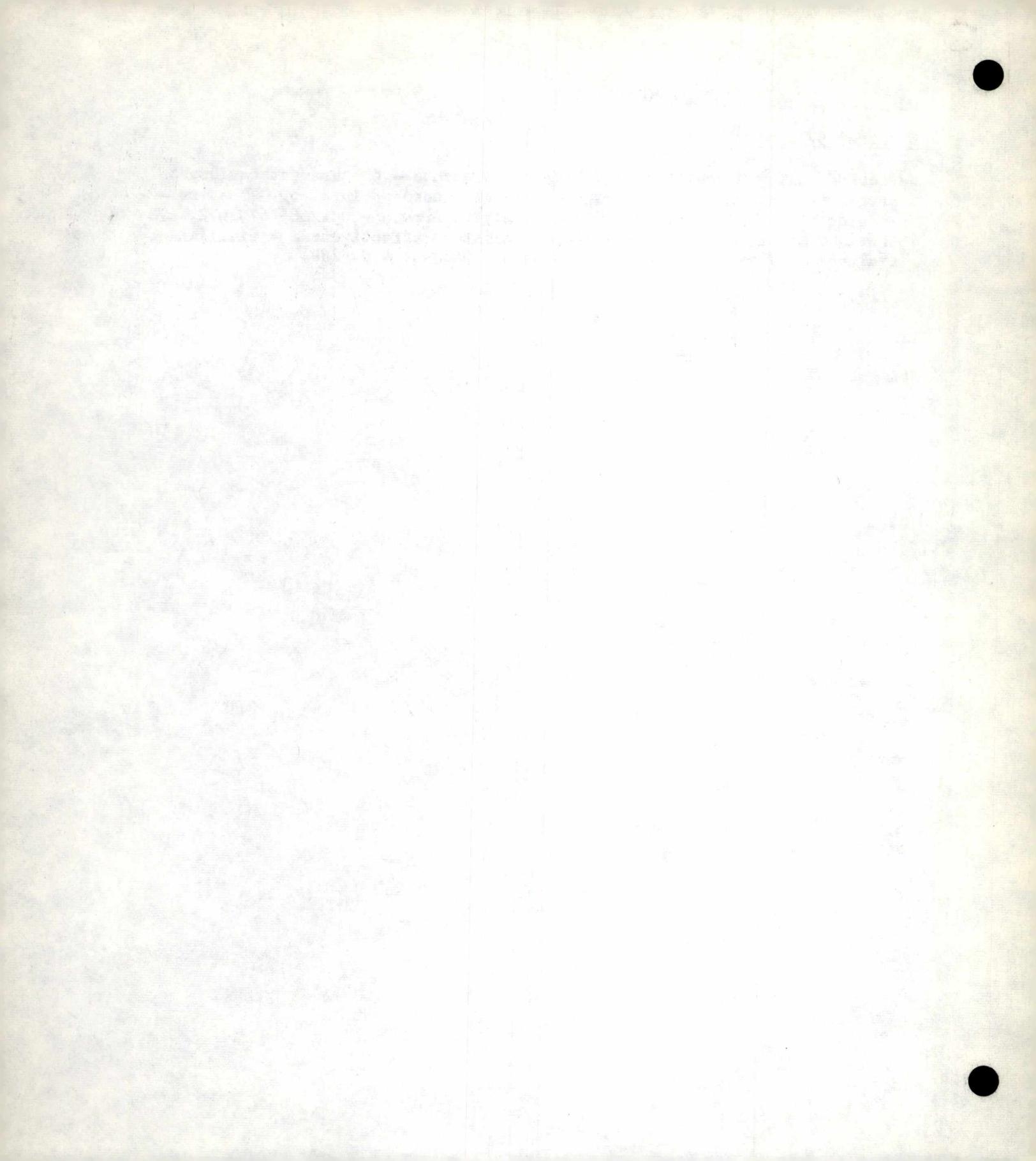
October 31, 1963

- Roles re Canada-U.S. region, NATO & U.N. - budget limitations re - use of obsolescent equipment, etc. - Patterson, CAS - pp. 661-62



CANADA'S DEFENCE POLICY - (Cont'd)November 5, 1963

Review of policy & commitments - Navy requirements - procurement equipment programs - cancellation of frigate program - need of info. by Cttee. re - sharing of info. in camera - Winch, Hellyer, Brewin - pp. 665-67, 672, 678.
Sutherland Cttee. - purpose - systems evaluation effectiveness - civilian evaluation of military proposals - Smith, Hellyer - p. 688.



CANADA'S DEFENCE POLICY - NATOJune 27, 1963

Cdn. provision of bases, communications & overflight privileges - Hellyer - p. 13

SACIANT - duties of & forces earmarked for - Hellyer - p. 13

- Cdn. contribution to - Hellyer - pp. 13-14

NAVY

- Destroyer escorts - sonar - helicopters for - Hellyer - pp. 13-14

- Anti-sub warfare - offence vs defence - Hellyer - p. 14

- Hydrofoil craft - Hellyer - p. 14

- Maritime a/c - Neptune - Argus - Hellyer - p. 14

ARMY

- Brigade - Hellyer - p. 14

- Balance of Division in event of hostilities - Hellyer - p. 14

- Review of contribution - p. 14

- Consideration of relationship between Cdn. & allied forces - Hellyer - p. 20

- U.S. Gen. Lemnitzer's visit to Canada - Hellyer - p. 20

- Change of strike-recce. role of 1 Air Div. & working out of role - NATO anxious re strike recce. role - Smith - p. 22

July 4, 1963

Change to conventional role - CCOS, Laniel - p. 66

Cdn. commitments to NATO - CCOS - p. 62

Cdn. contribution to NATO - CCOS, Matheson - p. 63

July 9, 1963

Navy - under NATO - ships for - CNS - pp. 89, 90, 91

Navy - exercises with allied ships - CNS - p. 90

Defence of Cdn. coastline - NATO & U.S. arrangements - Winch - p. 116

July 11, 1963

Army - forward strategy & Northern Army Group - CGS - p. 133

Army - field force evolution - co-op with NATO - CGS - p. 136

Army NATO commitments - CGS - p. 142

July 25, 1963

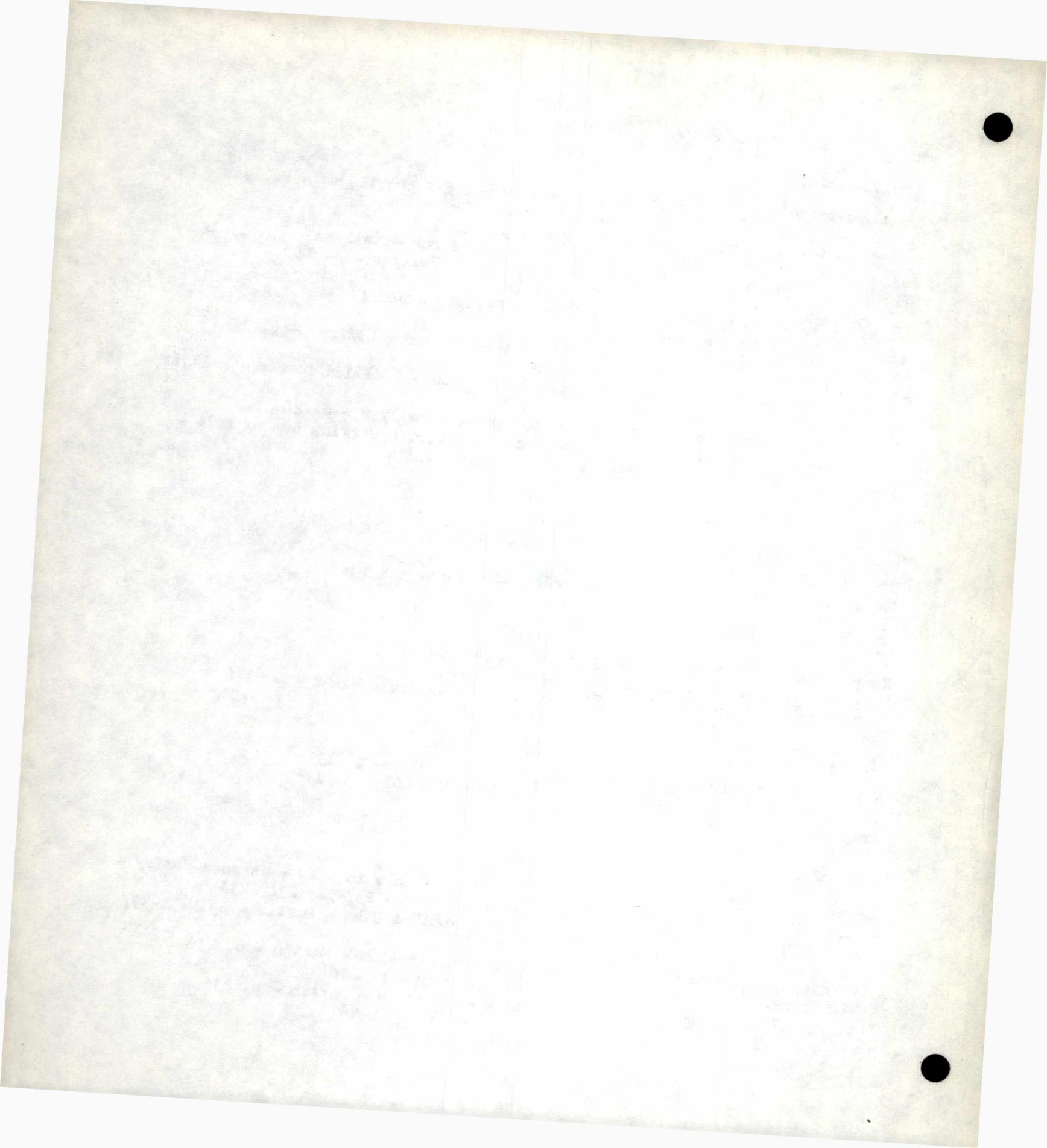
Relationship of defence & foreign policies - example in NATO - defence policy - preventive - preservation of peace - Martin - pp. 231-32, 234, 235

Membership in collective security of NATO, NORAD & U.N. - Martin - pp. 234-35, 238, 241

Organization & operation of NATO - Cdn. participation - Martin - p. 236

NATO Council study of nuclear problems - Martin - p. 236

Ottawa NATO meeting - decision re review of defence - Martin - p. 236



CANADA'S DEFENCE POLICY - NATO - (Cont'd)July 25, 1963

Co-ordination of defence, foreign & economic policies - review of - Martin - p. 241
 Cdn. commitments to NATO - keeping of - Matheson - pp. 244-45

October 15, 1963

NATO exercises - participation in - Churchill, CNS - pp. 421, 422
 Naval role in NATO & U.N. commitments - Matheson, CNS - pp. 424-25
 Anti-submarine role as specialized task of NATO - Brewin, CNS - pp. 431-32

October 17, 1963

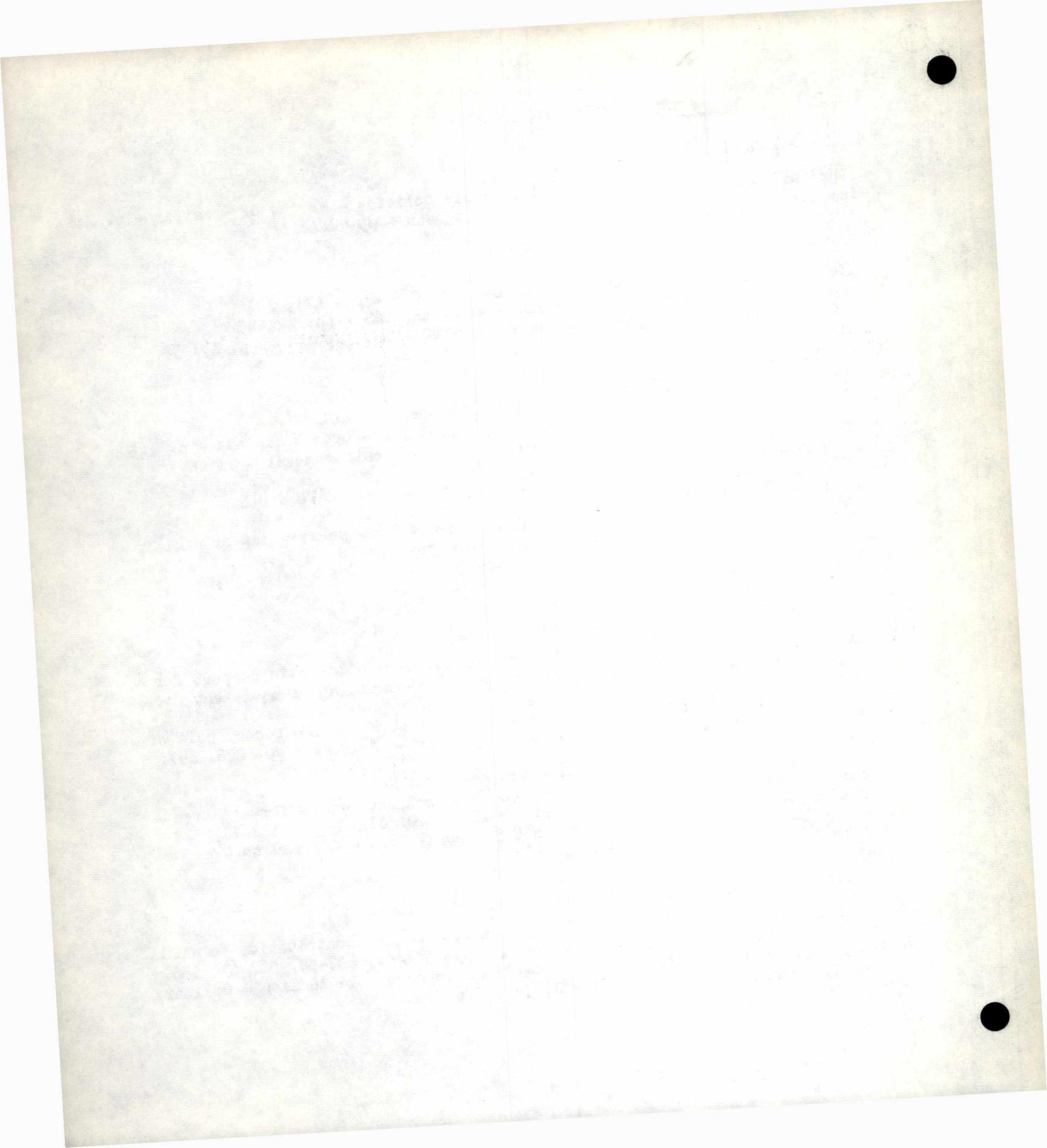
Maintenance of Brigade in Europe - Smith, Simonds - p. 441
 Cdn. contribution to NATO - storage of equipment for - Groos, Simonds - p. 445
 Forces in Europe - shorter rotation periods - dependents removal - Smith, Simonds - p. 456
 Peace-keeping operations - schedule of - divided between NATO & U.N. - Matheson, Simonds - pp. 464-66
 Deterrent - Cdn. role re - conventional role for NATO - phasing out of nuclear role for Canada - MacLean, Simonds, Matheson - pp. 474-76
 Cdn. defence role - possible re-negotiation of commitments - Matheson, Simonds - pp. 480-81

October 22, 1963

Brigade Group - strengths - effect of forward strategy - logistic support for - air portable formation - buildup after D-Day - stockpiling of equipment for - withdrawal of - Foulkes - pp. 496-98, 507
 1 Air Div. - aircraft of - additional airlift capacity - strike recce. role of - non-use of French air bases - nuclear weapons for - Foulkes - pp. 496, 497, 499-500.
 Mobile ready reserve for NATO & U.N. - Foulkes - p. 507
 Revision of Cdn. NATO contribution - movement of Brigade out of forward area - position assumed by Germany - Lambert, Foulkes, McMillan - pp. 511-12, 528
 Cdn. commitment to NATO - 1 Air Div. on U.S. supply line - Brigade on U.K. supply line - Foulkes, Lessard - p. 517

October 24, 1963

Cdn. defence effort auxiliary to NATO, U.K. & U.S. - Cdn. contribution to NATO - divergence of - Gellner, Asselin, Baldwin - pp. 551-52, 557-58, 562-63, 566.
 Strike recce. role for CF104 mistake - tactical support role in lieu - Gellner, Lambert, Brewin - pp. 554-55, 561-62, 571, 576-77



CANADA'S DEFENCE POLICY - NATO - (Cont'd)October 24, 1963

Stationing of Cdn. forces in Europe - withdrawal from - holding in reserve - air & sea transportability of - Gellner, Brewin - pp. 561-62
 Cdn. staffs highly regarded in NATO - Gellner - p. 566

October 29, 1963

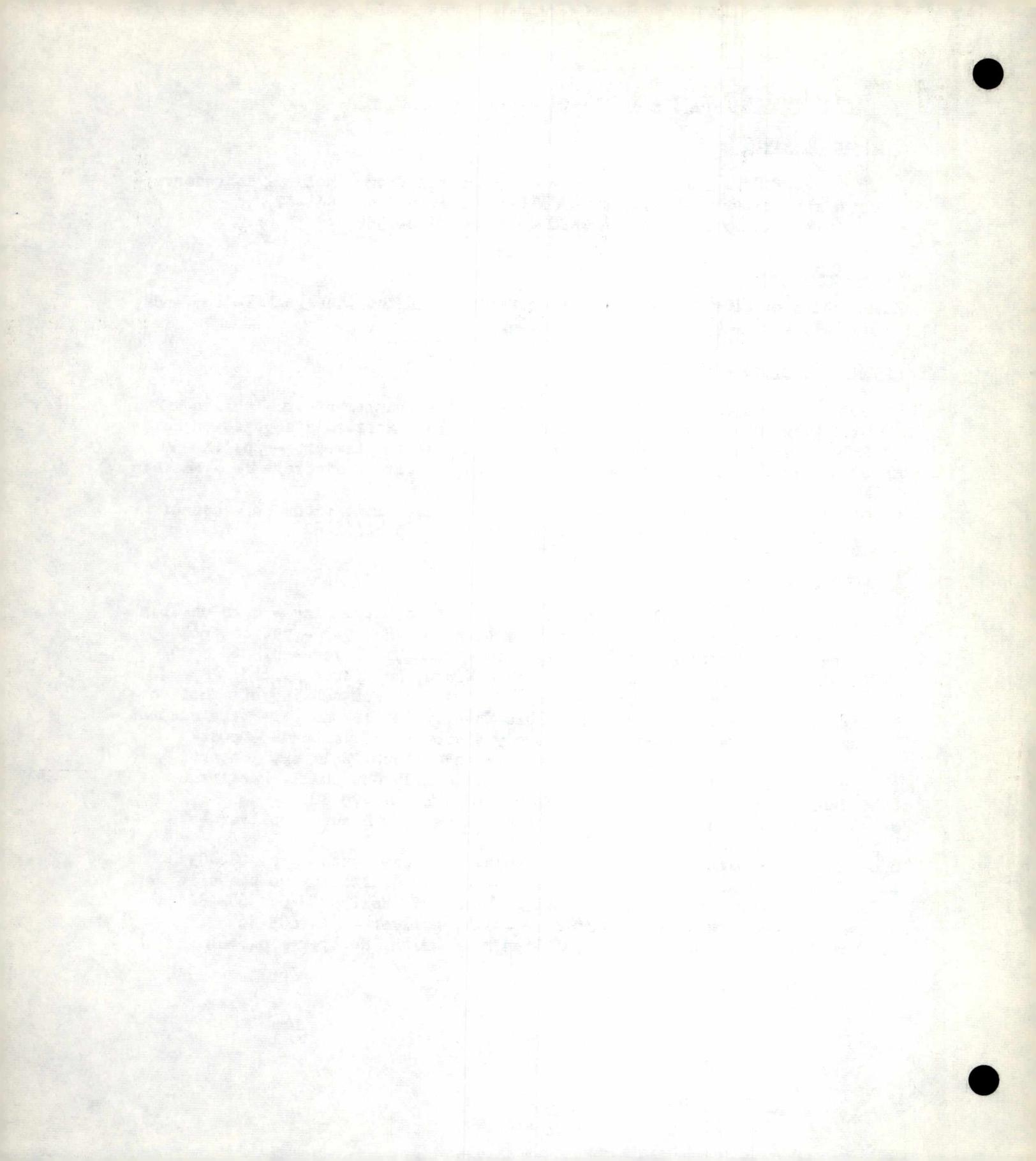
Integration of Services - existent commands - difficulties re NATO commands, SACLANT, etc. - Winch, CGS - pp. 614-15

October 31, 1963

NATO determination re strike role - date - Cdn. commitment to - change & completion of - adoption of conventional role - Norstad's suggestion re strike role for 1 Air Div. - Matheson, CAS, Smith, Lambert - pp. 649-50
 Maritime Air Command commitment to SACLANT - number of aircraft re - MacLean, CAS - pp. 660-61
 Roles re Canada-U.S. region, NATO & U.N. - budget limitations re - use of obsolescent equipment, etc. - Patterson, CAS - pp. 661-62

November 5, 1963

Acquisition of Oberon subs from U.K. - for anti-sub training - subs on loan - used as anti-sub barriers - available to NATO - Hellyer - pp. 665-66
 Briefing of NATO Parliamentary Delegation - Winch, Hellyer - p. 668
 Difficulty re Air Div. sqdns. in France - Winch, Hellyer - p. 668
 Canada-U.S. agreement re nuclear weapons - request for tabling of - motion - difficulties re for Cttee. - possible future limitations re - time element - technical nature of - control, custody & storage of warheads - cost-sharing re - concurrence of NATO countries - Winch, Hellyer, Lambert, Brewin, Smith, Lessard, Patterson, Hahn, Laniel, Churchill, Martineau, MacInnis - pp. 668-69, 670-71, 672-73, 673-74, 678-79-80.
 Review of NATO strategy - Cdn. recommendations re - Brewin, Hellyer - pp. 681-82
 Cdn. & NATO tactical air support - Brewin, Hellyer, Winch - pp. 682-83
 Need for dispersal of 1 Air Div. bases - nuclear difficulty re bases in France - re-examination of situation - Lessard, Hellyer - pp. 683-84
 Arrival at NATO commitments & roles - Smith, Hellyer - pp. 685-86
 NATO multilateral force - Cdn. position re - Smith, Hellyer - p. 686



CANADA-U.K. CO-OPERATIONJuly 9, 1963

Navy - submarines - Oberon - acquisition - CNS - pp. 104-05
Oberon sub acquisition - Groos - p. 117

July 18, 1963

Sonar - adoption by RCN & RN - CDRB - pp. 207, 208, 212
Defence research - co-op with U.K. & U.S. - CDRB - pp. 213-14
Research in anti-ICBM defence & survival - co-op with U.K. - explosives in
kiloton range - Lessard, CDRB - pp. 226-27

October 8, 1963

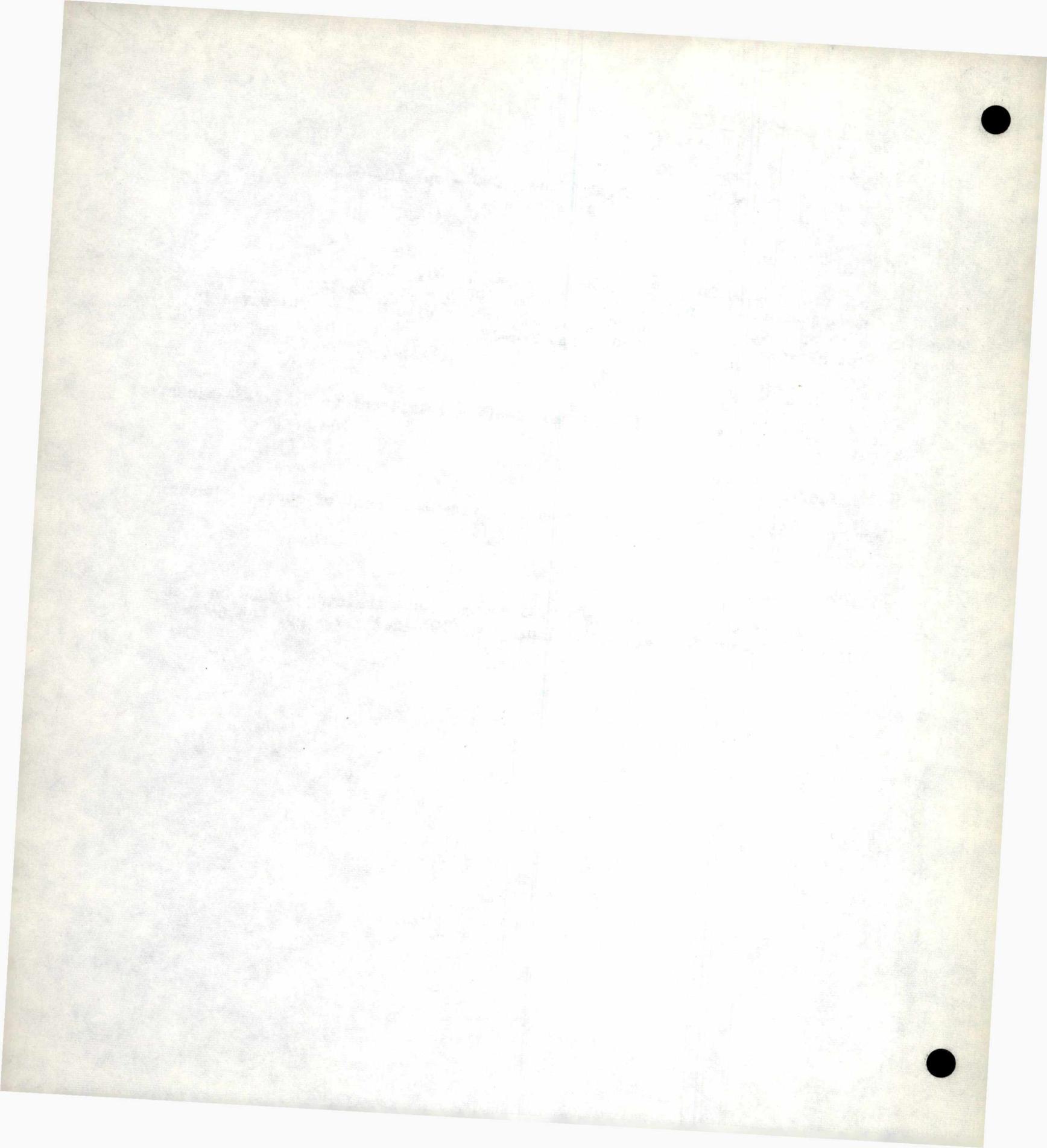
Sub training - Can.-U.S. & U.K. arrangements - commitment to U.K. re - Winch,
CNS - pp. 333-34

October 29, 1963

Forward strategy - Brigade - supplies for - re-deployment of stocks - British
& U.S. sources - Lambert, CGS - pp. 602-03

November 5, 1963

Acquisition of Oberon subs from U.K. - for anti-sub training - subs on loan -
used as anti-sub barriers - available to NATO - Hellyer - pp. 665-66



CANADA-U.S. CO-OPERATIONJune 27, 1963

Can.-U.S. negotiations re nuclear defensive weapons - Hellyer - p. 17

July 2, 1963

Cooking of nuclear warhead - info. from U.S. & bilateral nuclear agreement re -
 Churchill, Dr. Field, Hellyer, Baldwin, McMillan - pp. 35-36, 37, 38, 39, 45-46
 Flights of U.S. a/c over Canada & overflight privileges under NORAD - Hellyer,
 Lessard, Matheson - pp. 43, 48
 Bomarc paid for by U.S. - Deachman, Hellyer - p. 47

July 4, 1963

CF101 acquired from U.S. - type of armament - Churchill, Hellyer, Winch -
 pp. 75-76, 77, 78

July 9, 1963

Navy - Can.-U.S. arrangements - ships for - CNS - p. 89
 Defence of Cdn. coastline - NATO & U.S. arrangements - Winch - p. 116

July 16, 1963

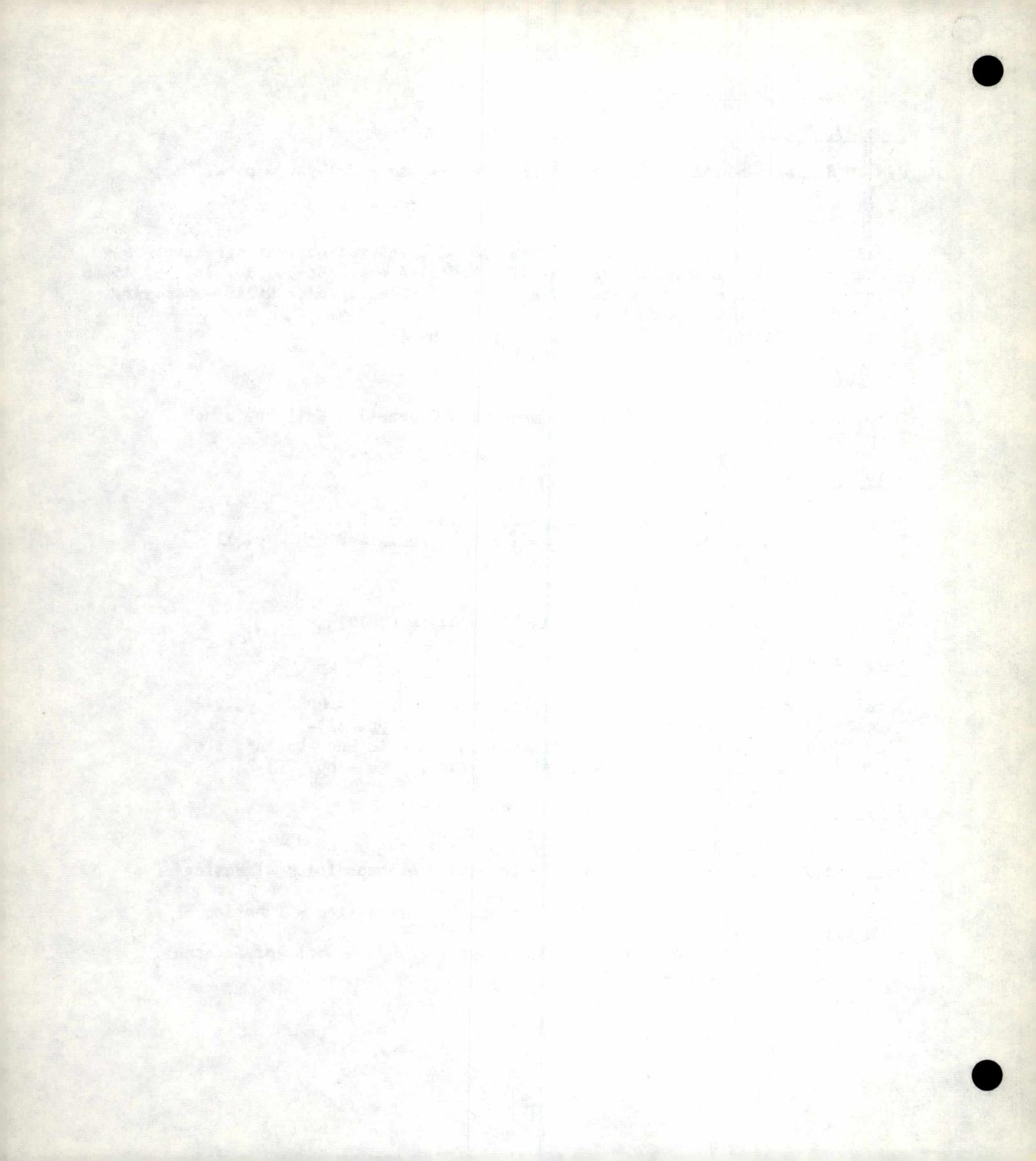
Maritime Air Command - co-op with CINCPAC - CAS - p. 171

July 18, 1963

Defence research development program - sharing program - CDRB - p. 212
 Defence research - co-op with U.K. & U.S. - CDRB - pp. 213-14
 Classified info. from U.S. made available on "need to know basis", i.e.,
 nuclear weapons, cooking effect, etc. - Winch, CDRB - pp. 223-24

July 25, 1963

Co-op with U.S. for security - Martin - pp. 233, 235
 Ministerial Cttee. on Joint Defence - formation & composition - meeting of -
 Martin - pp. 237
 Permanent Joint Board of Defence - formation & composition - function -
 Martin - pp. 237-38
 Request for breakdown of International Cttees. of DND & Dept. of External
 Affairs - Deachman - pp. 246-47



CANADA-U.S. CO-OPERATION - (Cont'd)October 8, 1963

Sub training - Can.-U.S. & U.K. arrangements - Winch, CNS - pp. 333-34

October 17, 1963

Cdn. defence policy muddled - influenced by U.S. - Brewin, Simonds - p. 453
 Nuclear weapons - Pentagon influence - Granger, Simonds - p. 463
 Nuclear warheads at U.S. bases in Nfld. - Winch, Simonds - p. 479

October 22, 1963

Intelligence Services of forces - function - co-op with U.S. - Smith, Foulkes - pp. 534-35

October 24, 1963

Cdn. contribution to U.S. deterrent - radar warning lines, BMEWS, etc. - refuelling facilities - Gellner - pp. 572-73

October 29, 1963

Honest John - authority to use - technical agreements being worked out with U.S. - function of - efficiency of Brigade re - Lessard, CGS, MacLean - pp. 600, 618, 619

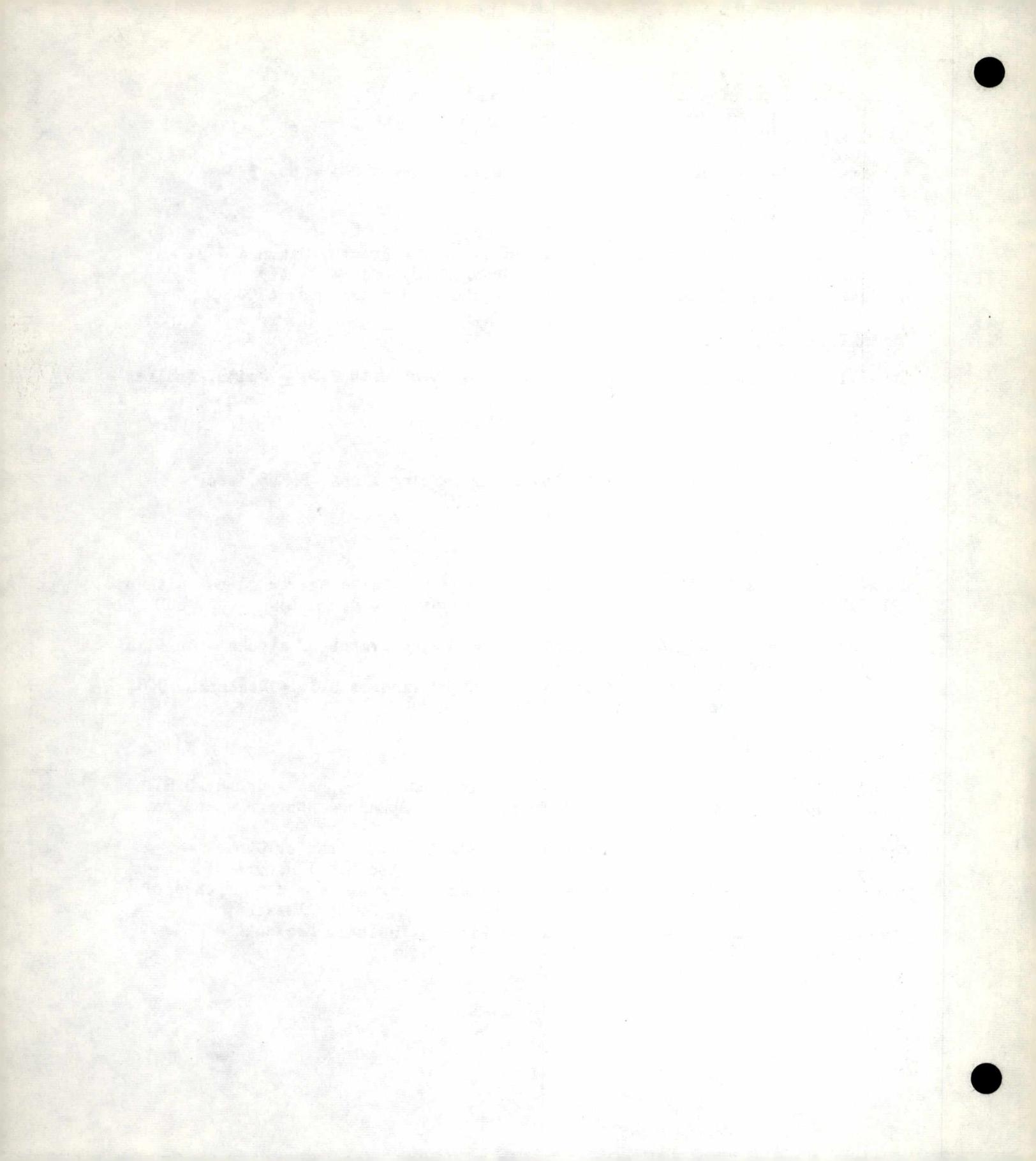
Forward strategy - Brigade - supplies for - re-deployment of stocks - British and U.S. sources - Lambert, CGS - pp. 602-03

Northwest Highway System - consultation with Province & U.S. - Deachman, CGS, Hellyer, Patterson, Baldwin - pp. 603-05

November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S. agreement re - for CF101, Honest John, CF104 & Bomarc - storage space for - Hellyer - p. 665

Canada-U.S. agreement re nuclear weapons - difficulties re for Cttee. - possible future limitations re - time element - technical nature of - control, custody & storage of warheads - cost-sharing re - concurrence of NATO countries - Winch, Hellyer, Lambert, Brewin, Smith, Lessard, Patterson, Hahn, Laniel, Churchill, Martineau, MacLean, MacInnis - pp. 668-69, 670-71, 672-73, 673-74, 678-79-80.



CANADA-U.S. PRODUCTION SHARINGJuly 18, 1963

Defence research - arrangements with industry re development and production and production sharing - Deachman, CDRB - pp. 222-23

July 30, 1963

DDP - production sharing - Can.-U.S. - amounts - NATO - amounts - Drury - pp. 260, 264-68, 280

October 29, 1963

Lessons re Bobcat development & production - future design & development of equipment for sale to NATO countries - success in field - Deachman, Hellyer, Smith, Matheson, Churchill - pp. 608-09, 611

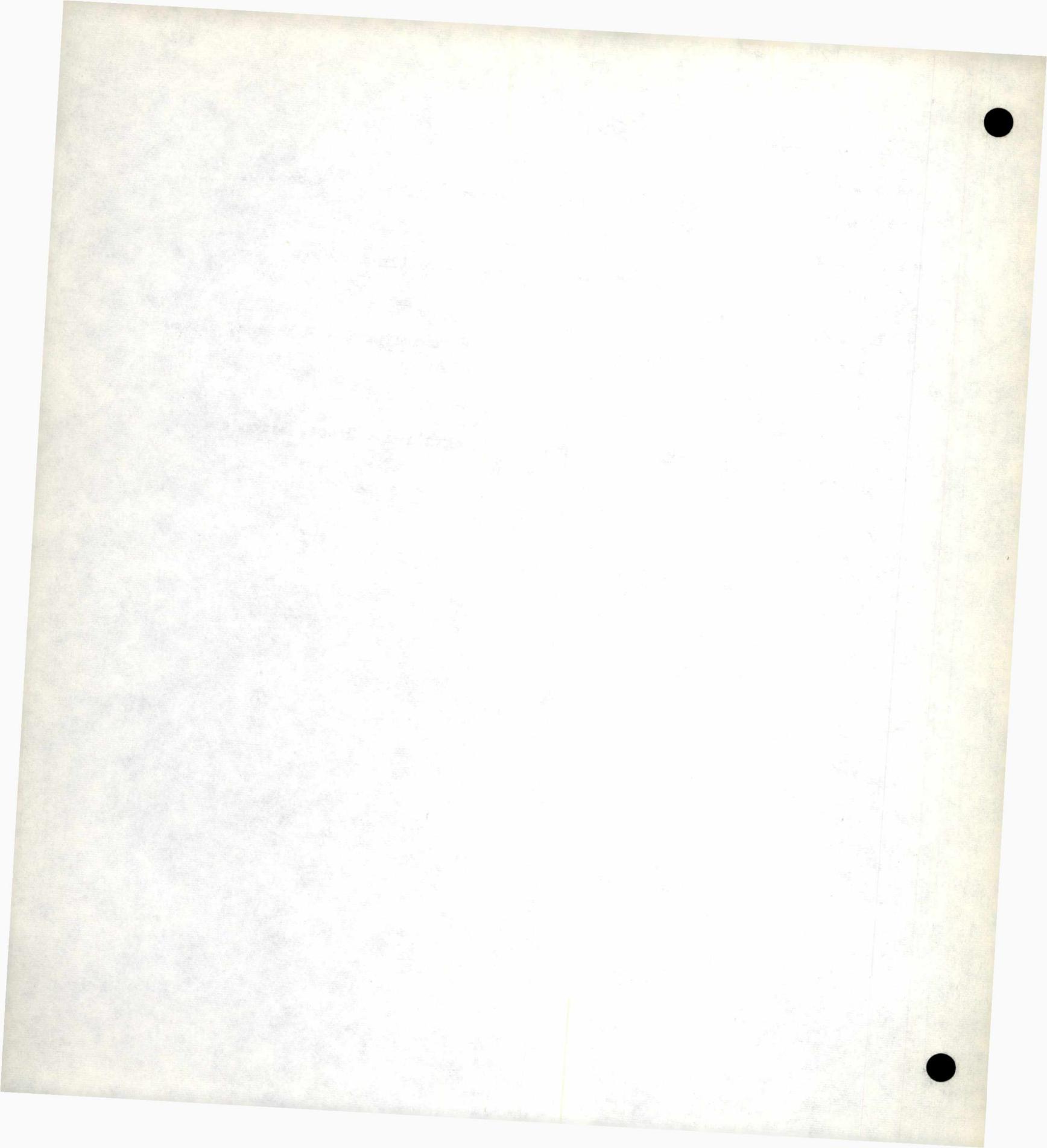
CANADIAN SERVICES COLLEGESJuly 11, 1963

Briefing by Director of Cdn. Services Colleges - Hellyer, Matheson - p. 156

July 25, 1963

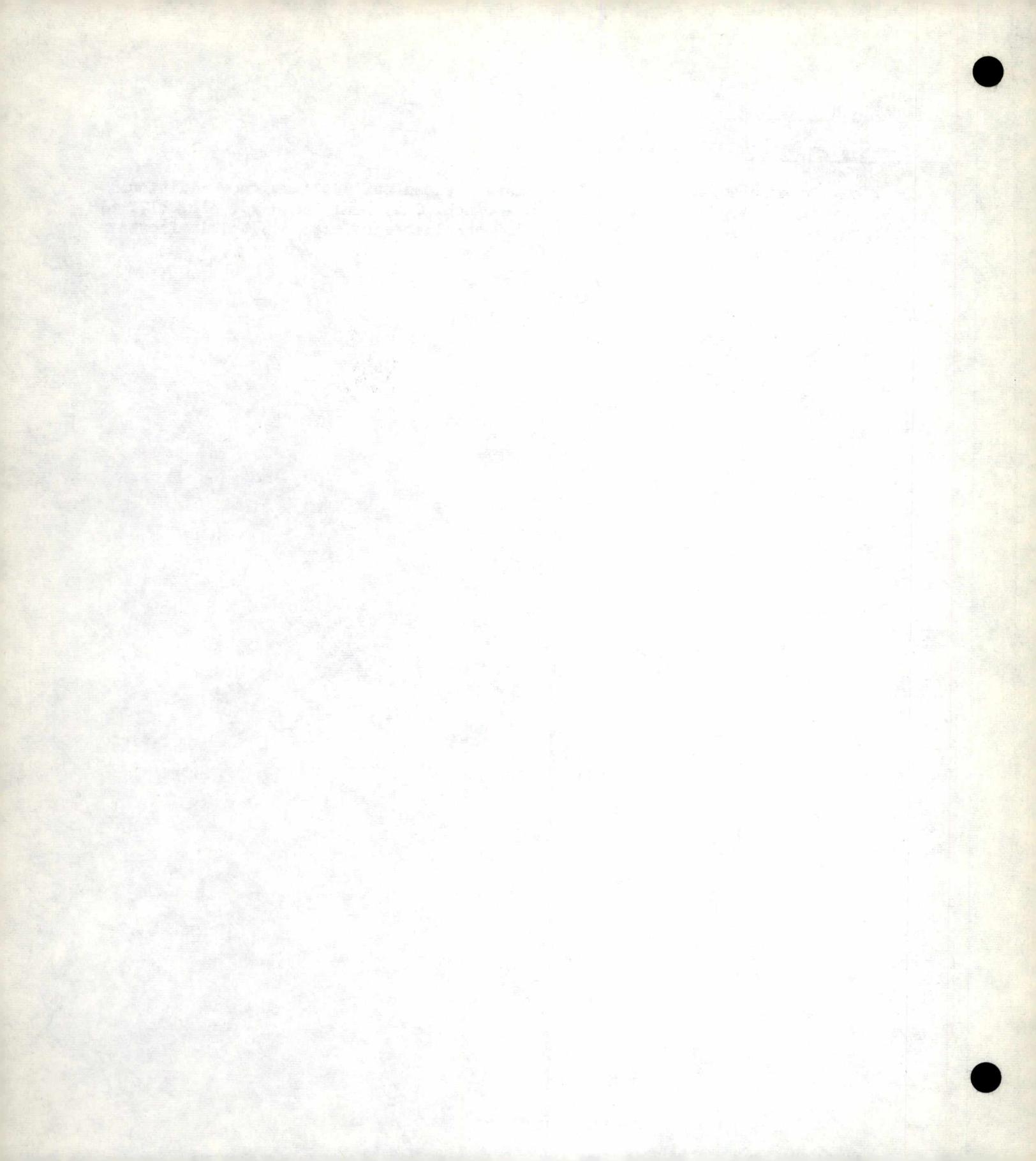
National Defence College - formation & function - Martin - p. 240

October 10, 1963Navy - Cdn. Services Colleges - value - officer recruitment - Matheson, Plomer -
p. 380October 17, 1963Tri-Service college training - tri-service integration - Groos, Simonds -
pp. 468, 469



CHAPLAIN SERVICESOctober 29, 1963

Unification of chaplain & medical services - wiped out duplication - additional book work - integration re hospitals - Winch, CGS, McMillan - pp. 616, 617, 618
Integration of Chiefs of Staff, medical & chaplain services resulted in increase of higher ranks - Groos, CGS - p. 618



CHIEFS OF STAFFOctober 10, 1963

- Navy - Flag Officer - law to himself - Plomer - p. 345
 Min. & CNS held in ignorance - Plomer - p. 345
 Senior officers leaving service - Plomer - pp. 345-46
 Cdn. Admirals amateurs - Plomer - p. 348
 Poor leadership at top - surgery re & promotion - chain of command -
 Lloyd, McMillan, Granger, Fairweather, Brewin, Plomer - pp. 355, 363,
 364, 372, 373, 374-75
 Naval Board - composition - liaison with Min. - civilian appointment to -
 tabling minutes of - Fairweather, Plomer, Winch - pp. 363-64, 370

October 15, 1963

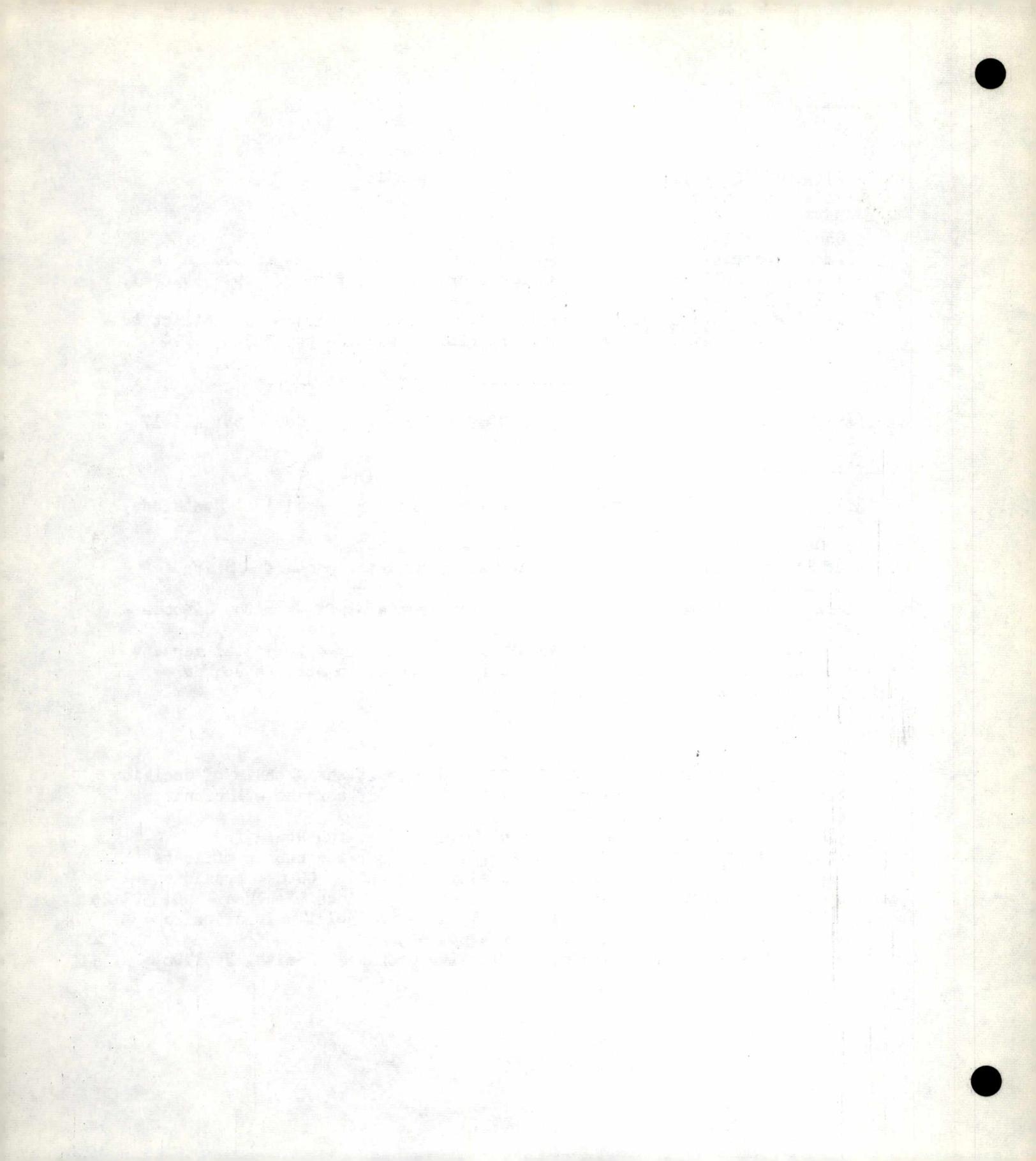
- Experience & qualifications of senior RCN officers - Lloyd, CNS - pp. 416-17

October 17, 1963

- One Chief of Staff - Chiefs of Staff access to Minister - political decisions,
 etc. - Matheson, Simonds - p. 466
 Roles of Chiefs of Staff - MacLean, Simonds - pp. 473-74
 Chiefs of Staff - disagreement - role of Deputy Minister's staff - Smith,
 Simonds - p. 478
 Brigadiers & Air Commodores - members of interservice staff - Smith, Simonds -
 p. 478
 Chiefs of Staff - nature of advice to Minister - military & political aspects -
 civilian component - Defence Cttee. - Defence Council & Service Boards -
 Lambert, Simonds - pp. 479-80

October 22, 1963

- Chiefs of Staff - responsibility to own service & ambitions - chain of decision
 re defence policy - conflicts of interest - tenure of service - MacInnis,
 Foulkes, Groos - pp. 513, 515, 522
 Integration of Services - establishment of Defence Research Board for
 integration of research - defence college for tri-service senior officers
 training - interruption by Korean War & establishment of CCOS - possible
 future plans - interservice transfer of personnel - Winch, Foulkes - pp. 522-25
 Function of Chiefs of Staff Cttee. re policy matters - political advice re -
 Cabinet Defence Cttee. - Winch, Foulkes - pp. 525-26
 Chiefs of Staff Cttee. resolution of conflicting problems - Smith, Foulkes - p. 534



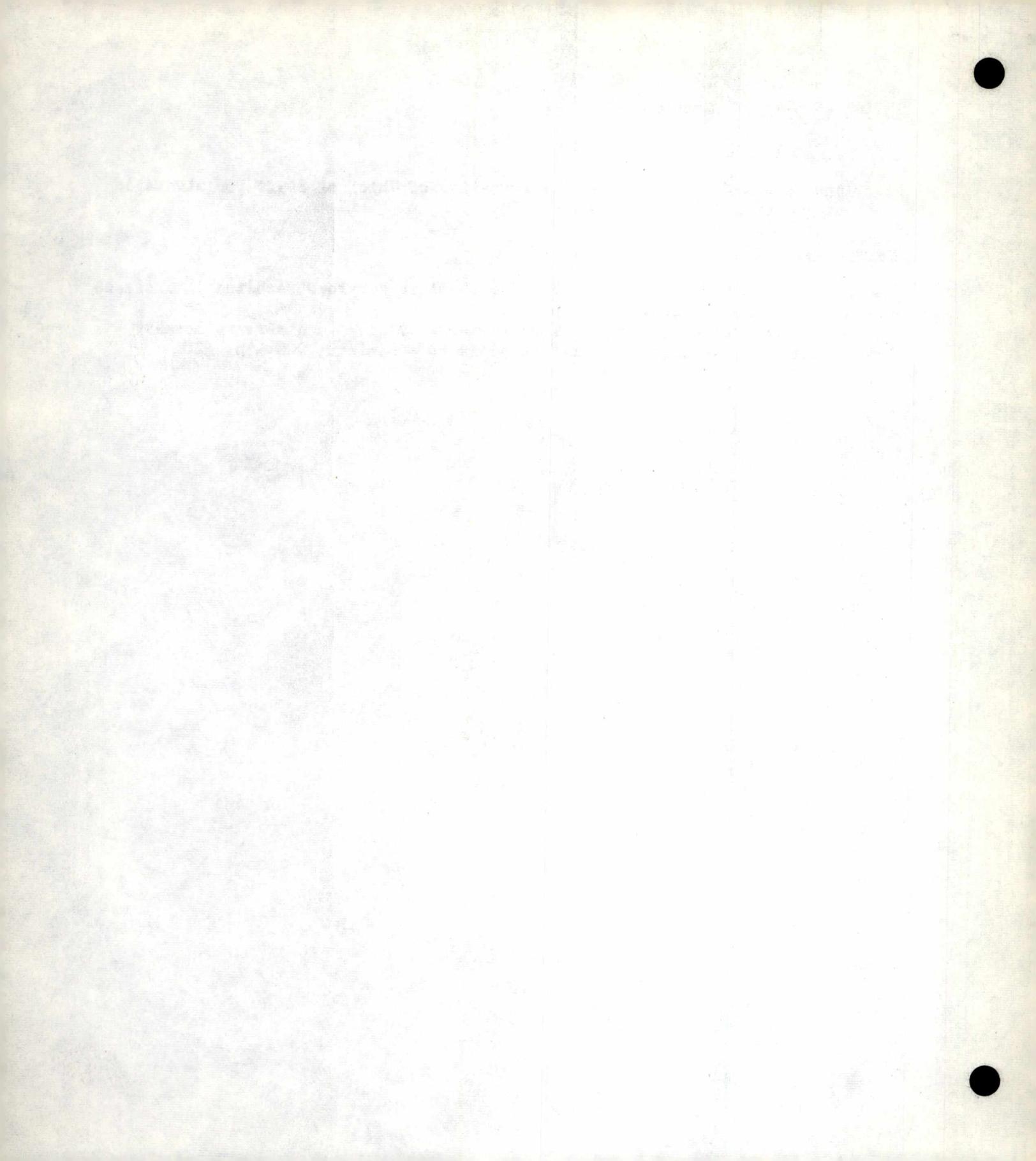
CHIEFS OF STAFF - (Cont'd)October 24, 1963

Civilians at Chiefs of Staff level - formation of Chief of Staff for strategic planning - Groos, Gellner - pp. 577-79

October 29, 1963

Integration of Chiefs of Staff, medical & chaplain services resulted in increase of higher ranks - Groos, CGS - p. 618

Conflict of role of Chiefs of Staff re advisers to gov't and service loyalty - maintenance of ex-Chiefs of Staff as advisers - MacLean, CGS - p. 620



CIVILIAN PERSONNELOctober 22, 1963

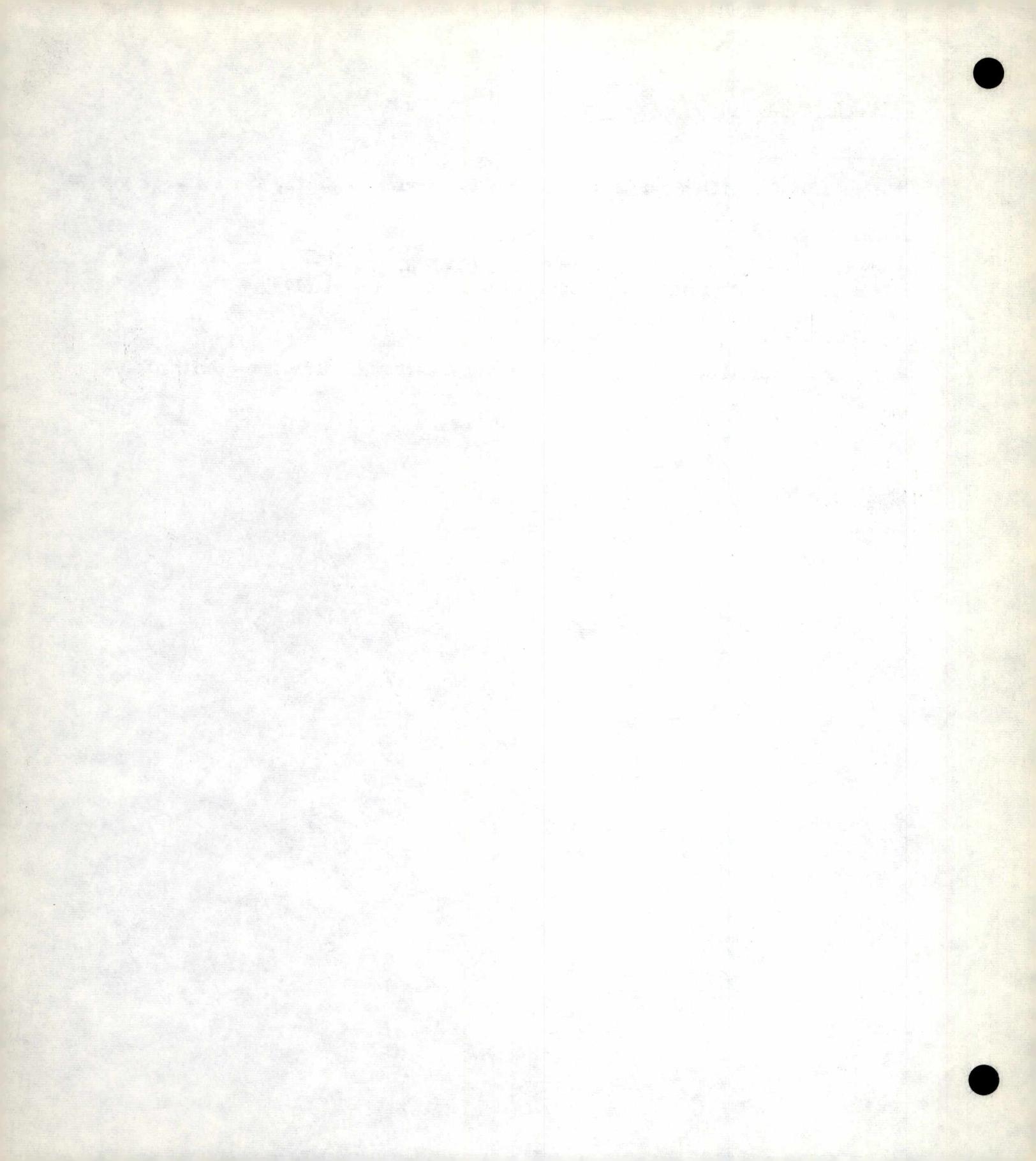
Integration of civilian personnel employed by Services - Smith, Foulkes - p. 535

October 29, 1963

Strength of civilian employees - McMillan, CGS - p. 594

Role & function of civilian personnel - McMillan, CGS - p. 617

October 31, 1963Separation of civilians employed in Services & personnel officers - Smith, CAS -
p. 654



CLOTHING, EQUIPMENT AND GENERAL STORESOctober 15, 1963

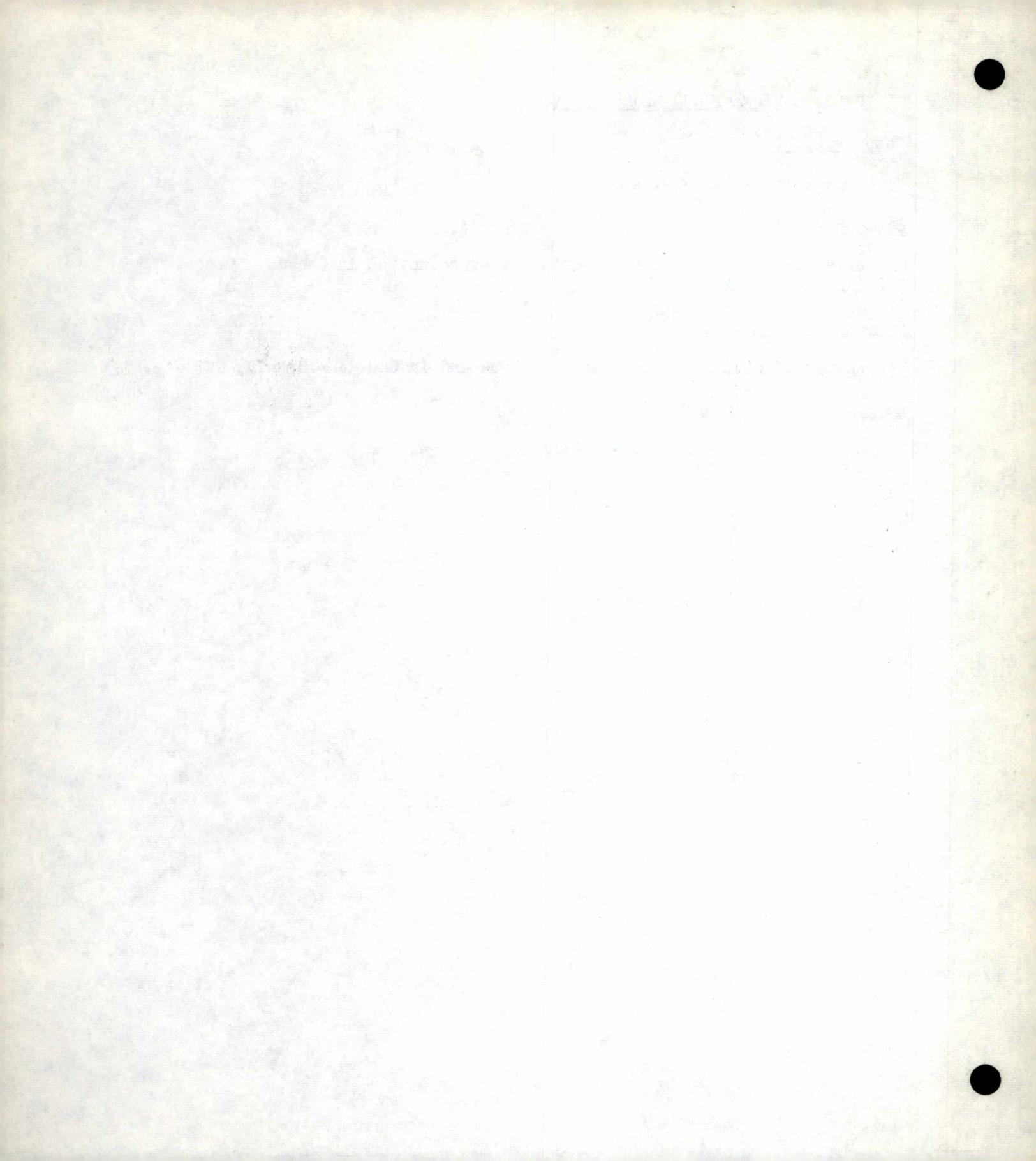
Naval uniforms - CNS - p. 408

October 22, 1963Criteria for length of life of equipment - production in Canada - Groos,
Foulkes - p. 521October 29, 1963

Percentage of equipment for Army in Europe and in Canada - Brewin, CGS - p. 593

October 31, 1963

Summer uniforms without hat - Patterson, CAS - p. 660



COMMITTEES

June 27, 1963

Security clearance of Cttee. members - Fairweather, Hellyer - p. 21

July 2, 1963

Bringing RCAF & USAF officers before Cttee. for briefing on Bomarc and visit to NORAD - Winch, Hellyer, Hahn - pp. 49-50, 53
Recommendation of policy - Groos, Hellyer - p. 53

July 4, 1963

Appearance of Air Force representatives - CCOS - pp. 67, 74
Cttee. exercise in futility - Churchill - p. 74
Role of and manner of procedure - Lloyd - p. 82

July 9, 1963

Cooking nuclear bomb - University of Alta. Scientist's brief - contradiction - calling of Dr. Scott - Brewin - p. 123

July 11, 1963

Calling of Dr. Scott - Brewin - p. 128
Payment of expenses - Winch, Lloyd - pp. 128-29
Responsibility and power to Cttee. - Winch, Hellyer, Churchill - pp. 156-58

July 16, 1963

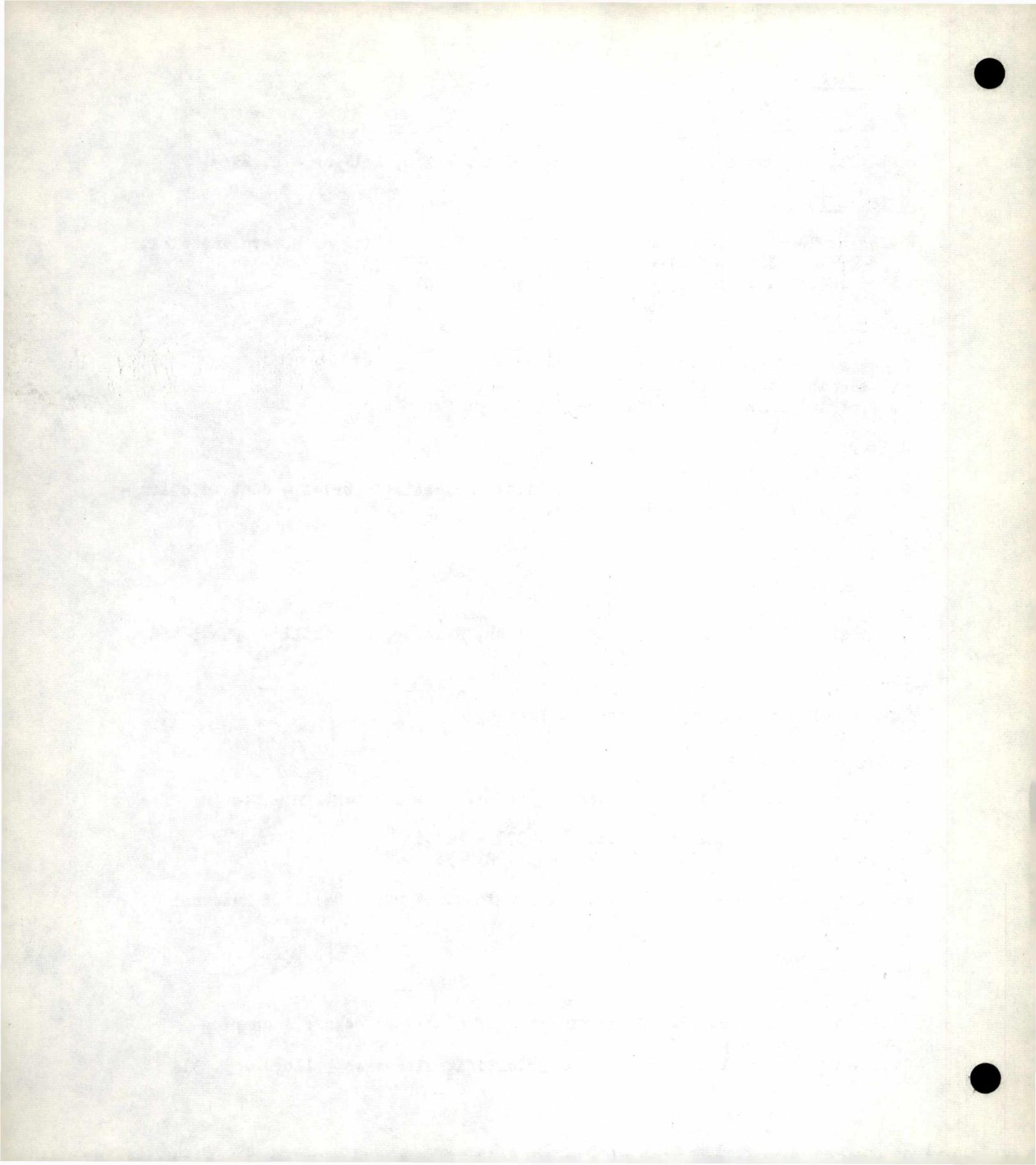
Tabling of U.S. Def. Appropriations Hearings

July 25, 1963

Ministerial Cttee. on Joint Defence - formation & composition - meeting of - Martin - p. 237
Permanent Joint Board of Defence - p. 237 - Martin
Formation & composition - Martin - pp. 237-38
Function - pp. 237-38
Request for breakdown of International Cttees. of DND & Dept. of External Affairs - Deachman - pp. 246-47

August 1, 1963

Cttee. to accept written submissions - p. 287
Approval of per diem allowance for Univ. of Alta. professors appearing before Cttee. - p. 313
Cttee. concerned with capability of scientific witnesses - Lloyd - p. 314



COMMITTEES - (Cont'd)October 15, 1963

- Ad Hoc Cttee. on naval objectives - composition & function - CNS - pp. 398-99, 401, 411
- RCN Personnel Structure Cttee. - function & composition - subsequent re-organization of personnel structure - CNS - p. 398
- Ad Hoc Cttee. recommendations - versatility of fleet - general purpose frigates, anti-submarine role - A/A capability, etc. - Lloyd, CNS - pp. 414-15

October 17, 1963

- Protest against press report that Cttee. dismissed CDR Plomer's charges of naval inefficiency, etc. - Brewin - p. 437
- Protest against headline in Citizen indicating Simonds urged Canada to acquire its own H-bomb - Simonds, Smith - p. 459
- Chiefs of Staff - nature of advice to Minister - military & political aspects - civilian component - Def. Cttee. - Chiefs of Staff Cttee. - Defence Council & Service Boards - Lambert, Simonds - pp. 479-80
- Paper for Def. Cttee. by Mr. D.B. Scott, etc. of the Univ. of Alta. re recent appearance before Cttee. on nuclear bomb cooking - pp. 483-90.

October 22, 1963

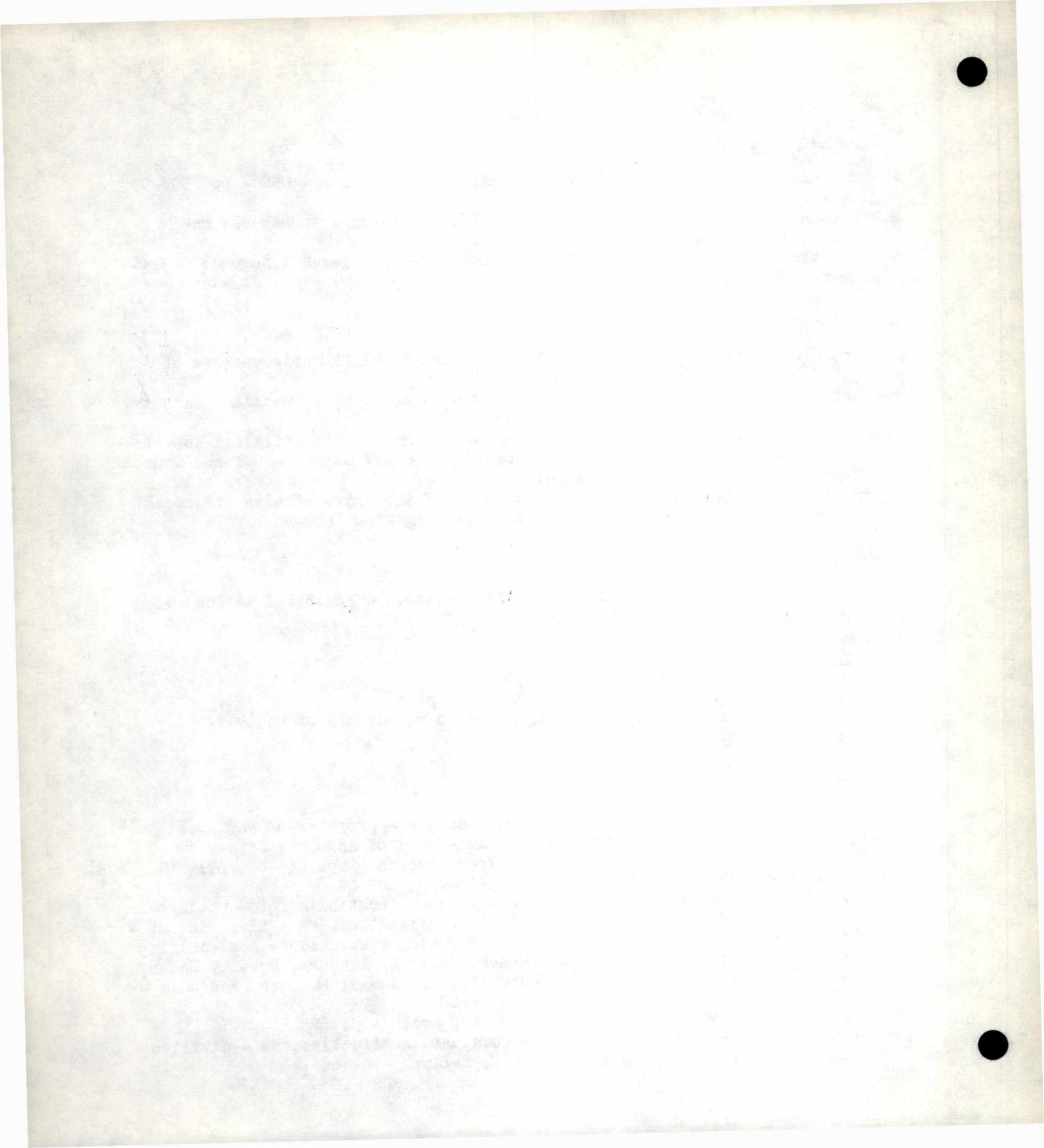
- Function of Chiefs of Staff Cttee. re policy matters - political advice re - Cabinet Def. Cttee. - Winch, Foulkes - pp. 525-26

October 24, 1963

- Qualifications of Mr. John Gellner - Gellner - p. 551
- Cttee. to submit interim report urging gov't to withdraw from nuclear commitments - Churchill - p. 587

November 5, 1963

- Review of policy & commitments - Navy requirements - procurement equipment programs - cancellation of frigate program - need of info. by Cttee. re - sharing of info. in camera - Winch, Hellyer, Brewin - pp. 665-67, 671, 672, 678.
- Cttee. deliberations - benefits of - Hellyer - pp. 667-68
- Canada-U.S. agreement re nuclear weapons - request for tabling of - motion - difficulties re for Cttee. - possible future limitations re - time element - technical nature of - control, custody & storage of warheads - cost-sharing re- concurrence of NATO countries - Winch, Hellyer, Lambert, Brewin, Smith, Lessard, Patterson, Hahn, Laniel, Churchill, Martineau, MacLean, MacInnis - pp. 668-69, 670-71, 672-73, 673-74, 678-79-80.
- Preparation of Cttee Report in camera - Winch, Smith - p. 678
- Sutherland Committee - purpose - systems evaluation effectiveness - civilian evaluation of military proposals - Smith, Hellyer - p. 688.

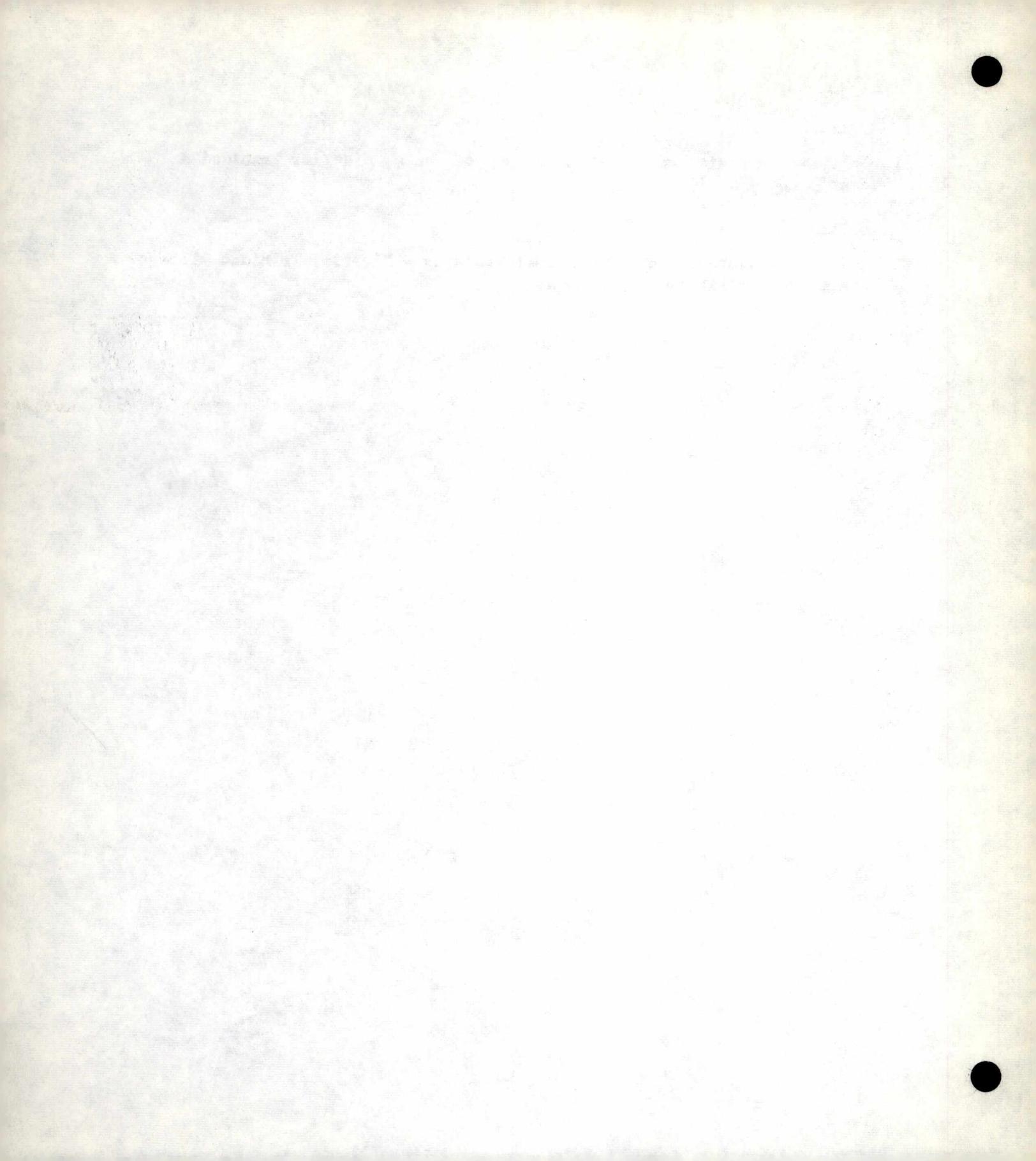


COMMONWEALTHJuly 11, 1963

Army - training assistance to Armed Forces of Ghana, Nigeria, Trinidad & Tobago - CGS - p. 149

July 25, 1963

Commonwealth assistance re armed forces training - Nigeria, Trinidad, Tobago, Ghana & India - Martin - pp. 239-40



COMMUNICATIONSJuly 11, 1963

Army - signal eqpt. unsuitable - CGS - p. 137

Army - defence of Canada brigade - radio equipment for - CGS - p. 144

October 15, 1963

Communications - ship/air vs submarine/air - CNS - p. 429

Anti-submarine role & conventional war - convoy & supplies - control of sea communications - protection of Cdn. shores & shipping - Brewin, CNS - pp. 429-30.

October 22, 1963

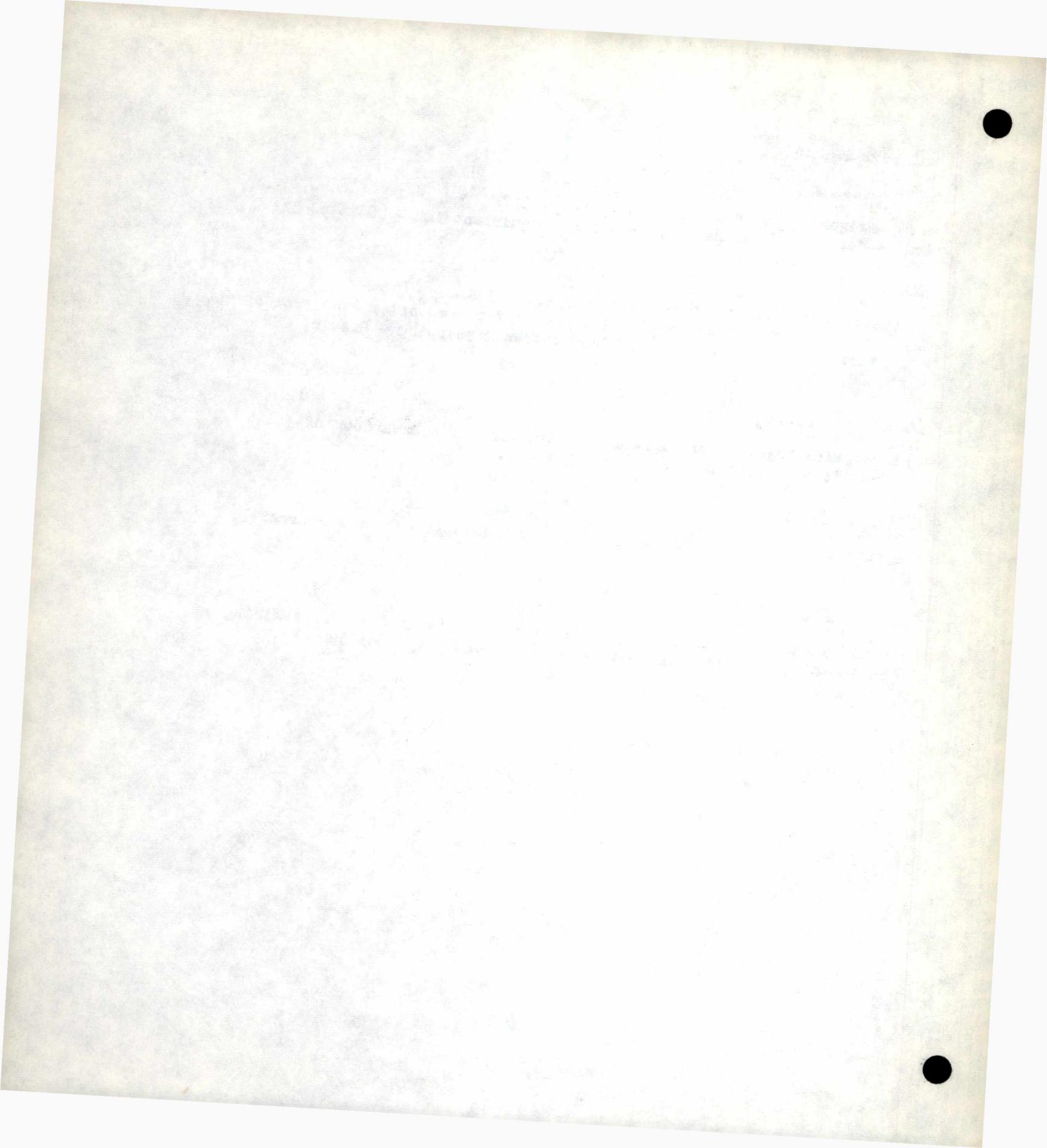
Interservice transfer of signallers - training of - breakdown of joint communication system - Smith, Foulkes - p. 538

October 29, 1963

Additional requirement for signal eqpt. & bridge transport - Churchill, CGS - p. 613

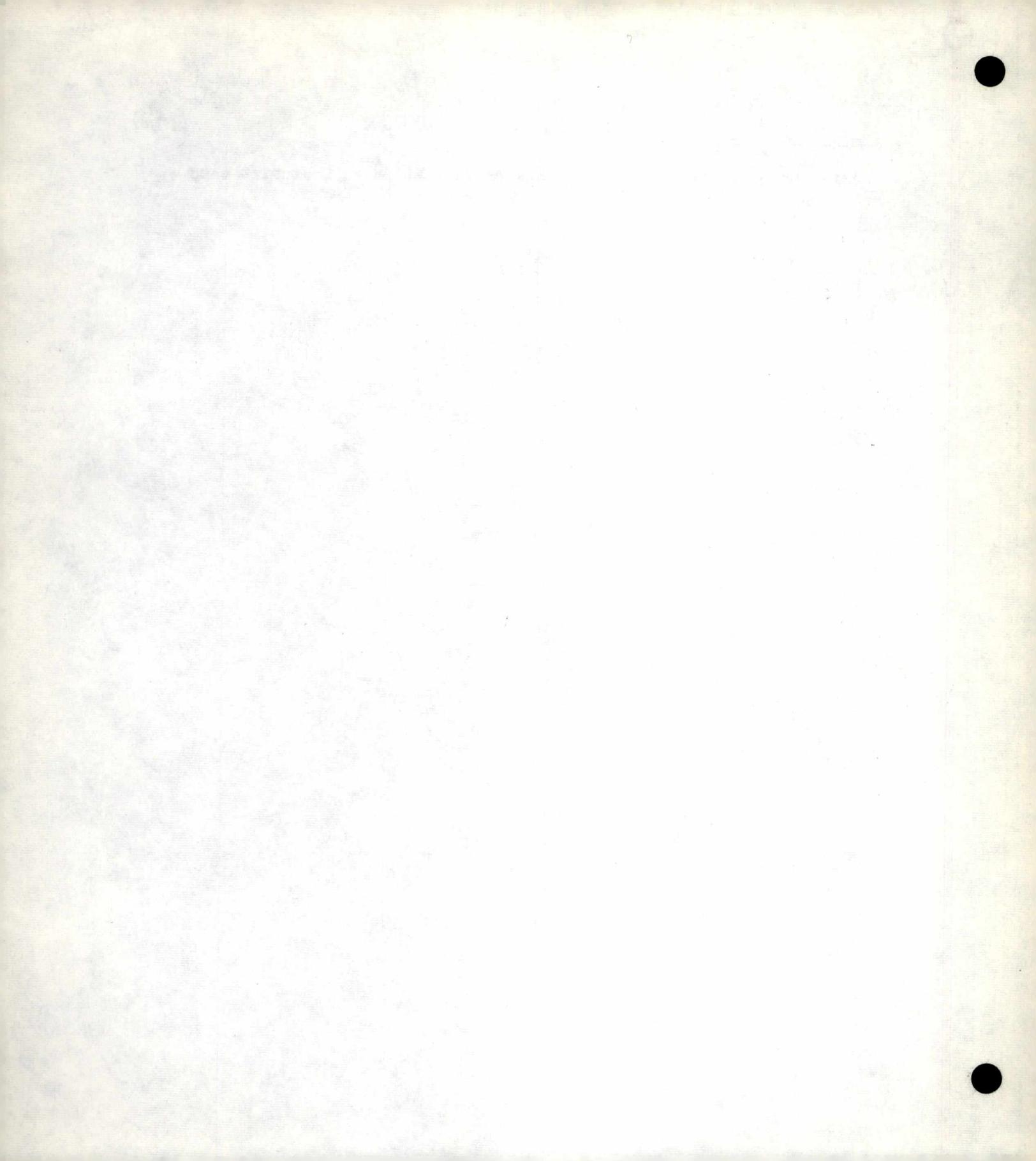
October 31, 1963

Individual service training establishments - re radar & signal training - business training specialization - Smith, CAS - pp. 653-55



COMMUNISMJuly 25, 1963

Consideration of Chinese threat in view of separation in Communist camp -
Hahn - pp. 251-52



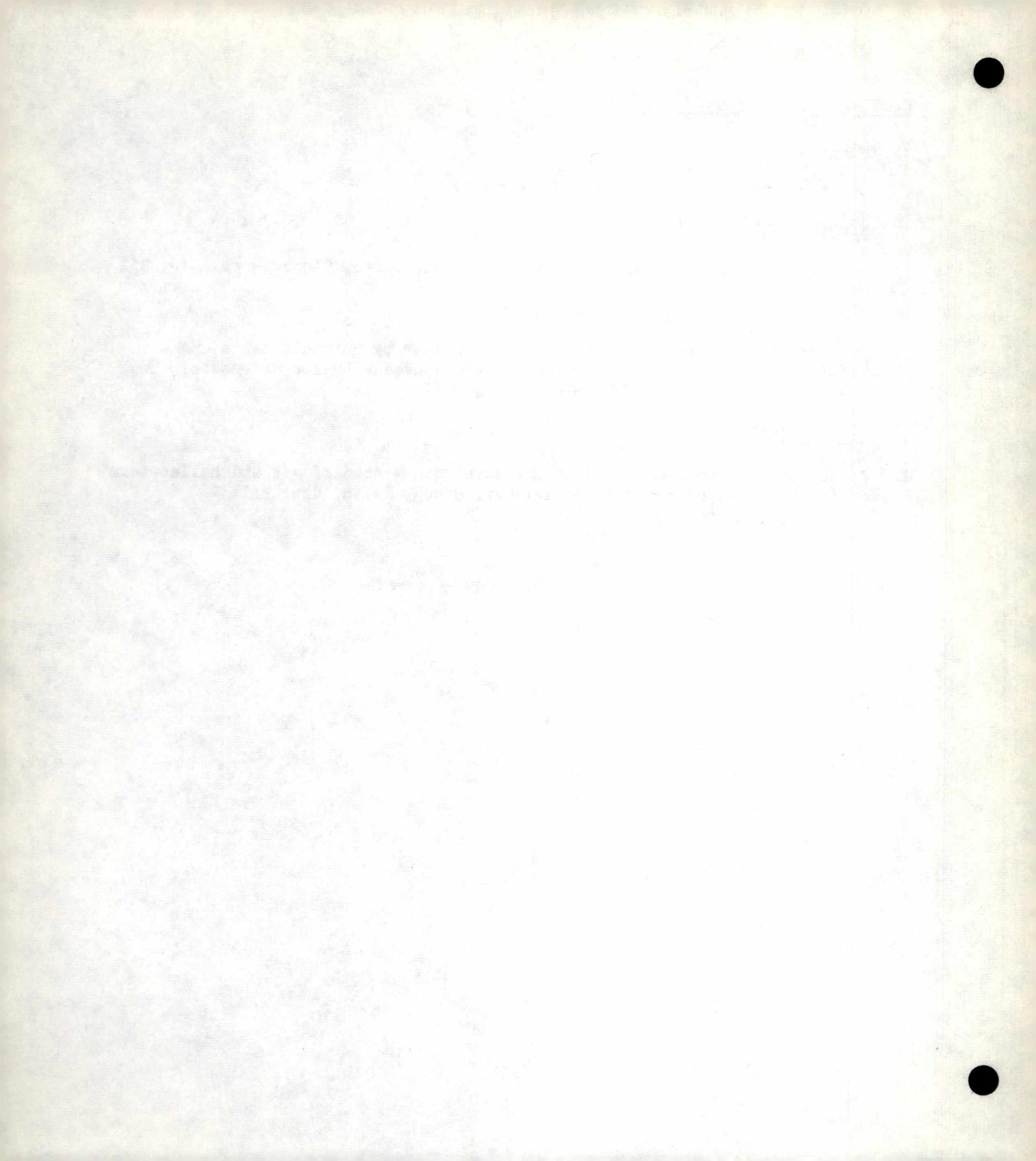
CONTINENTAL DEFENCE - GENERALJuly 9, 1963

Navy - re sovereignty of Arctic - CNS - p. 90

October 10, 1963

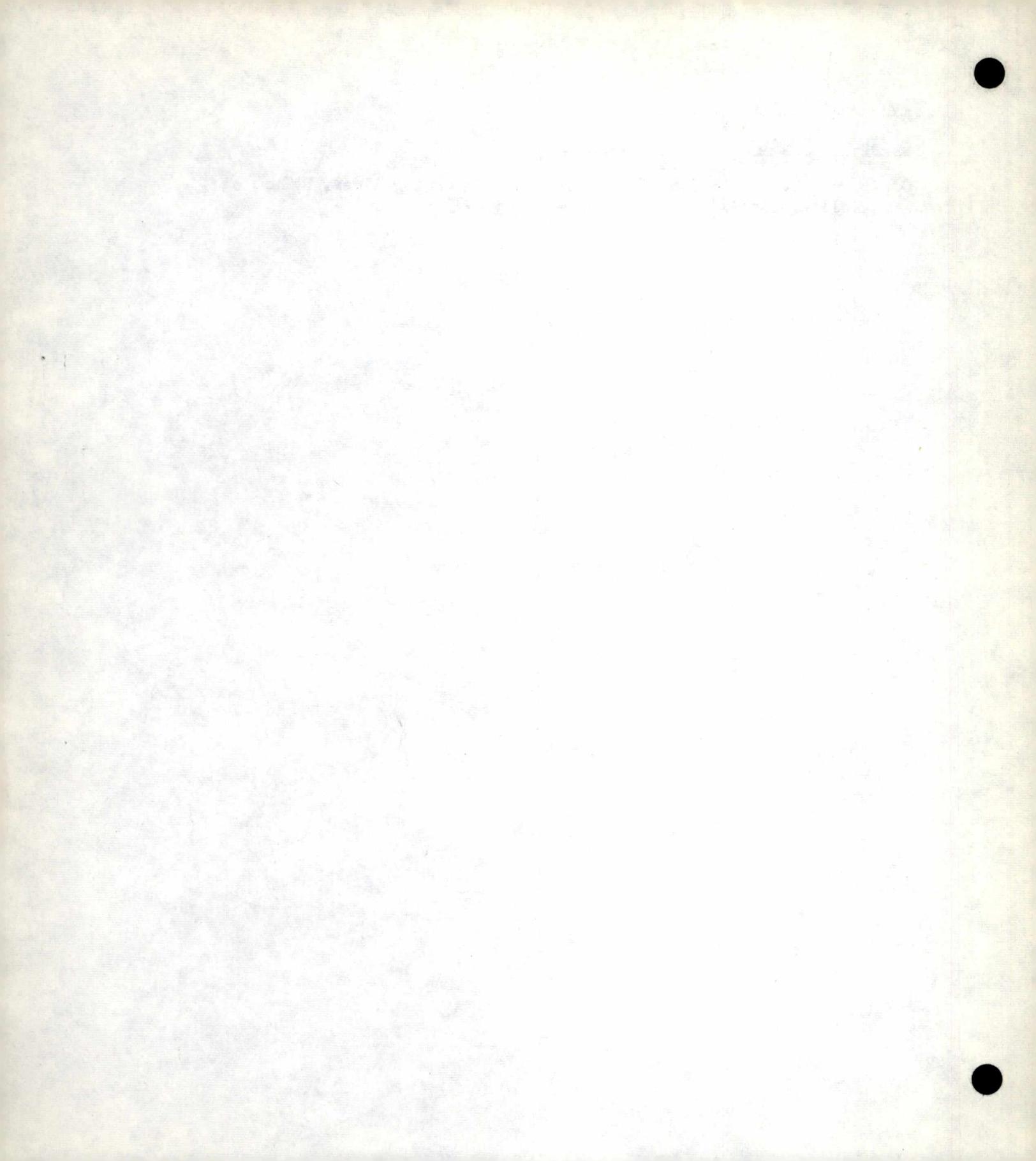
Protection of North with nuclear subs - Matheson, Smith, Plomer - pp. 350, 352

October 17, 1963Europe can't be defended by nuclear arms - defence by conventional means -
potential power of Russia - defence of Europe necessity for defence of
North America - McMillan, Simonds - pp. 466-67October 24, 1963Air space recce. & monitoring submarine movements - need of a/c and helicopters
and highly mobile ground force - Gellner, Groos, Smith, Churchill -
pp. 559-60, 566, 568-69, 572, 586



CONTINENTAL DEFENCE - BMEWSOctober 24, 1963

Cdn. contribution to U.S. deterrent - radar warning lines, BMEWS, etc. -
refuelling facilities - Gellner - pp. 572-73



CONTINENTAL DEFENCE - NORADJune 27, 1963

Establishment & function of - Hellyer - p. 16
 Commanders of - Hellyer - p. 16
 Radar lines & operation of - Hellyer - p. 16
 SAGE centres of - p. 16 - Hellyer
 ICBM & IRBM threat - Hellyer - p. 16
 Nike-Zeus - development - Hellyer - p. 16
 Limited to anti-bomber fleet - Hellyer - pp. 16-17
 Cdn. contribution of Bomarc & CF101 - Hellyer - pp. 17, 18
 Bomarc moved north to protect Cdn. cities - Hellyer - p. 17
 Bomarc effective anti-bomber weapon - Hellyer - p. 17
 Bomarc development cost - Hellyer - p. 17
 Bomarc armed with atomic warhead to be effective & cook bomb - Hellyer - p. 17
 Sqdns. under - Hellyer - p. 17

July 2, 1963

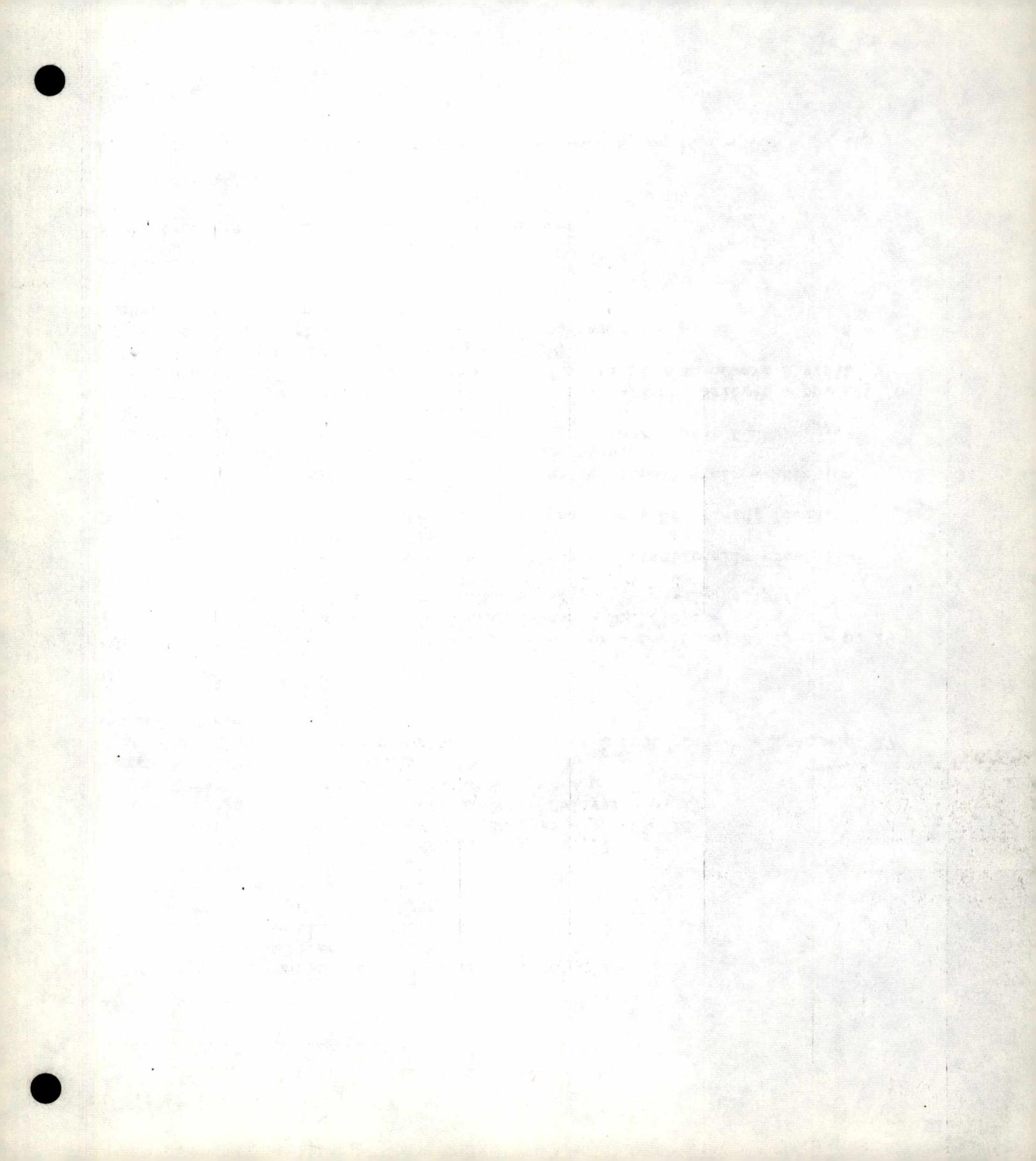
Vulnerability of Vancouver to air & missile attack - Deachman, Hellyer - p. 29
 Objective to knock down bomber in isolated area - Dr. Field - p. 34
 Cdn. contribution to NORAD - CF101, Bomarc, etc. - Matheson, Hellyer,
 Deachman - pp. 40, 43
 U.S. contribution to NORAD - percentage nuclear & conventionally armed F101
 & Bomarc, etc. - Lambert, Hellyer, Deachman - pp. 40, 43
 Dummy bombers - complex & electronic countermeasures - Dr. Field, Lloyd,
 Hellyer - pp. 41, 42-43
 Conventional vs nuclear equipped CF101 & relative effectiveness - location -
 Lambert, Hellyer, Temple, Deachman - pp. 43, 46-47
 Flights of U.S. a/c over Canada - overflight privileges under NORAD -
 Lessard, Hellyer, Matheson - pp. 43, 48
 Bomber threat not diminishing - intelligence re - Hellyer, Baldwin - pp. 44, 46
 Bringing RCAF & USAF officers before Cttee. for briefing on Bomarc & visit
 to NORAD - Winch, Hellyer, Hahn - pp. 49-50, 53
 Effect of DEW Line strike on NORAD - McMillan, Hellyer - p. 53
 Bomber vs ICBM - Hahn, Hellyer - p. 54

July 4, 1963

North American defence & NATO - CCOS - pp. 61-62

July 11, 1963

Army - survival operations - warning through NORAD & DEW Line - CGS - p. 145



CONTINENTAL DEFENCE - NORAD - (Cont'd)July 16, 1963

NORAD - CAS - pp. 163-69

Defence against manned bomber - CAS - p. 163

Missile & bomber threat - CAS - p. 163

Formation of - CAS - p. 163

Responsibility of - CAS - p. 164

Forces under - CAS - pp. 164-65

Strength of - CAS - p. 164

Organization of - CAS - pp. 164-65

Air defence flying units - location - CAS - pp. 164-66

CF101B & armament - CAS - p. 165

Bomarc - nuclear capability - CAS - p. 166

Air defence training - CAS - p. 166

Radar lines - manning & operation - CAS - pp. 166-68

CADIN - CAS - pp. 168, 183

SAGE - construction, function & operation - CAS - pp. 168-69

Satellite - detection & tracking - CAS - p. 169

60 hrs. week for air defence sqdns. - CAS - p. 169

Percentage of destruction of manned bombers - Brewin, CAS - p. 194

July 18, 1963Visit to NORAD - ~~201~~ - pp. 201, 203

Defence research - scientists at NORAD - CDRB - p. 207

July 25, 1963Membership in collective security of NATO, NORAD & U.N. - Martin -
pp. 234-35, 238, 241

Canada-U.S. co-op re NORAD - Martin - p. 237

October 17, 1963

Anti-ICBM missile role for NORAD - Hahn, Simonds - p. 458

Cdn. participation in NORAD - no advantage - Winch, Simonds - p. 479

October 22, 1963Defence of Canada-U.S. region - ICBM & bomber threats to - Nike-Zeus anti-
ICBM defence - reduction of Cdn. contribution to - Russian ballistic
missile submarine threat to - future Chinese sub threat - Foulkes,
Laniel, Lambert - pp. 502-03, 506-07, 538, 541-42

Re-assessment of North American air defence - Foulkes - p. 207

NORAD formation - decision re - Foulkes - p. 510

History of gov't. approval of NORAD agreement - Winch, Foulkes, Lambert -
pp. 526-27

NORAD - function, operation & responsibility of - Laniel, Foulkes - pp. 537-38

CONTINENTAL DEFENCE - NORAD - (Cont'd)October 24, 1963

Air space recce. & monitoring submarine movements - need of a/c & helicopters
& highly mobile ground force - Gellner, Groos, Smith, Churchill - pp. 559-60,
566, 568-69, 572, 586

October 31, 1963

Reduction in number of air force sqdns. - efficiency - Laniel, CAS - p. 641

NORAD - re-negotiation of - Matheson, CAS - pp. 650-51

Transport role - northern recce. & maritime roles for RCAF - CAS, Matheson -
p. 652

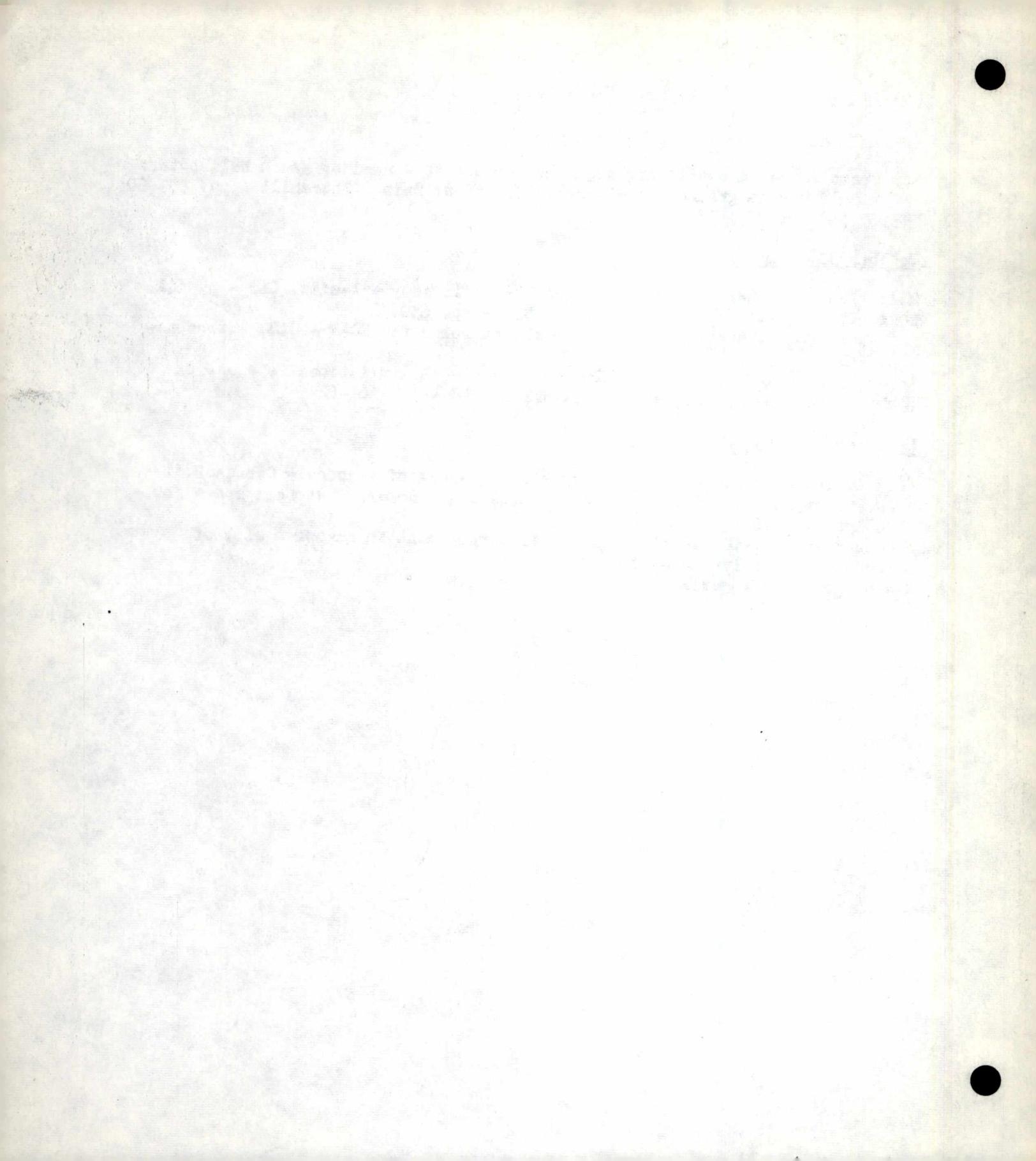
Roles re Canada-U.S. region, NATO & U.N. - budget limitations re - use of
obsolescent equipment, etc. - Patterson, CAS - pp. 661-62

November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S.
agreement re - for CF101, Honest John, CF104 & Bomarc - storage space for -
Hellyer - p. 665

Non-purchase of additional CF101's - re-arrangement in number & size of
sqdns. re - Hellyer - p. 667

NORAD agreement - review of - Hellyer - p. 670



CONTINENTAL DEFENCE - RADAR LINESJune 27, 1963

Radar lines & operation of - Hellyer - p. 16

July 11, 1963

Army - survival operations - warning through NORAD & DEW Line - CGS - p. 145

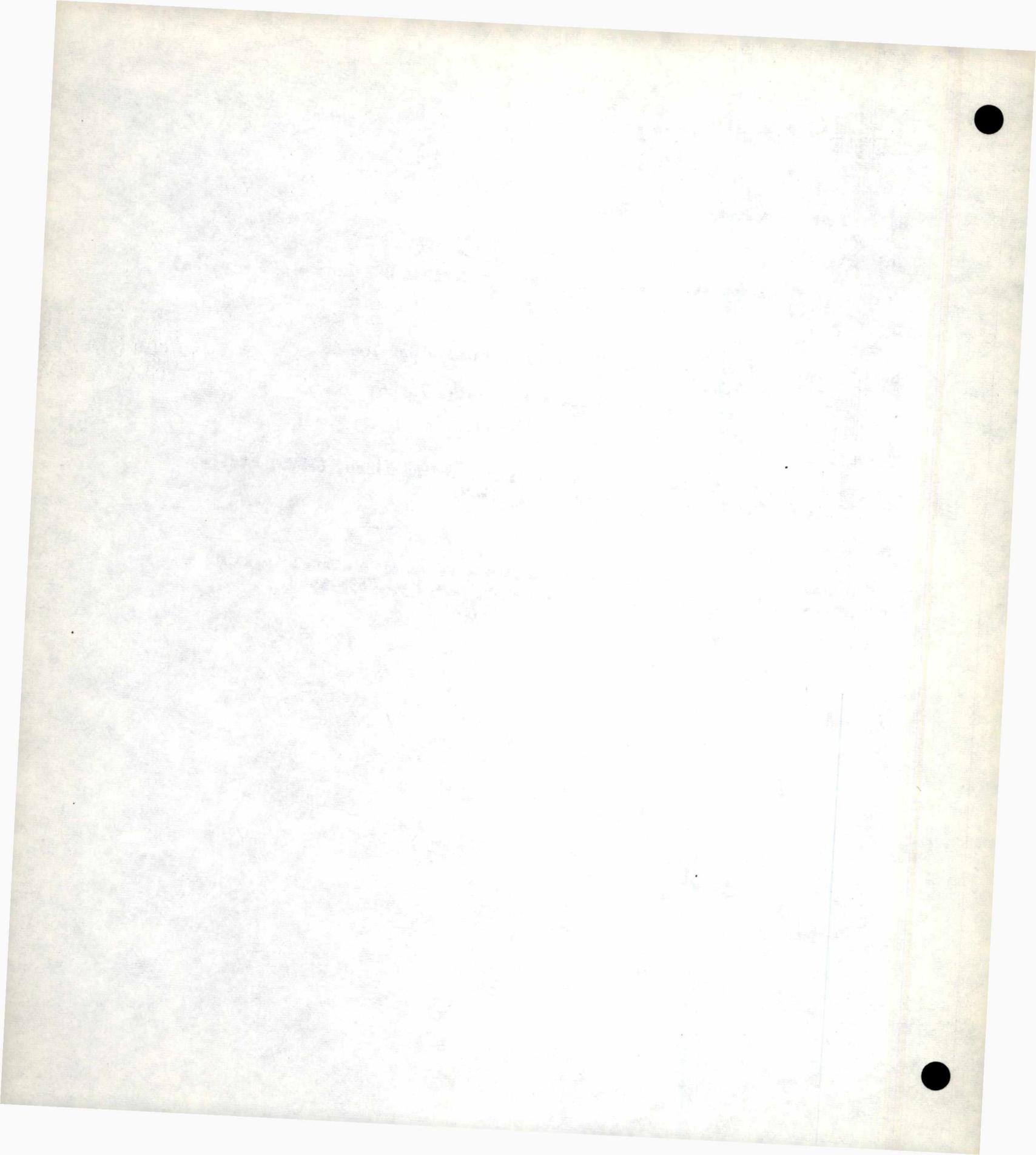
July 16, 1963

NORAD - radar lines - manning & operation - CAS - pp. 166-68

CADIN - CAS - pp. 168, 183

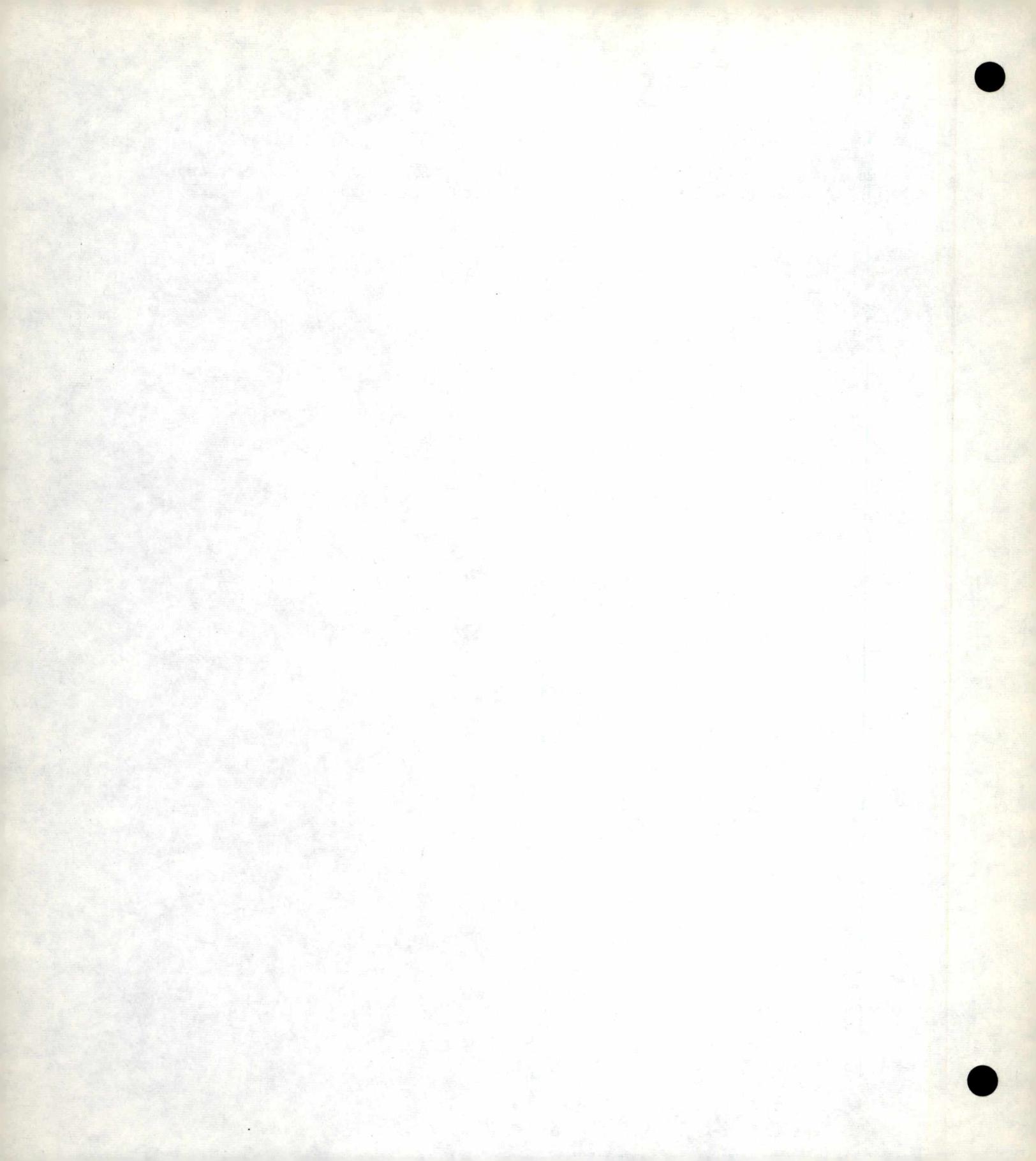
SAGE - construction, function & operation - pp. 168-69

October 24, 1963Cdn. contribution to U.S. deterrent - radar warning lines, BMEWS, etc. -
refuelling facilities - Gellner - pp. 572-73October 31, 1963Individual service training establishments - re radar & signal training -
business training specialization - Smith, CAS - pp. 653-55



CUBAOctober 15, 1963

Operation availability of ships during Cuban crisis - CNS - pp. 397, 405
Ship deficiencies - during Cuban crisis - Churchill, CNS - pp. 420, 421



DEFENCE RESEARCH AND DEVELOPMENTJune 27, 1963

DRB Operations Research re defence - Hellyer - p. 20

July 2, 1963

Upper atmosphere - height of - Smith, Dr. Field - pp. 33-34
 Dummy bombers - complex & electronic countermeasures - Dr. Field, Lloyd,
 Hellyer - pp. 41, 42-43

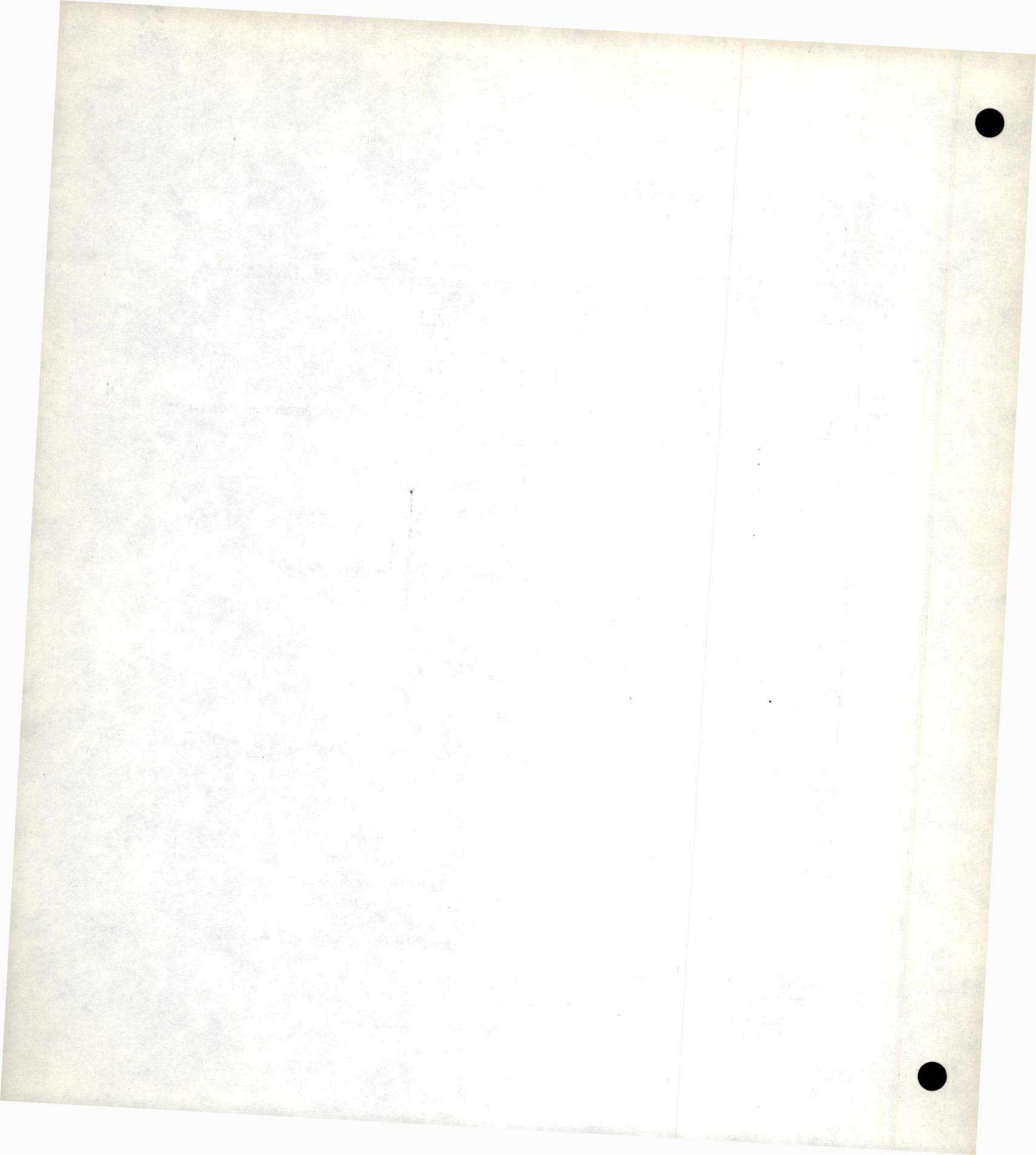
July 9, 1963

Navy - research ship - CNS - p. 104
 Navy - hydrofoil - CNS - p. 107
 Hydrofoil craft - development & construction, operation endurance - costs -
 role - Lambert, Temple, CNS - pp. 119-120
 Hovercraft for a/s work - CNS - p. 122
 Sonar - US acceptance - CNS - pp. 120-121

July 18, 1963

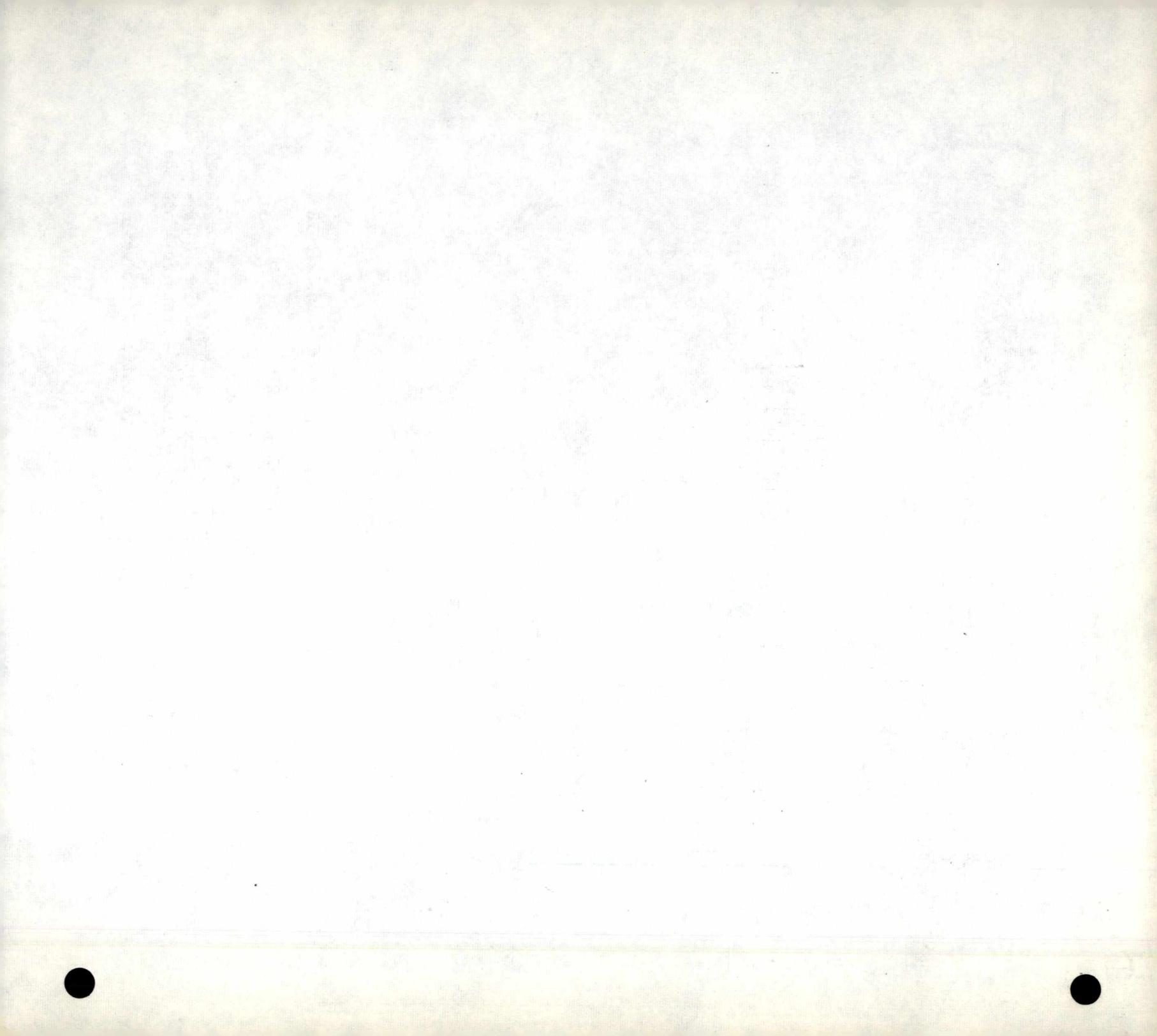
D.R.B.

Historical background of defence research - CDRB - pp. 203-04
 Scope of operations - DND Act - CDRB - p. 204
 Responsibilities - CDRB - p. 204
 Organization - pp. 205-06 - CDRB
 Members - CDRB - pp. 206, 219-20
 HQ staff function - CDRB - p. 206
 Scientific group at CJS - CDRB - p. 206
 Operational Research Corps - CDRB - p. 207
 Responsibilities - CDRB - p. 207
 Scientists at ADC, NORAC, SHAPE, SACLANT, 1 Air Div. & 4 CIB - CDRB - p. 207
 Establishments - CDRB - p. 207
 Function - CDRB - p. 207
 Responsibility - CDRB - p. 207
 Location - CDRB - pp. 207-10
 Type of research - CDRB - pp. 207-10
 Naval Research Establishment - CDRB - pp. 207-08
 Cdn. Armament Research & Development Establishment - CDRB - p. 208
 Defence Research Chemical Laboratories - CDRB - p. 208
 Defence Research Kingston Laboratory - CDRB - p. 208
 Defence Research Telecommunications Establishment - CDRB - p. 208
 Radio Physics Laboratory - CDRB - p. 208
 Communications Laboratory - CDRB - p. 208
 Electronics Laboratory - CDRB - p. 208
 Prince Albert Radar Laboratory - CDRB - p. 209



DEFENCE RESEARCH AND DEVELOPMENT (Cont'd)July 18, 1963D.R.B. (Cont'd)

- Defence Research Medical Laboratories - CDRB - p. 209
- Defence Research Northern Laboratory - CDRB - p. 209
- Suffield Experimental Station - CDRB - p. 209
- Pacific Naval Laboratory - CDRB - p. 209
- Sonar - CDRB - pp. 207, 212
- Adoption by RCN & RN - CDRB - p. 208
- Personnel - CDRB - pp. 209-10
- Number - CDRB - p. 210
- Turnover - CDRB - p. 210
- University students - CDRB - p. 210
- Research - CDRB - pp. 206-09, 210-12
- Intramural - basic & applied - CDRB - pp. 210-11
 - Defence against guided missiles & bombers - CDRB - p. 211
 - Anti-sub - CDRB - p. 211
 - Tactics - CDRB - p. 211
 - Survival - CDRB - p. 211
- Extramural - CDRB - pp. 211-12, 13
 - Grants-in-aid for - CDRB - p. 211
 - Expenditure for - CDRB - p. 211
 - Number of projects - CDRB - p. 211
 - Contracts for - CDRB - p. 212
 - Defence Industrial Research Program - CDRB - p. 212
 - Co-op with DDP - CDRB - p. 212
 - Projects - number - CDRB - p. 212
- Development Program - CDRB - p. 212
 - Co-op with DDP - CDRB - p. 212
 - Function - CDRB - p. 212
 - Sharing program - CDRB - p. 212
- Expenditures for defence research - CDRB - p. 213
 - Alouette & subsequent satellites - CDRB - p. 213
- Advisory Cttees & panels - CDRB - p. 213
- Co-op with UK & US - CDRB - pp. 213-14
- Co-op with NATO
 - NATO fellowship program - p. 214 - CDRB
 - Alouette satellite - purpose, launching, etc. - CDRB - pp. 214-18
 - Operation of - CDRB - p. 218
- NRC & DRB spheres of research - Hahn, CDRB - p. 219
- NRC research in radar & radio - Hahn, CDRB - p. 219
- Transfer of Info between DRB & NRC - CDRB - p. 219
- Meeting of DRB & members of - selection, etc. - Smith, CDRB - pp. 220-21
- Evaluation of research by Operational Research Corps - Smith, CDRB - pp. 220-21
- Aid to universities to undertake research - amounts - Deachman, Matheson, CDRB - pp. 221-22, 224-25
- Arrangements with industry re development & production & production sharing - Deachman, CDRB - pp. 222-23



DEFENCE RESEARCH AND DEVELOPMENT (Cont'd)July 18, 1963

D.R.D. (Cont'd)

- Classified info from US made available on "Need to Know Basis", i.e., nuclear weapons, cooking effect, etc. - Winch, CDRB - pp. 223-24
- stage & replacement of scientific personnel - restricted by austerity program - Churchill, Matheson, CDRB - pp. 224-25, 227
- Research grants to universities - number & amount - Deachman, CDRB - pp. 225, 226
- Research program not cut back by austerity program - amount of budget - Deachman, CDRB - p. 225
- Research in anti-ICBM defence & survival - co-op with UK - explosives in kiloton range - Lessard, CDRB - pp. 226-27

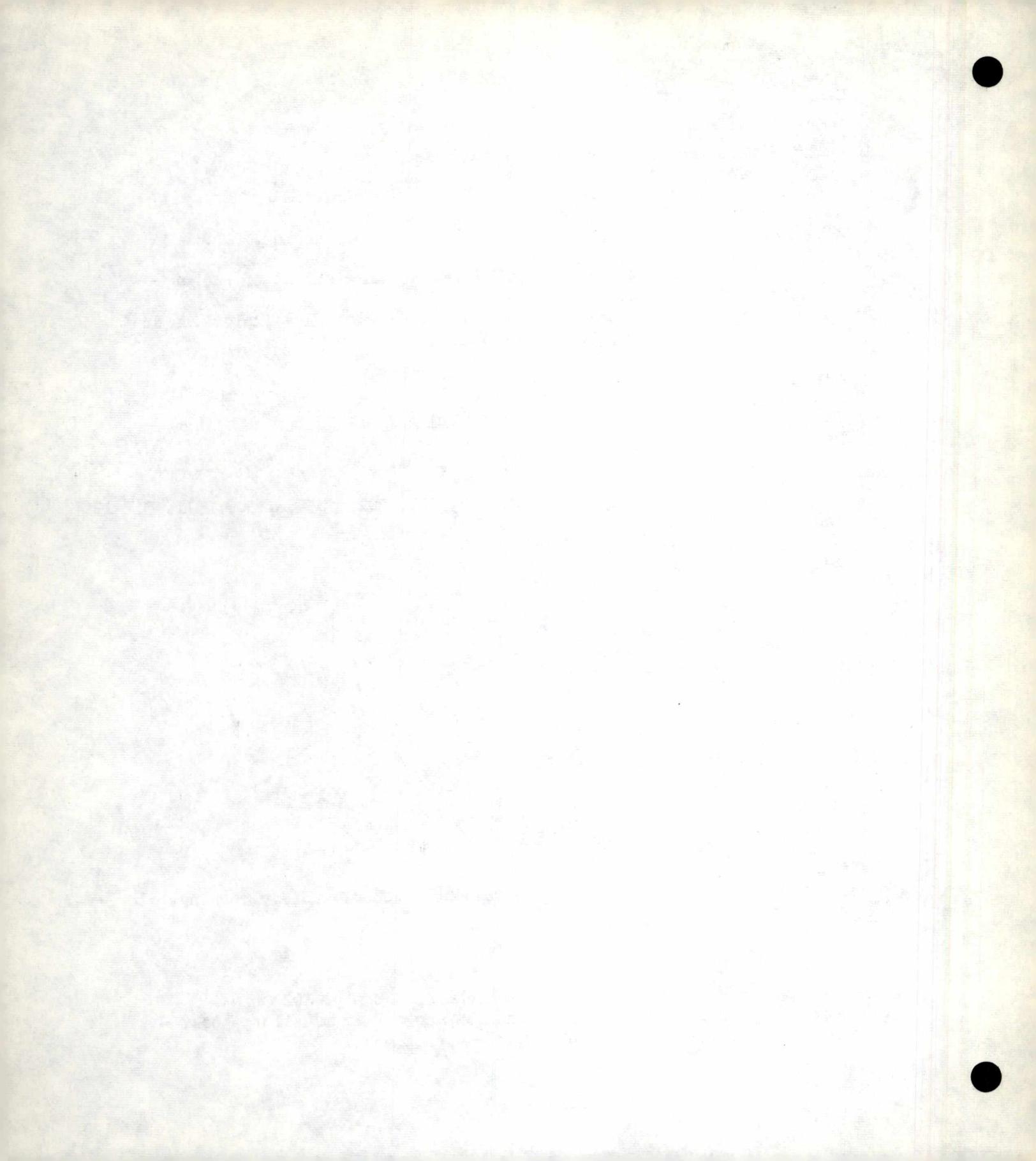
August 1, 1963

- Effectiveness of nuclear armed Bomarc of CF-101 against bomber carrying hydrogen bombs - cooking vs triggering -
- Dr. Scott - pp. 287-92, 293, 294, 295, 297, 298, 300, 303, 305, 308, 310, 311, 312
- Dr. Keyston - pp. 292, 293, 295, 298, 299, 301, 302, 305-06, 309, 311, 312-13
- Matheson - pp. 293, 294, 295, 301, 307
- Dr. Trainor - pp. 294, 296, 301, 307, 310
- Fairweather - p. 295
- Churchill - pp. 295, 301, 302, 304, 305, 309
- Croos - pp. 296-97
- Temple - pp. 297-98, 305
- Dr. Sample - pp. 298, 299, 306, 312, 313
- Lambert - pp. 298, 299, 312, 313
- Dr. Field - pp. 299-300, 308-09
- Smith - p. 300
- Hahn - pp. 301, 302, 307
- Asselin - pp. 302, 303-04, 305, 311
- Baldwin - p. 304
- Lloyd - p. 304
- Brewin - pp. 305, 306, 307
- Deachman - p. 308
- MacLean - pp. 310-11
- McMillan - pp. 311-12
- General appraisal of steps taken by DND re conclusion of nuclear cooking, etc. -
- Lloyd - p. 314

October 15, 1963

- Testing & development of new equipment - MacLean, CNS - p. 402
- Development of 3.70 AA gun - 5.54 gun and surface-to-air missiles - cost - use by RN and USN - MacRae, CNS, Winch - pp. 412-13

October 17, 1963



DEFENCE RESEARCH AND DEVELOPMENT (Cont'd)October 17, 1963

Development of submarine cargo or supply ships - Lloyd, Simonds - pp. 448-49
 Defence research - greater emphasis - examination of submarine cargo carrier -
 co-ordination of - Deachman, Simonds - pp. 469-70
 Paper for Defence Committee by Mr. D.B. Scott, etc. of University of Alta.
 re recent appearance before Cttee on nuclear bomb cooking - pp. 483-90

October 22, 1963

Defence research & technological development - Foulkes - p. 494
 Establishment of combined scientific & operational group - Foulkes - p. 496
 Anti-nuclear submarine defence requirement - development of - Foulkes - p. 506
 Integration of Services - establishment of Defence Research Board for inte-
 gration of research - defence college for tri-service senior officer
 training - interruption by Korean War & establishment of CCOS - possible
 future plans - interservice transfer of personnel - Winch, Foulkes -
 pp. 522-25
 Tracker - carrier anti-submarine defence - missile sub threat - studies and
 research re - Brewin, Foulkes - pp. 538-40

October 29, 1963

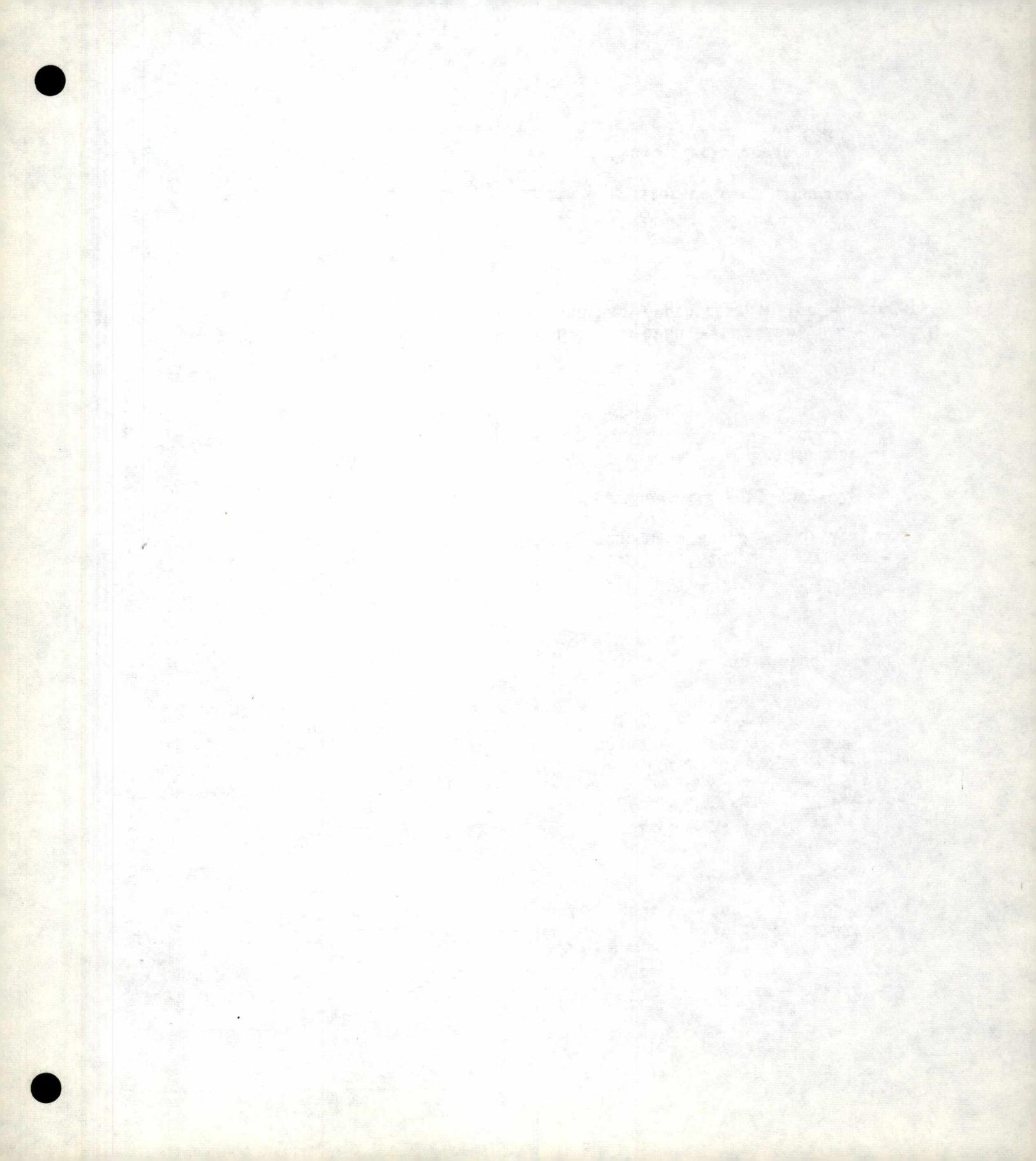
Bobcat - need of - weaknesses indicated by trials - decision re - purpose -
 spare parts re - initiation design date & subsequent tests - modifications
 for artillery mounting - comparison to other NATO & Russian models -
 Lessard, CCS, Hellyer, Deachman, Smith, Hahn, Churchill - pp. 600-01,
 606-09, 611-12
 Lessons re Bobcat development & production - future design & development of
 equipment for sale to NATO countries - success in field - Deachman,
 Hellyer, Smith, Matheson, Churchill - pp. 608-09, 611

October 31, 1963

US tests re nuclear vs conventional anti submarine arms - McMillan, CAS - p. 648
 Aerial recce re submarines - research re - nuclear depth charges for - Granger,
 CAS - p. 652

November 5, 1963

Anti-submarine studies - re future - Hellyer - p. 667
 Future research re anti-submarine capability - greater role by aircraft -
 Lessard, Hellyer, Smith - pp. 684, 686, 687
 Sutherland Committee - purpose - systems evaluation effectiveness -
 civilian evaluation of military proposals - Smith, Hellyer - p. 688



DEPARTMENTAL ADMINISTRATION AND ORGANIZATIONJuly 16, 1963

Budget & finance operations - CAS - p. 183

Percentage on capital outlays & operations & maintenance - CAS - p. 183

Management practices - CAS - pp. 183-84

"P. RT" management techniques - CAS - p. 184

Utilization of Glassco Commission suggestion - CAS - p. 184

Abbreviations appended re defence - CAS - pp. 198-99

July 25, 1963

DND and Ex. Aff. co-op - Martin - p. 235

Co-op of Disarm. Div. of Ex. Aff. & Directorate of Strategic Studies of

DND - Martin - p. 238

Cdn. contributions to U.N. actions - DND, Ex. Aff. & UN co-op re - Martin -

pp. 238, 239, 241, 242

July 30, 1963

DDP - Co-op with DND - Drury - pp. 259, 269-70, 275

October 15, 1963

Navy - management studies - maintenance studies - costs & savings - Lambert,

CNS - pp. 426-27

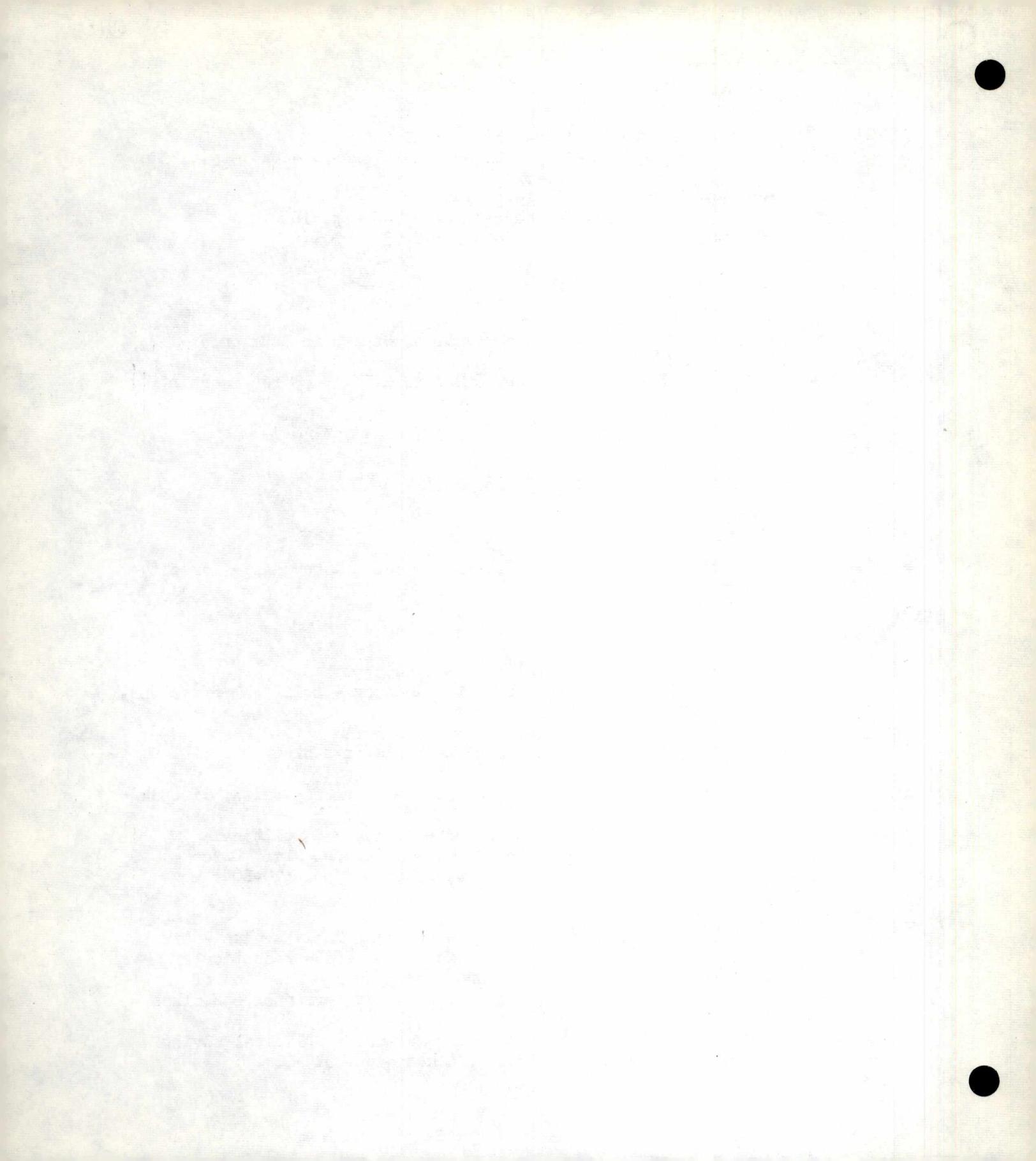
October 17, 1963

Civilian weapons evaluation - Smith, Simonds - p. 455

One Chief of Staff - Chiefs of Staff access to Minister - political decisions,
etc. - Matheson, Simonds - p. 466

Roles of Chiefs of Staff - MacLean, Simonds - pp. 473-74

Chiefs of Staff - disagreement - role of Deputy Minister's staff - Smith,
Simonds - p. 478Brigadiers & Air Commodores - members of interservice staff - Smith, Simonds -
p. 478Chiefs of Staff - nature of advice to Minister - military & political
aspects - civilian component - Defence Cttee - Chiefs of Staff Cttee -
Defence Council & Service Boards - Lambert, Simonds - pp. 479-80October 22, 1963Growth of organization when function redundant - Korean Bde. surplus - Air
Force manpower surplus when NATO air training completed - reduction of
Air Div., automation of Sage System - surplus manpower - adoption of
stringent manpower policy - interservice movement of personnel - Foulkes -
pp. 500-501Function of Chiefs of Staff Committee re policy matters - political advice
re - Cabinet Defence Committee - Winch, Foulkes - pp. 525-26



DEPARTMENTAL ADMINISTRATION & ORGANIZATION (Cont'd)October 27, 1963

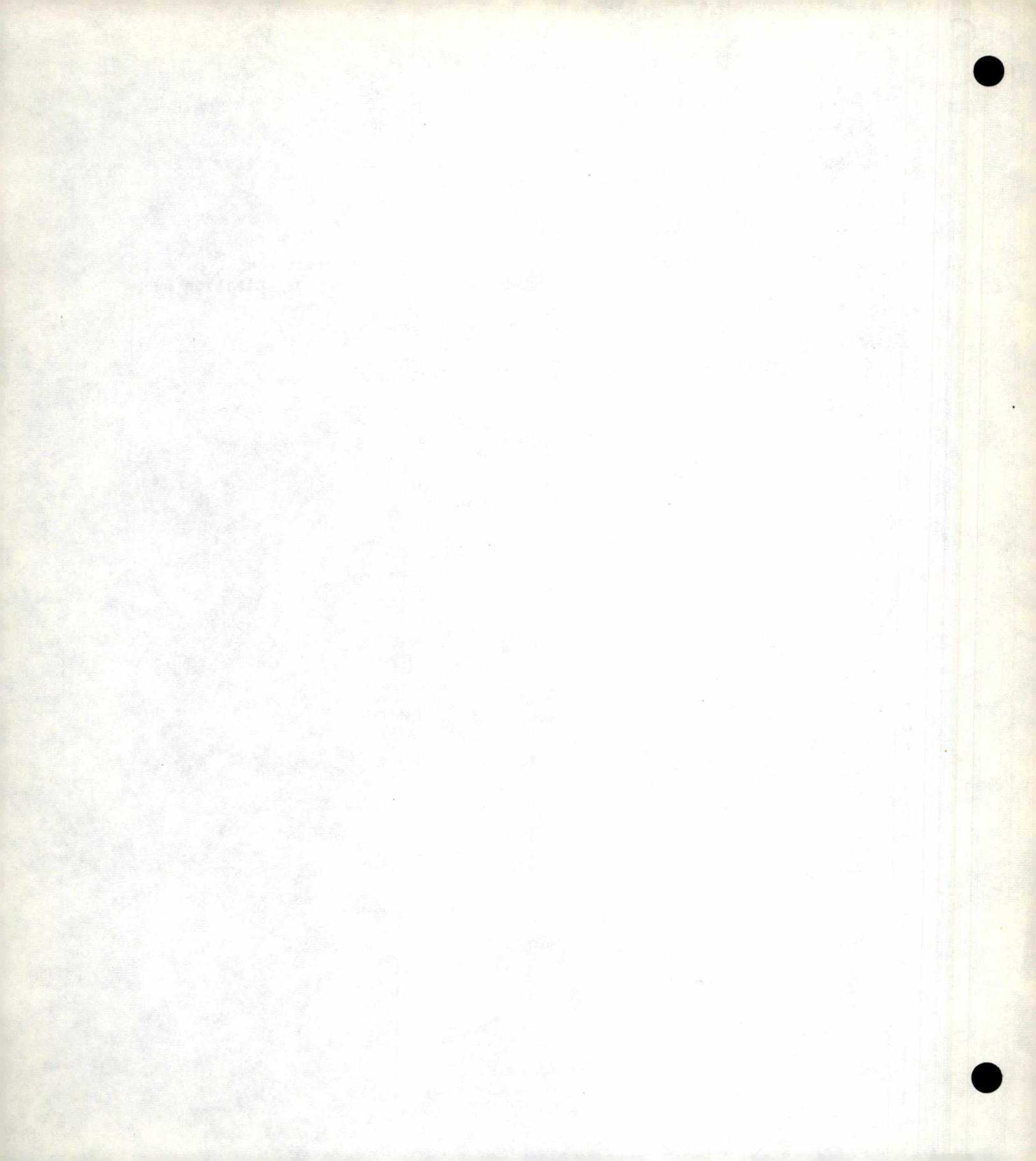
Civilians at Chiefs of Staff level - formation of Chief of Staff for strategic planning - Cross, Gellner - pp. 577-79

October 29, 1963

Reduction in functions without reduction in manpower not case - disbandment of Bde. after Korea - top-heavy set-up - review of Army organization by Gen. Allard - cut back in HQ size - Winch, CGS - pp. 615-16

Role & function of civilian personnel - McMillan, CGS - p. 617

Concentration of supply depots & utilization of air freight - re-organization of ordnance services re - MacLean, CGS - p. 619



DEPARTMENT OF DEFENCE PRODUCTIONJuly 18, 1963

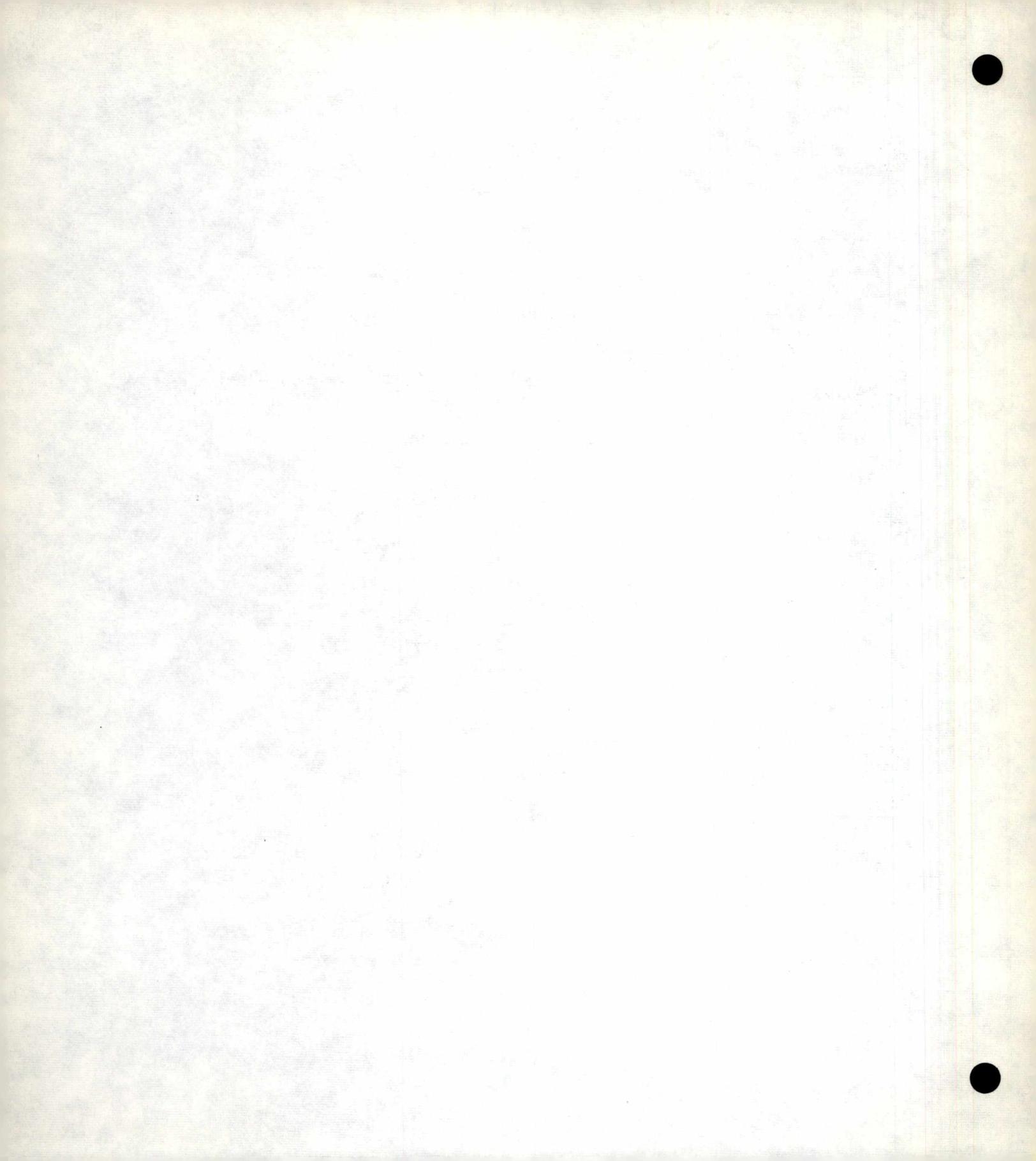
Defence Industrial Research Program - CDRB - p. 212
 Co-op with DDP - CDRB - p. 212
 DRB Development Program - co-op with DDP - CDRB - p. 212

July 30, 1963

Function & responsibilities of DDP - Drury - pp. 258-60, 267-68, 269, 275,
 278-79, 279-80
 Responsibility of DCL - Drury - p. 259
 Co-op with DND - Drury - pp. 259, 269-70, 275
 Expenditures & sales of - Drury - pp. 258, 276, 277
 Purchasing - suppliers & tenders - Drury - pp. 258-59, 262-63, 276-77, 280-81
 Negotiated & target prices - Drury - pp. 259, 272-275
 Organization of - Drury - pp. 261-63
 Aircraft production program - Drury - pp. 262, 264
 Electronics program - Drury - p. 262
 Armament program - Drury - p. 262
 Shipbuilding program - Drury - pp. 262, 272-73, 274
 Sub-offices abroad - Drury - p. 263
 Emergency supply branch - organization & function - Drury - p. 263
 Production sharing - Drury - pp. 260, 264-68, 280
 Can.-US - amounts - Drury - pp. 264-66, 268
 NATO - amounts - Drury - pp. 266-68
 Cdn. Commercial Corp. services - Drury - p. 267
 Glasco recommendations being implemented - Drury - p. 269
 Inventories & stockpiling - Drury - pp. 270-72
 Cdn. Arsenal stockpiling of ammunition - Drury - p. 272
 Contract profit ceiling - Drury - pp. 273-274
 Standardization of weapons in NATO - Drury - p. 276
 Co-op with Dept. of Industry - Drury - pp. 278-79
 Food supply of Cdn. NATO forces - Drury - pp. 281-82

October 22, 1963

Criteria for length of life of equipment - production in Canada - Groos,
 Foulkes - p. 521



DEPENDENTSOctober 17, 1963

Forces in Europe - shorter rotation periods - dependents removal - Smith, Simonis - p. 456

October 22, 1963

Dependents - movement from Europe - costs - Foulkes - p. 517

October 29, 1963

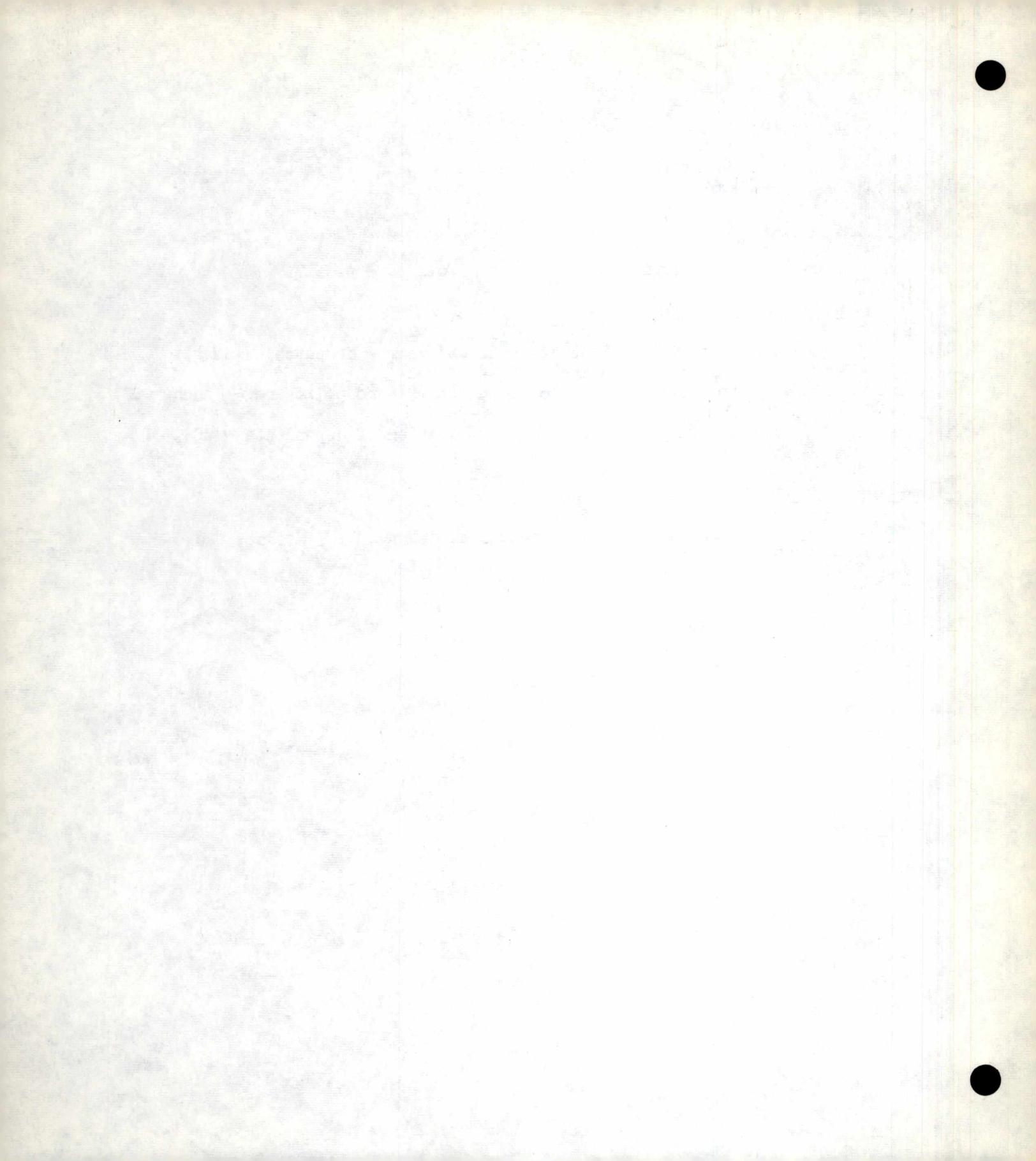
Rotation of Bde. personnel - limitation to one year - despatch of single units without dependents - Winch, CGS - p. 596

Evacuation of dependents in emergency - number of - no policy re - Winch, CGS, Hellyer, McMillan, Lambert - pp. 596-97-98

Lack of air transport limiting factor re evacuation of dependents - CGS, Smith - pp. 599-600

October 31, 1963

Strength of 1 Air Div. & 4th Bde. - number of dependents - MacRae, CAS - pp. 638-39



DISARMAMENTJuly 25, 1963

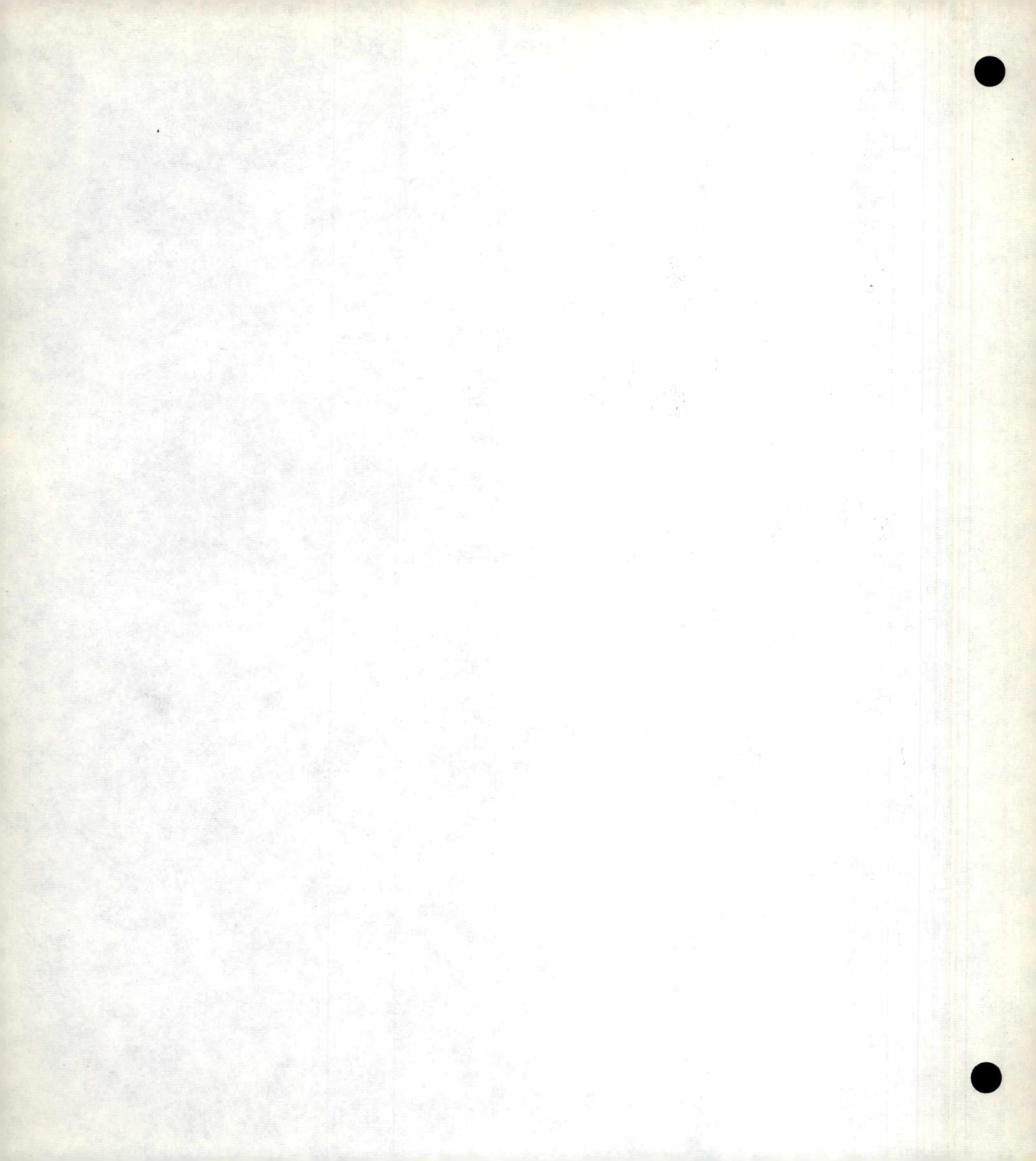
Disarmament efforts - need of - Martin - p. 238

Co-op of Disarm. of Ex. Aff. & Directorate of Strategic Studies of DND -
Martin - p. 238

Disarmament efforts & limitation of nuclear weapons - Martin - pp. 241, 246

October 22, 1963

Disarmament - specific agreements re - Laniel, Foulkes - p. 538



July 4, 1963

Percentage decrease in defence expenditures & re equipment and personnel costs - CCOS - p. 73

Ratio of contributions to NATO by countries - expenditures - CCOS, Smith, Matheson, MacLean, McMillan - pp. 60-61, 62, 63, 66-67

July 18, 1963

Defence research - Extramural - CDRB - pp. 211-12, 213
Grants-in-aid for - CDRB - p. 211
Expenditure for - CDRB - p. 211
- expenditures for defence research - CDRB - p. 213
- aid to universities to undertake research - amounts -
Deachman, Matheson, CDRB - pp. 221-22, 224-25
- research grants to universities - number & amount -
Deachman, CDRB - pp. 225, 226
- research program not cut back by austerity program -
amount of budget - Deachman, CDRB - p. 225

July 25, 1963

External Aid versus defence expenditures - Matheson, Martin, Brewin, Deachman -
pp. 245-46

October 15, 1963

Expenditures re Navy - Matheson, CNS - pp. 401-02

October 22, 1963

Defence expenditures - Korean War period - personnel proportion - equipment -
costs of F86, F104, North Star, Lancaster & Argus - frigate costs -
Foulkes - p. 500

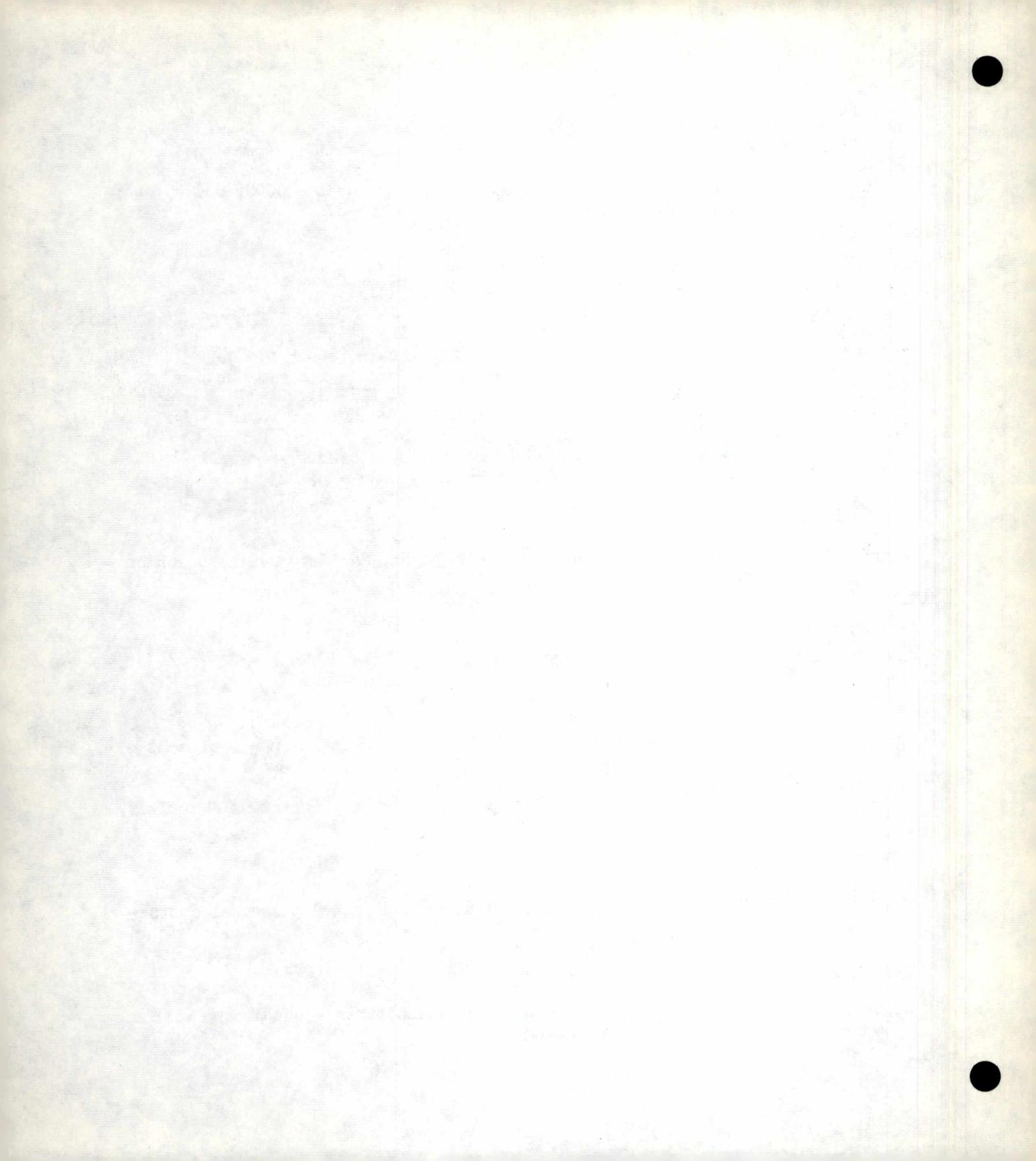
Defence costs for personnel & operations vs equipment appropriation - Foulkes,
Brewin - p. 540

October 24, 1963

Distribution of defence exp. among equipment, maintenance & personnel costs -
Gellner, p. 563

November 5, 1963

Effecting small economies in overall defence expenditures - comparison with
other NATO countries - Lessard, Hellyer - p. 684



FAR EASTJuly 25, 1963

Consideration of Chinese threat in view of separation in Communist camp -
Hahn, Martin - pp. 251-52

October 10, 1963

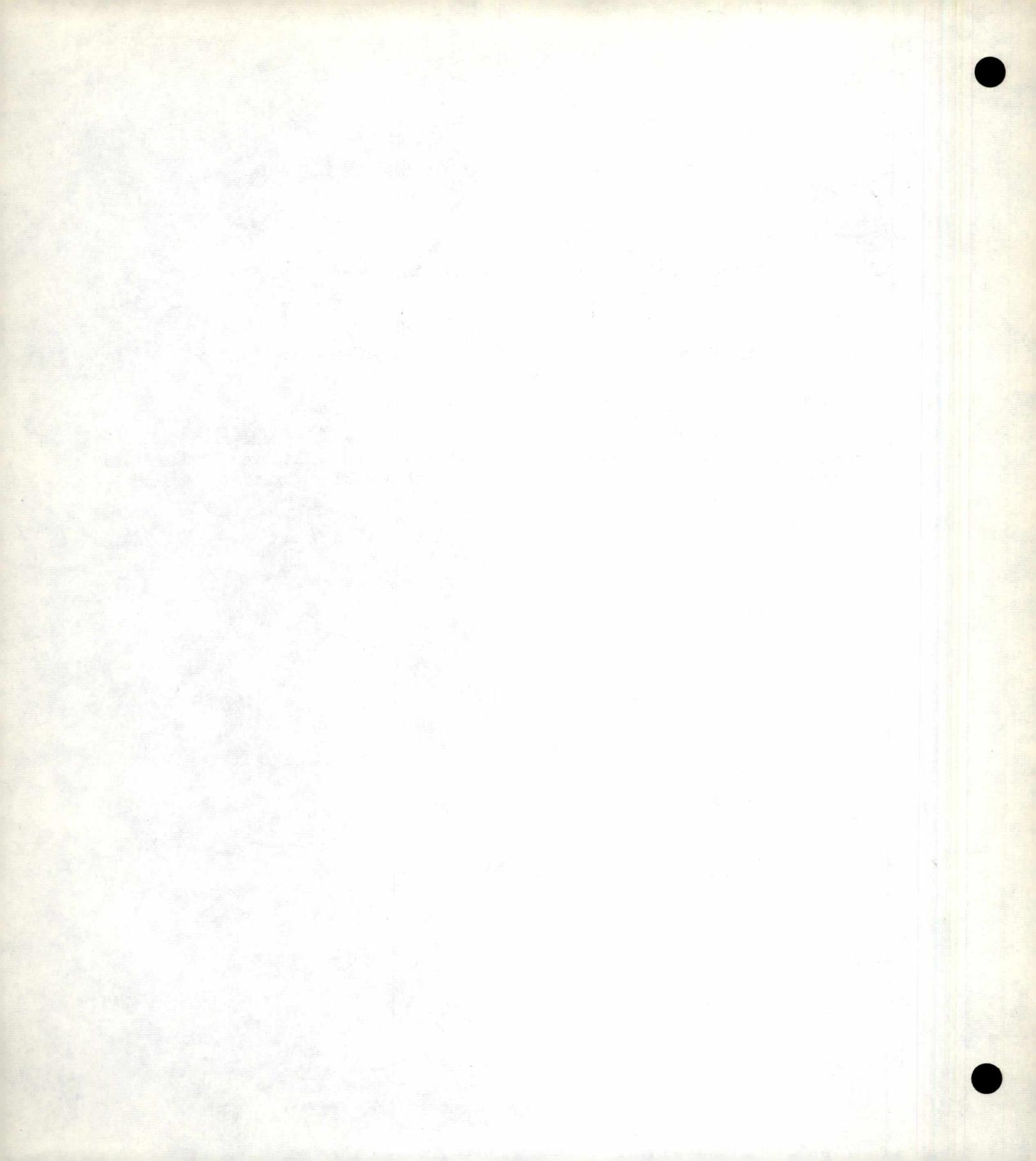
Navy - subs. - China, Russia, Egypt, Cuba - Asselin, Plomer - p. 385

October 17, 1963

Chinese threat - nuclear weapons in future - MacLean, Simonds - p. 476

October 22, 1963

Defence of Canada-US region - ICBM & bomber threats to - Nike-Zeus anti-ICBM
defence - reduction of Cdn. contribution to - Russian ballistic missile
submarine threat to - future Chinese sub threat - Foulkes, Laniel, Lambert -
pp. 502-03, 506-07, 538, 541-42.

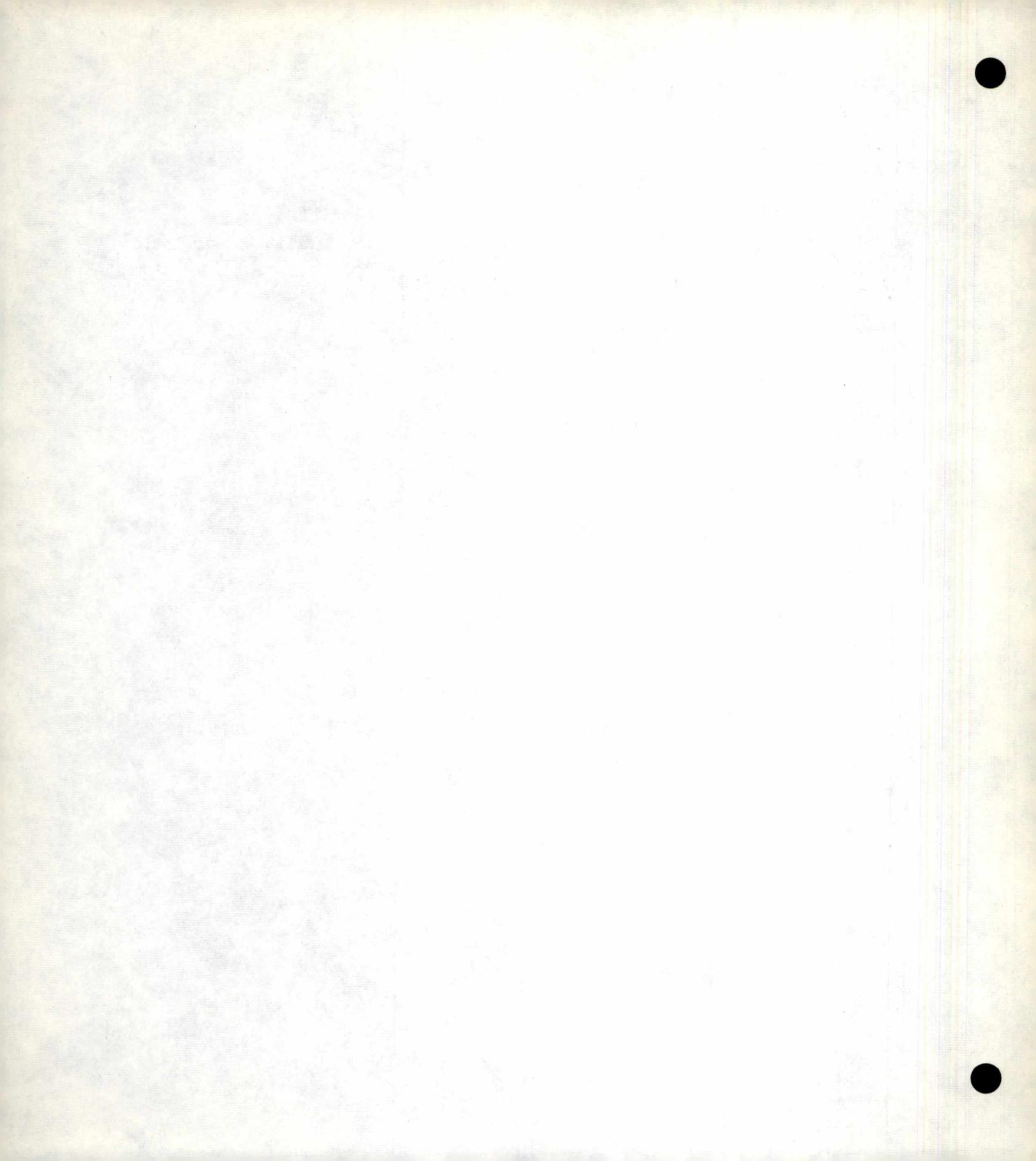


FOODJuly 30, 1963

DDP - food supply of Cdn. NATO forces - Drury - pp. 281-82

October 29, 1963Survival ops. - tasks re - planning for - utilization of facilities - relation
re MO - food program re - Lessard, CGS - pp. 601-02

Food supply to Bde. - McMillan, Winch, CGS - p. 618



GLASSCO REPORTJune 27, 1963

Consideration of Glassco recommendations - Hellyer - p. 20

July 16, 1963Management practices - utilization of Glassco Commission suggestion - CAS -
p. 184July 30, 1963

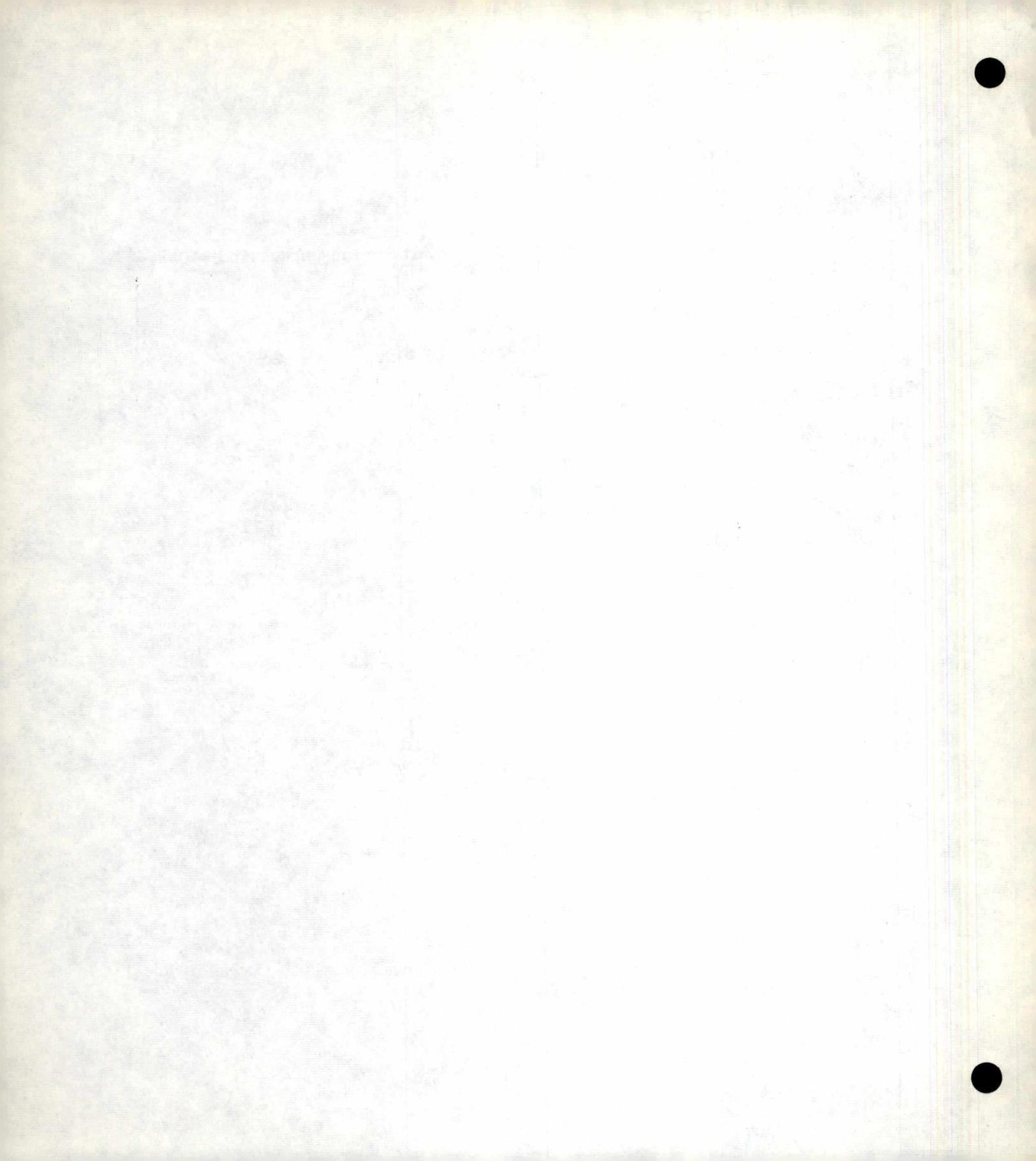
DDP - Glassco recommendations being implemented - Drury - p. 269

October 29, 1963

Studies re Glassco Commission recommendations - MacLean, CGS - pp. 620-21

November 5, 1963

Integration of Services - Glassco Commission suggestions re - Hellyer - p. 667



GUIDED MISSILESJune 27, 1963

SAGE centres of NORAD - Hellyer - p. 16
 ICBM & IRBM threat - Hellyer - p. 16
 Nike-Zeus - development - Hellyer - p. 16
 Cdn. contribution of Bomarc & CF-101 - Hellyer - pp. 17, 18
 Bomarc moved north to protect Cdn. Cities - Hellyer - p. 17
 Bomarc effective anti-bomber weapon - Hellyer - p. 17
 Bomarc development cost - Hellyer - p. 17
 Bomarc armed with atomic warhead to be effective & cook bomb - Hellyer - p. 17
 Arrangements re nuclear weapons use by CF-101 & Bomarc - Hellyer - p. 18
 Non-nuclear warhead for Honest John & Bomarc - Matheson, Hellyer - p. 23
 Request for cost of Bomarc program as indicated by US Defense Sec. -
 Churchill, Hellyer - p. 23
 Effectiveness of Bomarc greater with nuclear warhead - McMillan, Hellyer - p. 24

July 2, 1963

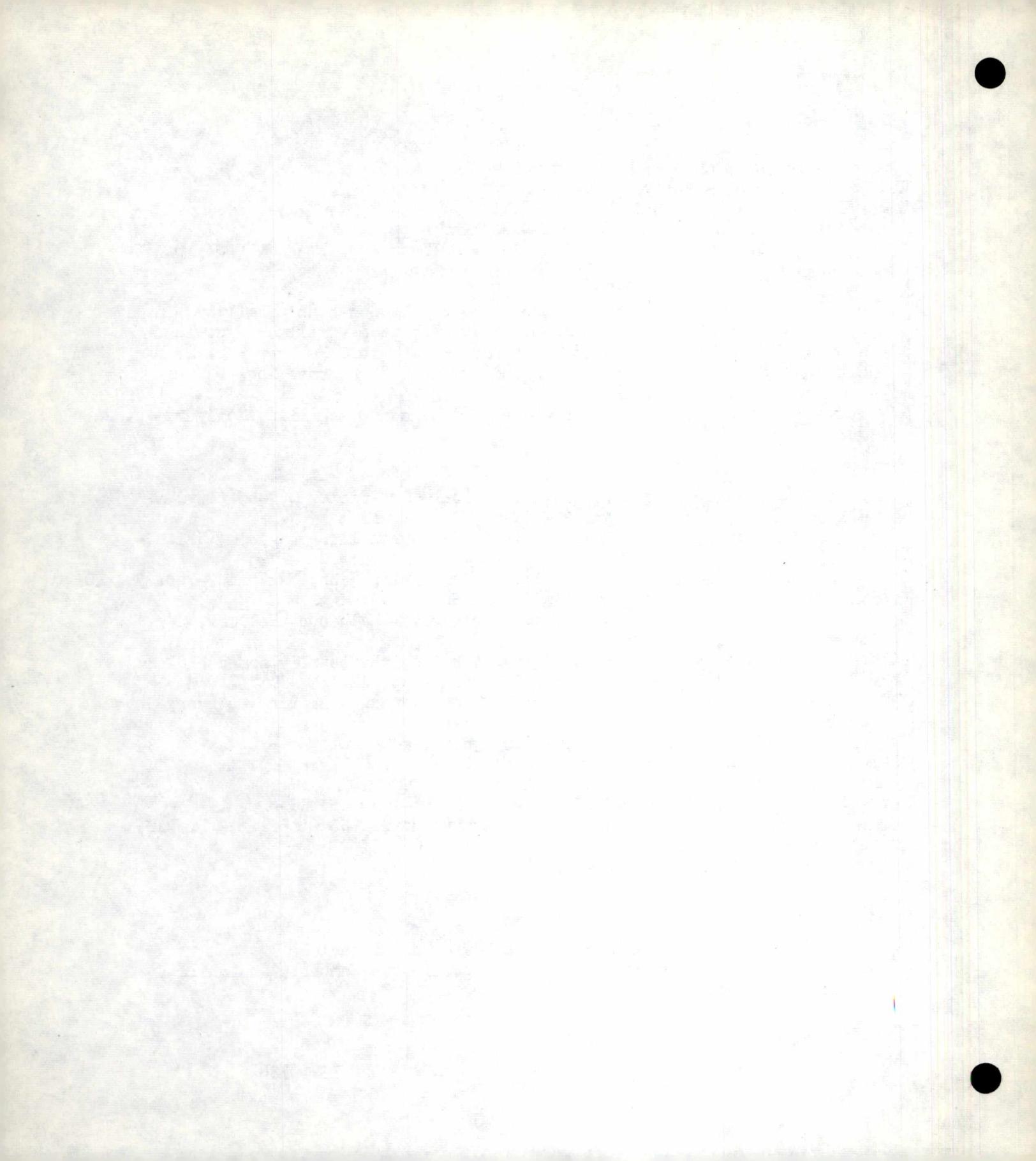
Bomarc height & range effectiveness & location - Dr. Field, Smith, Lloyd,
 Hellyer, Winch, MacLean - pp. 33-34, 35, 39, 41, 42
 Cooking of nuclear warhead by Falcon missile - Churchill, Dr. Field, Smith -
 pp. 35, 36, 39
 Cooking nuclear warhead by Bomarc - Smith, Dr. Field, Hahn, MacInnis - pp. 39, 40
 Evaluation of Bomarc - Lloyd, Hellyer - p. 43
 Cdn. contribution to NORAD - CF-101, Comarc, etc. - Matheson, Hellyer,
 Deachman - pp. 40, 43
 US contribution to NORAD - percentage nuclear & conventionally armed F101
 & Bomarc, etc. - Lambert, Hellyer, Deachman - pp. 40, 43
 Marginal & diminishing value of Bomarc & effectiveness - Brewin, Hellyer,
 Martineau - pp. 44, 45, 50-51
 Bomarc - expenditure for & operating cost justified - Hellyer - p. 45
 CF-101 equipped to carry Genie or Falcon - Deachman, Hellyer - p. 47
 Bomarc paid for by US - Deachman, Hellyer - p. 47
 Detonation & flight control of Bomarc - Lloyd, Hellyer, Field - p. 49
 Bomarc ineffective - statement by Gen. Simonds quoting US Generals - Brewin,
 Hellyer - p. 51
 Bomber vs ICBM - Hahn, Hellyer - p. 54

July 9, 1963

Defence against ICBM & sub-launched missiles - use of nuclear a/s sub vs
 surface ship & maritime patrol a/c - proportions - Lambert, Churchill,
 Brewin, CNS, Hellyer - pp. 112, 113, 120, 121-122

July 11, 1963

Army - acquisition & testing of SSN & ENTAC - CGS - pp. 137, 138



GUIDED MISSILES (Cont'd)July 16, 1963

NORAD - Bomarc - nuclear capability - CAS - p. 166
 Anti-ICBM Nike Zeus missile defence - problems involved - Temple, Hellyer,
 Patterson, CAS - pp. 192, 193
 ICBM versus threat from satellite - military role of, etc. - Asselin,
 CAS - p. 195
 Comparative size of warhead carried by ICBM & bomber - McMillan, CAS - p. 196

July 18, 1963

Defence research - Intramural - basic & applied - defence against guided
 missiles & bombers - CDRB - p. 211
 Research in anti-ICBM defence & survival - co-op with UK - explosives in
 kiloton range - Lessard, CDRB - pp. 226-27

October 15, 1963

Fleet - anti-aircraft defence for - missiles for - composition of - decisions
 re - Brewin, CNS - pp. 409, 411-12
 Frigate suitability for locating missiles - Lloyd, CNS - p. 415

October 17, 1963

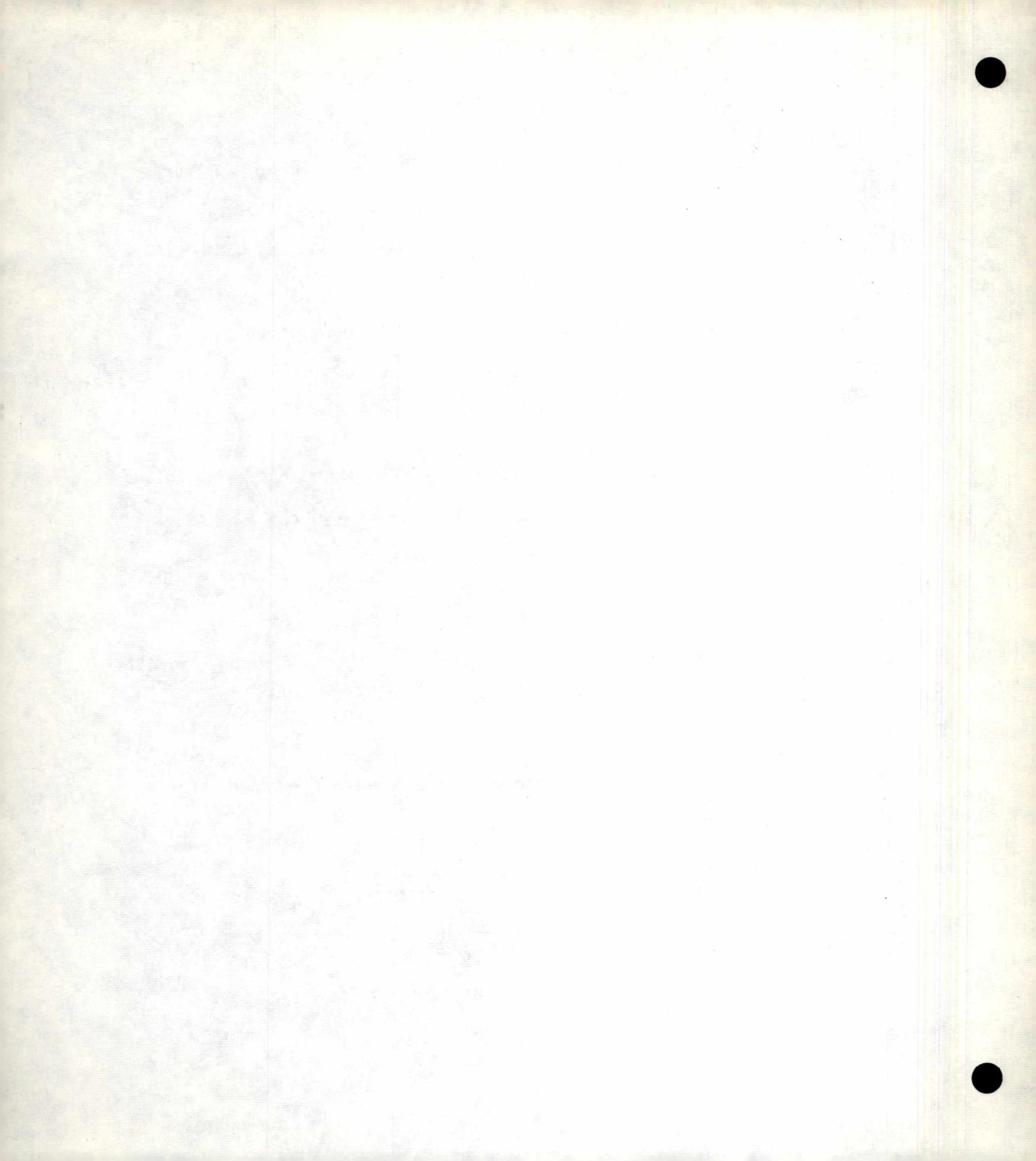
Adoption of strategic nuclear weapons - Winch, Simonds - p. 442
 Nuclear threat - initiative with enemy - Bomarc vulnerable - Simonds,
 MacLean - pp. 446-47, 474
 Bomarc obsolete - U.S. Defence Secretary statement - Brewin, Simonds - p. 451
 Aircraft close support role - missile role re - Simonds, Churchill, Lambert -
 pp. 459-60

October 29, 1963

SS11 guided missile weapon & medium-range anti-tank weapons - range, etc. -
 Brewin, CGS - pp. 593-94

October 31, 1963

1 Air Div. - use of air-to-surface missiles - Lambert, CAS - pp. 632-35
 Missile threat to 1 Air Div. bases - Churchill, CAS - pp. 643-44
 Use of Bomarc against aircraft-launched missile - vulnerability of Bomarc
 site to missile attack - Smith, CAS - p. 653

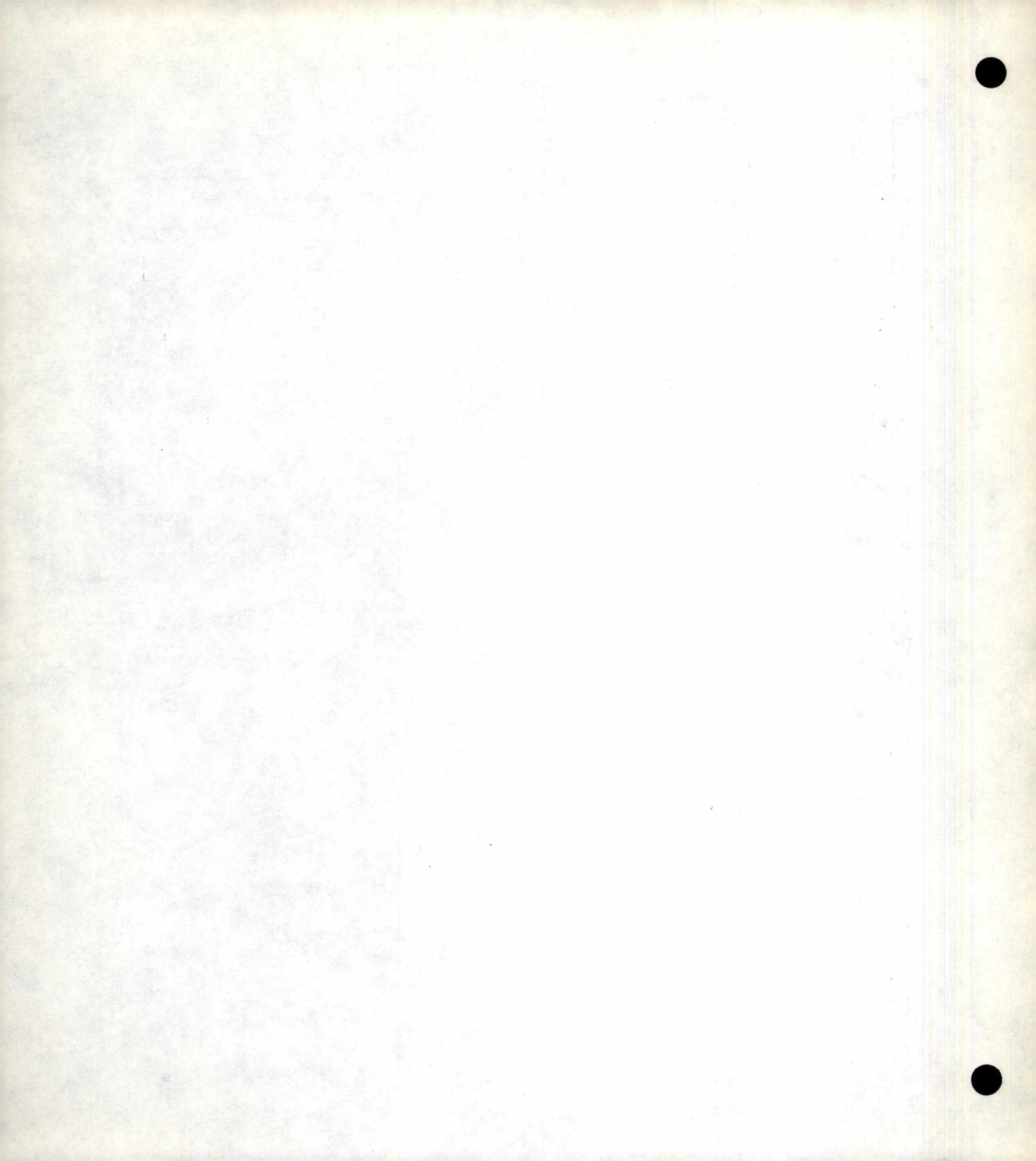


GUIDED MISSILES - (Cont'd)November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S. agreement re - for CF101, Honest John, CF104 & Bomarc - storage space for - Hellyer - p. 665

Availability of Genie rocket for Voodoo - Hellyer, Churchill - pp. 665, 674-75

Missile armament of CF101 - Smith, Hellyer - p. 687



GUIDED MISSILE - HONEST JOHNJune 27, 1963

Non-nuclear warhead for Honest John & Bomarc - Matheson, Hellyer - p. 23

July 11, 1963

Honest John - CGS - p. 134

October 17, 1963

Use of tactical nuclear weapons by Field Commander - Honest John - Brewin, Simonds - p. 454

October 22, 1963

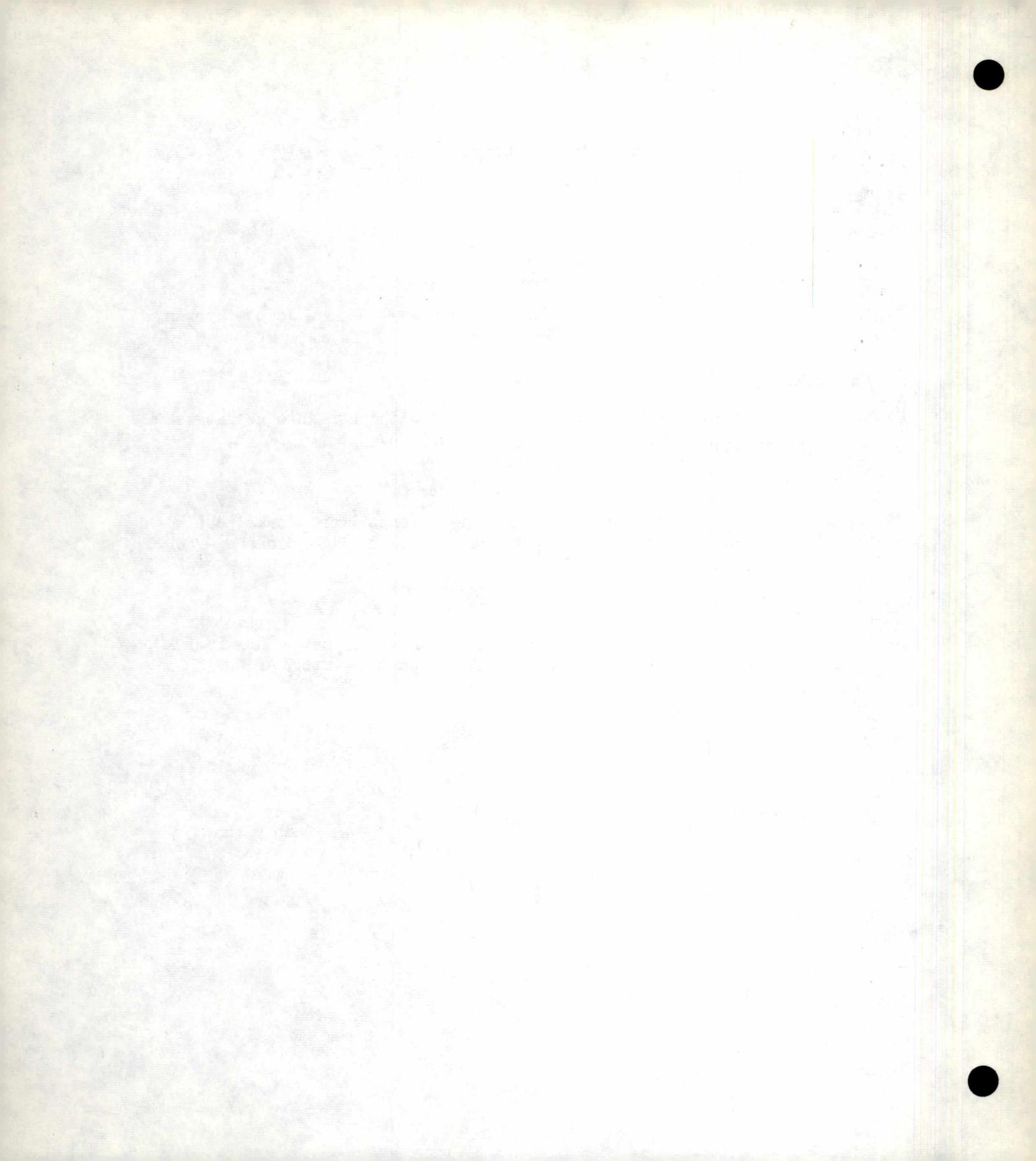
Bde. - armed with Honest John - reason for - if withdrawn into reserve, no need for nuclear weapons - McMillan, Foulkes - p. 528

October 29, 1963

Honest John - authority to use - technical agreements being worked out with US - function of - efficiency of Bde. re - Lessard, CGS, MacLean - pp. 600, 618, 619

November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S. agreement re - for CF101, Honest John, CF104 & Bomarc, storage space for - Hellyer - p. 665



GUIDED MISSILES - ICBMJuly 2, 1963

Fallout & Anti-ICBM's - Winch, Dr. Field, McMillan, Hellyer - pp. 32-33, 38

July 16, 1963

Anti-ICBM Nike Zeus missile defence - problems involved - Temple, Hellyer, Patterson, CAS - pp. 192, 193

ICBM versus threat from satellite - military role of, etc. - Asseling, CAS - p. 195

Comparative size of warhead carried by ICBM & bomber - McMillan, CAS - p. 196

October 8, 1963

ICBM vs sub-BM threat - Matheson, CNS, Asselin, Winch - pp. 322, 324, 334

Cuba missile threat - Matheson, CNS - p. 322

October 17, 1963

No defence against ICBM - Simonds, Winch - p. 442

Bomber threat unreal in reference to ICBM attack - Brewin, Simonds - p. 452

Russian rocket development - military value - Smith, Simonds - p. 454

Anti-ICBM missile role for NORAD - Hahn, Simonds - p. 458

ICBM accuracy - Granger, Simonds - p. 462

ICBM threat - enemy advantage - cooking of missiles - doubtful value -

McMillan, Simonds - p. 467

ICBM's - US & Russian strengths re - Temple, Simonds - pp. 477-78

October 22, 1963

Defence of Canada-US region - ICBM & bomber threats to - Nike-Zeus anti-ICBM defence - reduction of Cdn. contribution to - Russian ballistic missile submarine threat to - future Chinese sub threat - Foulkes, Laniel, Lambert - pp. 502-03, 506-07, 538, 541-42

ICBM vs bomber threat - advantage of attack with Russia - defence against - fail safety system & flexibility of bomber - Foulkes, Temple - pp. 519-20

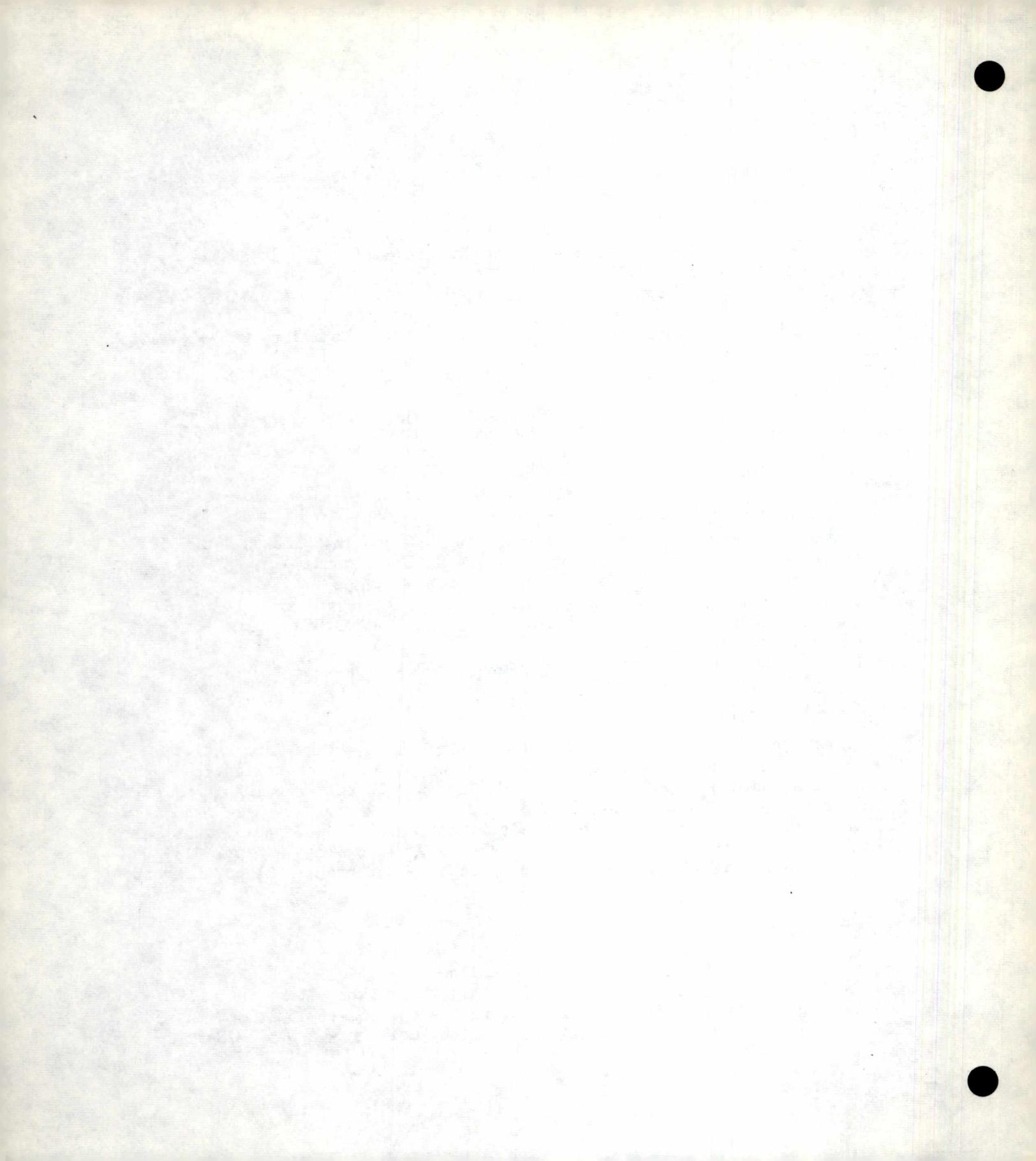
Threat to 1 Air Div. bases by ballistic missiles - Matheson, Foulkes, Lambert - pp. 533, 540-41

October 24, 1963

Nuclear weapons & anti-missile defence - Gellner - pp. 564-65

Russian ICBM & missile sub threat vs US retaliatory power - threat to NATO - deterrent Gellner, Smith, Deachman, Granger - pp. 564-65, 571, 580-82, 584

ICBM accuracy vs bomber carried missile - Smith, Gellner - pp. 571-72



GUIDED MISSILES - ICBMOctober 31, 1963

Shift from bomber to missile threat - intelligence reports re - Hahn, CAS -
p. 628

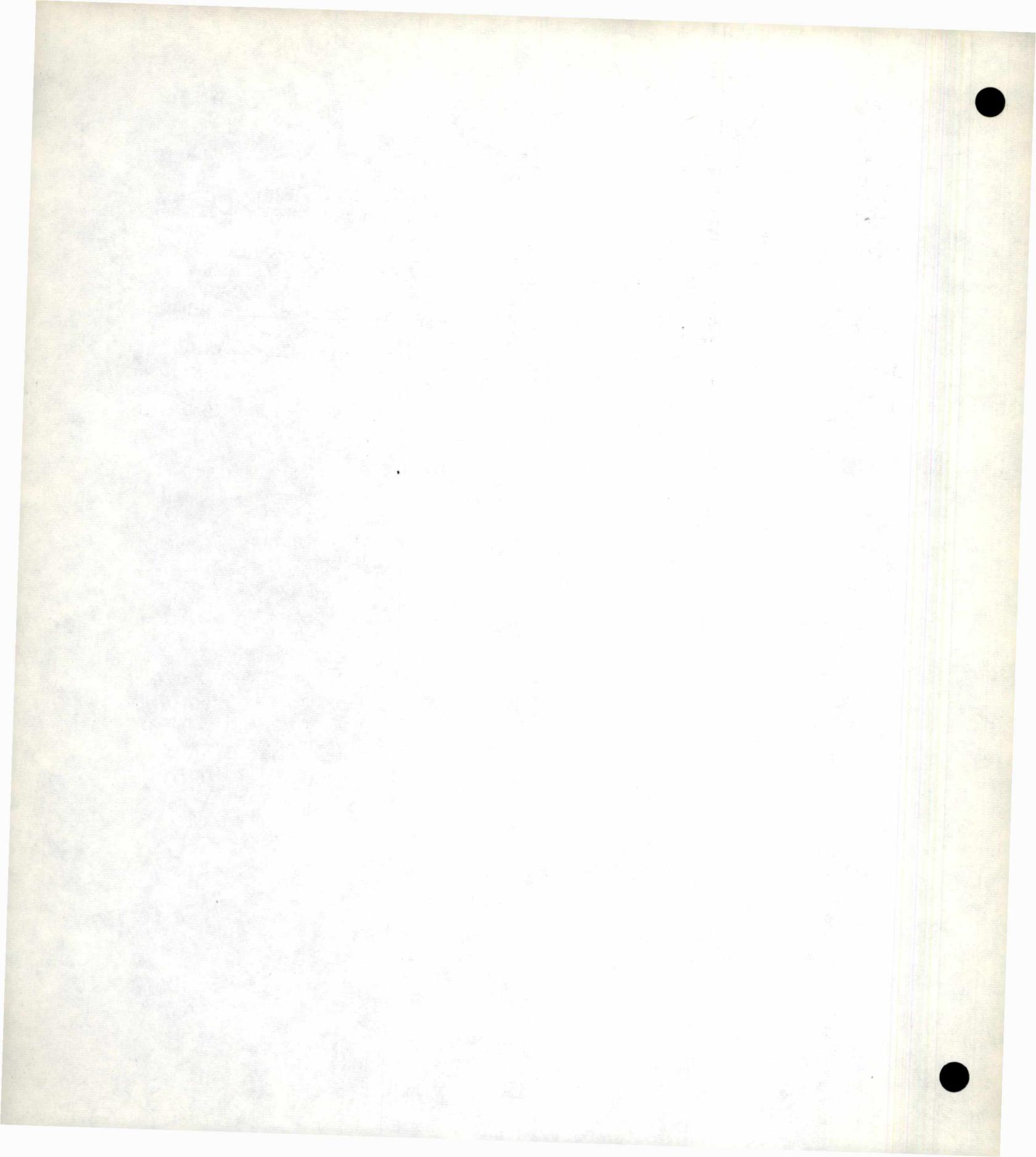
Soviet development of submarine ballistic missiles - CAS - p. 629

Nuclear missile-firing submarine threat - defence against difficult - MacRae,
CAS - p. 638

ICBM, ballistic missile submarine & bomber threats - degree of - statement by
US def. Sec. re - hardening of sites - accuracy of - defence against -
Churchill, CAS, MacInnis, Lambert, Hahn, Granger, Smith - pp. 639-42

Effective defence against Russian surface-launching ballistic missile sub-
marines - CAS - p. 646

Bomber threat & role of Air Force in future - defence against ICBM - CAS,
Hahn - pp. 657-58



GUIDED MISSILES - SATELLITESJuly 16, 1963

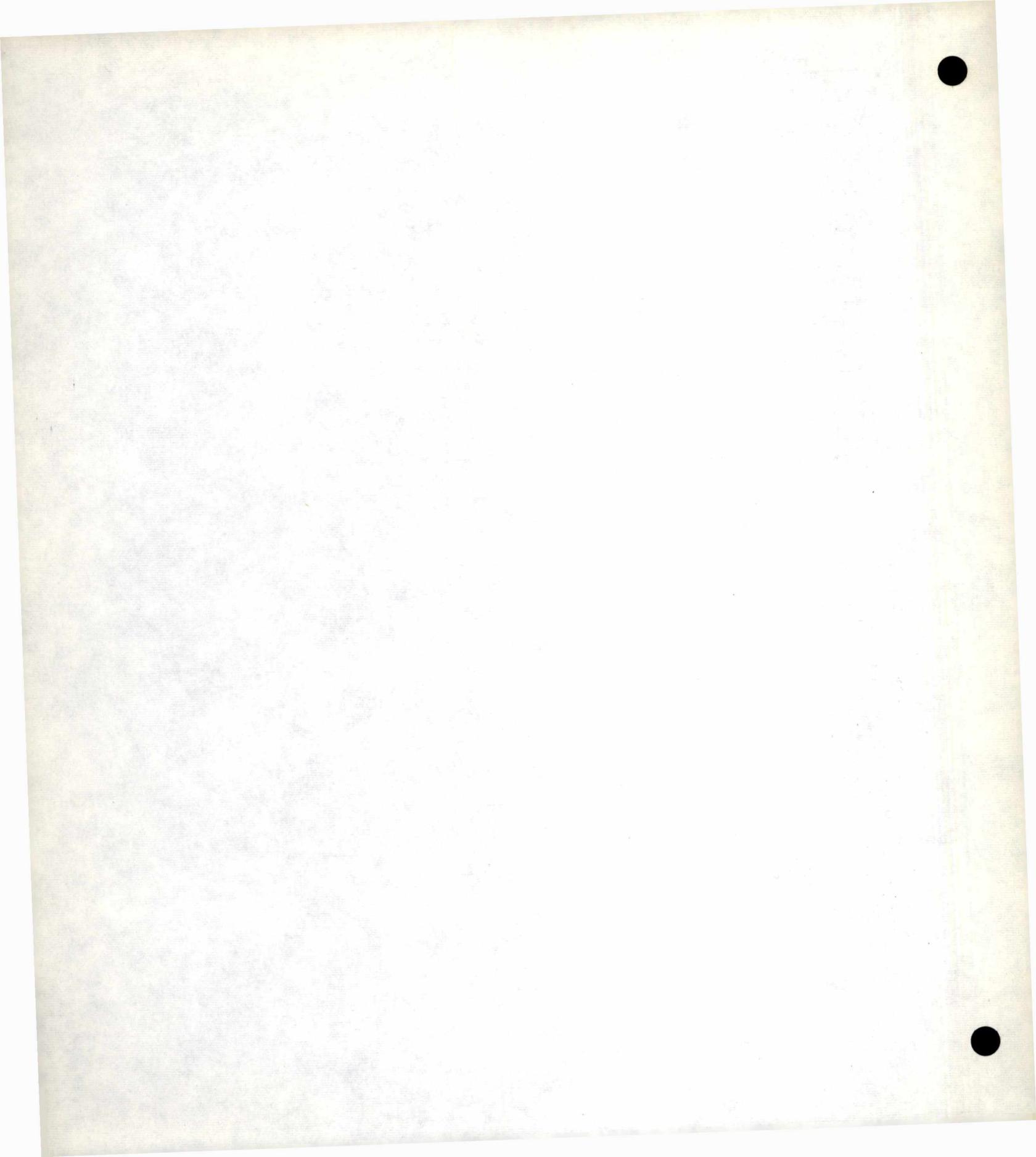
NORAD - satellite - detection & tracking - CAS - p. 169

Satellites in operational role - Asselin, CAS - p. 195

ICBM versus threat from satellite - military role of, etc. - Asselin,
CAS - p. 195July 18, 1963

Expenditures for defence research - Alouette & subsequent satellites - p. 213

Alouette satellite - purpose, launching, etc. - operation of - pp. 214-18

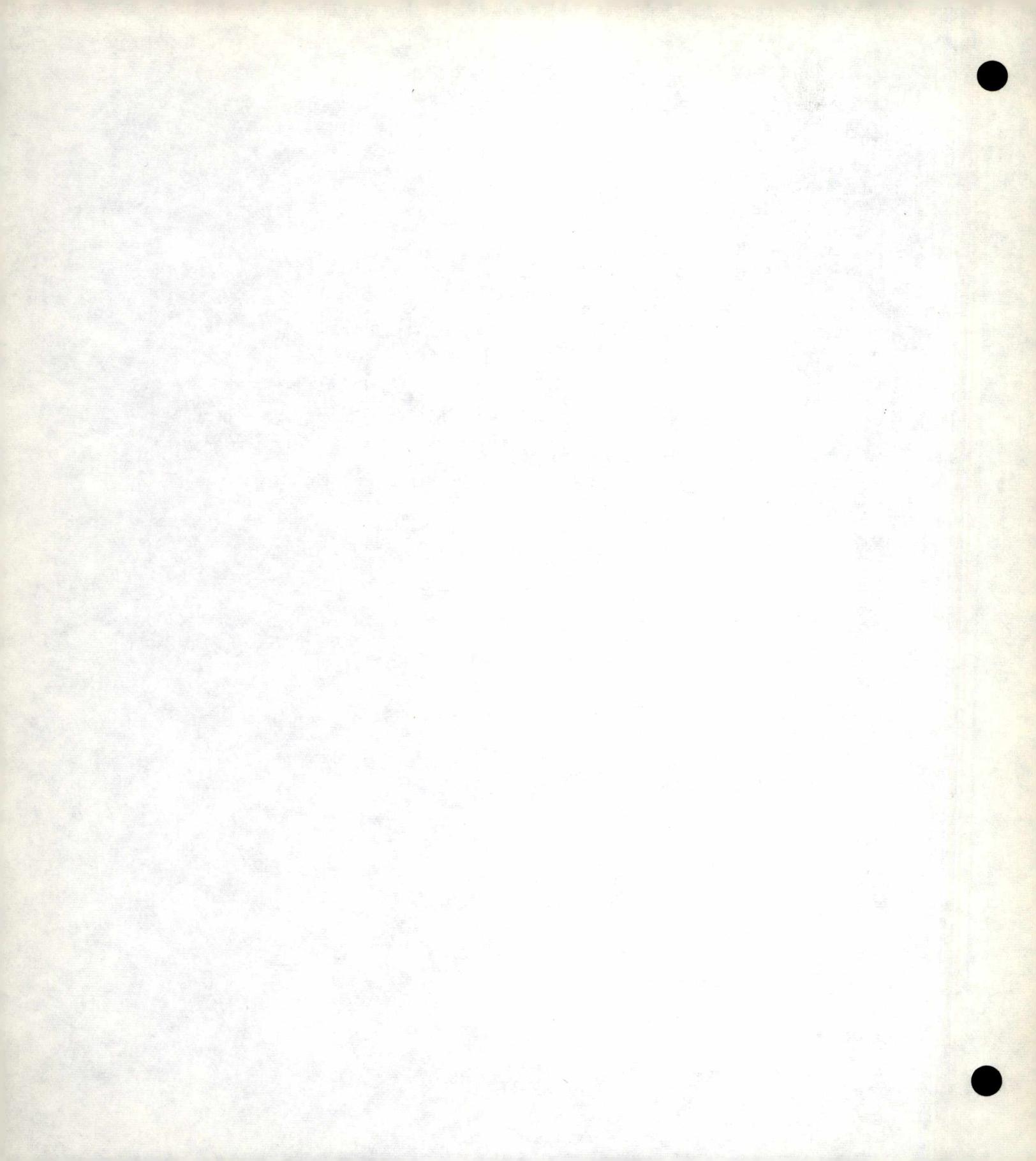


HIGHWAYS, DefenceJuly 11, 1963

NWHS - CGS - pp. 152-54
Commitment re - CGS - p. 152
Cost re - CGS - p. 152
Strengths - CGS - p. 152
Extent of - CGS - p. 152
Can.-U.S. agreement re - CGS - p. 153
Keep open for U.S. military - CGS - p. 154
Reconstruction of - CGS - p. 154
Maintenance - CGS - p. 153, 154

October 29, 1963

Northwest Highway System - transfer to DFW - date of - paving re - consul-
tation with Province & US - portion burned over to B.C. - Deachman, CGS,
Hellyer, Patterson, Baldwin - pp. 603-05



July 2, 1963

Bomare ineffective - statement by Gen. Simonds quoting US Generals - Brewin, Hollyer - p. 51

October 10, 1963

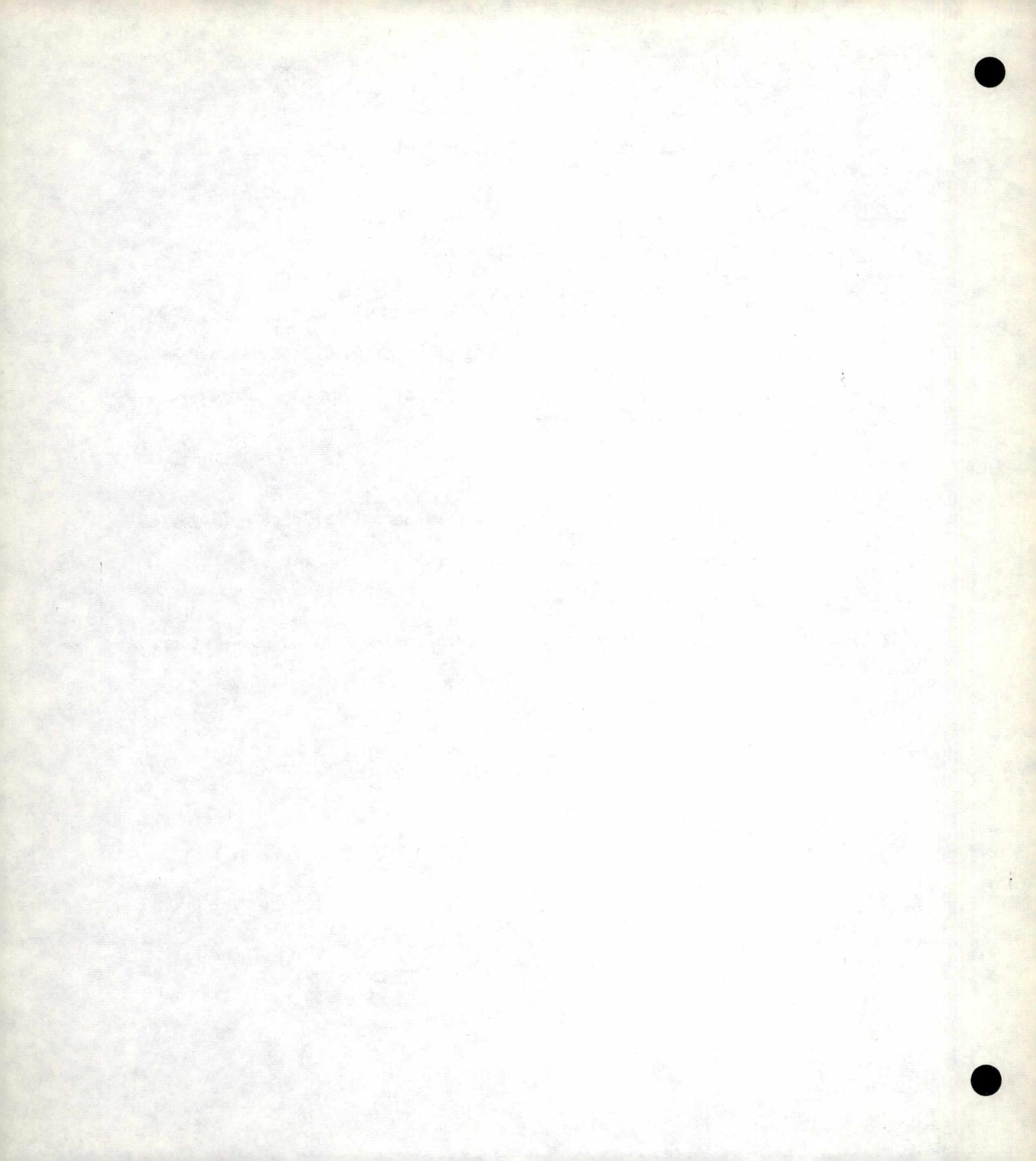
- Navy - Mainingy Report - summary - mutinies - Matheson, Plomer, MacRae - pp. 351, 381-82
- Promotions & grievances - poor morale - comparison with USN & UK - Lloyd, Brewin, Plomer, Fairweather, Hahn, MacInnis - pp. 354, 363 367-68, 369, 370, 374, 375
- Low morale due to shortage of housing at Halifax - Lloyd, Plomer - p. 362
- Cmdre. Plomer's departure from Navy - investigation of - Lloyd, Winch, Plomer - pp. 372, 375-76

October 15, 1963

- Navy - officer grievances - Brewin, CNS, MacInnis - p. 409
- CDR Plomer's representations to Min. & subsequent release - Lloyd, CNS, MacInnis - pp. 417-18
- Saskatchewan - boiler defects - Deachman, CNS - p. 422

October 17, 1963

CDR Plomer's dismissal from Navy - statement by former Min. of ND - Patterson - p. 438



MANPOWEROctober 10, 1963

- Navy - Personnel Problems & Leadership - Cmdre Plomer - pp. 346-47
 Senior officers leaving service - Cmdre Plomer - pp. 345-46
 Morale poor - Cmdre Plomer - pp. 346, 347, 348
 Service run by club - Cmdre Plomer - p. 346
 Promotion - Cmdre Plomer - pp. 346, 347, 349
 Executive officers not qualified to command - Cmdre Plomer - p. 346
 Improvement of standards - Cmdre Plomer - p. 346
 Lack of integrity at top - Cmdre Plomer - pp. 347, 348
 Promotion from ranks impossible - Cmdre Plomer - p. 347
 Housing shortage in Halifax - Cmdre Plomer - p. 347
 Shortage of qualified personnel - Cmdre Plomer - p. 347
 Mutinies result of frustration - Cmdre Plomer - p. 348
 Navy personnel use & costs re training - Matheson, Plomer - p. 350
 Appointment of Cmdre Plomer - Lloyd, Brewin, Plomer, Winch - pp. 353, 355-56, 361-62
 Promotions & grievances - poor morale - comparison with USN & UK - Lloyd, Brewin, Plomer, Fairweather, Hahn, MacInnis - pp. 354, 363, 367-68, 369, 370, 374, 375
 Navy - shortage of technical staff - Fairweather, Winch, Plomer, Patterson - pp. 357, 364, 365-66

October 15, 1963

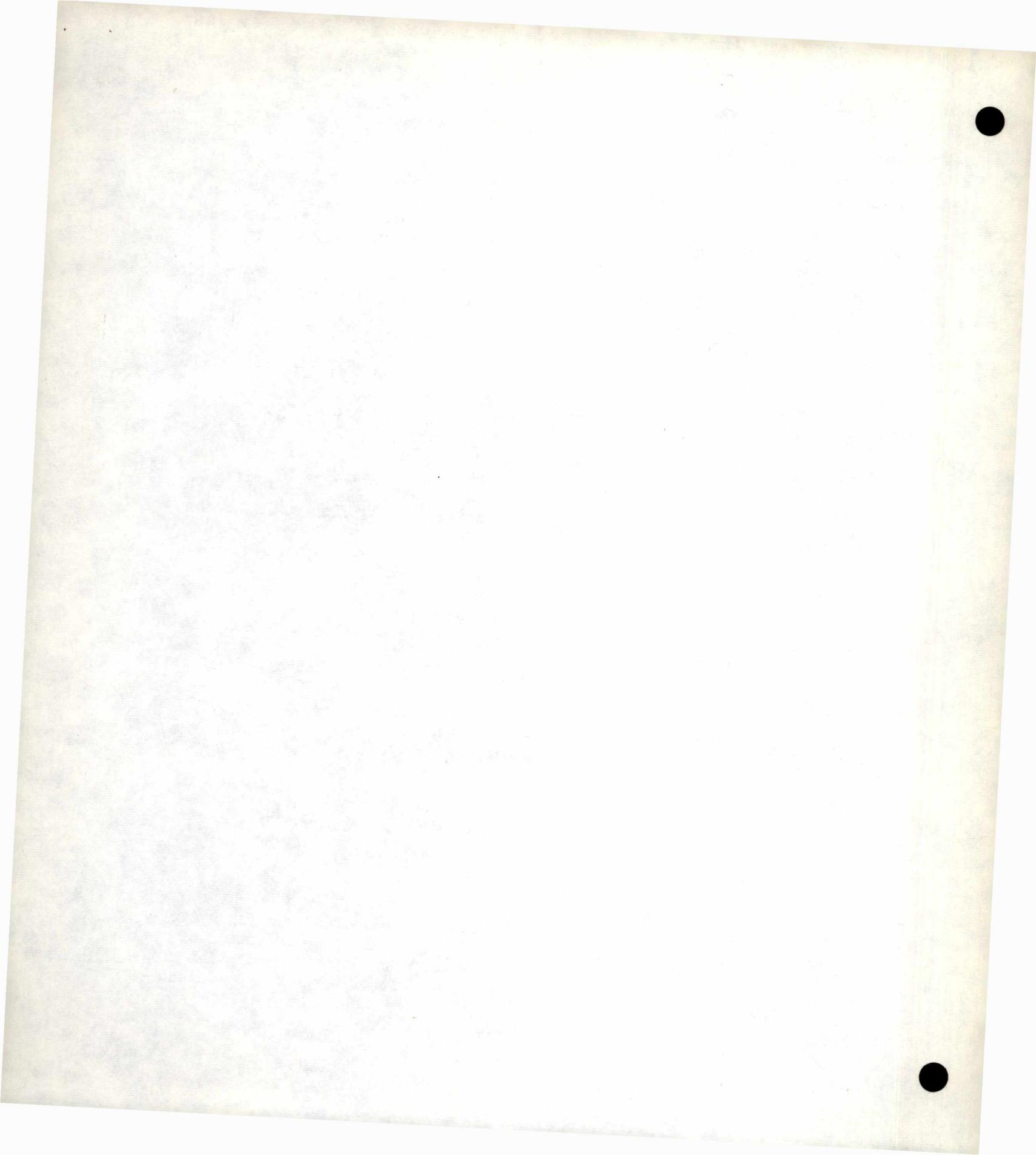
- Manpower strengths and complement of fleet - CNS - p. 398
 RCN personnel structure committee - function & composition - subsequent re-organization of personnel structure - CNS - p. 398
 Promotions - effect re attendance at defence colleges - selection - MacLean, CNS, MacInnis - pp. 402, 403-04
 Retirement of officers - ages, resignations - MacLean, CNS - pp. 402-03
 Navy - morale of personnel - McMillan, CNS - pp. 418-19
 Navy - strengths - officers & men - MacRae, CNS - pp. 413-14

October 17, 1963

- CDR Plomer's dismissal from Navy - statement by former Min. of ND - Patterson - p. 438

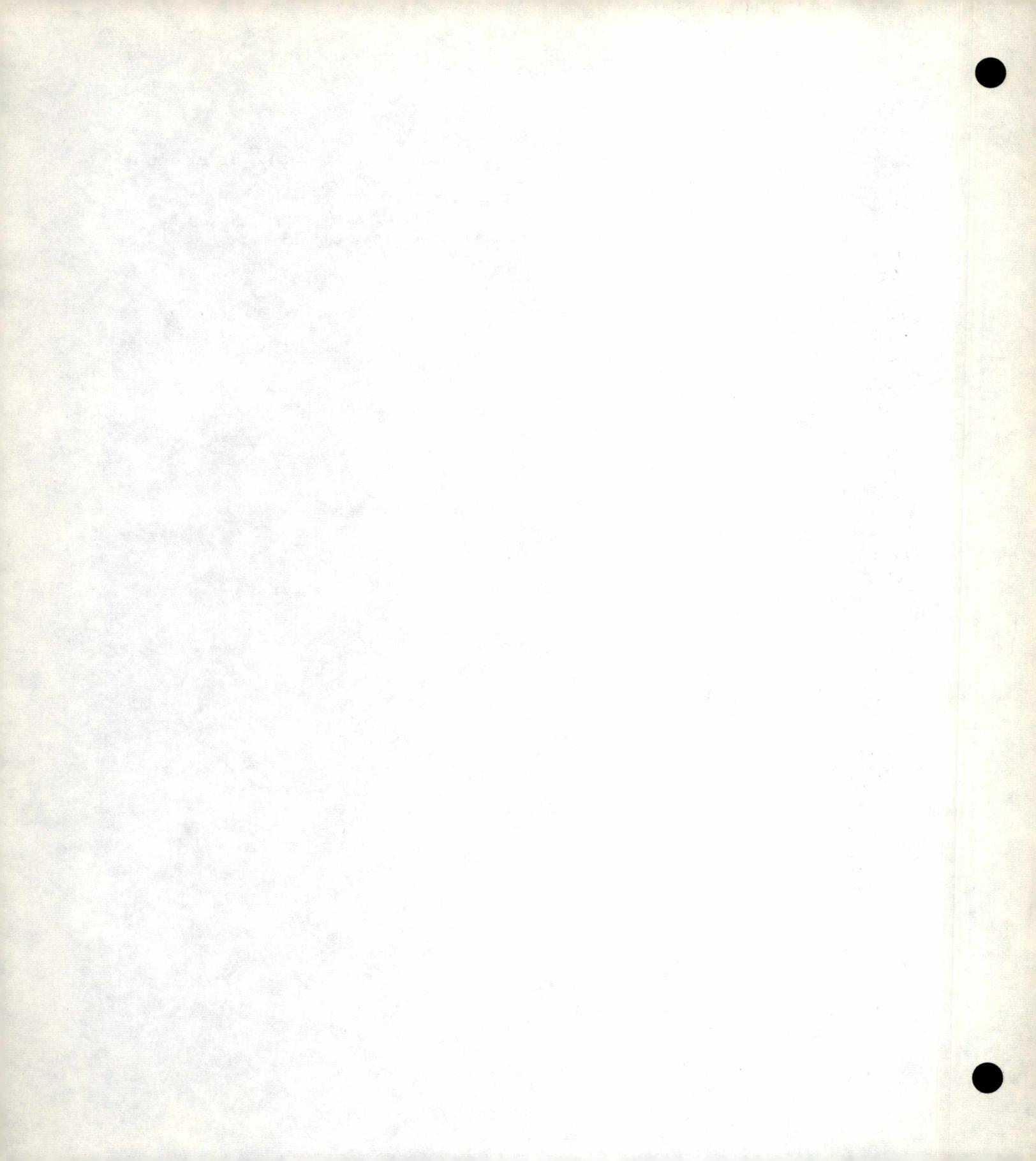
October 22, 1963

- Growth of organization when function redundant - Korean Bde. surplus - Air Force manpower surplus when NATO air training completed - reduction of Air Division, automation of Sage System - surplus manpower - adoption of stringent manpower policy - interservice movement of personnel - Foulkes - pp. 500-501
 Withdrawal of Cdn. troops abroad - Foulkes - p. 507



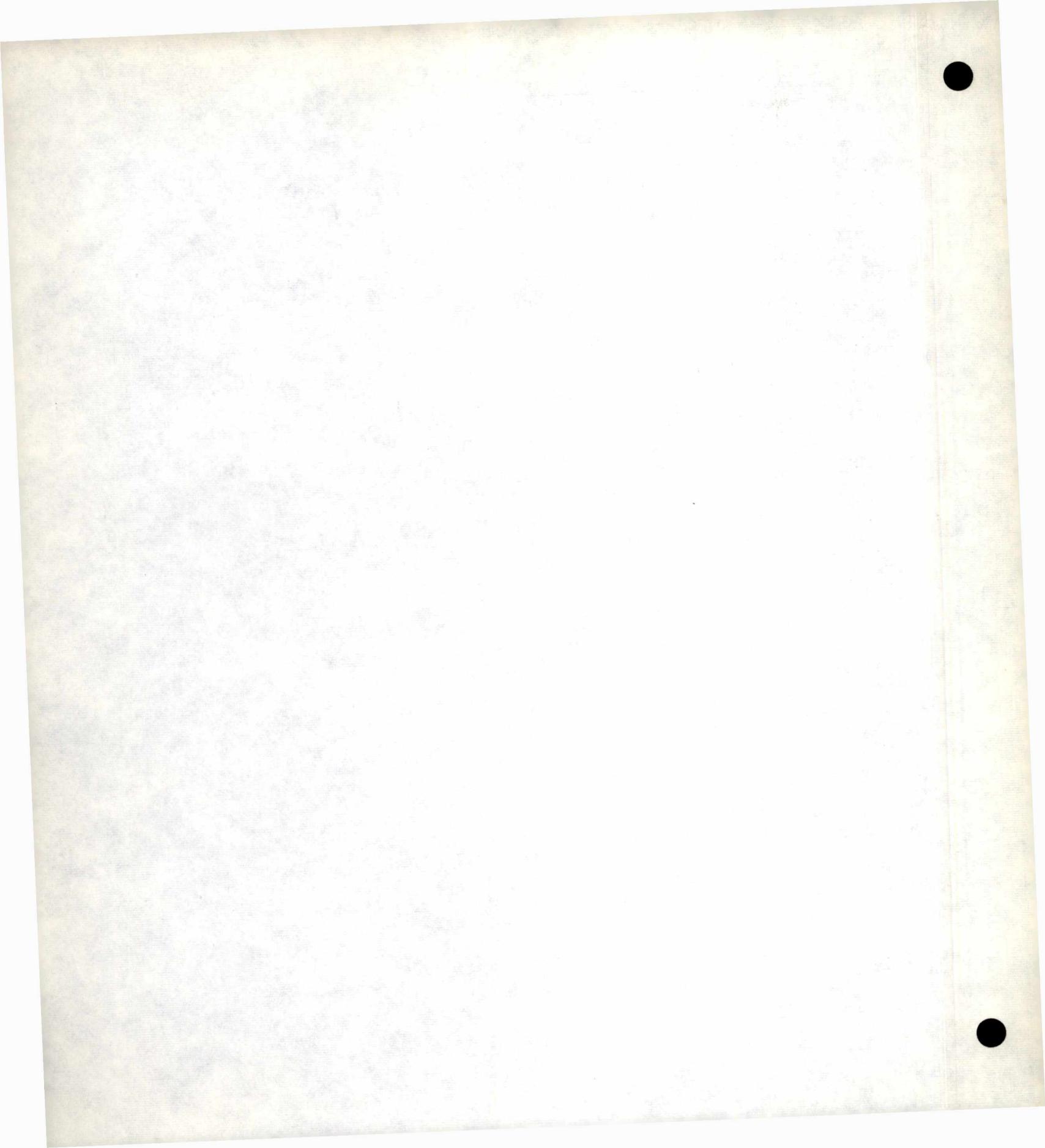
MANPOWER (Cont'd)October 29, 1963

Manpower required in support of 3 infantry battalions - wastate & attrition -
ratio, etc. - Temple, CGS, McMillan, Smith - pp. 595-96
Reduction in functions without reduction in manpower not case - disbandment
of Bde. after Korea - top-heavy set up - review of Army organization by
Gen. Allard - cut back in HQ size - Winch, CGS - pp. 615-16



MANPOWER, COMPULSORY MILITARY TRAININGOctober 17, 1963

Compulsory military training & voluntary system - French-Canadian attitude -
length of service - not applicable to senior NCO's - in Militia - MacRae,
Simonds - pp. 471-73



MANPOWER, RecruitingOctober 10, 1963

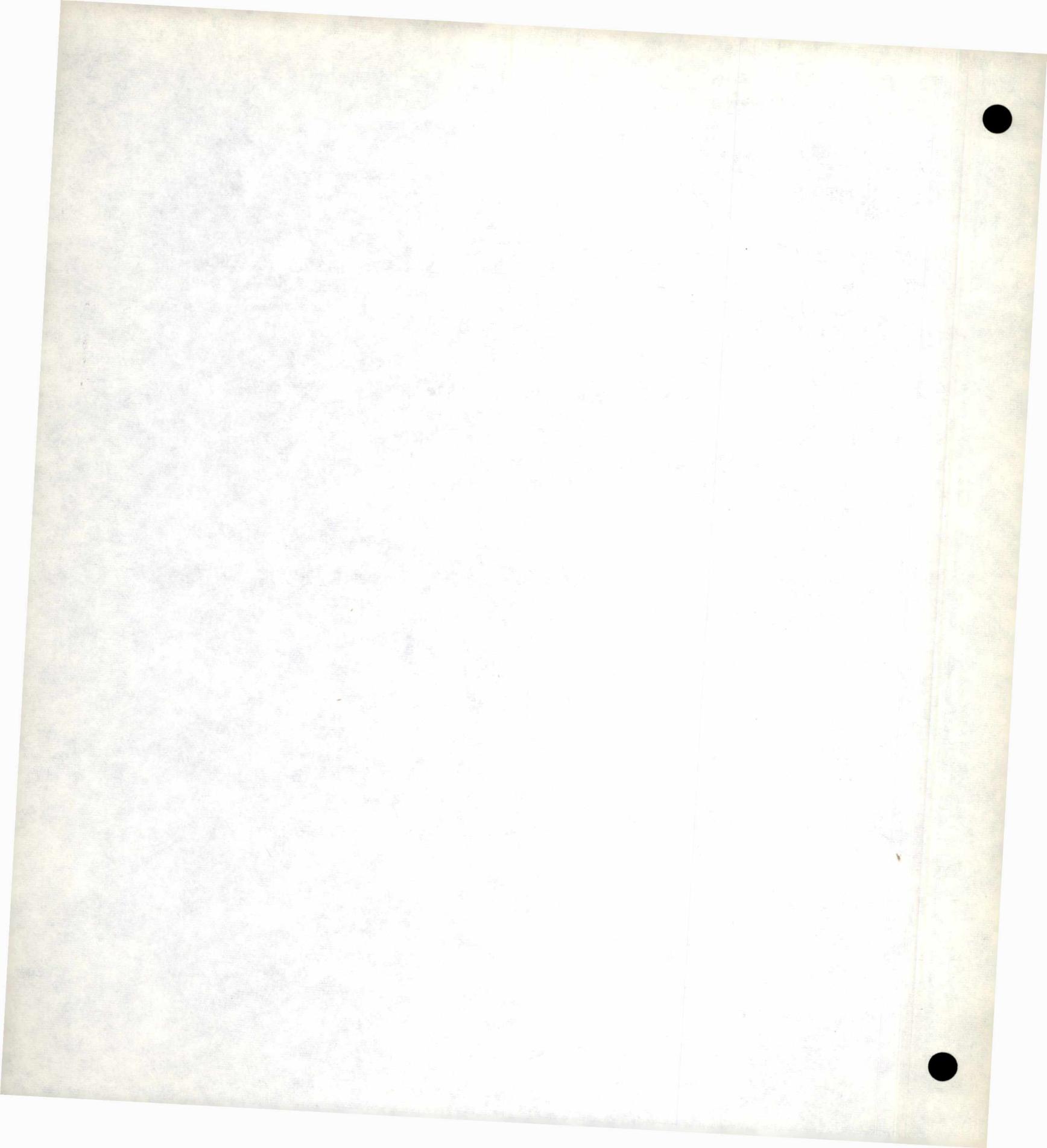
Navy - Cdn. Services Colleges - value - officer recruitment - Matheson,
Plimer - p. 380

October 17, 1963

Compulsory military training & voluntary system - French-Canadian attitude -
length of service - not applicable to senior NCO's - in Militia -
MacRae, Simonds - pp. 471-73

October 29, 1963

Monthly recruiting average - offsets wastage, etc. - McMillan, CGS - p. 594



MANPOWER - StrengthsJuly 16, 1963

NORAD - strength of - CAS - p. 164

Personnel strength in installations, staff colleges, etc. - MacLean, CAS -
p. 186October 17, 1963

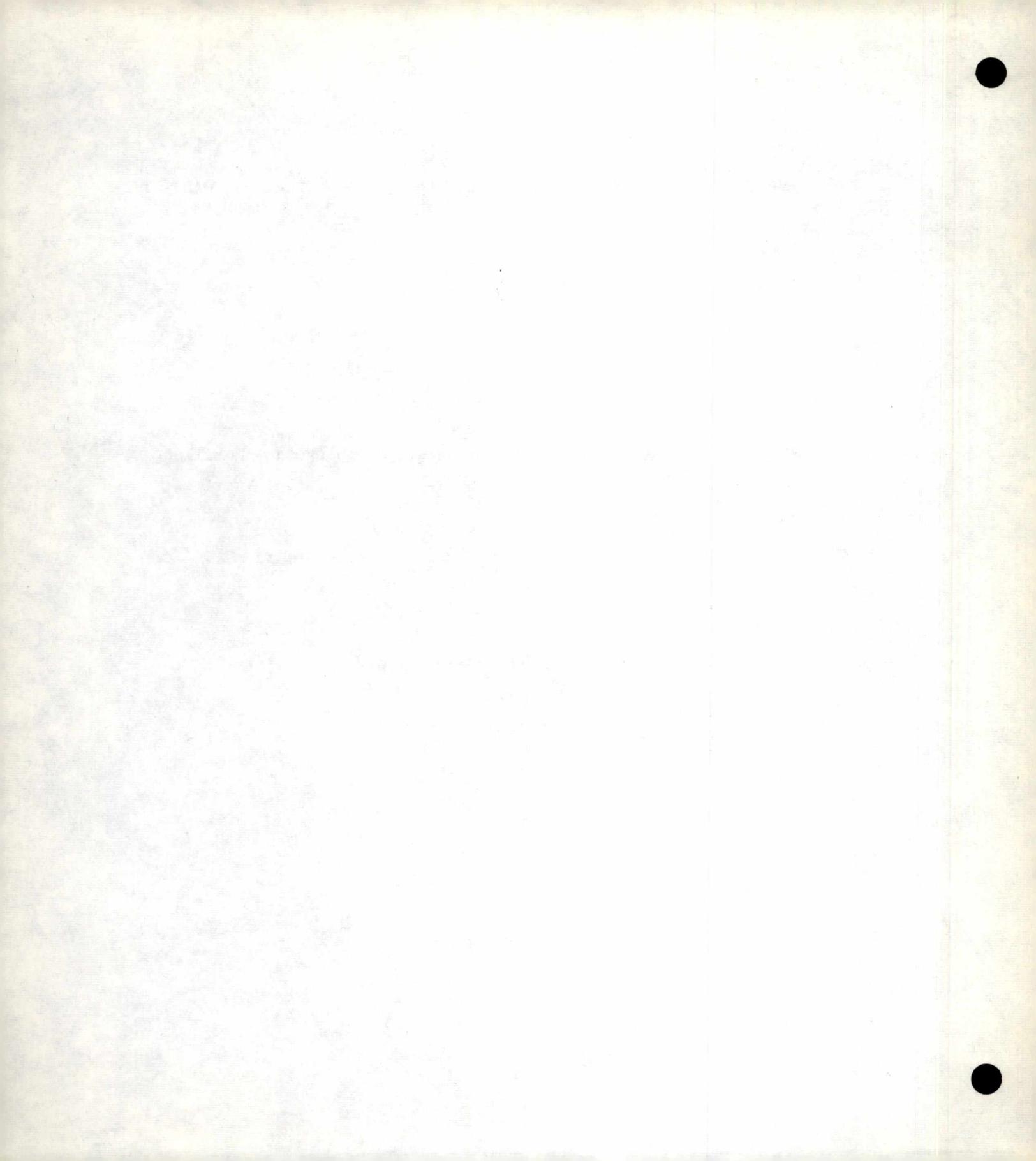
Reduction of armed forces - Lessard, Simonds - p. 450

October 22, 1963

Reduction of strengths of forces - MacRae, Foulkes - pp. 508-09

October 29, 1963Strength of Army Regular & Militia, cadets & civilian employees - McMillan,
CGS - p. 594October 31, 1963Strength of 1 Air Div. & 4th Bde. - number of dependents - MacRae, CAS -
pp. 638-39November 5, 1963

Civilian & military strengths at Army HQ - CGS - p. 690



MARITIME COMMANDOctober 8, 1963

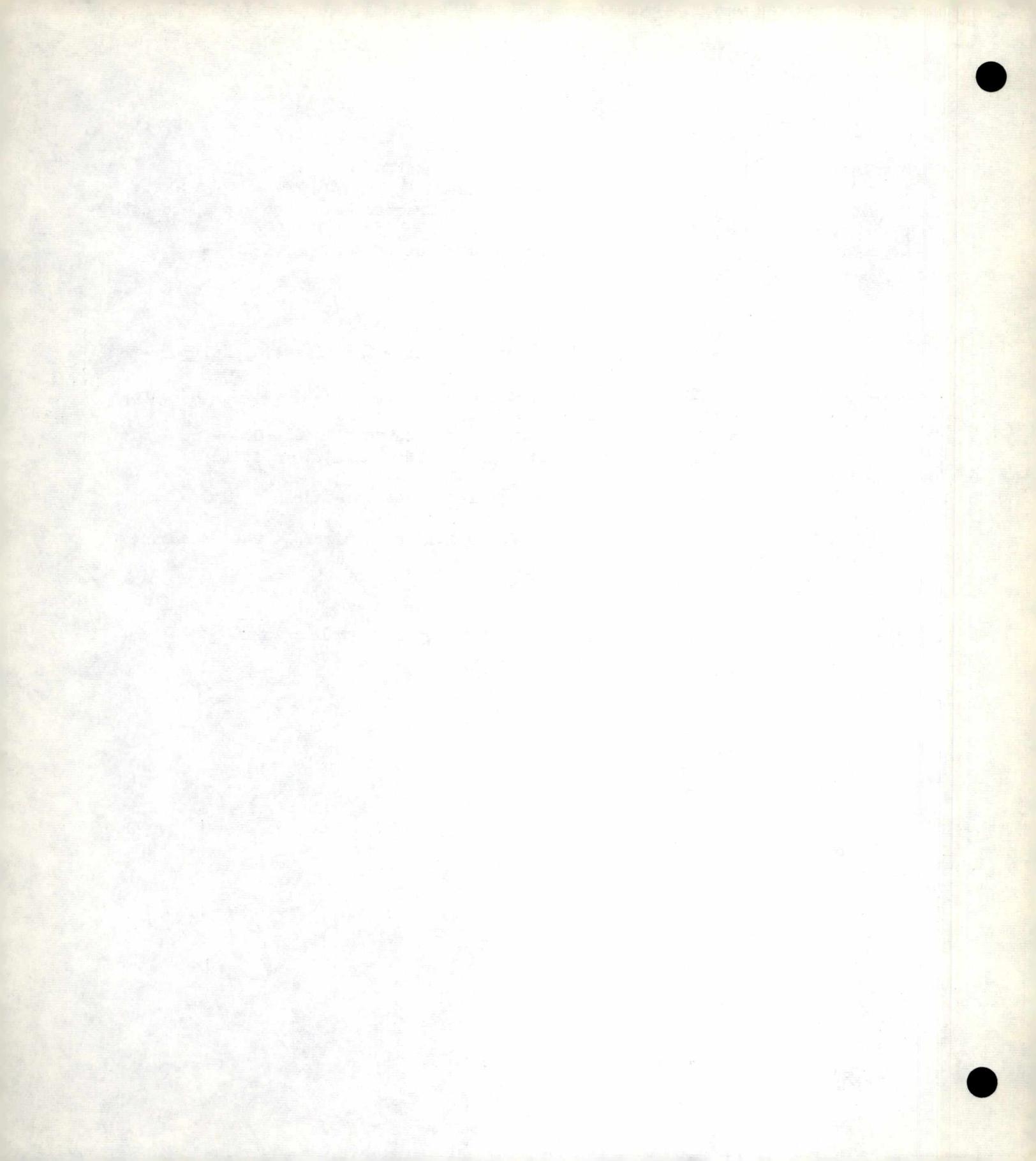
Maritime patrol craft - function - RCAF abandonment of a sqdn. - anti-sub capability - Smith, CNS, Hellyer - pp. 321-22
 Sub location by Argus, Tracker & helicopters - Tracker being brought up-to-date - Hahn, CNS - pp. 328-29
 Co-ordination RCAF-Navy anti-sub forces & division of responsibility - MacLean, CNS - pp. 332-33

October 31, 1963

Anti-submarine a/c - Argus, Neptune - number, cost - CAS, Lessard, Hellyer - p. 629
 Anti-submarine surveillance - use of sonobuoys - range of detection - Lessard, CAS, McMillan, Laniel - pp. 629, 630
 Argus, Neptune & Sonobuoys - costs - number of sonobuoys used - CAS - p. 646
 Effective defence against Russian surface-launching ballistic missile submarines - CAS - p. 646
 Recce ability of Maritime Air Command & search & rescue - MacLean, CAS - pp. 646-47
 Maritime Air Command commitment to SACLANT - number of aircraft re - MacLean, CAS - pp. 660-61

November 5, 1963

Future research re anti-submarine capability - greater role by aircraft - Lessard, Hellyer, Smith - pp. 684, 686, 687



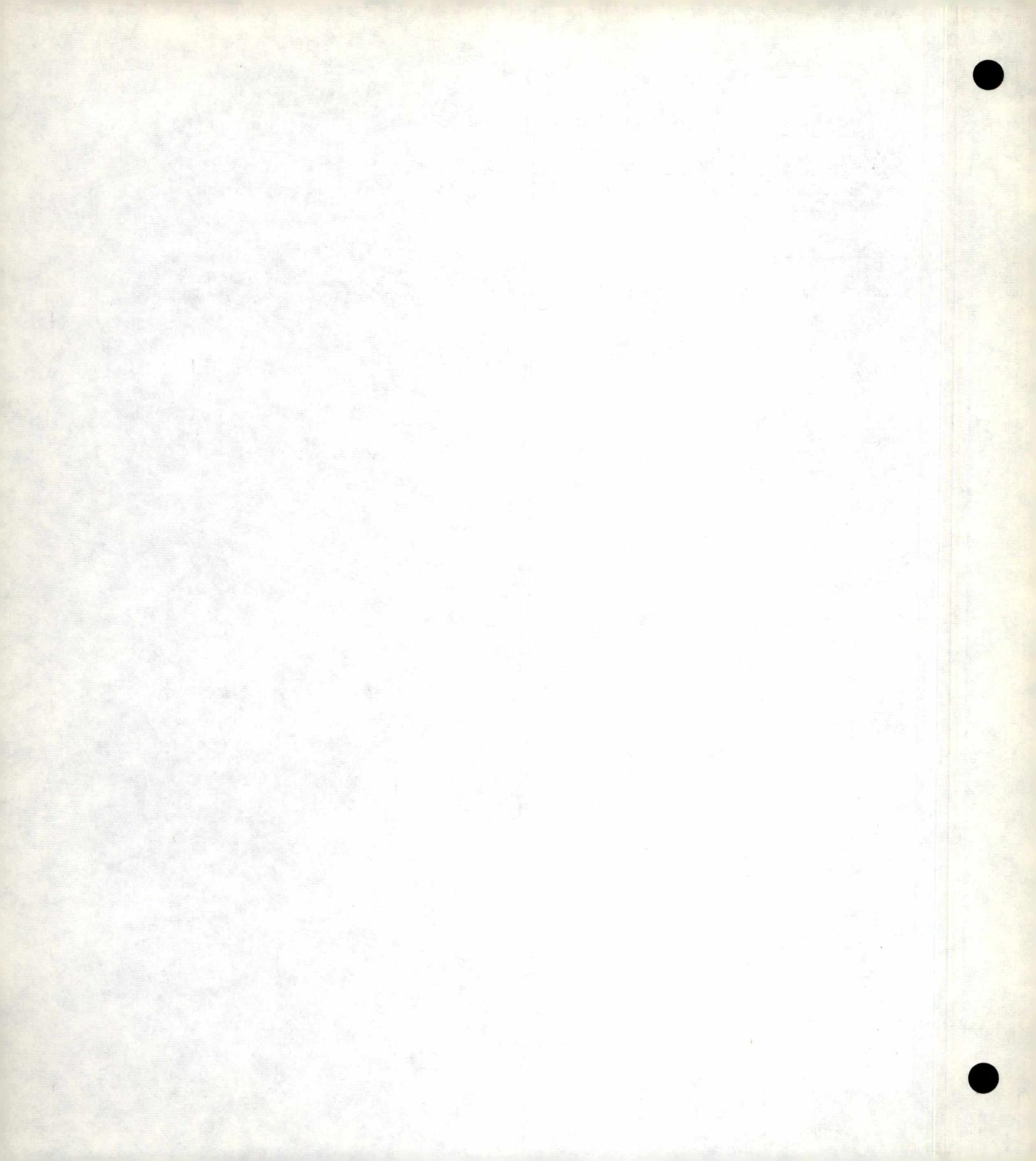
MARRIED QUARTERS

October 10, 1963

Housing shortage in Halifax - Cmdre Plomer - p. 347
Navy - low morale due to shortage of housing at Halifax - Lloyd, Plomer -
p. 362

October 29, 1963

Housing accommodation - married quarters - CGS - p. 596

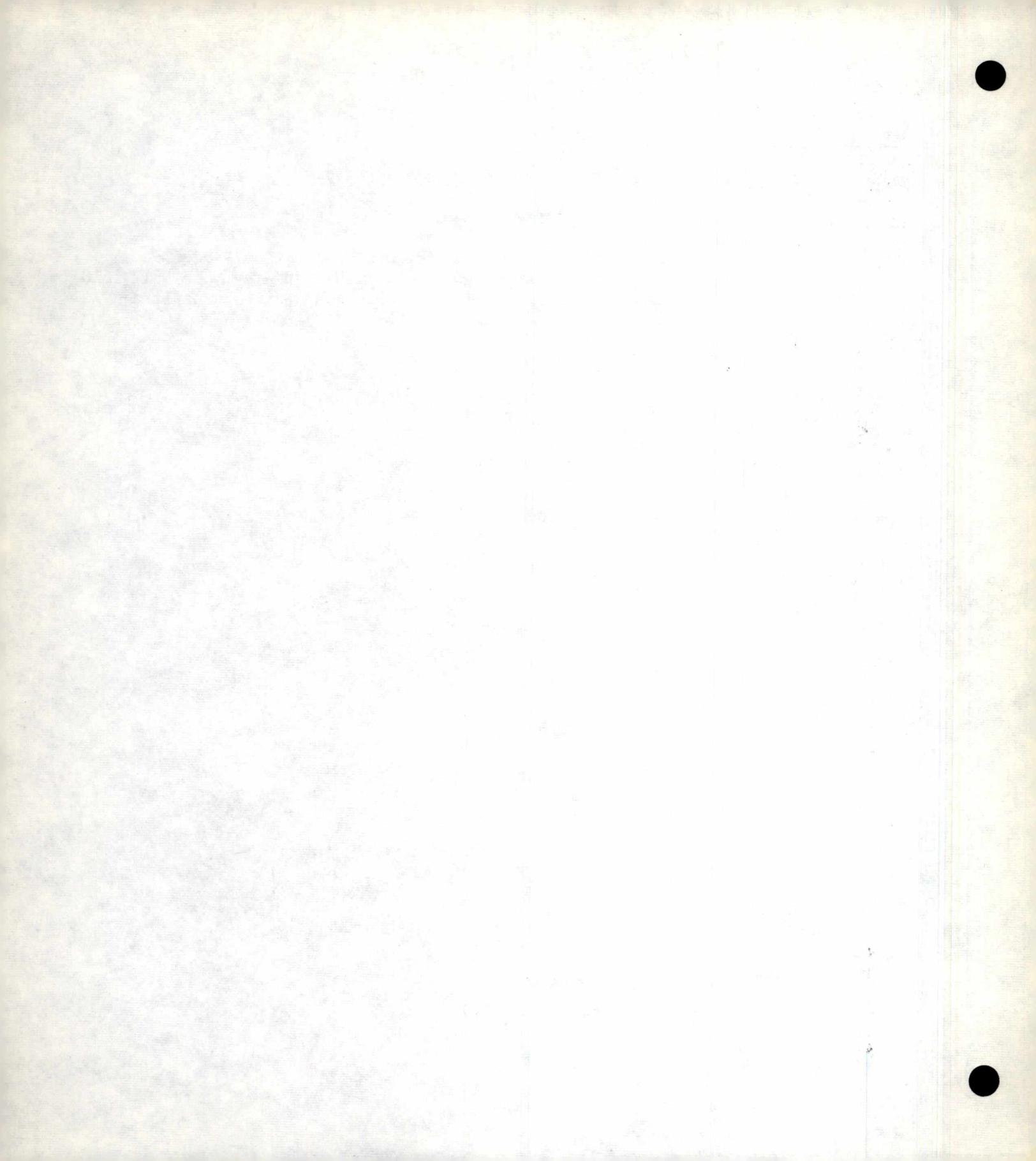


MEDICAL SERVICESOctober 22, 1963

Medical services integration - McMillan, Foulkes - pp. 527-28

October 29, 1963

Unification of chaplain & medical services - wiped out duplication - additional
book work - integration re hospitals - Winch, CGS, McMillan - pp. 616, 617, 618
Integration of Chiefs of Staff, medical services & chaplain services resulted
in increase of higher ranks - Groos, CGS - p. 618



MOVEMENTS AND TRANSFERSJuly 11, 1963

Army - Division re-inforcements - movement to Europe - CGS - pp. 135, 136

October 10, 1963

Navy - convoy transportation - atomic war vs air transport - Asselin, Plomer, Smith - pp. 384-85, 386

October 15, 1963

GP frigates - troop transport - helicopters for - anti-submarine capability - operation with carrier force - troop landing capacity - Granger, CNS, Matheson, Deachman, Brewin - pp. 422-23, 423-24, 425-26, 431

Merchant troop carriers - fitted with helicopters - Smith, CNS, MacInnis - p. 428

October 17, 1963

Transportation adequacy - Lessard, Simonds - p. 450

Forces in Europe - shorter rotation periods - dependents removal - Smith, Simonds - p. 456

Army mobility - use of fixed wing a/c re - need for armoured personnel carrier - Churchill, Simonds - pp. 460-62

Mobile force - composition - modeled after US Marine Corps - armament re - air transport of - Temple, Simonds - p. 477

Submarine cargo transport - no future for surface convoys - Granger, Simonds - p. 463

October 22, 1963

Dependents - movement from Europe - costs - Foulkes - p. 517

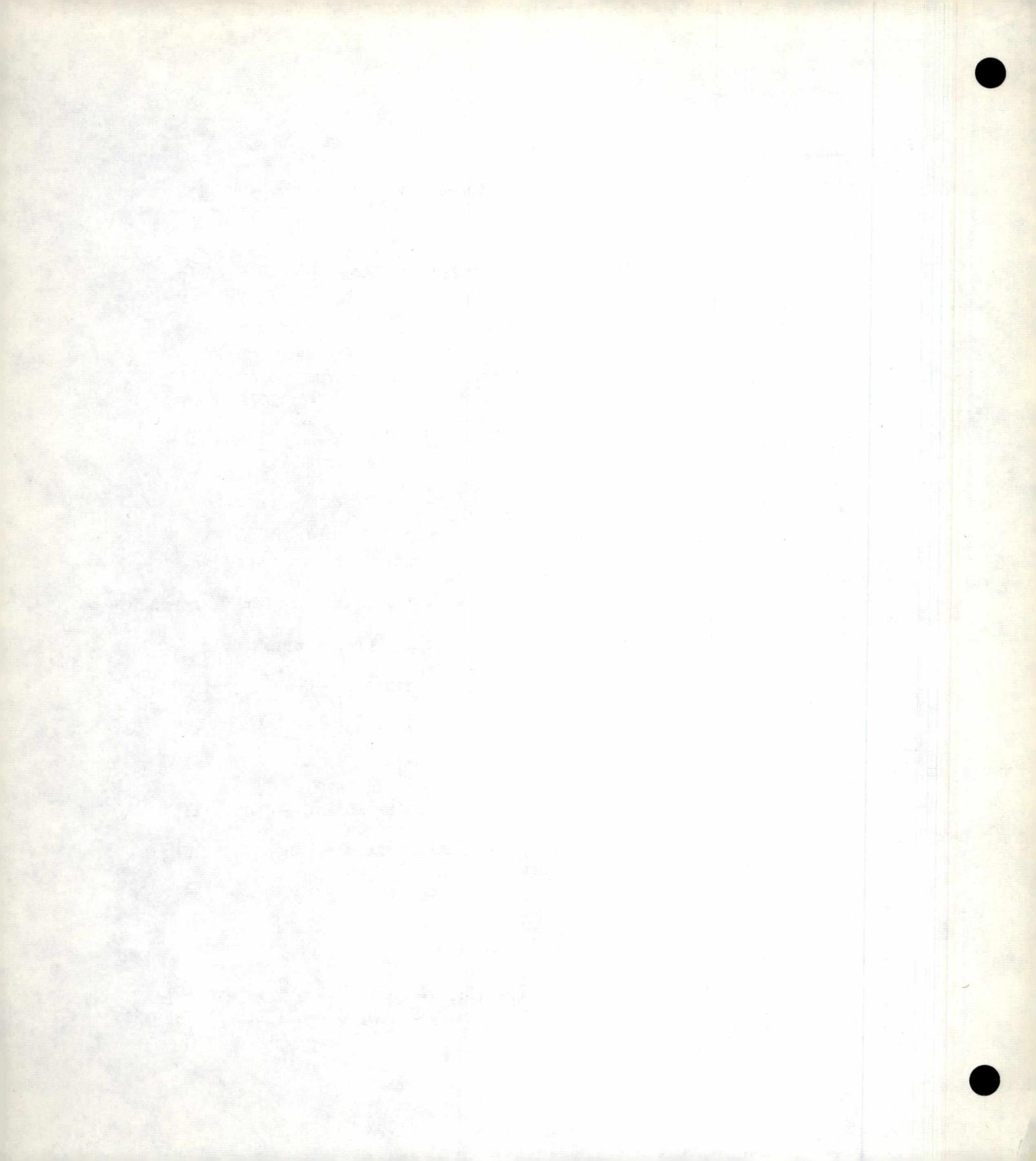
Air portability of troops & use of Bobcat - parachute element - Churchill, Foulkes - pp. 529-30

Mobility of infantry & use of armoured personnel carriers - Bobcat - ruling out heavy armour - Churchill, Foulkes - p. 530

Supply of forces by sea not visualized - NATO shipping board - allocation by - Smith, Foulkes - p. 536

October 24, 1963

Air space recce & monitoring submarine movements - need of a/c & helicopters & highly mobile ground force - Gellner, Groos, Smith, Churchill - pp. 559-60, 566, 568-69, 572, 586

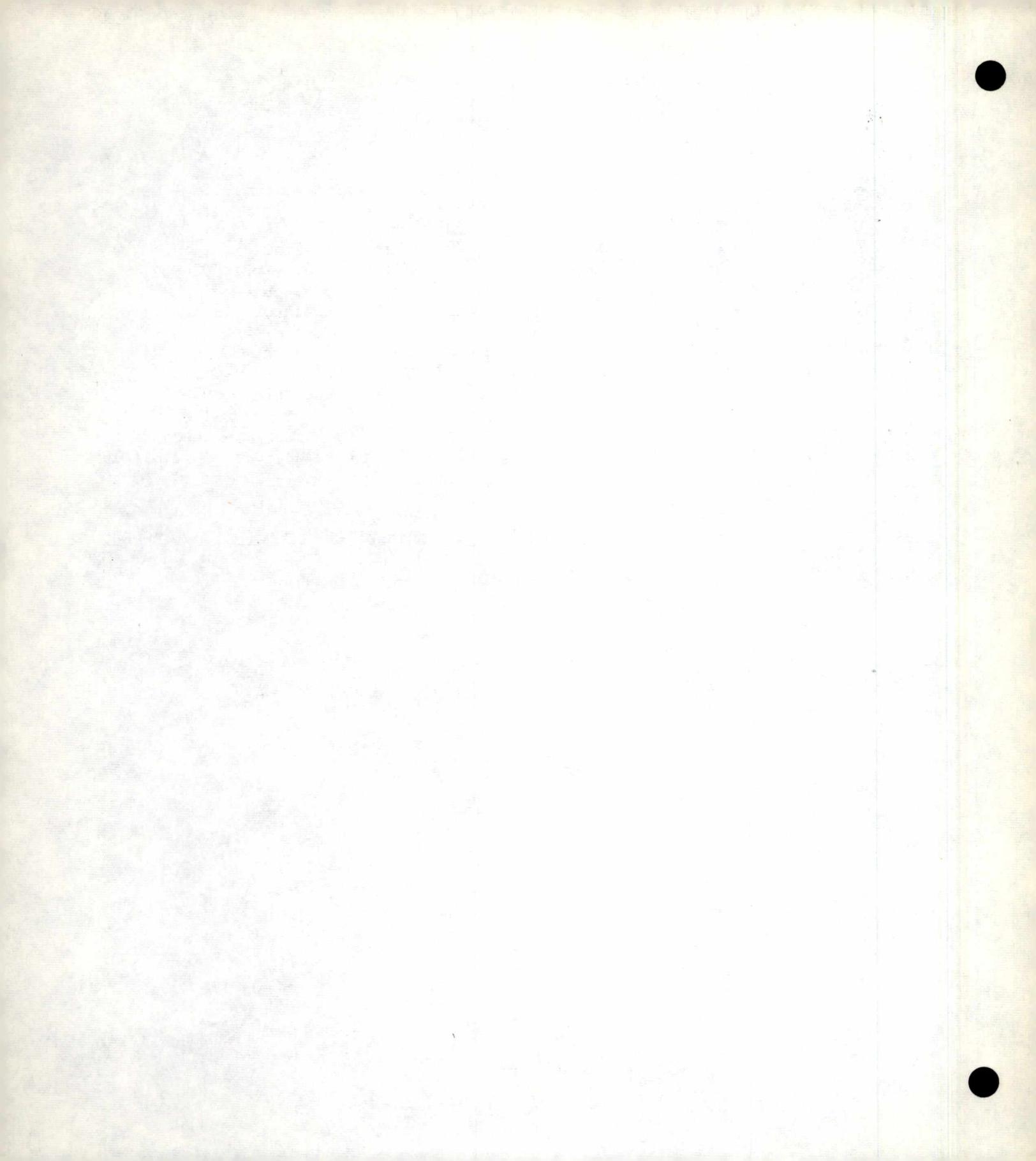


MOVEMENTS AND TRANSFERS (Cont'd)October 29, 1963

- Airlifting of mobile force with recce & artillery equipment - Hahn, CGS - p. 592
- Cariboo lifting capacity - Smith, CGS - p. 592
- Brigades in Canada for NATO - shipment to NATO - time - utilization of shipping - development of loading devices re - Brewin, CGS - pp. 592-93
- Reinforcements for 4th Bde - Brewin, CGS, McMillan - pp. 593, 594
- Rotation of Bde. personnel - limitation to one year - despatch of single units without dependents - Winch, CGS - p. 596
- Evacuation of dependents in emergency - number of - no policy re - Winch, CGS, Hellyer, McMillan, Lambert - pp. 596-97-98
- Lack of air transport limiting factor re evacuation of dependents - CGS, Smith - pp. 599-600
- Mobility of Army - ship transport to disappear with heavy lift a/c - co-op with RCAF - efficient if done on tri-service set-up - Winch, CGS - pp. 614-15

October 31, 1963

- Movement of Bde. from North America to Europe - suitability of Hercules & Yukon - Temple, CAS - pp. 627-28
- Utilization of civilian air carriers - Smith, CAS - pp. 652-53



NATOJune 27, 1963

Purpose & formation - Hellyer - p. 12, 13
 Forces of - Hellyer, p. 12, 13
 SAC backup & polaris missiles - Hellyer - pp. 12-13
 Cdn. provision of bases, communications & overflight privileges - Hellyer -
 p. 13
 "Measured response" doctrine - Hellyer - p. 13
 Cdn. commitments to - Hellyer - p. 13
 Maritime forces of - Hellyer - p. 13
 SACLANT - duties of and forces earmarked for - Hellyer - p. 13
 - Cdn. contribution to - Hellyer - pp. 13-14

NAVY

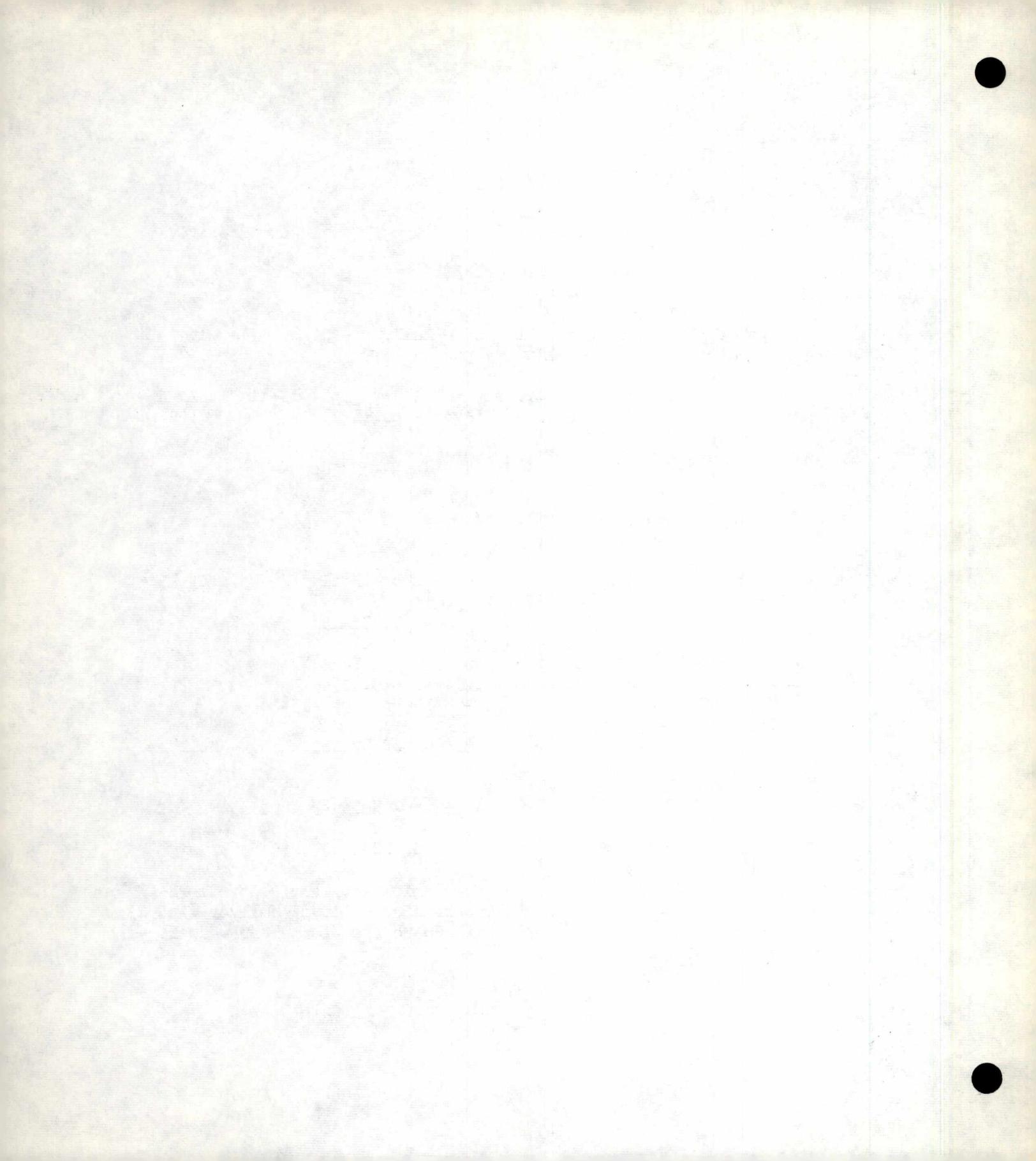
Destroyer escorts - sonar - helicopters for - Hellyer - pp. 13-14
 Anti-sub warfare - offence vs defence - Hellyer - p. 14
 Hydrofoil craft - Hellyer - p. 14
 Maritime a/c - Neptune - Argus - Hellyer - p. 14

ARMY

Brigade - Hellyer - p. 14
 Balance of Division in event of hostilities - Hellyer - p. 14
 Review of contribution - Hellyer - p. 14

AIR FORCE

1 Air Div. - role change - drop of bombs on targets - Hellyer - pp. 14, 15
 - reduction of sqdns - Hellyer - p. 14
 - atomic devices - use by - Hellyer - pp. 14-15
 Nuclear Policy - adoption of - Hellyer - pp. 14-15, 16
 - Cdn. commitments - Hellyer - pp. 14, 15, 16
 - Inter-allied nuclear force - Hellyer - p. 15
 - Tactical weapons - need & use - Hellyer - pp. 15-16
 - Deterrence - p. 16
 Conventional forces - need & increase - statement of US Def. Min. - Hellyer -
 pp. 15, 16
 Defence of Europe - Hellyer - p. 15
 Honest John - use of - not member of nuclear club - Hellyer - p. 15
 Defensive alliance - Hellyer - p. 16
 US Gen. Lemnitzer's visit to Canada - Hellyer - p. 20
 Review of NATO strategy - Hellyer - p. 20
 Comparative contributions of NATO countries - Laniel, Hellyer - pp. 21-22
 Releasing of info on defence of other NATO countries - Lloyd, Hellyer - p. 23
 NATO nations having bilateral agreements with US re use of nuclear weapons -
 Baldwin, Hellyer - p. 24
 Strike role defined - Lambert, Hellyer - p. 24



NATO (Cont'd)July 4, 1963

U.S. sqdns. withdrawn from France - CCOS, Martineau - p. 67
 Ratio of contributions to NATO by countries - expenditures - CCOS, Smith, Matheson, McMillan, MacLean - pp. 60-61, 62, 63, 65, 66-67
 Function, formation of, planning groups, commands of - CCOS - pp. 61-62
 North American defence & NATO - CCOS - pp. 61-62
 Cdn. contribution to - CCOS, Matheson - p. 63
 Command of forces in emergency - CCOS, Laniel - p. 83
 Nuclear sqdns. in France - CCOS, MacLean - p. 65
 Selection of role under - CCOS, Brewin - p. 67
 Conventional & nuclear arms - balance, review of - flexible response - provocation - CCOS, Brewin, Winch, Hellyer, MacLean, MacInnis - pp. 67, 68, 70-72, 74, 79, 80-81
 Tactical nuclear weapons - control, use - stockpiling - decision re acquisition - CCOS, Winch, Hellyer, Brewin, Lambert, Deachman - pp. 68, 69, 72, 78, 79
 Conceived as conventional force - strength in Divisions - CCOS, Deachman - pp. 78-79, 80
 Fire power - increase by nuclear weapons - CCOS, Deachman, Brewin - p. 79

July 9, 1963

Statement by US Assist. Def. Sec. re comparative Soviet-NATO conventional forces strength - Brewin - p. 123

July 11, 1963

Force goals - CGS - p. 133
 SHAPE request mechanization of 4 CIB - CGS - p. 134
 Army - NATO concept re European war - CGS - p. 137

July 16, 1963

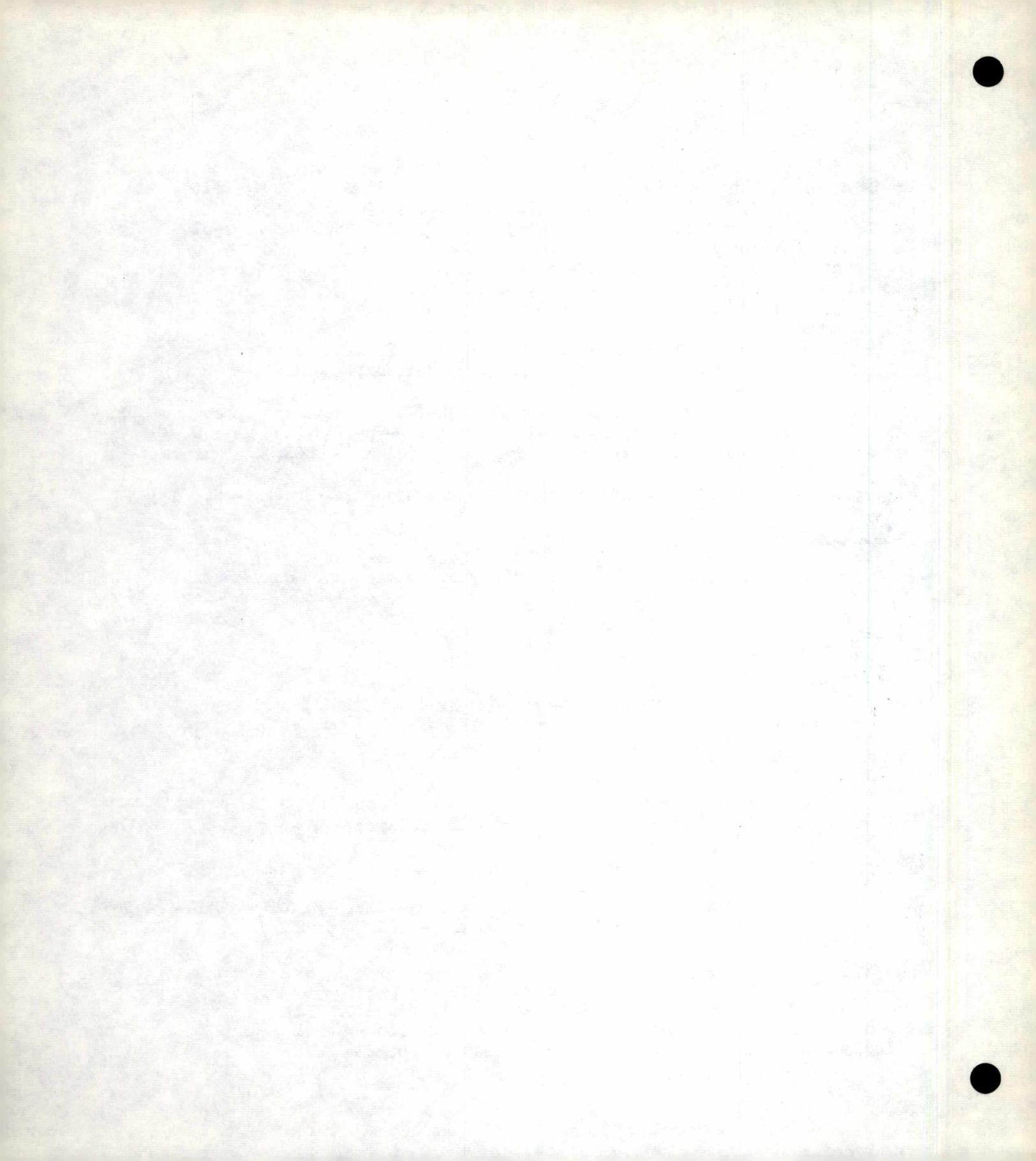
Maritime Air Command - assignment to SACLANT - CAS - pp. 169, 171
 Deficiency in NATO tactical resources - Brewin, Hellyer - CAS - p. 186

July 18, 1963

DRB scientists at ADC, NORAD, SHAPE, SACLANT, 1 Air Div. & 4 CIB - CDRB - p. 207
 DRB - co-op with NATO - NATO fellowship program - CDRB - p. 214

July 25, 1963

Deterrence being accepted by nuclear powers - Martin - p. 232
 Organization & operation of NATO - Cdn. participation - Martin - p. 236
 NATO Council study of nuclear problems - Martin - p. 236



NATO (Cont'd)July 25, 1963

Ottawa NATO mtg. - decision re review of defence - Martin - p. 236
 NATO Defence College - formation - Martin - p. 240
 Limited flexible response to aggression - Groos, Martin - pp. 242-43
 France's nuclear force & NATO - Groos, Martin - p. 243
 France's position re test ban conference - Lessard, Martin - p. 244
 Future & present commitments re nuclear role & NATO nuclear role - Brewin,
 MacLean, Martin - pp. 247-49
 Re-negotiation & review of nuclear role - Patterson, Lloyd, Martin -
 pp. 250-51

October 10, 1963

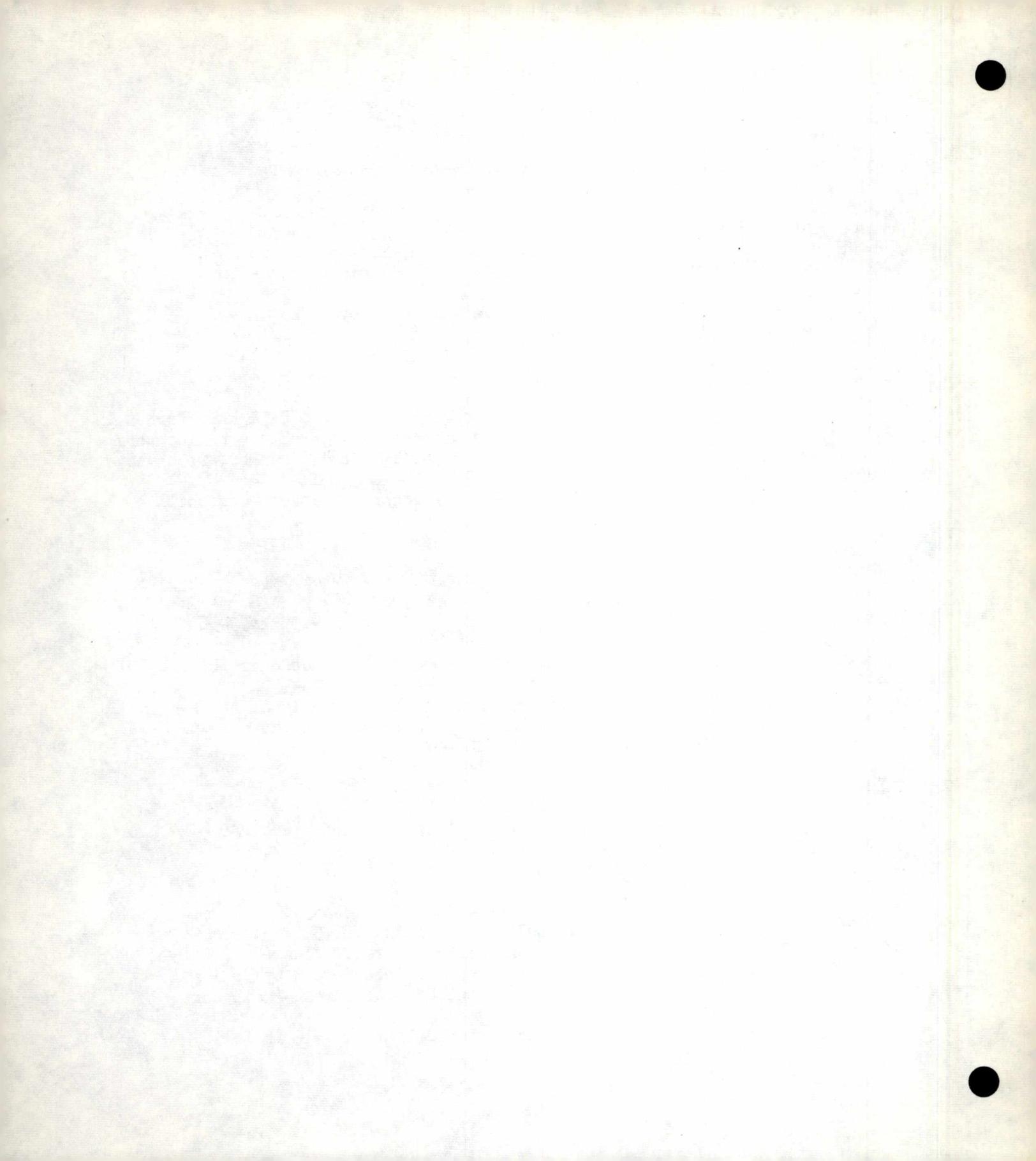
Frigates - function & capability - costs - comparison to US & UK & NATO forces &
 Mackenzie Class vessel - speed - troop accommodation - purpose - helicopters
 for - Asselin, Matheson, Plomer, Smith, Churchill, Lloyd, Granger, Deachman -
 pp. 250-51-52, 359-60, 361, 365, 376-79, 380, 382-83, 384, 385-86-87.
 Navy - comparison of Cdn. to US & NATO ship performance - Plomer, Churchill -
 p. 383

October 17, 1963

Defence of Europe by conventional forces - Simonds, Groos - p. 446
 Bde. in Europe - decreasing morale value - Smith, Seimonds - pp. 455-56
 Integration in NATO - Smith, Simonds - p. 479
 Escalation into a nuclear war - nuclear weapons no place in defence role (NATO) -
 Hahn, Simonds - p. 458
 Europe can't be defended by nuclear arms - defence by conventional means -
 potential power of Russia - defence of Europe necessity for defence of
 North America - McMillan, Simonds - pp. 466-67

October 22, 1963

NATO - future of - expiration of Treaty - political problems involved -
 withdrawal of troops from - Foulkes - p. 502
 NATO - assumption of own territorial defence re close tactical nuclear
 support, etc. - Foulkes - p. 505-06
 Control over nuclear arms in Europe - US position re - Lessard, Foulkes - p. 516
 Revision of NATO Charter - McInnis, Foulkes, Lessard - pp. 516, 517
 Withdrawing of Bde. - effect on NATO countries - Foulkes, Groos - pp. 521-22
 UN truce & peace-keeping activities - costs re - reimbursement by UN - not
 necessary to withdraw from NATO to carry out UN activities - Matheson,
 Foulkes - pp. 532-33
 Trading of facilities with Germany if Bde. placed in reserve - Laniel,
 Foulkes - p. 537



NATO (Cont'd)October 24, 1963

- Defence policy objectives - military doctrine - nuclear policy & commitments - deterrents, etc. - re NATO - Gellner, Lambert, Asselin, McMillan, Temple, Croos, Churchill, Patterson, Deachman, MacRae - pp. 552-60, 564, 568-71, 573-74-76, 580, 584, 586
- NATO use of nuclear weapons - Gellner, Asselin - pp. 557-58
- Forward strategy of NATO not useful - Gellner - p. 562
- Canada should not participate in multi-lateral nuclear force - cost of - Gellner, Baldwin, Patterson - pp. 563-64, 575
- Russian ICBM & missile sub threat vs US retaliatory power - threat to NATO - deterrent - Gellner, Smith, Deachman, Granger - pp. 564-65, 571, 580-82, 584
- Conventional war impossible - German & French view interested in absolute deterrence - re Greece & Turkey - Russia & US would only fight nuclear war - stockpiling of nuclear weapons to over-kill capacity - Gellner, MacLean, Lambert, Deachman, Granger, Brewin - pp. 566, 567-68, 575, 577, 580-86
- NATO contributions by non-nuclear powers - Churchill, Gellner - p. 586
- Conventional war possible in Greece, Turkey or Norway, etc. - Cdn. contribution of intervention force re - Gellner - p. 587

October 29, 1963

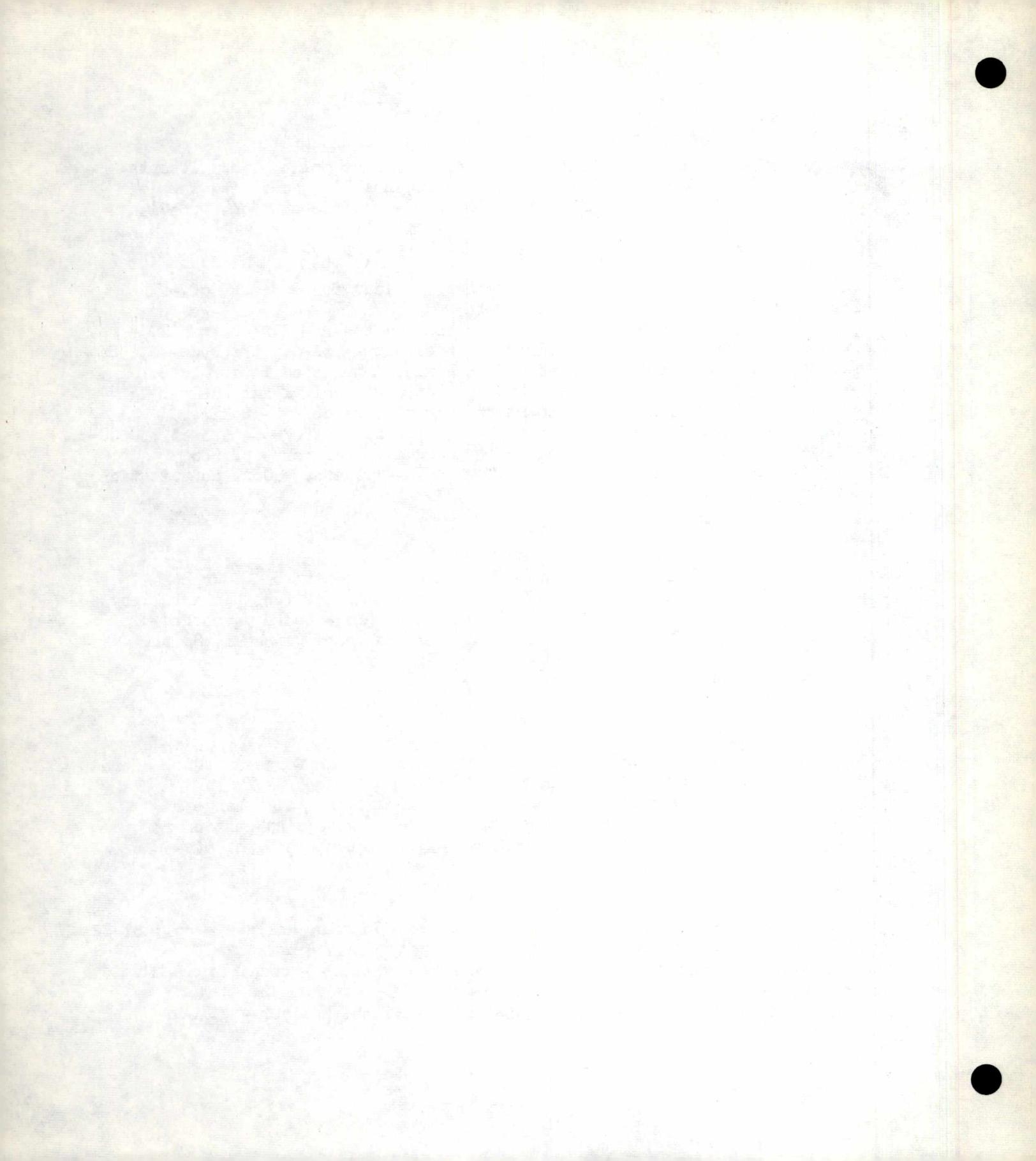
- Bobcat - need of - weaknesses indicated by trials - decision re - purpose - initiation design date & subsequent decisions - modifications for artillery mounting - comparison to other NATO & Russian models - spare parts re - design changes - effectiveness - Lessard, CGS, Hellyer, Deachman, Smith, Hahn, Churchill - pp. 600-01, 606-09, 611-12.
- Airborne troops within NATO - MacLean, CGS - p. 619

October 31, 1963

- Deterrent - value of tactical forces in Europe & strategic forces in US & UK re escalation into nuclear war - Churchill, CAS - pp. 644-45
- NATO determination re strike role - date - Cdn. commitment to - change & completion of - adoption of conventional role - Norstad's suggestion re strike role for 1 Air Div. - Matheson, CAS, Smith, Lambert - pp. 649-50

November 5, 1963

- Review of NATO strategy - Cdn. recommendations re - Brewin, Hellyer - pp. 681-82
- Cdn. & NATO tactical air support - Brewin, Hellyer, Winch - pp. 682-83
- Effecting small economies in overall defence expenditures - comparison with other NATO countries - Lessard, Hellyer - p. 684
- NATO multilateral force - Canadian position re - Smith, Hellyer - p. 686



NATO, GERMANYJuly 9, 1963

German sub strength in war - CNS - p. 113

October 23, 1963

NATO - German contribution - Foulkes - pp. 497, 506

Revision of Cdn. NATO contribution - movement of Bde. out of forward area - position assumed by Germany - Lambert, Foulkes, McMillan - pp. 511-12, 528

Withdrawal of Bde. to reserve position - British attitude - German acceptance - MacInnis, Foulkes - pp. 515, 516, 517

Possibility of strong military Germany after 1969 - Laniel, Foulkes - p. 537

Unification of Germany - Granger, Foulkes - p. 542

October 24, 1963

Conventional war impossible - German & French view interested in absolute deterrence - re Greece & Turkey - Russia & US would only fight nuclear war - stockpiling of nuclear weapons to over-kill capacity - Gellner, MacLean, Lambert, Deachman, Granger, Brewin - pp. 566, 567-68, 575, 577, 580-86

October 29, 1963

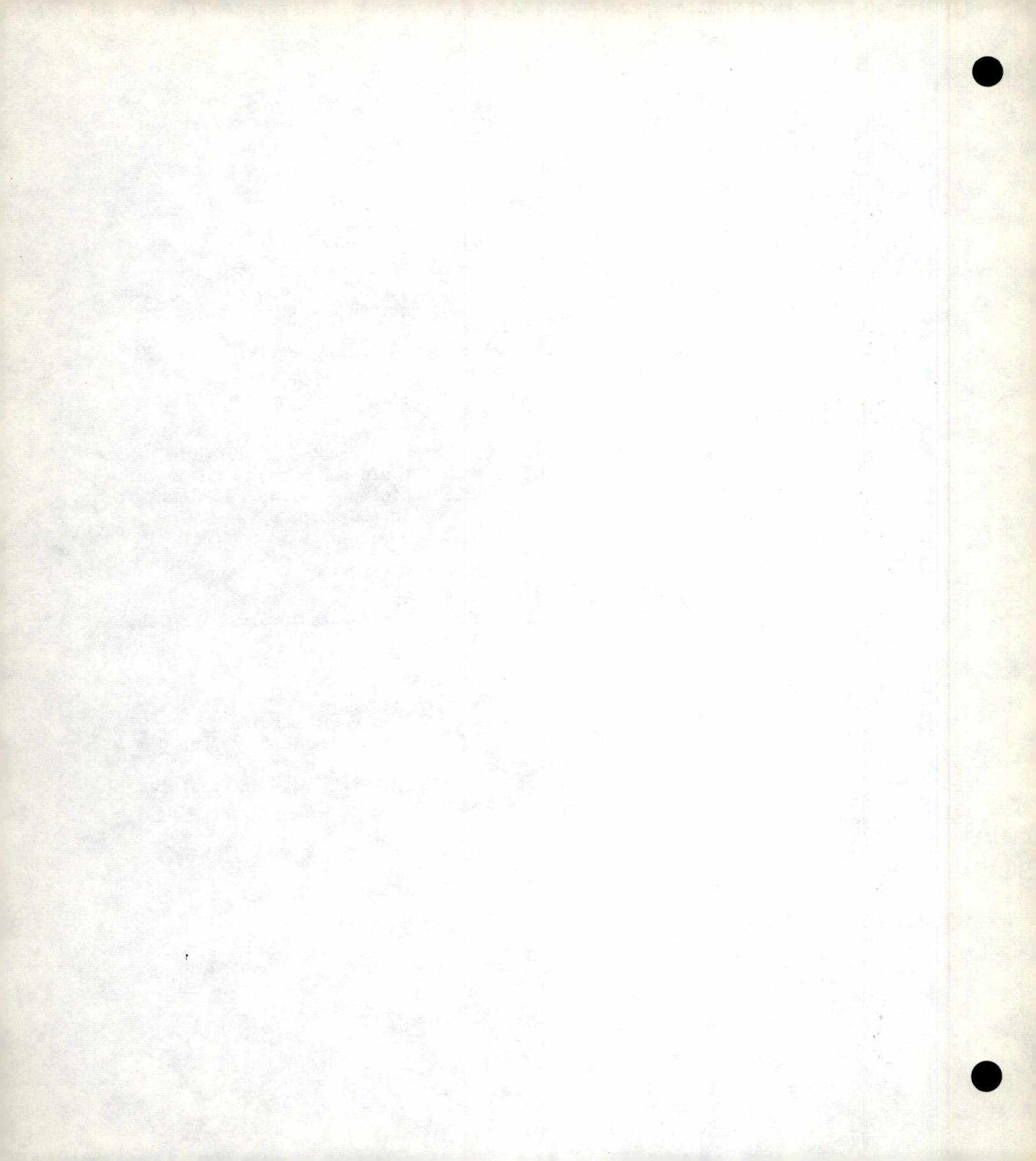
NATO defence re Germany - Lessard, CGS - pp. 594-95

Forward strategy & German re-assurance - political elements involved - Smith, Hellyer - p. 599

October 31, 1963

CF-104 still in production - replacement re - used in various roles by Germany - dual training re - replacement by TFX - movement to another theatre - Smith, CAS - pp. 635-37

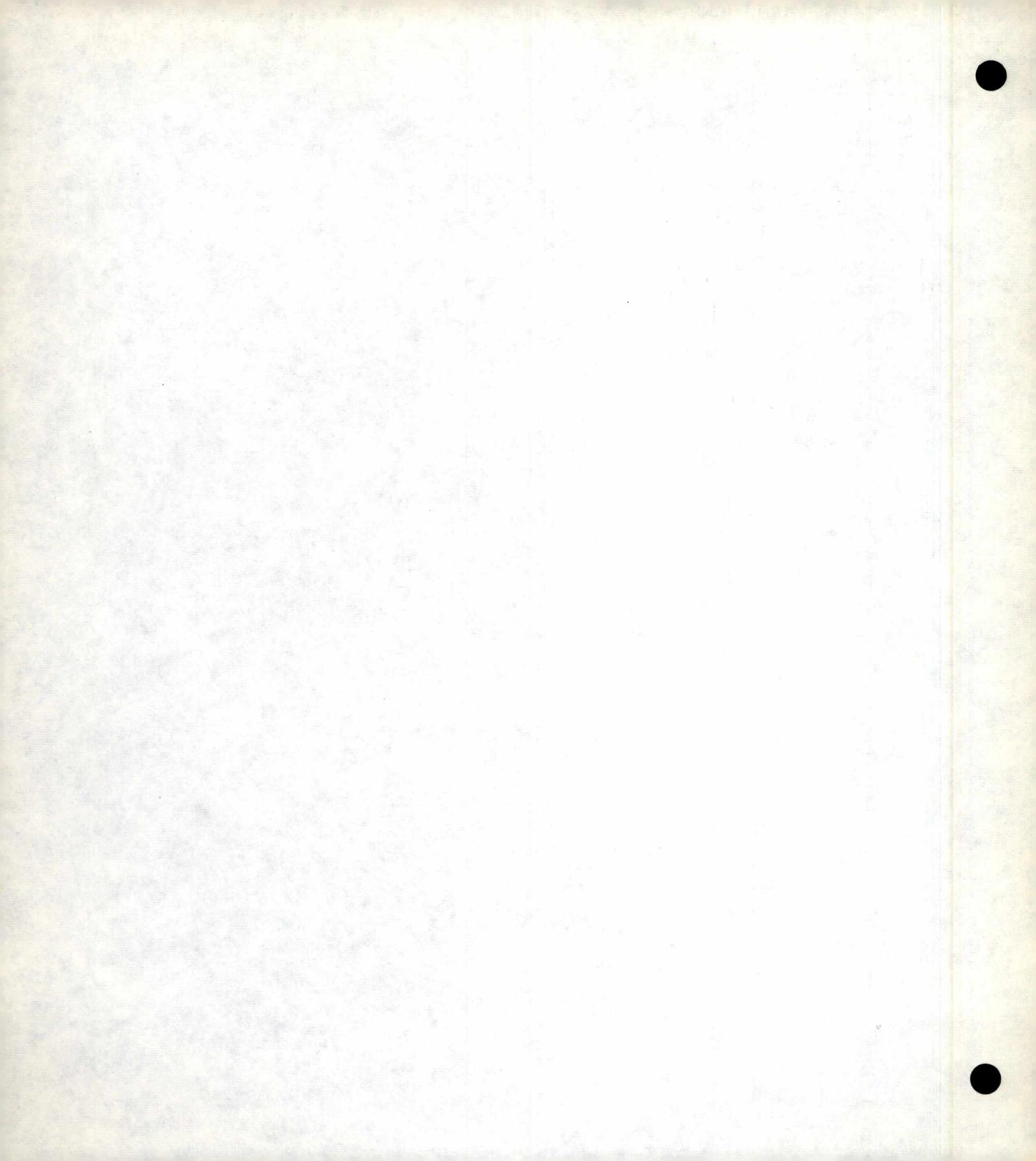
Shifting of 1 Air Div. bases from France to Germany & Belgium - difficulties re - Permissive Action Link (PAL) - Churchill, CAS - p. 644



NATO - MUTUAL AID

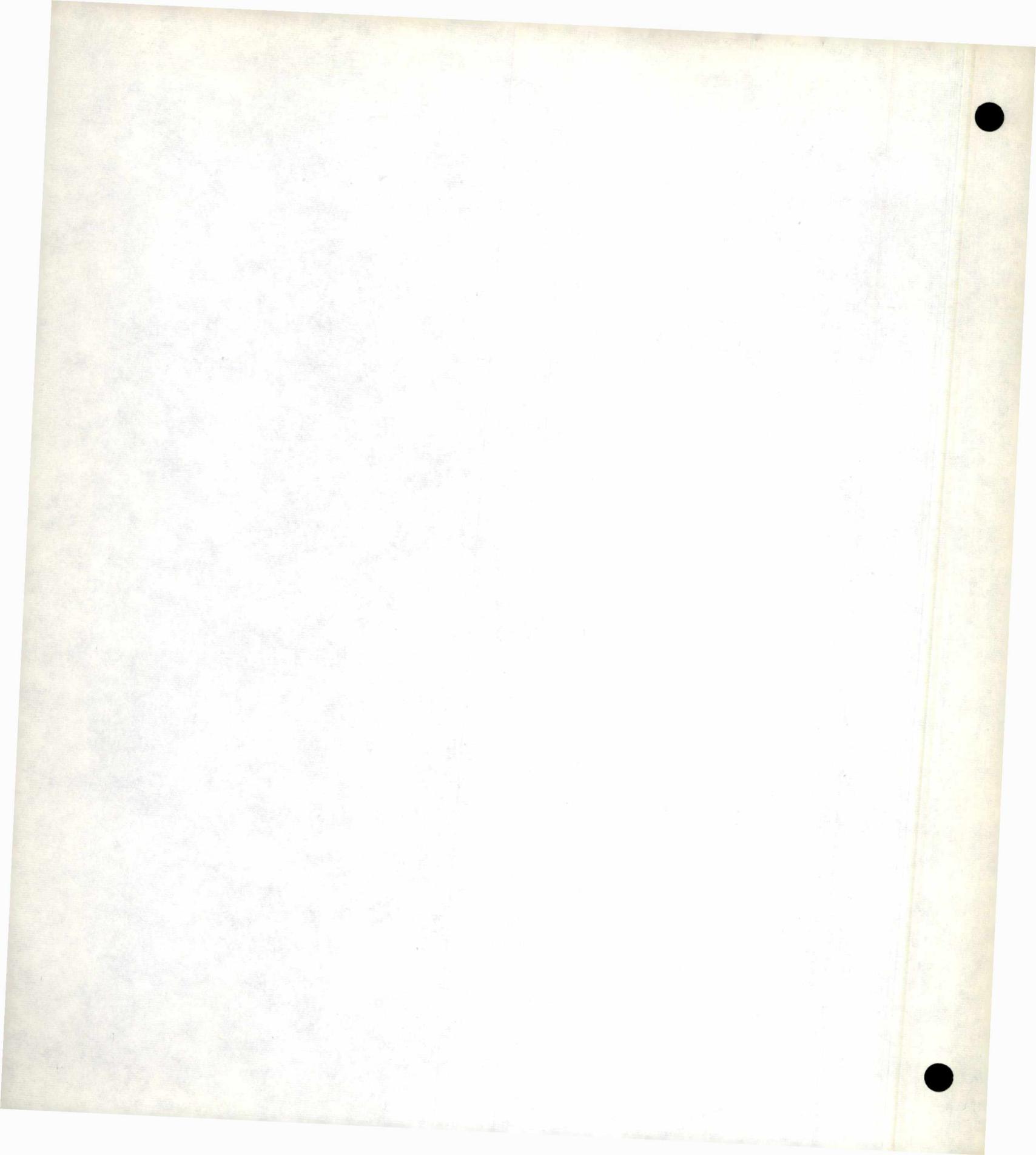
June 25, 1963

Mutual Aid - amount - Martin - pp. 236-37



NATO PRODUCTION SHARINGJuly 30, 1963

DDP - production sharing - Drury - pp. 260, 264-68, 280
Can.-Us - amounts - Drury - pp. 264-66, 268
NATO - amounts - Drury - pp. 266-68



NAVYJune 27, 1963

Destroyer escorts - sonar - helicopters for - Hellyer - pp. 13-14
 Anti-sub warfare - offense vs defence - Hellyer - p. 14
 Hydrofoil craft - Hellyer - p. 14
 Maritime a/c - Neptune - Argus - Hellyer - p. 14
 Re-consideration of frigate program - Hellyer - p. 19

July 2, 1963

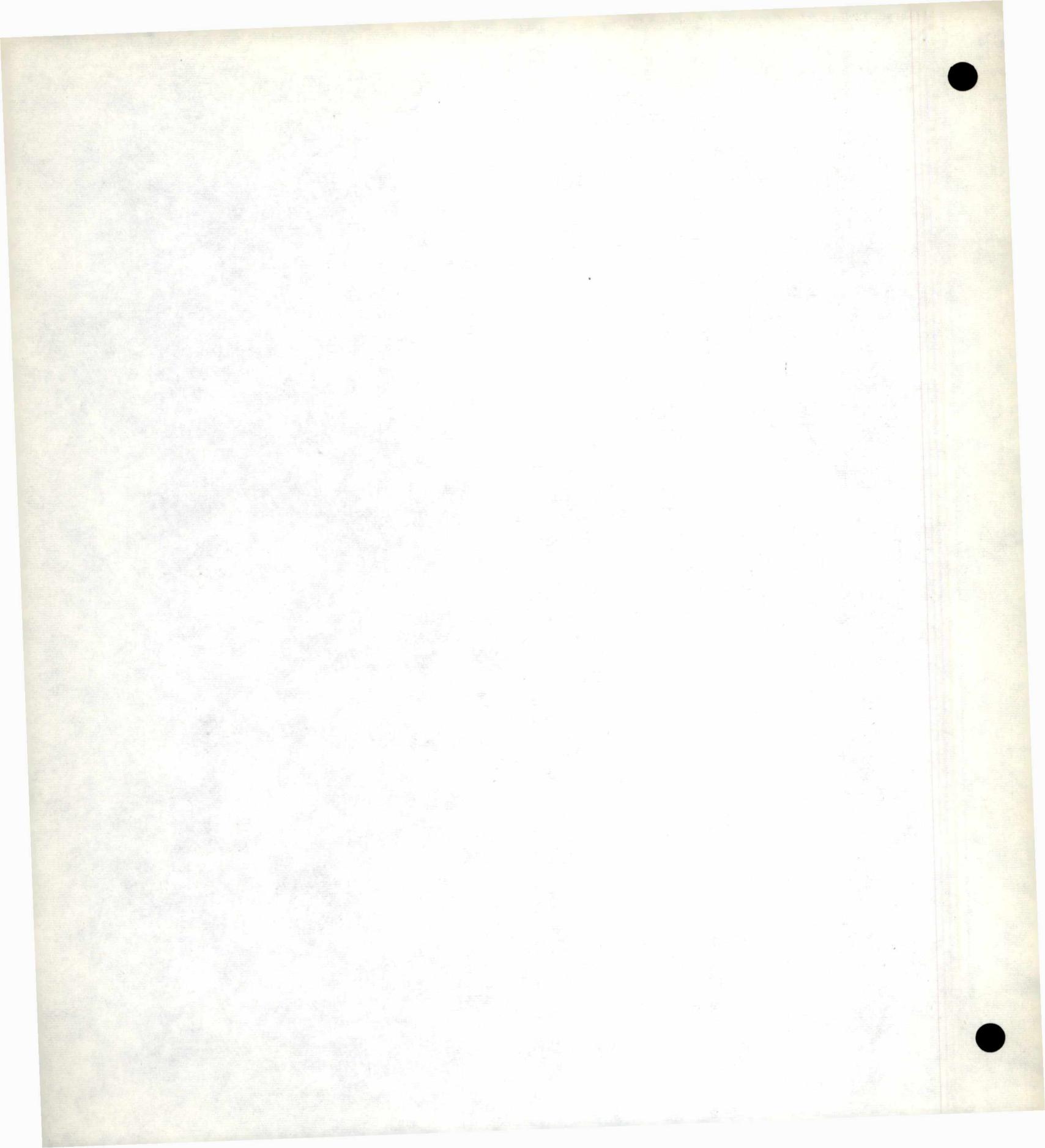
Nuclear weapons for Navy - McMillan, Hellyer - p. 53

July 4, 1963

Sabotaging Navy - Churchill - p. 74
 Frigate program - MacInnis, Hellyer, Lloyd - pp. 81-82

July 9, 1963

Comparative land & water masses of earth - CNS - p. 88
 Commerce & ships on sea - CNS - p. 88
 Purpose of - CNS - p. 89
 Role of - CNS - pp. 89-90
 Maritime Command - CNS - p. 89
 Under NATO - ships for - CNS - pp. 89, 90, 91
 Re Can.-Us arrangements - ships for - CNS - p. 89
 Anti-submarine warfare - CNS - pp. 89, 90, 100, 101, 105, 94, 97
 Re U.N. - CNS - p. 90
 Support of Army - CNS - p. 90
 Re sovereignty of Arctic - CNS - p. 90
 Operational tasks - CNS - p. 90
 Visits by RCN ships - CNS - p. 90
 Exercises with allied ships - CNS - p. 90
 Sonar - CNS - pp. 94, 97, 101
 Nuclear submarine threat - CNS - p. 97
 Logistic support responsibility - CNS - p. 104
 Organization of - CNS pp. 107-08
 Deployment of - CNS - p. 107
 Manpower - CNS - p. 109
 Expenditures - CNS - pp. 109-112
Ships & aircraft - CNS - pp. 91-104
 Destroyers and destroyer escorts - CNS - pp. 92-97
 Bonaventure - CNS - p. 92
 Anti-sub capability - CNS - pp. 97, 100, 101, 105
 Helicopters for - CNS - pp. 97, 101, 102
 Prestonian frigates - CNS - p. 97
 Submarines - CNS - pp. 97, 101, 104-05



July 9, 1963

Ships & aircraft

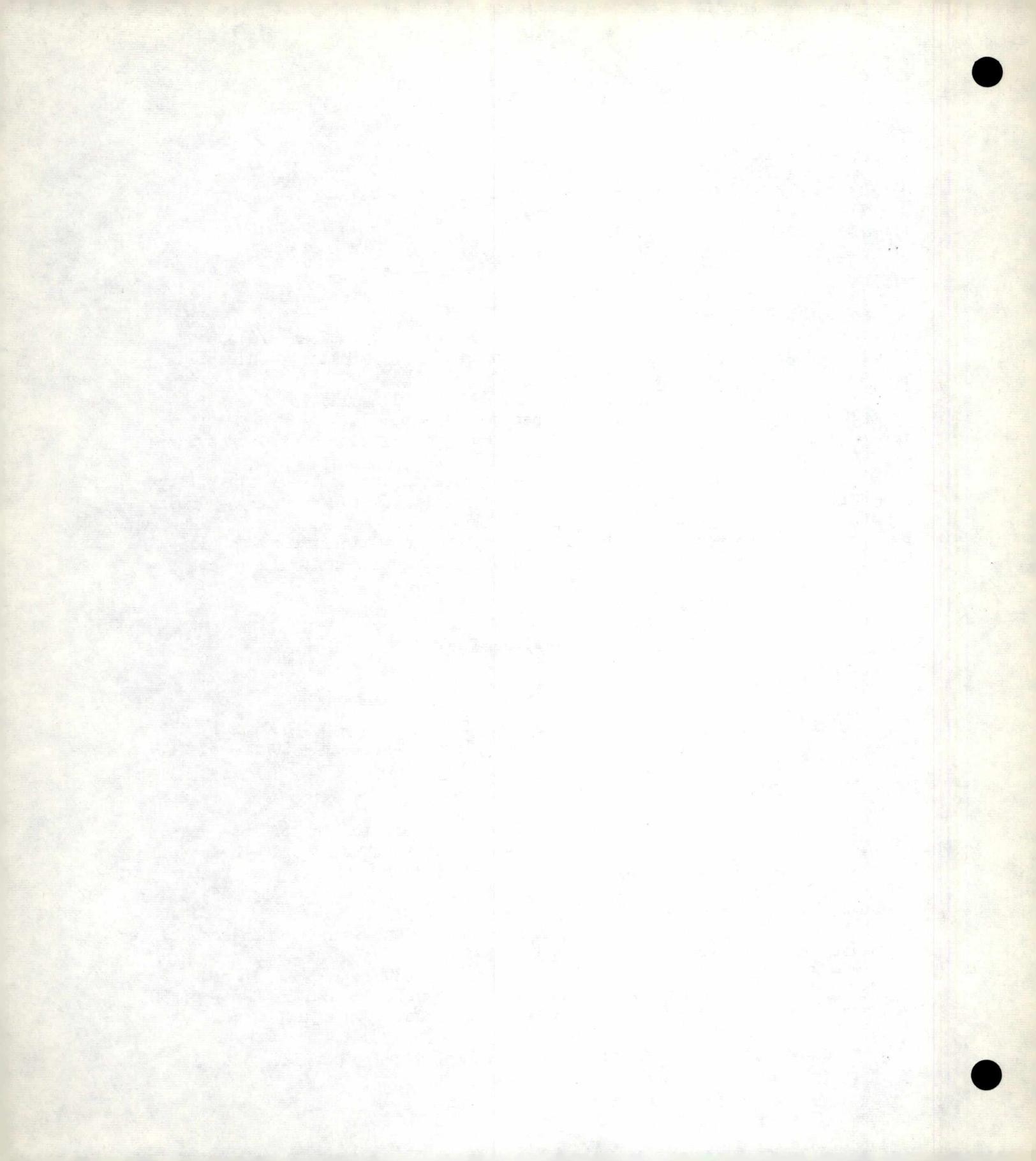
- Tracker (CS2F) aircraft - CNS - p. 101
- Maintenance repair & replenishment ships - CNS - p. 104
- Troop carrying capacity - CNS - pp. 92, 104, 105
- Research ship - CNS - p. 104
- Replacement program - CNS - pp. 104-107
 - Submarines - Oberon - acquisition - CNS - pp. 104-05
 - G.P. frigates - p. 105 - CNS
- Hydrofoil - CNS - p. 107
- Defence against ICBM & sub-launched missiles - use of nuclear a/s sub vs surface ship & maritime patrol a/c - proportions - Lambert, Churchill, Brewin, CNS, Hellyer - pp. 112-113, 120, 121-122
- Deployment of fleet - Matheson, Hellyer, CNS - p. 114, 115
- HMCS Labrador - change of role - Matheson, CNS - p. 114
- Operations in North - borrowing ice-breaker & utilization of HMCS Provider in - CNS, Matheson, Groos - pp. 114, 117
- Frigates not able to operate in North - proportion for anti-air capability - as replacement for Tribal destroyers - troop transport capacity - Groos, CNS, Martineau - pp. 115, 117, 118, 122
- Defence of Cdn. coastline - NATO & US arrangements - Winch, CNS - p. 116
- Hydrofoil craft - development & construction, operation endurance - costs - role - Lambert, Temple, CNS - pp. 119-120
- Hovercraft for a/c work - CNS - p. 122
- Sonar - US acceptance - CNS - pp. 120, 121
- Navy - various capabilities - Hellyer, Brewin - p. 120

July 18, 1963

- Defence research - Sonar - adoption by RCN & RN - CDRB - pp. 207, 208, 212
 - Intramural - basic & applied - anti-sub - CDRB - p. 211

October 8, 1963

- Navy - role of - under single Service Command - modification of integration of - need for new specialized ships - studies in this regard - hydrofoil craft - convoy role - decision re role & frigates - Winch, CNS, Lambert, Matheson, Lessard, Hahn, Churchill, Hellyer - pp. 318-19, 323, 325, 330-31, 332
- Speed of US nuclear submarine - Temple, CNS - p. 319
- Proposed frigates - speed of & comparison to US - submarine hunting capability - convoying - Temple, CNS, Hahn - pp. 319-20, 330
- Russia - nuclear powered subs - Temple, CNS - p. 320
- Need for ship replacement, freighters & troop carriers - Smith, CNS - p. 321
- Maritime patrol craft - function - RCAF abandonment of a sqdn. - anti-sub capability - Smith, CNS, Hellyer - pp. 321-22
- ICBM vs sub-BM threat - Matheson, CNS, Asselin, Winch - pp. 322, 324, 334

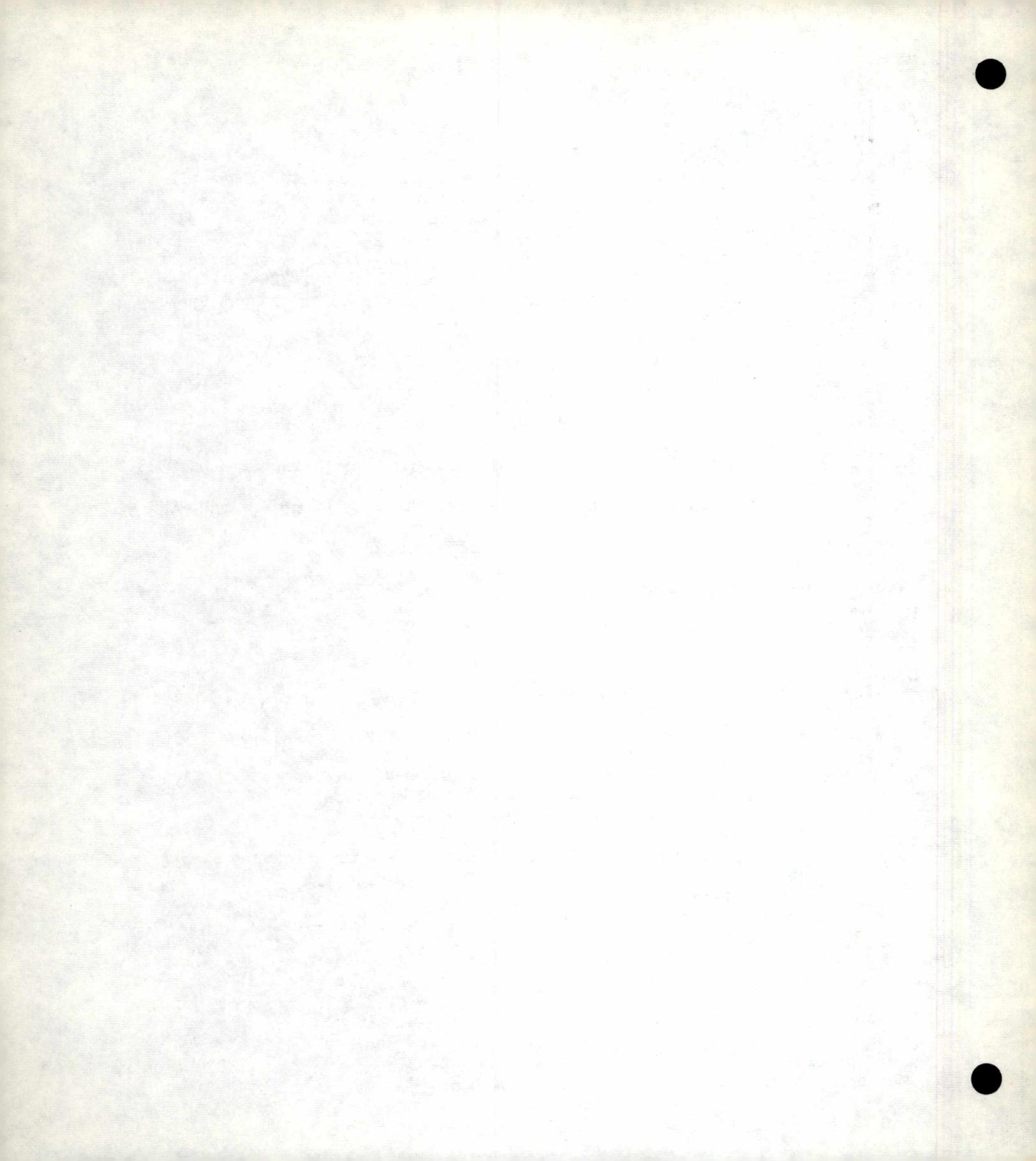


NAVY (Cont'd)October 8, 1963

- Cuba missile threat - Matheson, CNS - p. 322
 Detection & warning vs convoy role of Navy - Matheson, CNS, Asselin - pp. 322, 324
 Austerity frigate - reason for cancellation - Matheson, CNS - pp. 322-23
 Sub threat - future development against - Lessard, CNS, Asselin - pp. 323-24
 DE's - speed and A/S capability - Asselin, CNS - p. 324
 Shipbuilding - planning, design and lead time - life of ship - training of personnel for frigate program - Lloyd, Hellyer, CNS - pp. 325-28
 Sub location by Argus, Tracker & helicopters - Tracker being brought up-to-date - Hahn, CNS - pp. 328-29
 Aircraft carrier as troop carrier - Hahn, CNS - p. 329
 Oberon, etc. - training subs - Hahn, CNS - pp. 329, 331
 Threat of Russian surface ships - Hahn, CNS - pp. 329-30
 Need for ships, aircraft and helicopters - MacLean, CNS - p. 332
 Co-ordination RCAF-Navy anti-sub forces & division of responsibility - MacLean, CNS - pp. 332-33
 Cdn. & US development of hydrofoil - Smith, CNS, Matheson, Granger - pp. 323, 333, 334-35
 Sub training - Can.-US & UK arrangements - commitment to UK re - Winch, CNS - pp. 333-34
 Present naval construction - Fairweather, CNS - p. 334
 Sea power - composition of ships - Fairweather, CNS - p. 334
 Construction of merchant ships - Smith, CNS - pp. 335-36

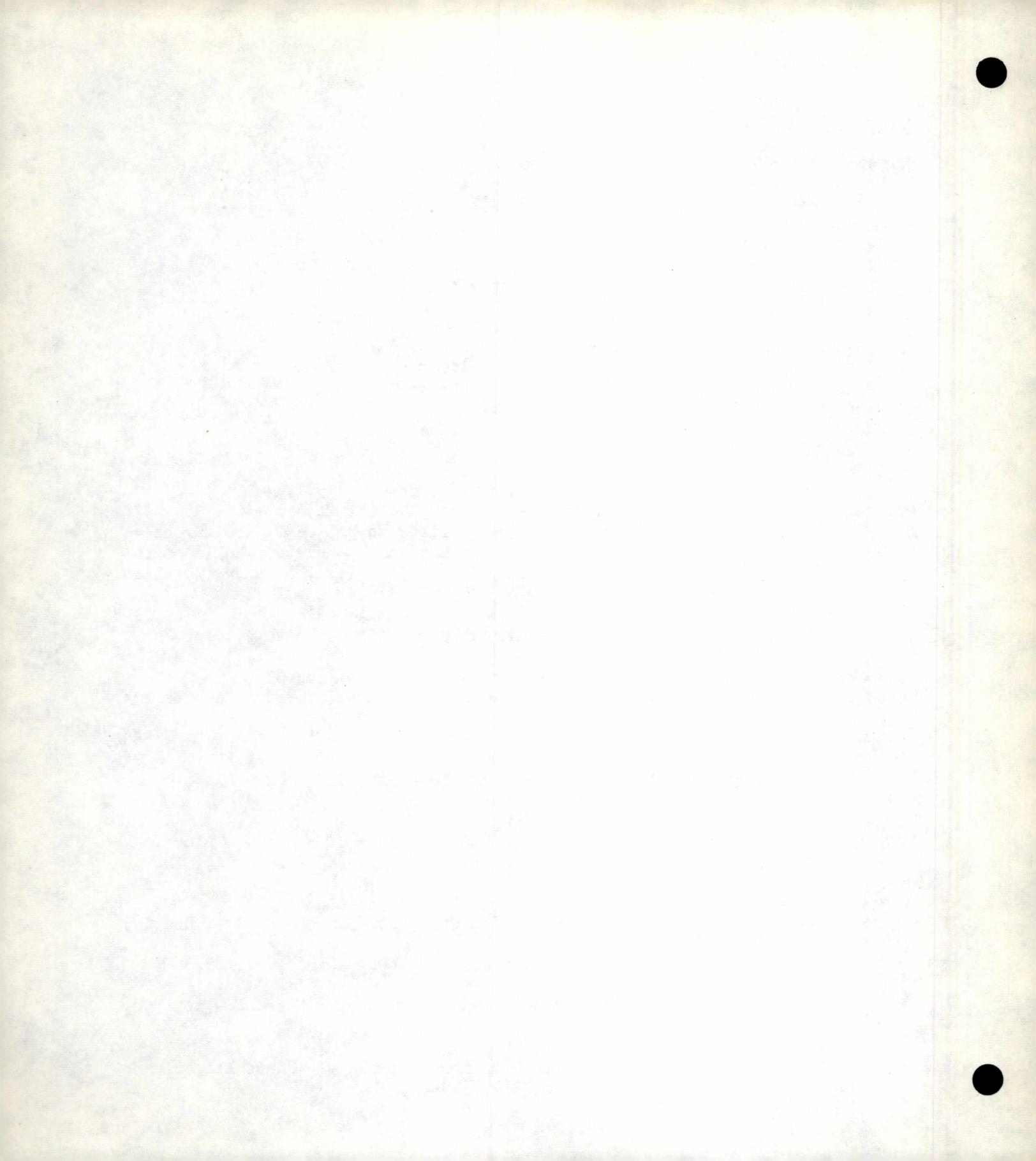
October 10, 1963Navy

- Fleet - Cmdre Plomer - pp. 342-44
 Physical state of - Cmdre Plomer - p. 342
 Bonaventure, Crusader & Sioux mishaps - Cmdre Plomer - p. 342
 Limitations of Tribal destroyers - Cmdre Plomer - pp. 342-43
 Limitations of destroyer escorts - Cmdre Plomer - p. 343
 Not ready during Cuban crisis - Cmdre Plomer - pp. 343, 349
 Considerations re of Naval Board - pp. 343-44
 Mainway Report - Cmdre Plomer - pp. 344, 346
 National Policy Co-ordinating Committee minutes - Cmdre Plomer - p. 344
 Comparison with other navies - Cmdre Plomer - pp. 344, 348
 Frigates too costly - Cmdre Plomer - p. 344
 Shortcomings of - Cmdre Plomer - pp. 344, 348
 Loss of ice-breaker - Cmdre Plomer - p. 344
 Organization & management of RCN - Cmdre Plomer - pp. 345-46
 Leadership & admin. poor - Cmdre Plomer - pp. 345, 348
 Flag Officer - law to himself - Cmdre Plomer - p. 345
 Min. & CNS held in ignorance - Cmdre Plomer - p. 345
 Dismissal of management & work study - Cmdre Plomer - p. 345
 Ship maintenance wasteful - Cmdre Plomer - p. 345
 Planned maintenance - Cmdre Plomer - p. 345



NAVY (Cont'd)October 10, 1963

- Personnel problems & leadership - Cmdre Plomer - pp. 346-47
- Senior officers leaving service - Cmdre Plomer - pp. 345-46
- Morale poor - Cmdre Plomer - pp. 346, 347, 348
- Service run by club - Cmdre Plomer - p. 346
- Promotion - Cmdre Plomer - pp. 346, 347, 349
- Executive officers not qualified to command - Cmdre Plomer - p. 346
- Improvement of standards - Cmdre Plomer - p. 346
- Lack of integrity at top - Cmdre Plomer - pp. 347, 348
- Promotion from ranks impossible - Cmdre Plomer - p. 347
- Housing shortage in Halifax - Cmdre Plomer - p. 347
- Shortage of qualified personnel - Cmdre Plomer - p. 347
- Mutinies result of frustration - Cmdre Plomer - p. 348
- Pre-war Navy limited - Cmdre Plomer - p. 348
- Shortcomings prior to WWII - Cmdre Plomer - p. 348
- Cdn. Admirals amateurs - Cmdre Plomer - p. 348
- Investigation of - Cmdre Plomer - p. 349
- Personnel use & cost re training - Matheson, Plomer - p. 350
- Protection of North with nuclear subs - Matheson, Smith, Plomer - pp. 350, 352
- Frigates - function, capability, costs - comparison to US, UK & NATO forces - Mackenzie Class vessel - speed - troop accommodation - purpose-helicopters for - Asselin, Matheson, Plomer, Smith, Churchill, Lloyd, Granger, Deachman - pp. 350-51-52, 359-60, 361, 365, 76-79, 80, 82-83, 84, 85-86-87
- Mainy Report - summary - mutinies - Matheson, Plomer, MacRae - pp. 351, 381-82
- Construction of subs, need - for training of Navy & RCAF - Smith, Plomer, Asselin - pp. 352, 386
- Ship design & construction problems - Smith, Plomer - pp. 352-53
- Operational deficinecy - no inquiries re - MacInnis, Brewin, Plomer, Patterson - pp. 353-54, 365, 366, 368-69
- Appointments of Commodore Plomer - Lloyd, Brewin, Plomer, Winch - pp. 353, 355-56, 361-62
- Promotions & grievances - poor morale - comparison with USN & UK - Lloyd, Brewin, Plomer, Fairweather, Hahn, MacInnis - pp. 354, 363, 367-68, 369, 370, 374, 375
- Poor leadership at top - surgery re & promotion - chain of command - Lloyd, McMillan, Granger, Fairweather, Brewin, Plomer - pp. 355, 363, 364, 372, 373, 374-75
- Helicopters - Brewin, Plomer, Asselin - pp. 355, 384, 386
- Retired officers - names - re substantiation of shortcomings - MacRae, Brewin, Plomer - pp. 355, 382
- Technical deficiencies - at time of Cuban crisis, etc. - Winch, Plomer, Churchill - pp. 356-57-58, 359
- Shortage of technical staff - Fairweather, Winch, Plomer, Patterson - pp. 357, 364, 365-66
- Sonar defects - Winch, Plomer - p. 357
- Utilization & role of subs & helicopters on merchant ships - Churchill, Plomer, Lloyd, Smith, Asselin - pp. 357-58, 360, 380-81, 384

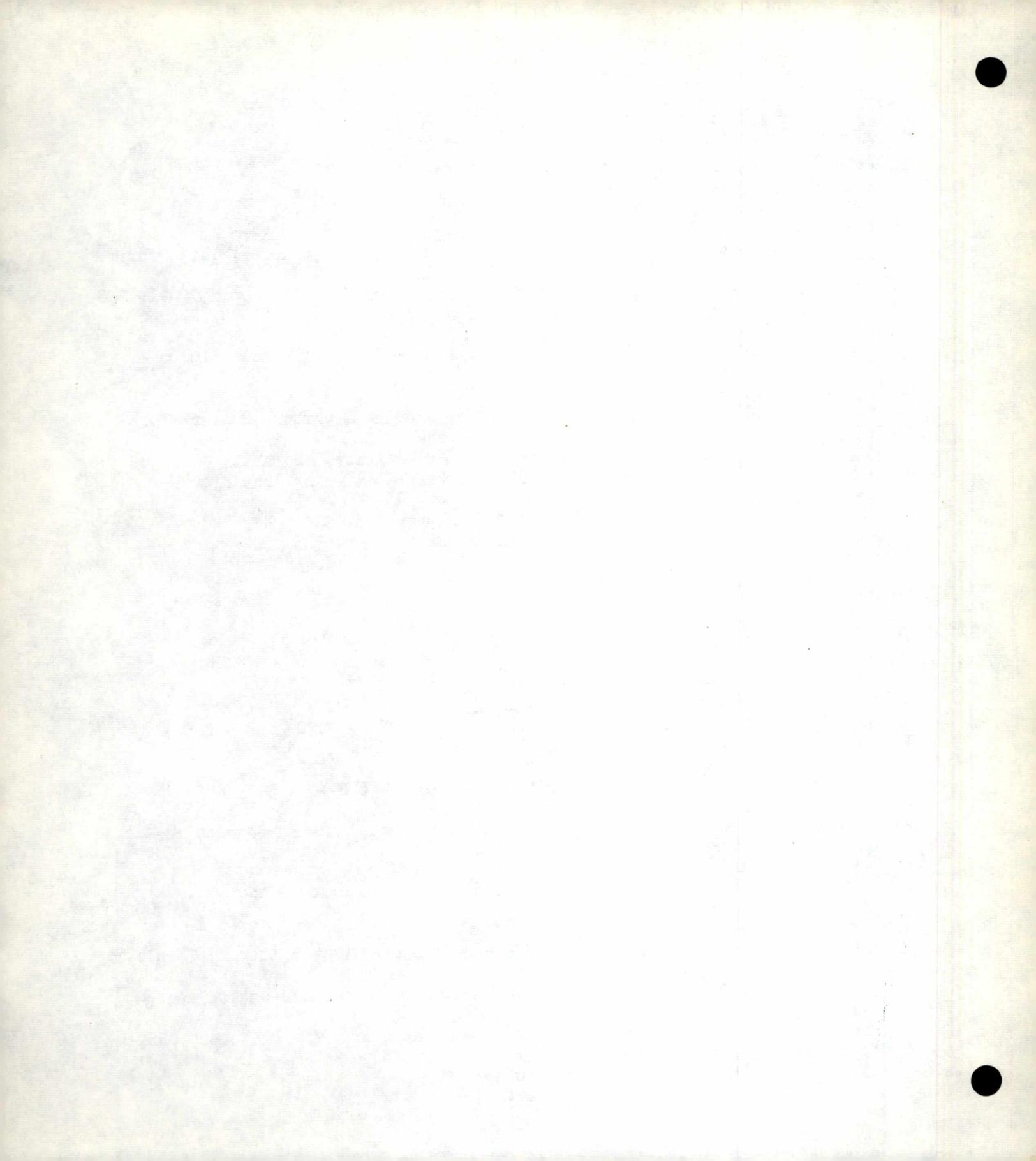


NAVY (Cont'd)October 10, 1963

- Low morale due to shortage of housing at Halifax - Lloyd, Plomer - p. 362
 Naval Board - composition - liaison with Min.-civilian appointment to -
 tabling minutes of - Fairweather, Plomer, Winch - pp. 363-64, 370
 Fleet maintenance - Flag Officer responsibility - burnt-out boilers, etc. -
 work study group re - lack of money re - Winch, Granger, Plomer, Patterson,
 McMillan - pp. 364, 365, 366, 371-73, 381, 384
 Air defence for fleet - guided missiles - Winch, Plomer, Smith - pp. 370-71, 380
 Cmdre Plomer's departure from Navy - investigation of - Lloyd, Winch, Plomer -
 pp. 372, 375-76
 Responsibility of Captain & Exec. Officer on ship - Granger, Winch, Plomer -
 pp. 372, 381
 Air arm efficient - McMillan, Plomer - p. 373
 Cdn. Services Colleges - value - officer recruitment - Matheson, Plomer - p. 380
 Training & need for reserves - Matheson, Plomer - p. 380
 Comparison of Cdn. to US & NATO ship performance - Plomer, Churchill - p. 383
 Convoy transportation - atomic war versus air transport - Asselin, Plomer,
 Smith - pp. 384-85, 386
 Subs - China, Russia, Egypt, Cuba - Asselin, Plomer - p. 385
 Aircraft carriers with helicopters - Asselin, Plomer - p. 386
 Offer of CNR boat - Matheson, Plomer, Deachman, Winch - pp. 386-87

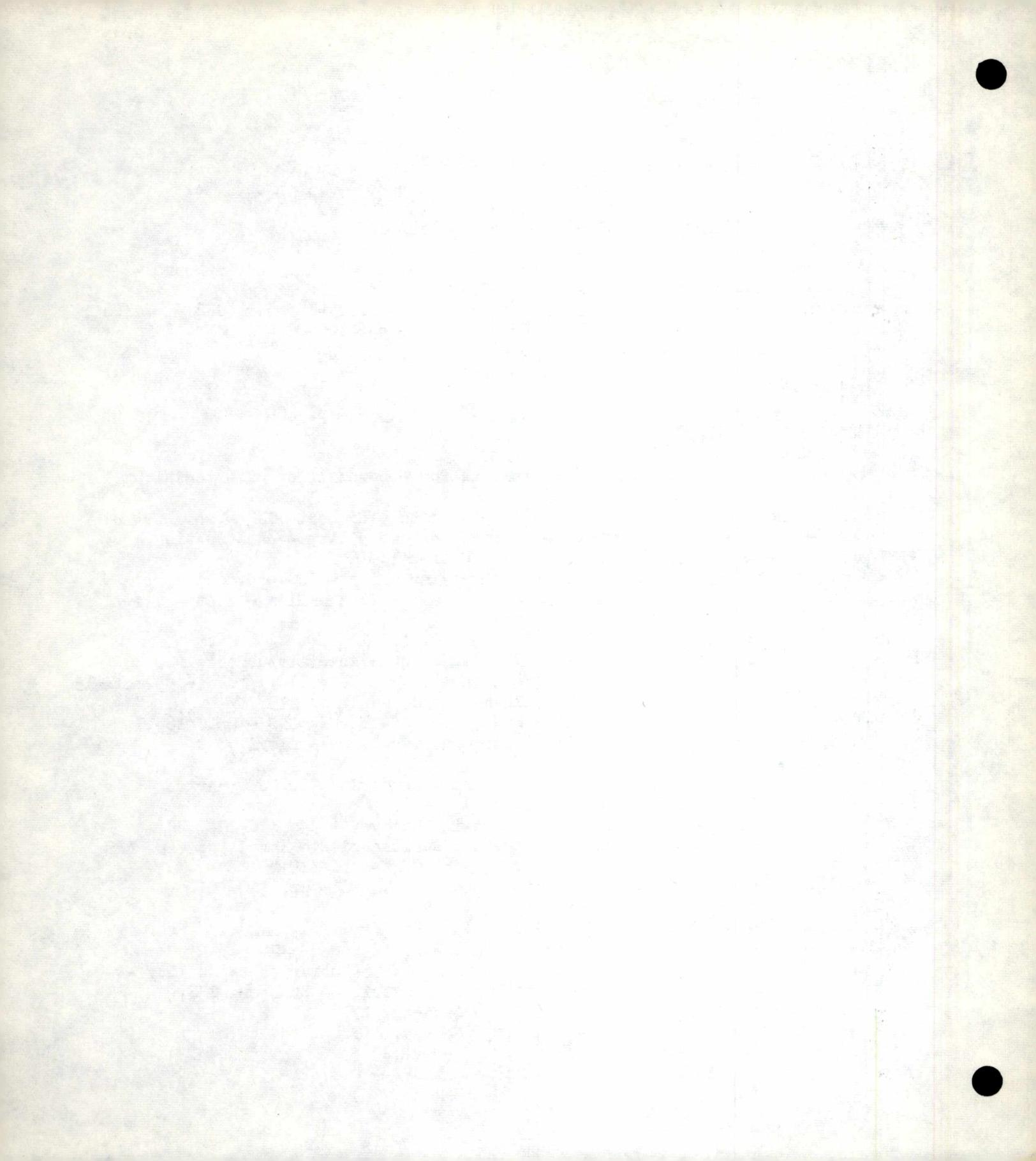
October 15, 1963

- Comparative performance of Navy - CNS - p. 391
 Chain of responsibility - CNS - pp. 391-92
 Promotion policy - CNS - p. 392
 Pre-War senior officers - leadership - p. 393
 State of RCN ships - Crusader, Crescent, Mackenzie DE's, 3.70 guns - CNS -
 pp. 393-94
 Ship maintenance - material failure - design deficiency - CNS - pp. 394-96
 Operation availability of ships during Cuban crisis - CNS - p. 397, 405
 Manpower strengths & complement of fleet - CNS - p. 398
 RCN Personnel Structure Committee - function & composition - subsequent re-
 organization of personnel structure - CNS - p. 398
 Mainy Report - subsequent reforms - CNS - pp. 397, 399
 Ad Hoc Committee on naval objectives - composition & function - CNS -
 pp. 398-99, 401, 411,
 Frigates - costs - CNS, Temple - p. 399
 Crusader & Crescent - construction & life - maintenance re - Matheson, Temple,
 MacInnis - pp. 400, 404-05
 Mainy Report - recommendations & implementation re pay & allowances, etc. -
 Matheson, CNS - p. 400
 Ships - replacement need & NATO commitments - maintenance re - Matheson, CNS,
 MacInnis - pp. 400-01, 404-05
 Expenditures re - Matheson, CNS - pp. 401-02



NAVY (Cont'd)October 15, 1963

- Testing & development of new equipment - MacLean, CNS - p. 402
- Promotions - effect re attendance at defence colleges - selection, etc. -
MacLean, CNS, MacInnis - pp. 402, 403-04
- Retirement of officers - ages, resignations - MacLean, CNS - pp. 402-03
- CDR Plomer's criticisms - studies & investigation of - Groos, CNS - p. 403
- Fleet - emergency readiness of & efficiency - consideration by Naval Board -
CNS, MacInnis, Brewin - pp. 405-06, 407-08
- Bonaventure - feed pumps out of action for NATO exercise - Brewin, CNS - p. 406.
- Tribal destroyers - versatility of - Brewin, CNS - pp. 406-07
- Iroquois - boiler damage - Brewin, CNS - p. 407
- Ship deficiencies lists - Brewin, CNS - p. 407
- Naval uniforms - CNS - p. 408
- Boards of Inquiry - court martials, etc. - Brewin, CNS - p. 408
- Commendations re CDR Plomer - CNS, Brewin - p. 408
- Officer grievances - Brewin, CNS, MacInnis - p. 409
- Fleet - anti-aircraft defence for - missiles for - composition of - decisions
re - Brewin, CNS - pp. 409, 411-12
- Submarine construction - need for training - costs - Lambert, CNS - pp. 409-10
- Frigates - costs - helicopters for - air defence capability - construction
intervals - Lambert, CNS, Lloyd - pp. 410-11- 415-16
- MacKenzie class DE's - specialized anti-submarine ships - CNS - p. 411
- Development of 3.70 AA gun - 5.54 gun & surface-to-air missiles - cost - use
by RN & USN - MacRae, CNS, Winch - pp. 412-13
- Strengths - officers and men - MacRae, CNS - pp. 413-14
- Ad Hoc Cttee recommendations - versatility of fleet - general purpose
frigates - anti-submarine role - A/A capability, etc. - Lloyd, CNS - pp. 414-15
- Frigate suitability for locating missiles - Lloyd, CNS - p. 415
- Experience & qualifications of senior RCN officers - Lloyd, CNS - pp. 416-17
- CDR Plomer's representations to Min. & subsequent release - Lloyd, CNS,
MacInnis - pp. 417-18
- Fleet readiness - deficiencies on Bonaventure - comparison to NATO navies -
McMillan, CNS, Churchill - pp. 418, 421
- Morale of personnel - McMillan, CNS, Churchill, Hellyer - pp. 418-19, 422
- Cruising turbines on St. Laurent destroyers - deficiencies - Hahn, CNS - p. 419
- Bow damage to Bonaventure & Magnificent - Hahn, CNS - pp. 419-20
- Ship deficiencies - during Cuban crisis - Churchill, CNS - pp. 420-421
- Sea time of fleet - Churchill, CNS - pp. 420, 422
- NATO exercises - participation in - Churchill, CNS - pp. 421, 422
- Saskatchewan - boiler defects - Deachman, CNS - p. 422
- GP frigates - troop transport - helicopters for - anti-submarine capability -
operation with carrier force - troop landing capacity - Granger, CNS,
Matheson, Deachman, Brewin - pp. 422-23-24-25-26, 431
- Ship maintenance responsibility - Granger, CNS - p. 423
- Drydock facilities - shortage - Granger, CNS - p. 423
- Naval role in NATO & UN commitments - Matheson, CNS - pp. 424-25



NAVY (Cont'd)October 15, 1963

- Increased utilization of helicopters - Lambert, CNS - p. 426
 Management studies - maintenance studies - costs & savings - Lambert, CNS - pp. 426-27
 Merchant troop carriers - fitted with helicopters - Smith, CNS, MacInnis - p. 428
 Surface ships vs submarines re anti-submarine role - MacInnis, CNS - p. 429
 Communications - ship/air versus submarine/air - CNS - p. 429
 Anti-submarine role & conventional war - convoy & supplies - control of sea communications - protection of Cdn. shores & shipping - Brewin, CNS - pp. 429-30
 Destroyer escorts - Cadillacs - Brewin, CNS - p. 431
 Destroyer escorts & submarine attack - Brewin, CNS - p. 431
 Anti-submarine role as specialized task of NATO - Brewin, CNS - pp. 431-32

October 17, 1963

- Protest against press report that Cttee dismissed CDR Plomer's charges of naval inefficiency, etc. - Brewin - p. 437
 CDR Plomer's dismissal from Navy - statement by former Min. of ND - Patterson - p. 438
 Surface ships vs submarines - exploration of sub surface sea travel - Simonds, Matheson - pp. 443-44

October 22, 1963

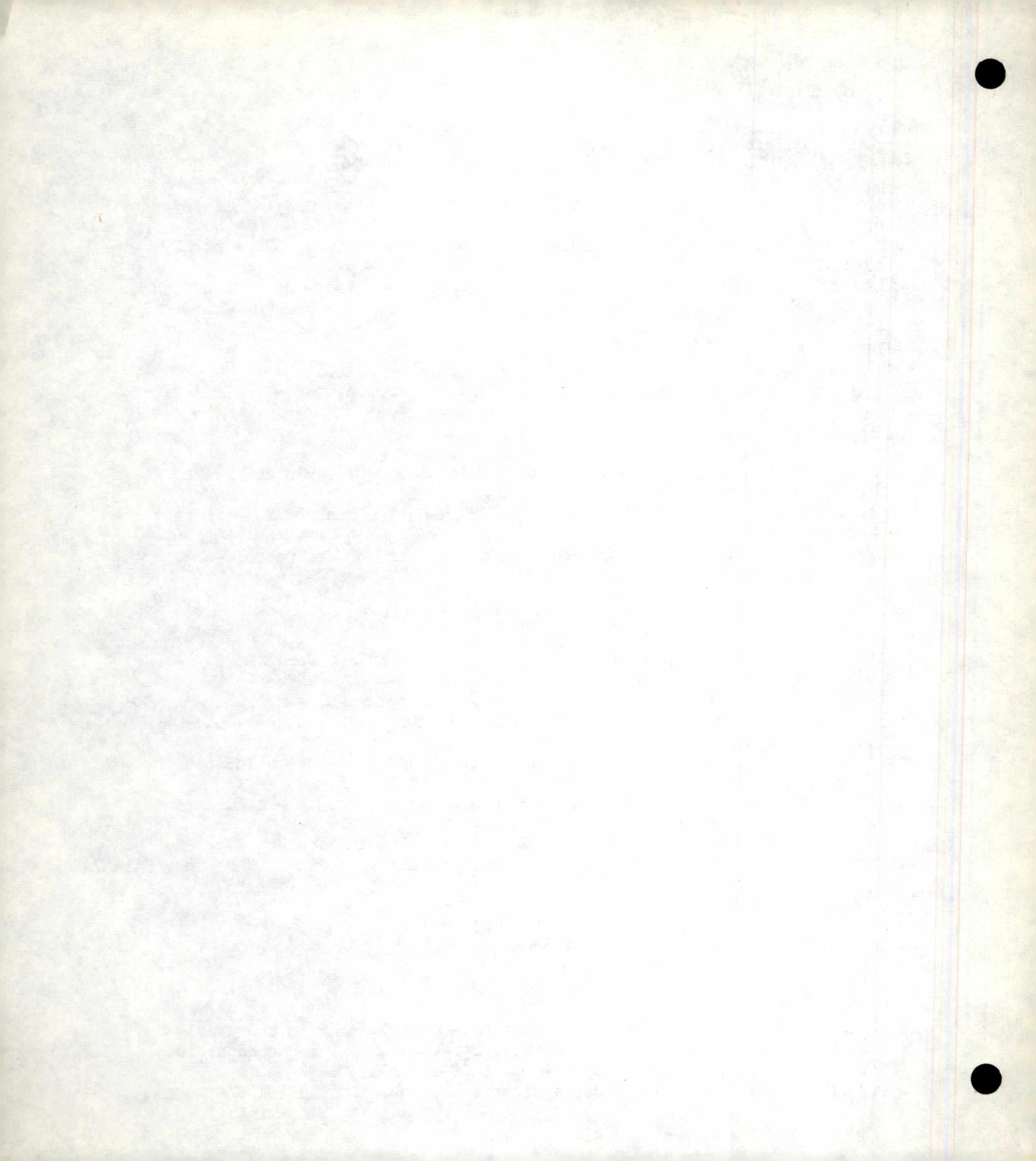
- Maritime defence - anti-sub development - ambitions of Air Force & Navy - Foulkes - pp. 495, 496
 Anti-nuclear submarine defence requirement - development of - Foulkes - p. 506
 Anti-submarine operations in Atlantic, Pacific & Arctic - Foulkes - p. 507
 Nuclear depth charges - Temple, Foulkes - p. 519
 Supply of forces by sea not visualized - NATO shipping board - allocation by - Smith, Foulkes - p. 536
 Tracker - carrier anti-submarine defence - missile sub threat - studies and research re - Brewin, Foulkes - pp. 538-40
 Dealing with submarine threat adds to deterrent - Brewin, Foulkes - p. 540
 Average time of fleet at sea - letter & accompanying appendix by CNS - pp. 544-47

October 24, 1963

- Nuclear depth charges - Temple, Gellner - p. 564

October 28, 1963

- Review of future defence policy - studies re - policy ready in new year - examination of Western strategy - special review of naval programs, ie., anti-submarine warfare - Hellyer - pp. 4109-10, 4113, 14
 Submarine missile threat - defence against - MacLean - pp. 4115-16



NAVY (Cont'd)October 23, 1963

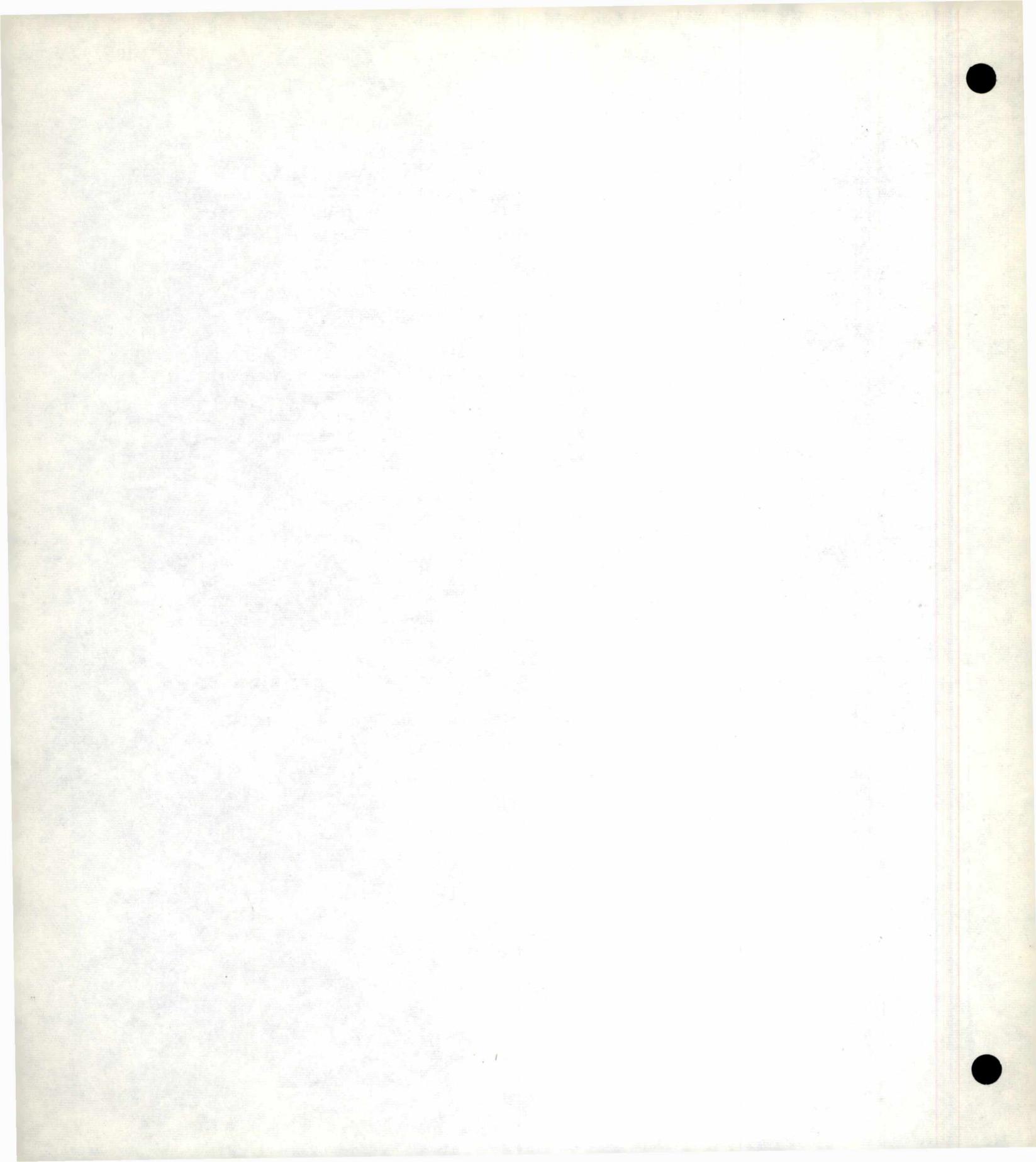
Design merchant ships for military convoy use - UK & US - Smith, CGS - p. 599
 Unification of ordnance & supply services - procurement of FN rifle - Air
 Force procurement of helicopters - food, etc. - co-op with Navy & Air
 Force - common supply service - Winch, CGS, Deachman - pp. 616-17

October 31, 1963

Nuclear missile-firing submarine threat - defence against difficult - MacRae,
 CAS - p. 638.
 ICBM, ballistic missile submarine & bomber threats - degree of - statement
 by US Def. Sec. re - hardening of sites - accuracy of - defence against -
 Churchill, CAS, MacInnis, Lambert, Hahn, Granger, Smith - pp. 639-42
 US tests re nuclear vs conventional anti-submarine arms - McMillan, CAS - p. 648
 Aerial recce re submarines - research re - nuclear depth charges for -
 Granger, CAS - p. 652

November 5, 1963

Review of policy & commitments - Navy requirements - procurement equipment
 programs - cancellation of frigate program - need of info. by Cttee. re -
 sharing of info. in camera - Winch, Hellyer, Brewin - pp. 665-67, 671, 672, 678
 Acquisition of Oberon subs from U.K. - for anti-sub training - subs on loan -
 used as anti-sub barriers - available to NATO - Hellyer - pp. 665-66
 Anti-submarine studies - re future - Hellyer - p. 667
 Cost of new subs - Lessard, Hellyer, Smith - pp. 684, 687
 Future research re anti-submarine capability - greater role by aircraft -
 Lessard, Hellyer, Smith - pp. 684, 686, 687
 Capability re Russian submarine threat - Lessard, Hellyer - pp. 684-85
 Air defence re naval force - Smith, Hellyer - pp. 686-87



NAVY SHIPBUILDINGJune 27, 1963

Re-consideration of frigate program - Hellyer - p. 19

July 2, 1963

Frigate program - review of - Lloyd, Hellyer - pp. 48-49

July 9, 1963

Navy - replacement program - CNS - pp. 104-07
 submarines - Oberon - acquisition - CNS - pp. 104-05
 GP frigates - CNS - p. 105
 Sub construction in Canada - Croos, CNS - p. 118

July 30, 1963

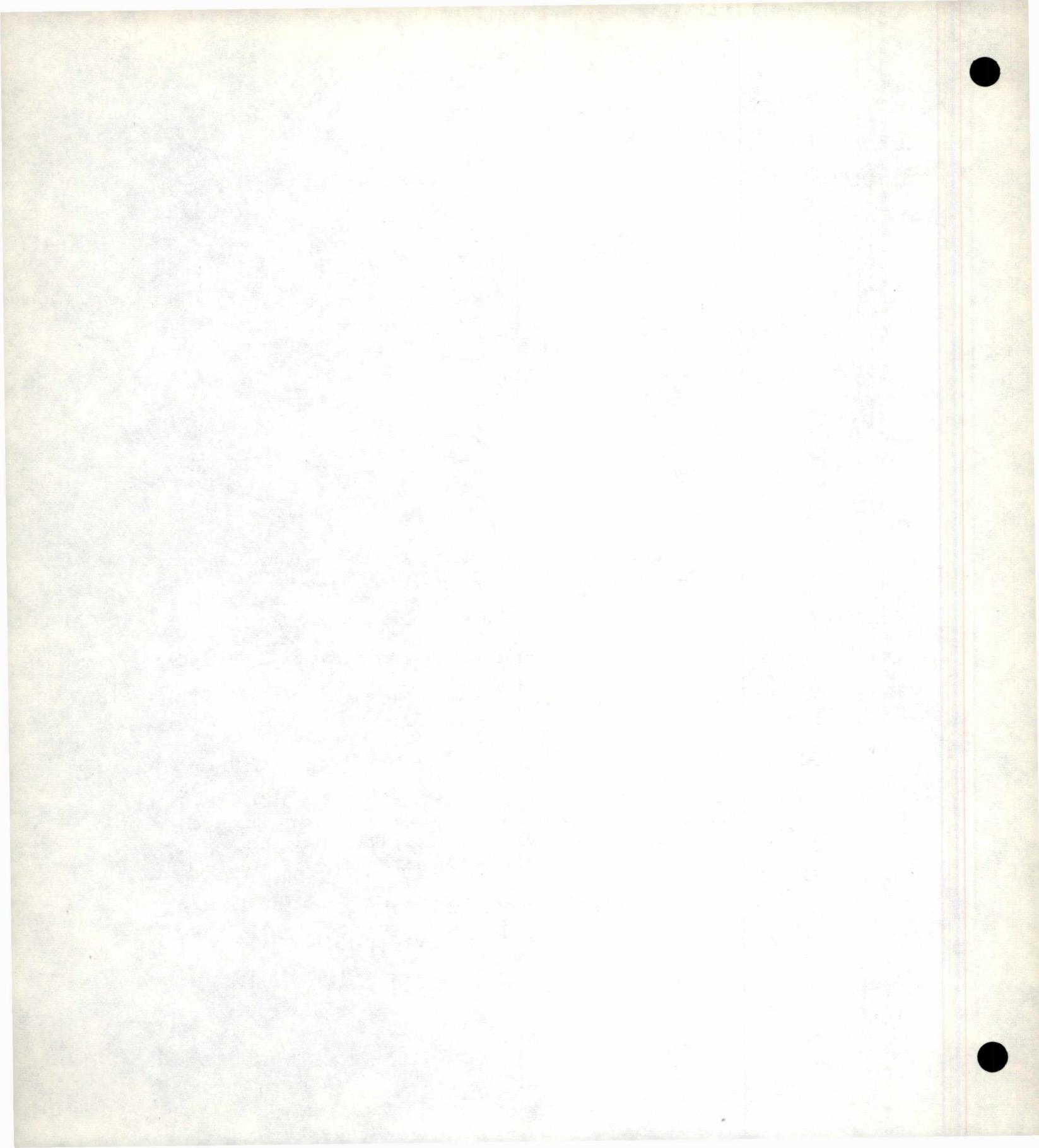
DDP - shipbuilding program - Drury - pp. 262, 272-73, 274

October 8, 1963

Hydrofoil craft - convoy role - decision re role & frigates - CNS, Matheson,
 Lessard, Hahn, Churchill, Hellyer - pp. 323, 325, 330-31, 332
 Proposed frigates - speed of & comparison to U.S. - submarine hunting
 capability - convoying - Temple, CNS, Hahn - pp. 319-20, 330
 Austerity frigate - reason for cancellation - Matheson, CNS - pp. 322-23
 Shipbuilding - planning, design & lead time - life of ship - Lloyd, Hellyer,
 CNS - pp. 325-28
 Present naval construction - Fairweather, CNS - p. 334
 Construction of merchant ships - Smith, CNS - pp. 335-36

October 10, 1963

Frigates - function & capability - costs - comparison to U.S., U.K. & NATO
 forces & Mackenzie Class vessel - speed - troop accommodation - purpose -
 helicopters for - Asselin, Matheson, Plomer, Smith, Churchill, Lloyd,
 Granger, Deachman - pp. 350-51, 352, 359-60, 361, 365, 376-79, 380,
 382-83, 384, 385-86-87
 Construction of subs - need - for training of Navy & RCAF - Smith, Plomer,
 Asselin - pp. 352, 386
 Ship design & construction problems - Smith, Plomer - pp. 352-53



NAVY SHIPBUILDING - (Cont'd)October 15, 1963

Ship maintenance - material failure - design deficiency - CNS - pp. 394-96
 Frigates - costs - CNS, Temple - p. 399
 Crusader & Crescent - construction & life - maintenance re - Matheson,
 Temple, MacInnis - pp. 400, 404-05
 Ships - replacement need and NATO commitments - maintenance system -
 Matheson, CNS, MacInnis - pp. 400-01, 404-05
 Submarine construction - need for training - costs - Lambert, CNS - pp. 409-10
 Frigates - costs - helicopters for - air defence capability - construction
 intervals - Lambert, CNS, Lloyd - pp. 410-11, 415-16

October 17, 1963

Development of submarine cargo or supply ships - Lloyd, Simonds - pp. 448-49
 Submarine cargo transport - no future for surface convoys - Granger, Simonds -
 p. 463
 Defence research - greater emphasis - examination of submarine cargo carrier -
 co-ordination of - Deachman, Simonds - pp. 469-70

October 22, 1963

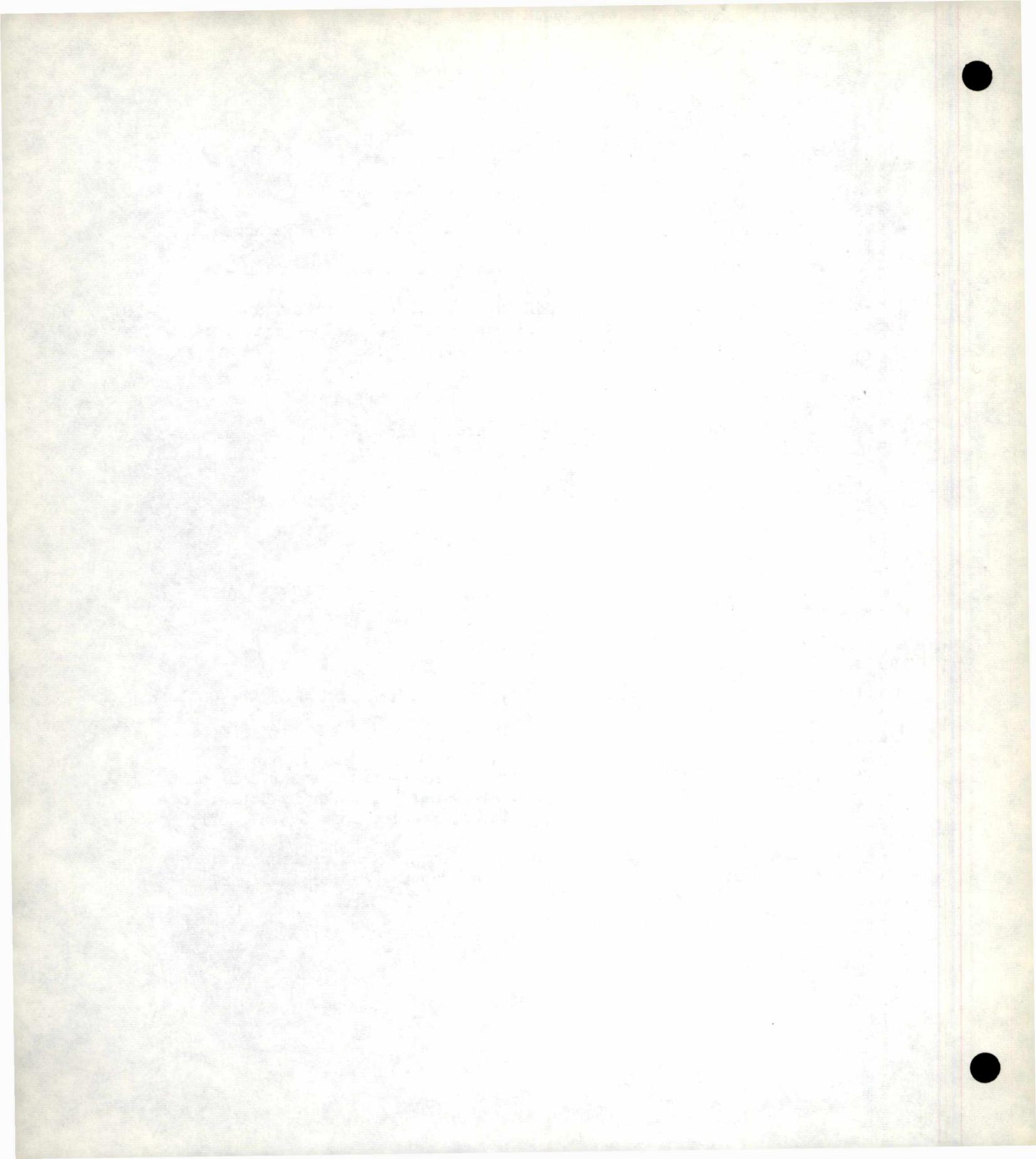
Hydrofoil development - use of - Foulkes, McMillan - pp. 495-96, 528
 Missile submarines - costs - Foulkes - p. 496

October 29, 1963

Design merchant ships for military convoy use - U.K. & U.S. - Smith, CGS - p. 599

November 5, 1963

Review of policy & commitments - Navy requirements - procurement equipment
 programs - cancellation of frigate program - need of info. by Cttee. re -
 sharing of info. in camera - Winch, Hellyer, Brewin - pp. 665-67, 671,
 672, 673
 Future construction of submarines in Canada & acquisition of Oberons -
 production-sharing agreement re CL89 recce. drone - Laniel, Hellyer,
 MacInnis - pp. 685, 687-88.

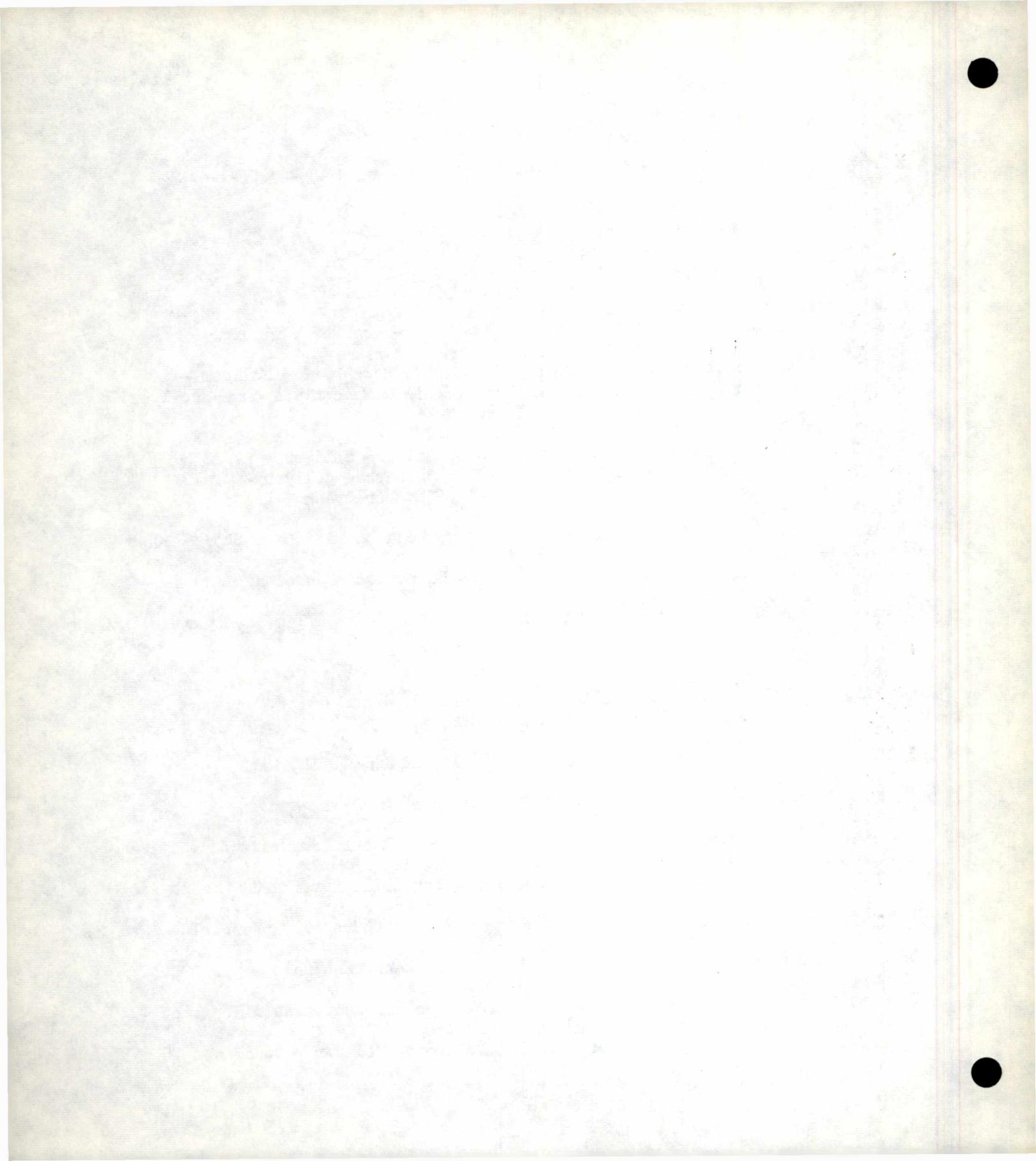


NUCLEAR WARFAREJune 27, 1963

- 1 Air Div. - role change - drop of bombs on targets - Hellyer - pp. 14, 15
- Reduction of sqdns - Hellyer - p. 14
- Atomic devices - use by - Hellyer - pp. 14, 15
- Nuclear policy - adoption of - Hellyer - pp. 14-15, 16
- Can. commitments - Hellyer - pp. 14, 15, 16
- Inter-allied nuclear force - Hellyer - p. 15
- Tactical weapons - need & use - Hellyer - pp. 15-16
- Deterrence - Hellyer - p. 16
- Honest John - use of - not member of nuclear club - nuclear bombs for
1 Air Div. - Hellyer - p. 15
- Bomarc armed with atomic warhead to be effective & cook bomb - Hellyer - p. 17
- CF-101B - carry both conventional & nuclear (Genie & Falcon weapons - Hellyer -
p. 17
- Can.-US negotiations re nuclear defensive weapons - Hellyer - p. 17
- CF-101 use only high explosive warheads for training - Hellyer - p. 18
- Arrangements re nuclear weapons use by CF-101 & Bomarc - Hellyer - p. 18
- Safety devices to prevent explosion in event of bomber crash - Brewin,
Hellyer - p. 21
- Cooking of nuclear bomb & difference between warhead carried by bomber & ICBM -
Winch, Hellyer, Churchill - pp. 22, 23
- NATO nations having bilateral agreements with US re use of nuclear weapons -
Baldwin, Hellyer - p. 24
- Effectiveness of Bomarc greater with nuclear warhead - McMillan, Hellyer - p. 24

July 2, 1963

- Cooking of nuclear warhead - Hellyer, Dr. Field, Lambert, Smith, Granger,
Churchill, Matheson, Winch, Hahn, MacLean - pp. 30, 31, 33, 34, 35, 36, 38,
40, 41, 42
- Fallout - effects of & dangers from - Dr. Field, Winch, Smith, Hahn, -
pp. 30, 31, 39
- Fallout & anti-ICBM's - Winch, Dr. Field, McMillan, Hellyer - pp. 32-33, 38
- Upper atmosphere - height of - Smith, Dr. Field - pp. 33-34
- Non-explosion of nuclear warhead on ground impact - & handling hazards -
Dr. Field, McMillan, MacInnis - pp. 31, 34-35, 39, 43
- Cooking of nuclear warhead by Falcon missile - Churchill, Dr. Field, Smith -
pp. 35, 36, 39
- Protecting nuclear warheads against cooking - Smith, Churchill, Dr. Field,
MacInnis - pp. 39, 40, 41
- Cooking nuclear warhead by Bomarc - Smith, Field, Hahn, MacInnis - pp. 39, 40
- Fission, fusion & chain reaction - Dr. Field - p. 42
- Conventional vs nuclear equipped CF-101 & relative effectiveness & location -
Lambert, Hellyer, Temple - p. 43, 46-47 - Deachman
- CF-101 equipped to carry Genie or Falcon - Deachman, Hellyer - p. 47



NUCLEAR WARFARE (Cont'd)July 2, 1963

Membership in nuclear club & custody & control of weapons - Lessard, Hellyer, Brewin, Winch - pp. 51-52
 Nuclear weapons for Navy - McMillan, Hellyer - p. 53

July 4, 1963

U.S. authority re use of nuclear weapons - Hellyer, Lambert - p. 72
 Decision re nuclear weapons - Churchill - p. 74
 Nuclear weapons at battalion level - Deachman, CCOS, Winch - p. 79
 Nuclear sqdns. in France - CCOS, MacLean - p. 65
 Conventional & nuclear arms - balance, review of - flexible response - provocation - CCOS, Brewin, Winch, Hellyer, MacLean, MacInnis - pp. 67, 68, 70-72, 74, 79, 80-81
 Tactical nuclear weapons - control - use - stockpiling - decision re acquisition - CCOS, Winch, Hellyer, Brewin, Lambert, Deachman - pp. 68, 69, 72, 78, 79
 Fire power - increase by nuclear weapons - CCOS, Deachman, Brewin - p. 79

July 9, 1963

Cooking nuclear bomb - University of Alta. Scientist's brief - contradiction - calling of Dr. Scott - Brewin - p. 123

July 11, 1963

Calling of Dr. Scott - Brewin - p. 123
 Army - survival operations - nuclear detonation reporting - CGS - p. 145

July 16, 1963

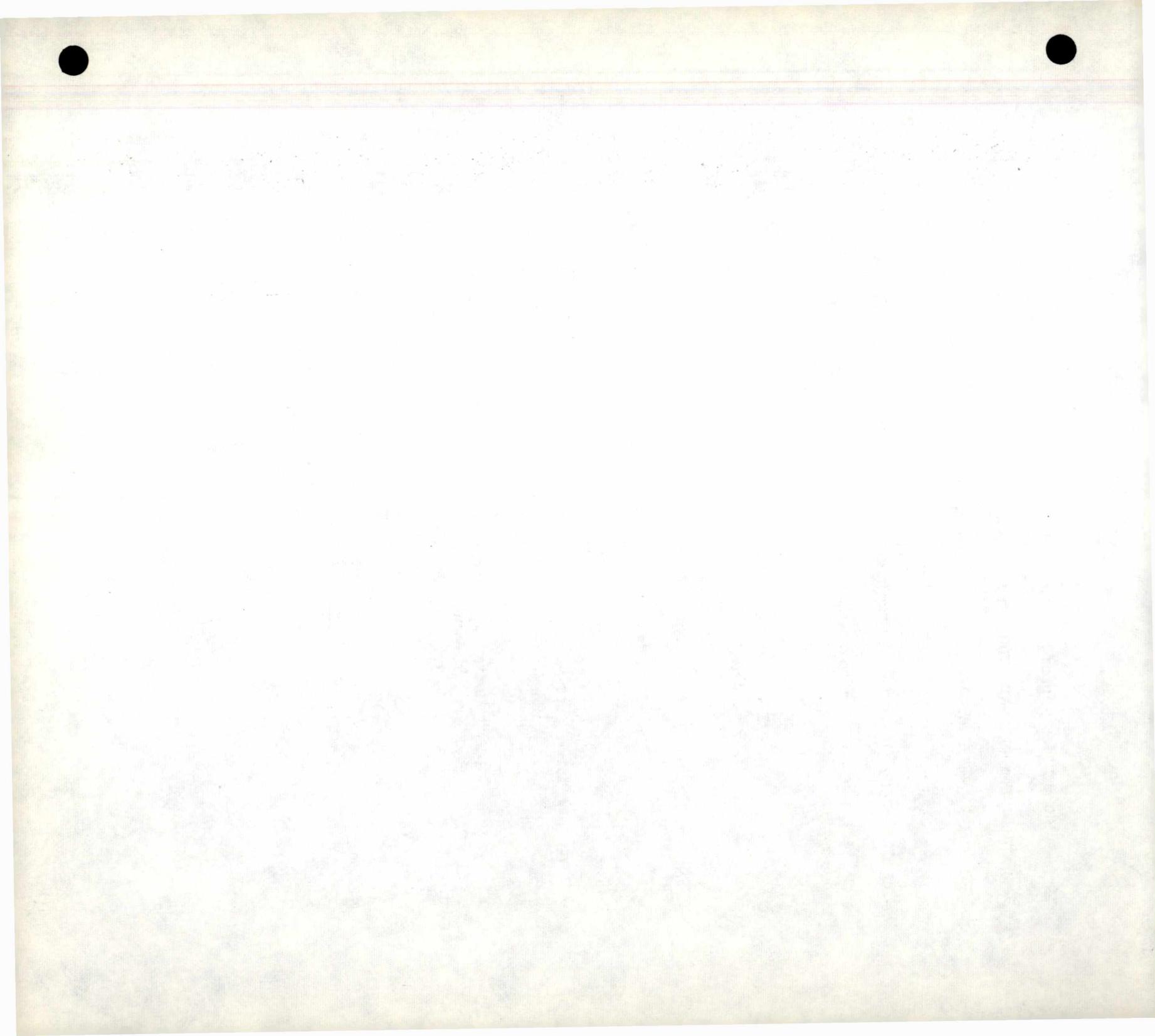
1 Air Division - nuclear weapons - small yield - CAS - pp. 176, 177

July 18, 1963

DRB - classified info from US made available on "Need to Know Basis", i.e., nuclear weapons, cooking effect, etc. - Winch, CDRB - pp. 223-24
 Request for copies of "Nuclear Weapons Effect Booklet" - Brewin, CDRB - p. 224

July 25, 1963

Deterrence being accepted by nuclear powers - Martin - p. 232
 Acquisition of nuclear weapons - Martin - pp. 237, 241
 Future & present commitments re nuclear role & NATO nuclear role - Brewin, MacLean, Martin - pp. 247-49
 Re-negotiation & review of nuclear role - Patterson, Lloyd, Martin - pp. 250-51

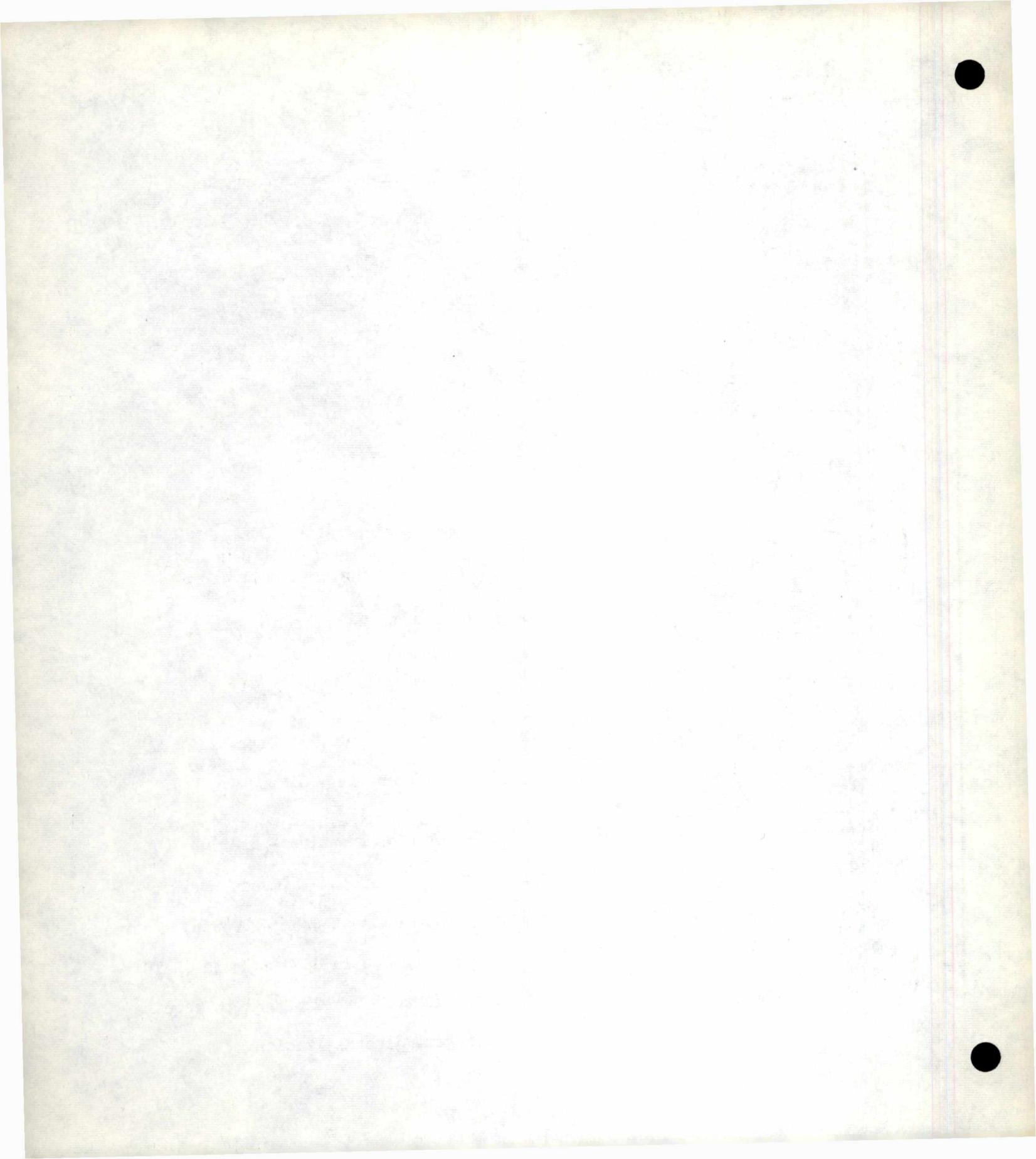


NUCLEAR WARFARE (Cont'd)August 1, 1963

Effectiveness of nuclear armed Bomarc or CF-101 against bomber carrying hydrogen bombs - cooking vs triggering -
 Dr. Scott - pp. 287-92, 293, 294, 295, 297, 298, 300, 303, 305, 308, 310, 311, 312
 Dr. Keyston - pp. 292, 293, 295, 298, 299, 301, 302, 305-06, 309, 311, 312-13
 Matheson - pp. 293, 294, 295, 301, 307
 Dr. Trainor - pp. 294, 296, 301, 307, 310
 Fairweather - p. 295
 Churchill - pp. 295, 301, 302, 304, 305, 309
 Groos - pp. 296-97
 Temple - pp. 297-98, 305
 Dr. Sample - pp. 298, 299, 306, 312, 313
 Lambert - pp. 298, 299, 312, 313
 Dr. Field - pp. 299-300, 308-09
 Smith - p. 300
 Hahn - pp. 301, 302, 307
 Asselin - pp. 302, 303-04, 305, 311
 Baldwin - p. 304
 Lloyd - p. 304
 Brewin - pp. 305, 306, 307
 Deachman - p. 308
 MacLean - pp. 310-11
 McMillan - pp. 311-12
 General appraisal of steps taken by DND re conclusion on nuclear cooking, etc. - Lloyd - p. 314

October 17, 1963

Adoption of strategic nuclear weapons - Winch, Simonds - p. 442
 Canada not to adopt nuclear weapons - Simonds, Winch, Martineau - pp. 442, 443
 Tactical nuclear weapons - escalation to strategic - Simonds - pp. 445-46
 Nuclear threat - Initiative with enemy - Bomarc vulnerable - Simonds, MacLean - pp. 446-47, 474
 Canadian role re prevention of nuclear war - Lessard, Simonds - pp. 449-450
 Acquisition of nuclear weapons - marginal value - too expensive - Brewin, Simonds - p. 452
 Bomber advantage over fighter - threat with nuclear weapons - Simonds, Brewin - pp. 453-54
 Use of tactical nuclear weapons by Field Commander - Honest John - Brewin, Simonds - p. 454
 Escalation into a nuclear war - nuclear weapons no place in defence role (NATO) - Hahn, Simonds - p. 458
 Protest against headline in Citizen indicating Simonds' urged Canada to acquire its own H-bomb - Simonds, Smith - p. 459
 Major war without use of nuclear weapons - Granger, Simonds, MacInnis, Patterson - pp. 462, 475-76



NUCLEAR WARFARE (Cont'd)October 17, 1963

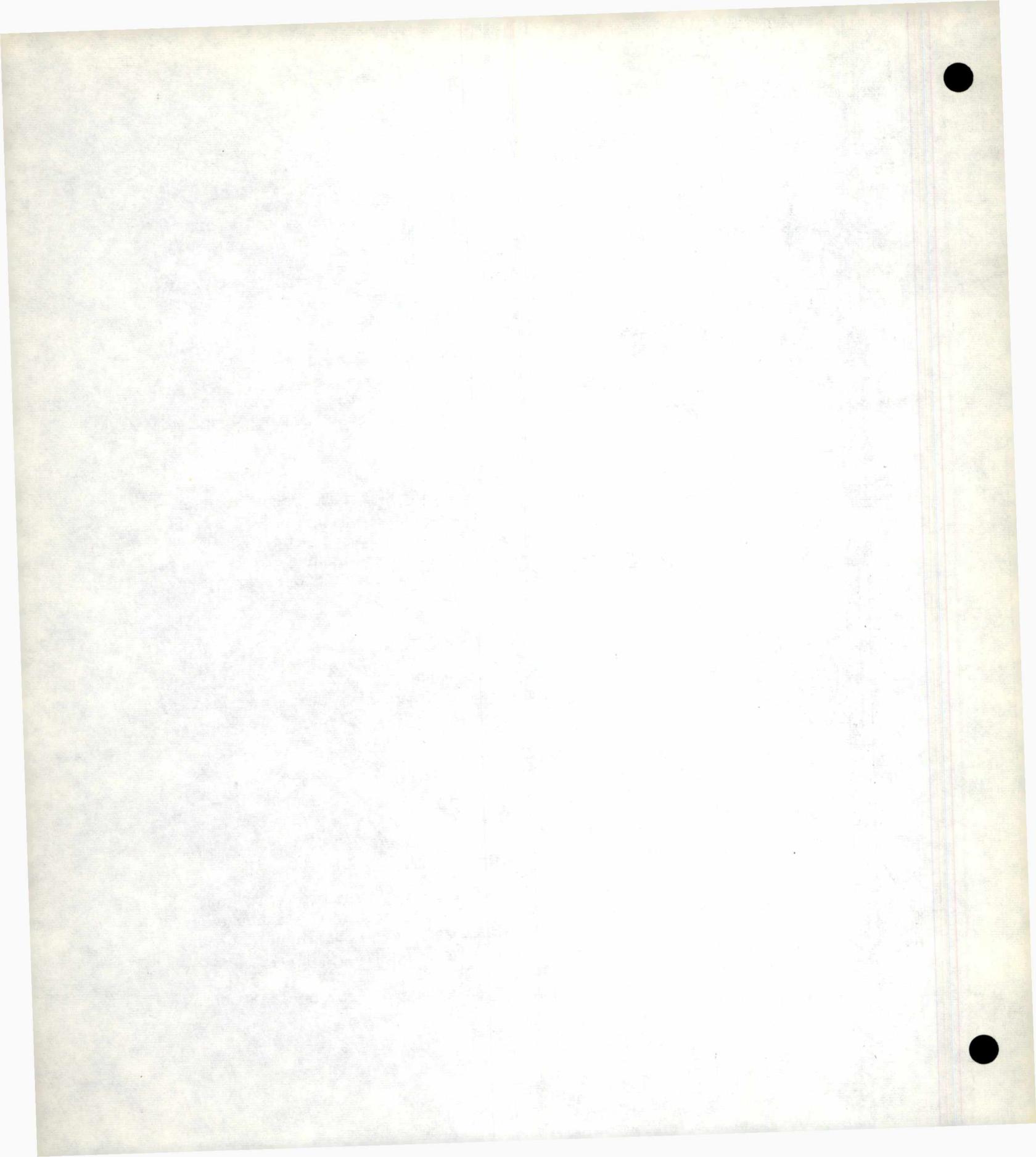
- Nuclear weapons - Pentagon influence - Granger, Simonds - p. 463
 Europe can't be defended by nuclear arms - defence by conventional means -
 potential power of Russia - defence of Europe necessity for defence of
 North America - McMillan, Simonds - pp. 466-67
 Deterrent - Canadian role re - conventional role for NATO - phasing out of
 nuclear role for Canada - McLean, Simonds, Matheson - pp. 474-76
 Chinese threat - nuclear weapons in future - MacLean, Simonds - p. 476
 ICBM's - US and Russian strengths re - Temple, Simonds - pp. 477-78
 Nuclear versus conventional forces - use of - Smith, Simonds - p. 478
 Nuclear warheads at US bases in Nfld. - Winch, Simonds - p. 479
 Paper for Defence Committee by Mr. D.B. Scott, etc. of the University of
 Alta. re recent appearance before Cttee on nuclear bomb cooking - pp. 483-90

October 22, 1963

- 1 Air Div. - aircraft of - additional lift capacity - strike recce role of -
 non use of French air Bases - nuclear weapons for - pp. 496, 497, 499-500
 Nuclear war vs conventional war - Brewin, MacInnis, Foulkes - pp. 513-15
 Control over nuclear arms in Europe - US position re - Lessard, Foulkes - p. 516
 Bde. - armed with Honest John - reason for - if withdrawn into reserve, no
 need for nuclear weapons - McMillan, Foulkes - p. 528

October 24, 1963

- Defence policy objectives - military doctrine - nuclear policy & commitments -
 deterrents, etc. - re NATO - Gellner, Lambert, Asselin, McMillan, Temple,
 Groos, Churchill, Patterson, Deachman, MacRae - pp. 552-60, 564, 568-71,
 573-74-76, 584, 586
 NATO use of nuclear weapons - Gellner, Asselin - pp. 557-58
 Unlikely Canada to be involved in nuclear war - Gellner - p. 560
 Canada should not participate in multilateral nuclear force - cost of -
 Gellner, Baldwin, Patterson - pp. 563-64, 575
 Nuclear weapons & anti-missile defence - Gellner - pp. 564-65
 Nuclear depth charges - Temple, Gellner - p. 564
 US control of nuclear weapons - Gellner - pp. 565-66
 Conventional war impossible - German & French view interested in absolute
 deterrence - re Greece & Turkey - Russia & US would only fight nuclear war -
 stockpiling of nuclear weapons to over-kill capacity - Gellner, MacLean,
 Lambert, Deachman, Granger, Brewin - pp. 566, 567-68, 575, 577, 580-86
 NATO contributions by non-nuclear powers - Churchill, Gellner - p. 586
 Cttee to submit interim report urging gov't to withdraw from nuclear commit-
 ments - Churchill - p. 587



NUCLEAR WARFARE (Cont'd)October 29, 1963

Honest John - authority to use - technical agreements being worked out with
 US - function of - efficiency of Bde. re - Lessard, CGS, MacLean -
 pp. 600, 618, 619

Bde. - use of nuclear weapons - Lambert, CGS - p. 603

Escalation into nuclear war - services not to use a strategic nuclear weapon -
 Baldwin, CGS - pp. 613-14

October 31, 1963

1 Air Div. - strike role - a/c configured for - use of air-to-surface missiles -
 strike role exclusively nuclear - possible use of nuclear weapons on purely
 military targets - Lambert, CAS - pp. 632-35

Limited use of nuclear weapons - escalation of - constraint re use - Lambert,
 CAS - pp. 634-35

1 Air Div. - movement of sqdns. out of France for arming - increasing normal
 alert to reinforced alert - Churchill, CAS - pp. 642-43

Deterrent - value of tactical forces in Europe & strategic forces in US & UK
 re escalation into nuclear war - Churchill, CAS - pp. 644-45

US tests re nuclear vs conventional anti-submarine arms - McMillan, CAS -
 p. 648

November 5, 1963

Acquisition of nuclear warheads for effectiveness of weapons - Canada-U.S.
 agreement re - for CF-101, Honest John, CF-104 & Bomarc - storage space for -
 Hellyer - p. 665

Canada-U.S. agreement re nuclear weapons - request for tabling of - motion -
 difficulties re for Cttee. - possible future limitations re - time element -
 technical nature of - control, custody & storage of warheads - cost-sharing re -
 concurrence of NATO countries - Winch, Hellyer, Lambert, Brewin, Smith,
 Lessard, Patterson, Hahn, Laniel, Churchill, Martineau, MacLean, MacInnis -
 pp. 668-69, 670-71, 672-73, 673-74, 678-79-80

Storage for nuclear weapons - Martineau, Hellyer, Hahn - pp. 669-670

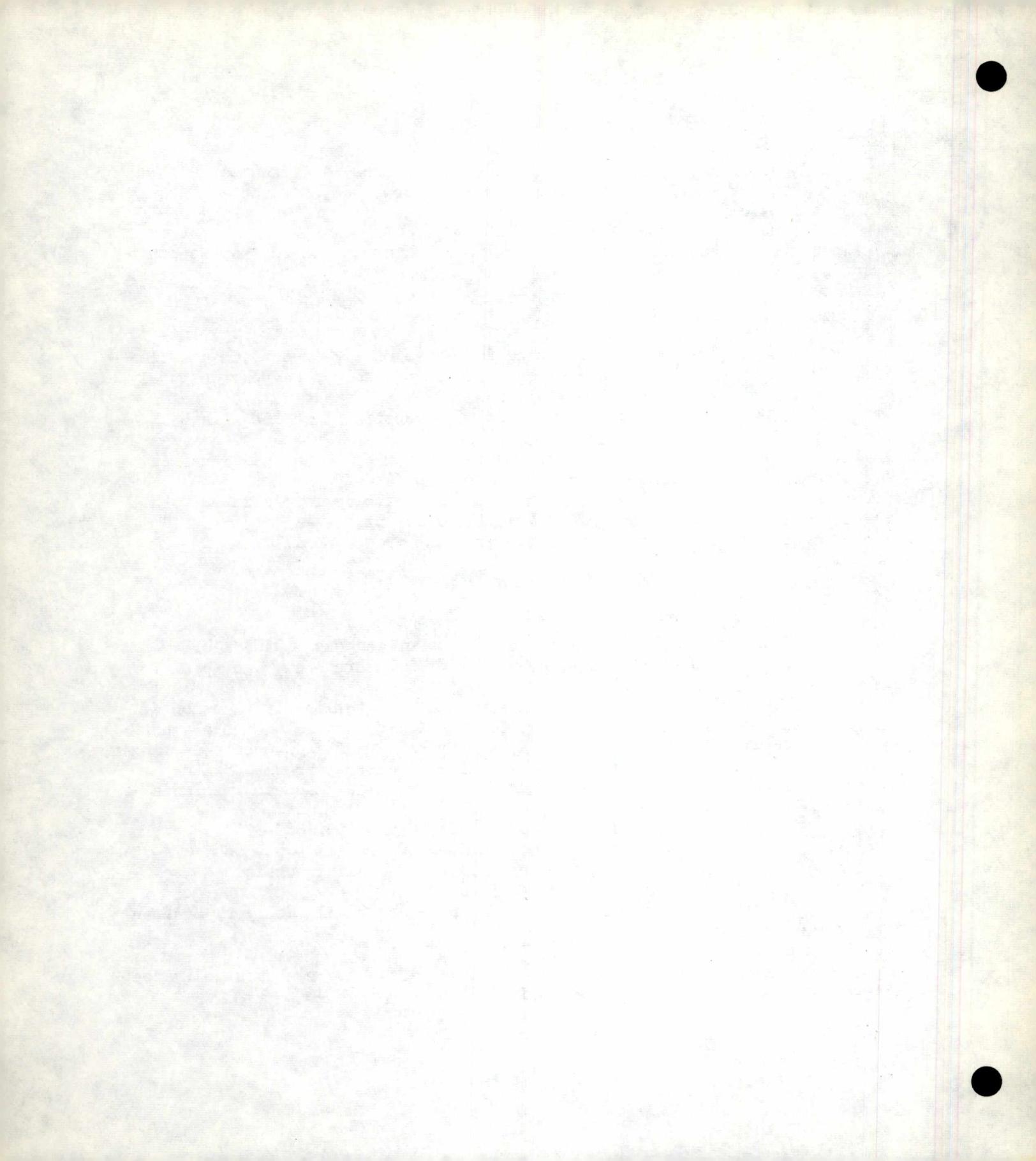
Availability of Genie rocket for Voodoo - Hellyer, Churchill - pp. 665, 674-75

Limited nuclear war - escalation of - possibility of small incursions -
 deterrent - Hellyer, Churchill - pp. 675-76

Nuclear weapons yield - availability of info. re - Churchill, Hellyer, MacLean -
 pp. 675-76-77-78

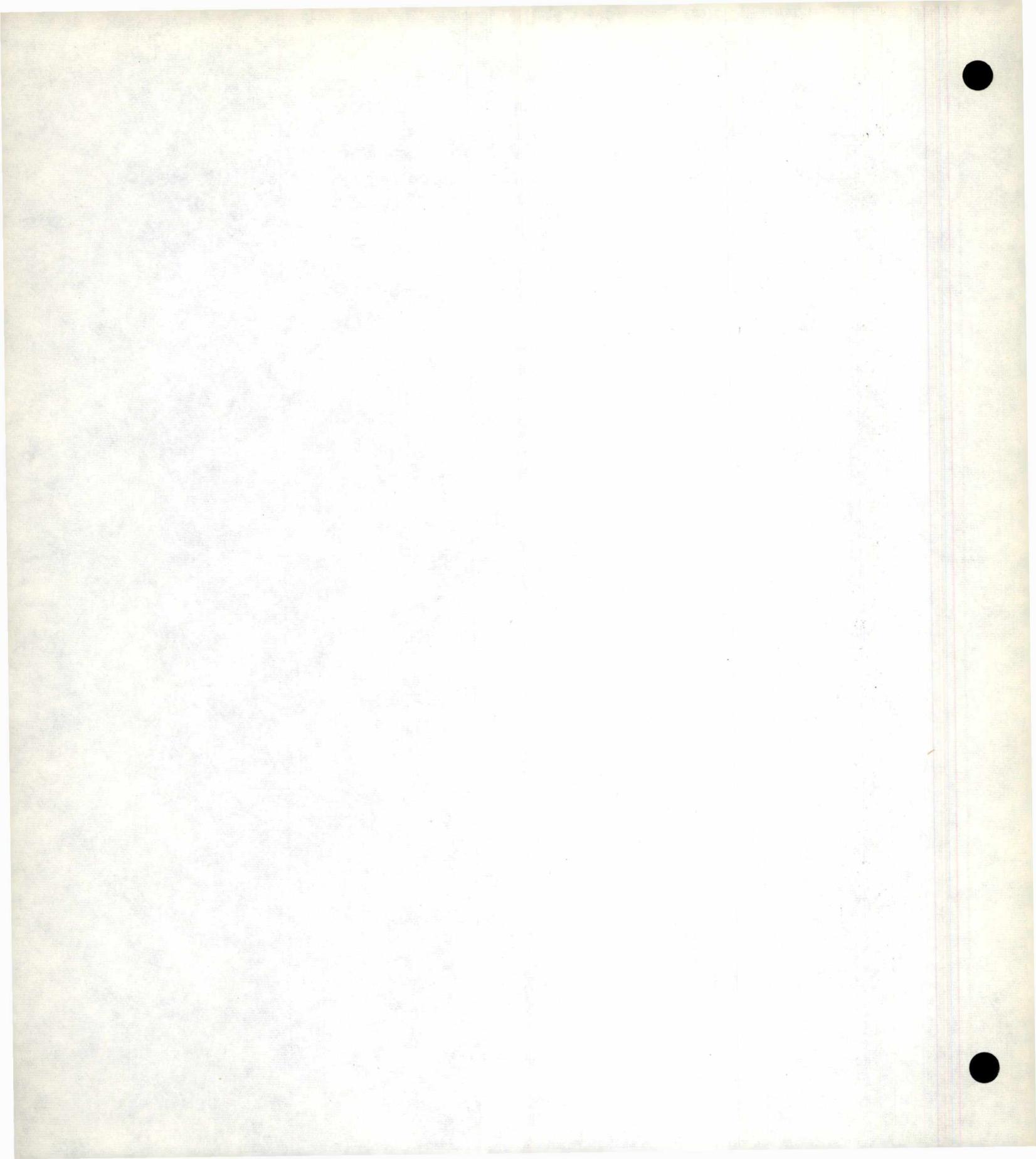
Tactical nuclear deficiency - Lessard, Hellyer - p. 683

Need for dispersal of 1 Air Div. bases - nuclear difficulty re bases in France -
 re-examination of situation - Lessard, Hellyer - pp. 683-84



PAY AND ALLOWANCESOctober 15, 1963

Mainguy Report - recommendations & implementation re pay & allowances, etc. -
Matheson, CNS - p. 400.



POLITICALOctober 17, 1963

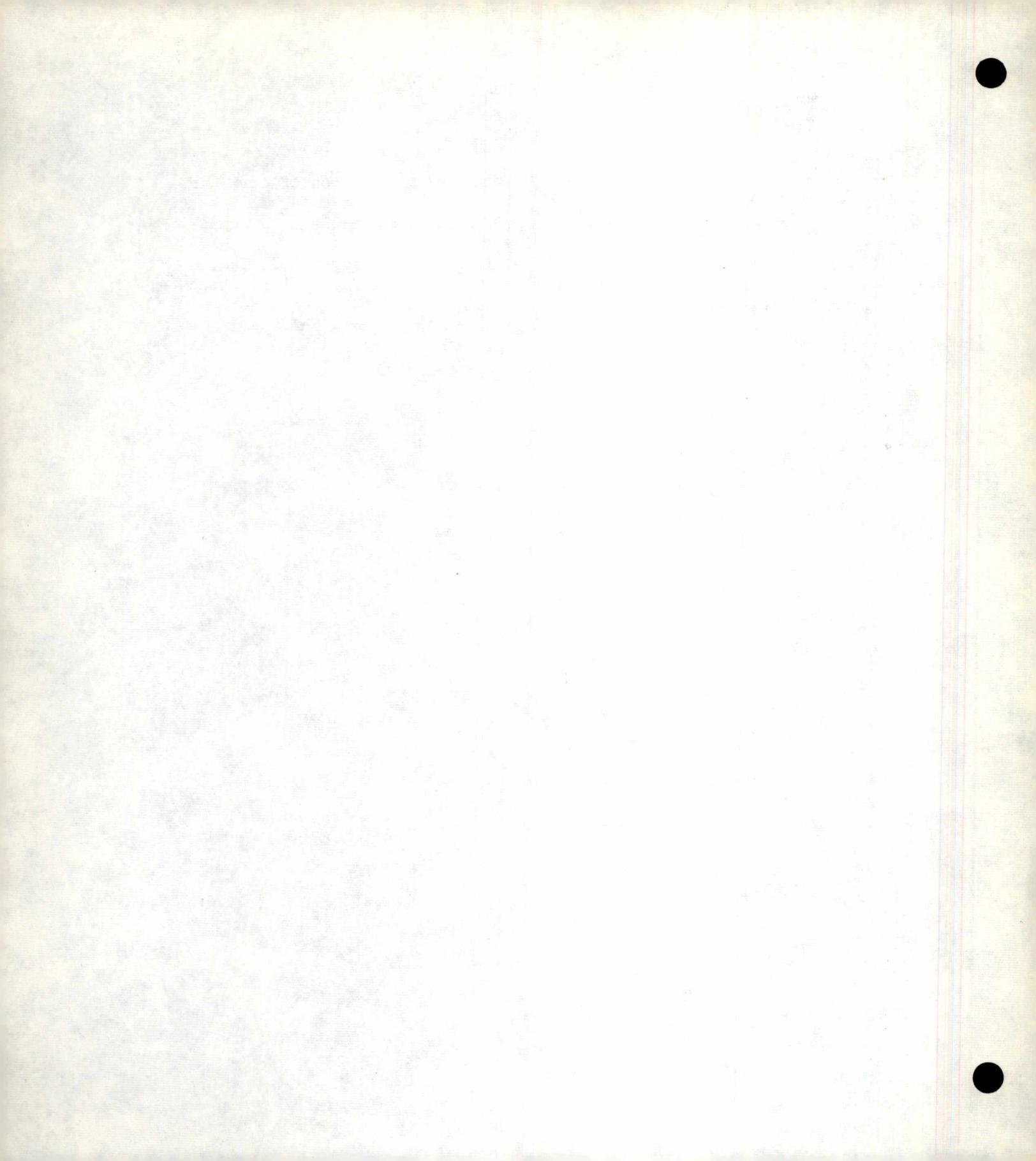
Tri-Service integration - political decisions - unification of commands -
MacInnis, Simonds - pp. 456-57

Defence policy - public & political indifference re - MacLean, Simonds -
pp. 476-77

Chiefs of Staff - nature of advice to Minister - military & political
aspects - civilian component - Defence Cttee. - Chiefs of Staff Cttee. -

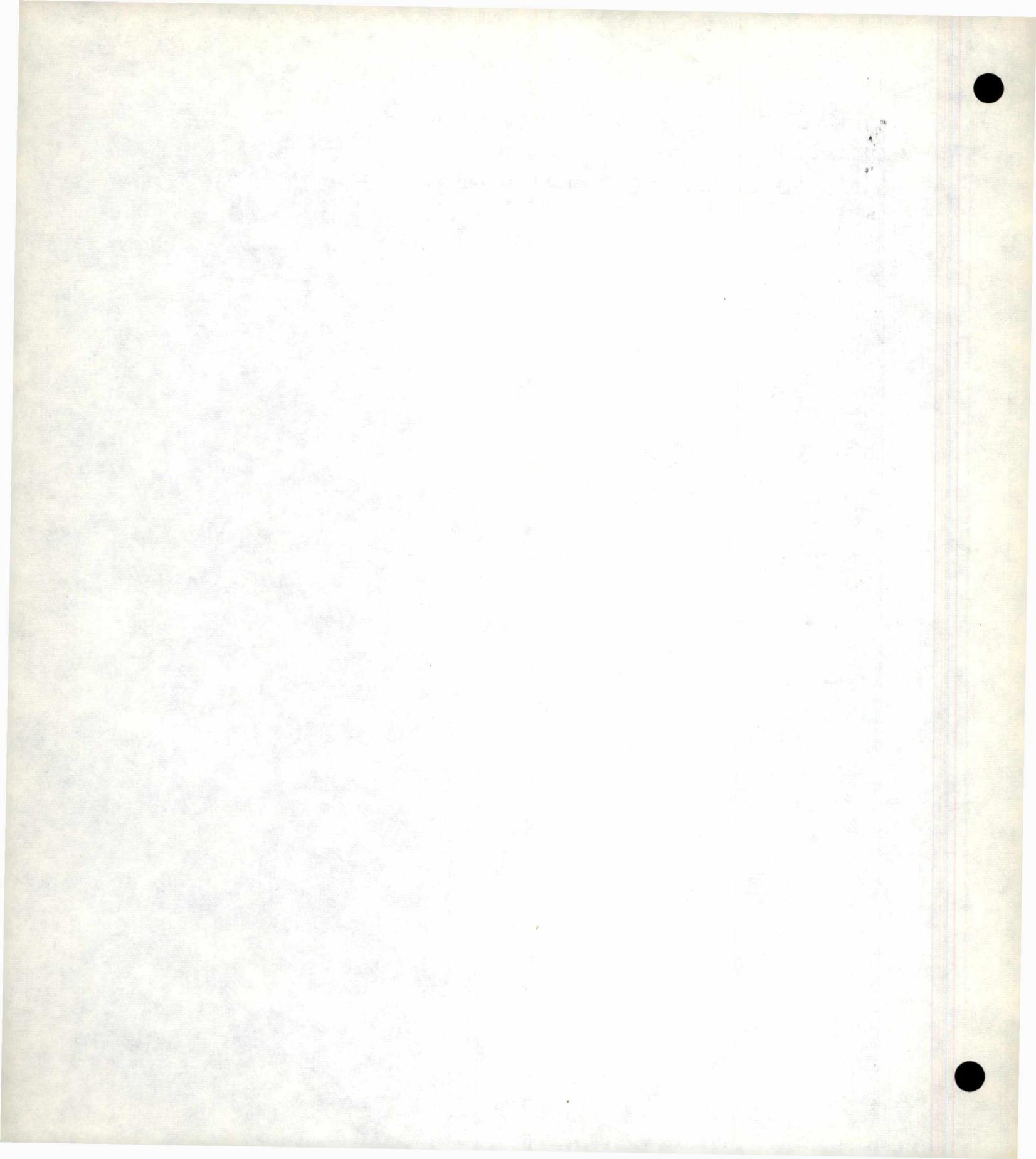
Defence Council & Service Boards - Lambert, Simonds - pp. 479-80

One Chief of Staff - Chiefs of Staff access to Minister - political
decisions, etc. - Matheson, Simonds - p. 466.



PUBLIC RELATIONSOctober 17, 1963

Protest against headline in Citizen indicating Simonds urged Canada to
acquire its own H-bomb - Simonds, Smith - p. 459



RUSSIAJune 27, 1963

Missile production not materialized - Hellyer - p. 17

July 2, 1963

Russian missile lag - Brewin, Hellyer, Baldwin - pp. 44, 46

July 9, 1963

Soviet Maritime threat - CNS - pp. 87-88

Submarine strength - CNS - p. 87

Missile - CNS - p. 87

Bomber - CNS - p. 87

Fishing fleet strength, etc. - CNS - p. 88

Merchant Marine size - CNS - p. 88

Oceanographic research - CNS - p. 88

Missile base in Cuba - CNS - p. 88

Navy - nuclear submarine threat - CNS - p. 97

Bomber threat - Churchill - p. 113

Russian ocean-going submarine threat - types, etc. - MacLean, Lambert,
Churchill, CNS - pp. 113; 116-17, 121Russian deployment of submarines in Atlantic & Pacific rather than in
Arctic - CNS - pp. 115-16

Polaris vs Russian subs - relative capabilities - Smith, CNS - p. 118

Statement by U.S. Assist. Def. Sec. re comparative Soviet-NATO conventional
forces strength - Brewin - p. 123July 11, 1963

Warsaw Pact - CGS - p. 131

Land strength - CGS - pp. 131, 132, 133

Threat & capabilities - CGS - pp. 131, 132, 133, 137, 142, 144-45

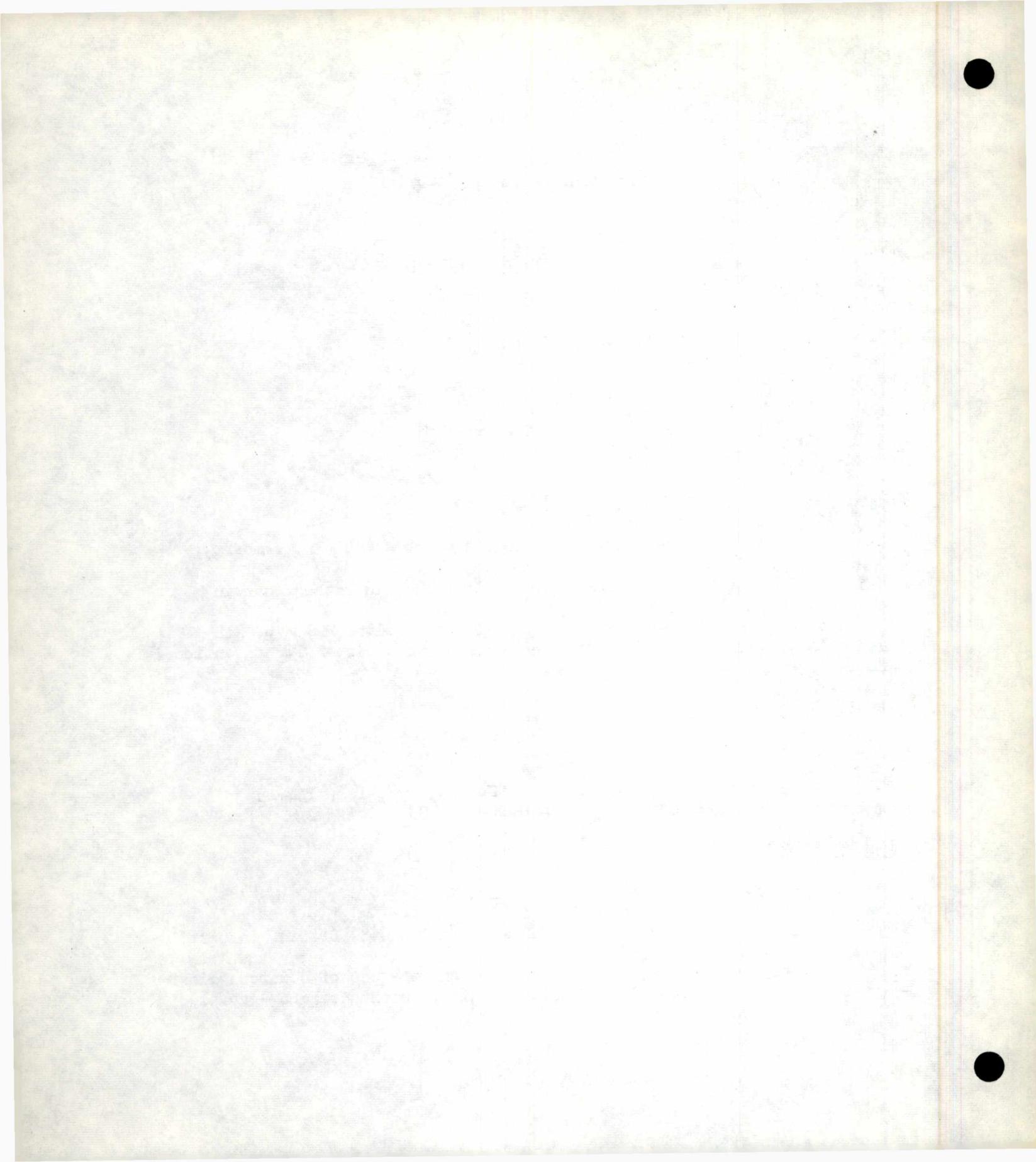
Army equipped with nuclear missiles - CGS - p. 133

July 16, 1963

Soviet threat - CAS - pp. 163, 175-76, 184

Missiles & bomber - CAS - p. 163

Soviet missile & bomber threat - ratio - Churchill, CAS, Brewin, Lambert,
Hellyer - pp. 187, 188, 189, 193Soviet stand-off bombers - size of warhead - range - use of Bomarc against
Soviet Fitter aircraft - CAS, McMillan, Smith, Deachman, Hahn - pp. 188,
189, 190, 195-96.



RUSSIA - (Cont'd)July 16, 1963 - (Cont'd)

Accuracy of Russian ICBM's - Granger, CAS - p. 189
 Soviet threat vs Chinese threat - Winch, Hellyer - pp. 190-91
 Comparative Soviet & U.S. ICBM threat - Smith, CAS - p. 191
 Soviet threat capabilities classified - not in public interest to reveal -
 MacLean, Hellyer - p. 191

October 8, 1963

Nuclear powered subs - Temple, CNS - p. 320
 Threat of Russian surface ships - Hahn, CNS - pp. 329-30

October 10, 1963

Russian subs - speed & threat of - Plomer - p. 341
 Subs - China, Russia, Egypt, Cuba - Asselin, Plomer - p. 385

October 17, 1963

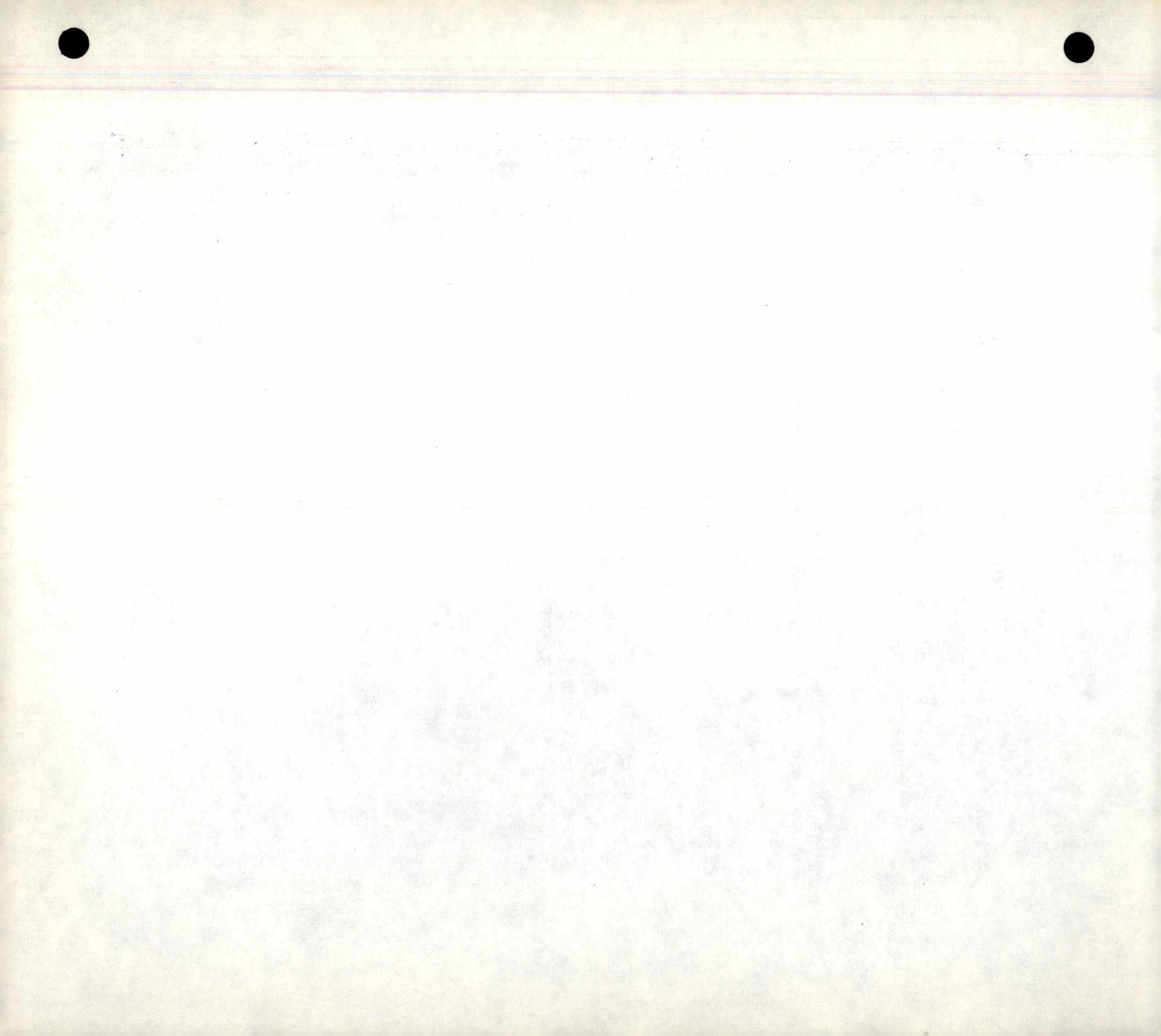
Russian rocket development - military value - Smith, Simonds - p. 454
 Europe can't be defended by nuclear arms - defence by conventional means -
 potential power of Russia - defence of Europe necessity for defence of
 North America - McMillan, Simonds - pp. 466-67
 ICBM's - U.S. & Russian strengths re - Temple, Simonds - pp. 477-78

October 22, 1963

Defence of Canada-U.S. region - ICBM & bomber threats to - Nike-Zeus anti-
 ICBM defence - reduction of Cdn. contribution to - Russian ballistic
 missile submarine threat to - future Chinese sub threat - Foulkes,
 Laniel, Lambert - pp. 502-03, 506-07, 538, 541-42
 ICBM vs bomber threat - advantage of attack with Russia - defence against -
 fail safety system & flexibility of bomber - Foulkes, Temple - pp. 519-20

October 24, 1963

Russian ICBM & missile sub threat vs U.S. retaliatory power - threat to
 NATO - deterrent - Gellner, Smith, Deachman, Granger - pp. 564-65, 571,
 580-82, 584
 Conventional war impossible - German & French view interested in absolute
 deterrence - re Greece & Turkey - Russia & U.S. would only fight nuclear
 war - stockpiling of nuclear weapons to over-kill capacity - Gellner,
 MacLean, Lambert, Deachman, Granger, Brewin - pp. 566, 567-68, 575, 577,
 580-86.



RUSSIA - (Cont'd)October 29, 1963

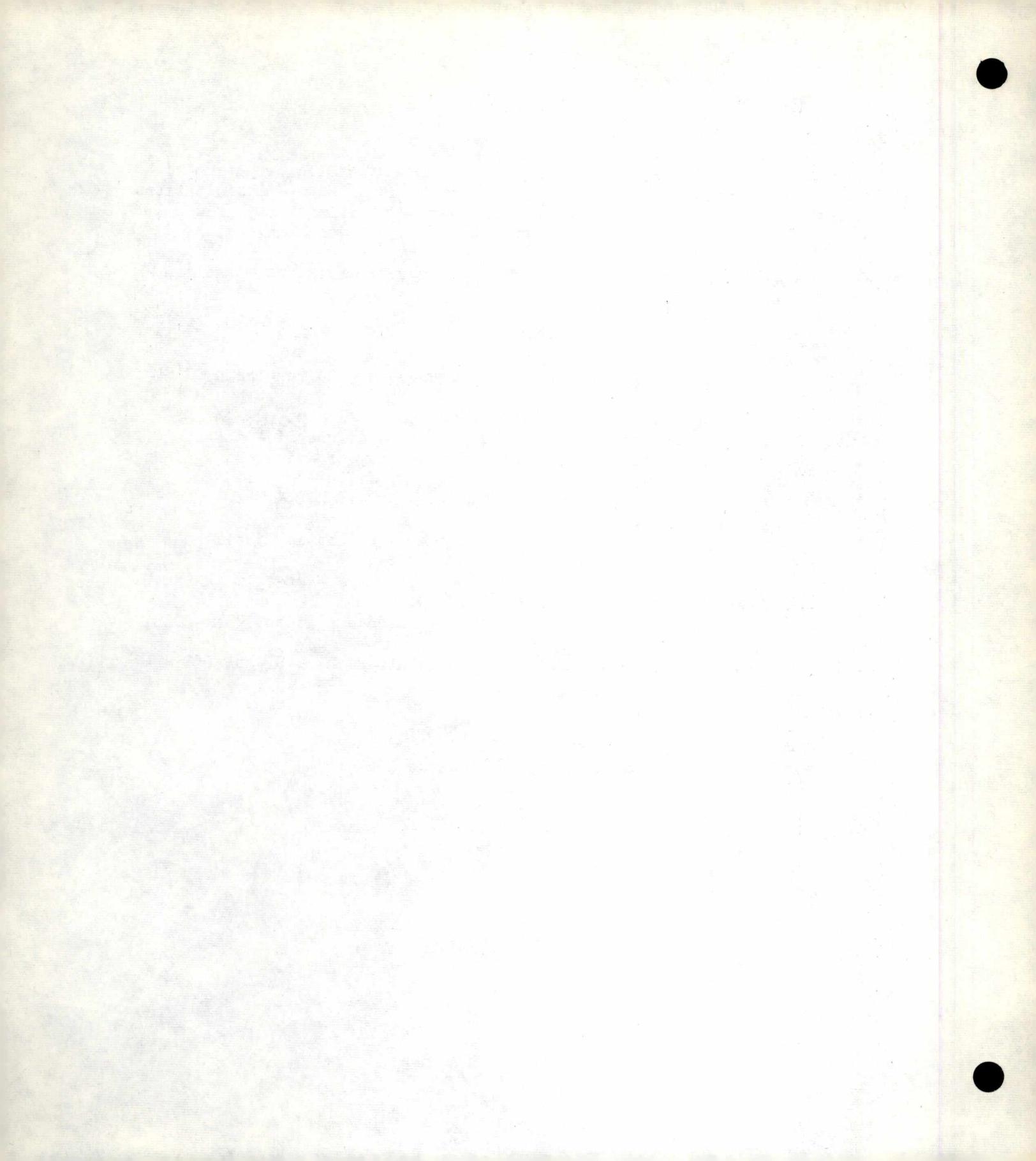
Bobcat - need of - weaknesses indicated by trials - decision re - purpose - spare parts re - initiation design date & subsequent tests - modifications for artillery - design changes - effectiveness - mounting - comparison to other NATO & Russian models - Lessard, CGS, Hellyer, Deachman, Smith, Hahn, Churchill - pp. 600-01, 606-09, 611-12
 Russian tactical support for ground forces - airborne divisions - MacLean - p. 619

October 31, 1963

Shift from bomber to missile threat - intelligence reports re - Hahn, CAS - p. 628
 Soviet development of submarine ballistic missiles - CAS - p. 629
 ICBM, ballistic missile submarine & bomber threats - degree of - statement by U.S. Def. Sec. re - hardening of sites - accuracy of - defence against - Churchill, CAS, MacInnis, Lambert, Hahn, Granger, Smith - pp. 639-42
 Supersonic bomber development in Russia, U.S. & U.K. - TSR-2 & TFX - Granger, CAS - pp. 641-42
 Effective defence against Russian surface-launching ballistic missile submarines - CAS - p. 646
 Recce. in Arctic - replacement of Lancaster - defence re - co-op with Army - Soviet submarine threat in - Matheson, CAS - p. 651
 Bomber threat and role of Air Force in future - defence against ICBM - CAS, Hahn - pp. 657-58
 Russian nuclear submarine capability & threat - Patterson, CAS - p. 660

November 5, 1963

Russian threat - Lessard, Hellyer - p. 683
 Capability re Russian submarine threat - Lessard, Hellyer - pp. 684-85



SEARCH, RESCUE & EMERGENCIESJuly 11, 1963

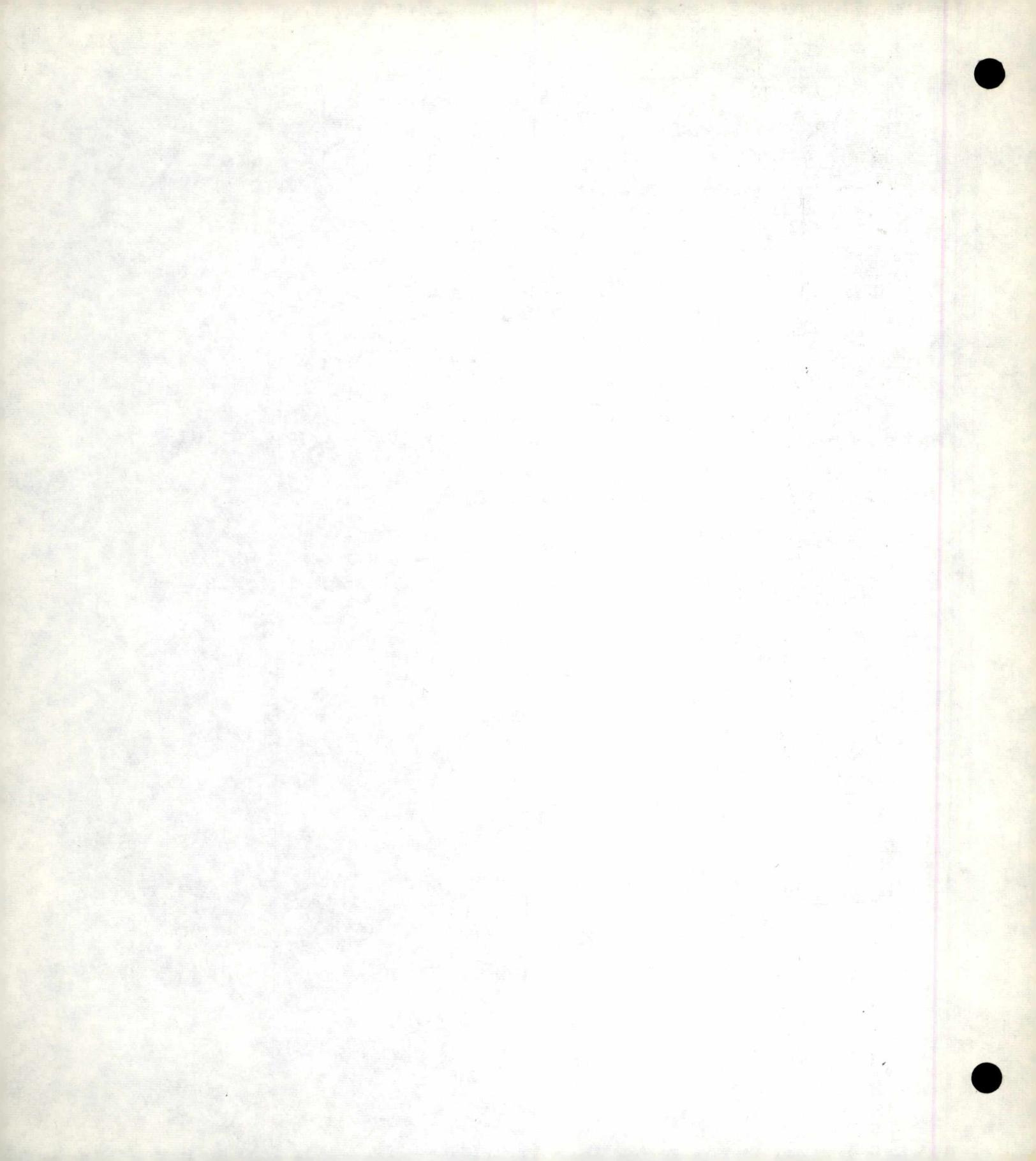
Army - assistance to civil authorities - CGS - pp. 149-151
 Provincial request - CGS - p. 149
 Types of assistance - CGS - pp. 149, 151
 Assistance to other gov't depts - CGS - p. 149
 Penitentiary commitment - CGS - pp. 149-150, 151
 Avalanche control - CGS - pp. 150, 151
 De-activation of dangerous explosives - CGS - pp. 150, 151
 Forest firefighting - CGS - pp. 149, 150, 151
 Flooding - CGS - pp. 149, 151
 Army Militia - aid to civil power - CGS - p. 151

July 16, 1963

Air Transport Command - aid to civil authorities - CAS - p. 173
 Search & rescue - CAS - pp. 180-181
 Responsibility - CAS - p. 180
 Aircraft & helicopters for - CAS - p. 181

October 31, 1963

Recce ability of Maritime Air Command & search & rescue - MacLean, CAS -
 pp. 646-47



SECURITYJune 27, 1963

Security clearance of Cttee members - Fairweather, Hellyer - p. 21
 Releasing of info on defence of other NATO countries - Lloyd - p. 23

July 2, 1963

Intelligence - evaluation of enemy's capability - Hellyer - p. 46

July 11, 1963

Army Militia - Support of RCMP for internment & Security duties - CGS - p. 152

July 16, 1963

Soviet threat capabilities classified - not in public interest to reveal -
 MacLean, Hellyer, CAS - p. 191

July 25, 1963

Decisions based on intelligence - Martin - p. 235
 Intelligence Cttees - Martin - pp. 235-36

October 17, 1963

Intelligence slanted to accommodate service - Simonds - p. 447
 Intelligence services - liaison - Smith, Simonds - pp. 478-79

October 22, 1963

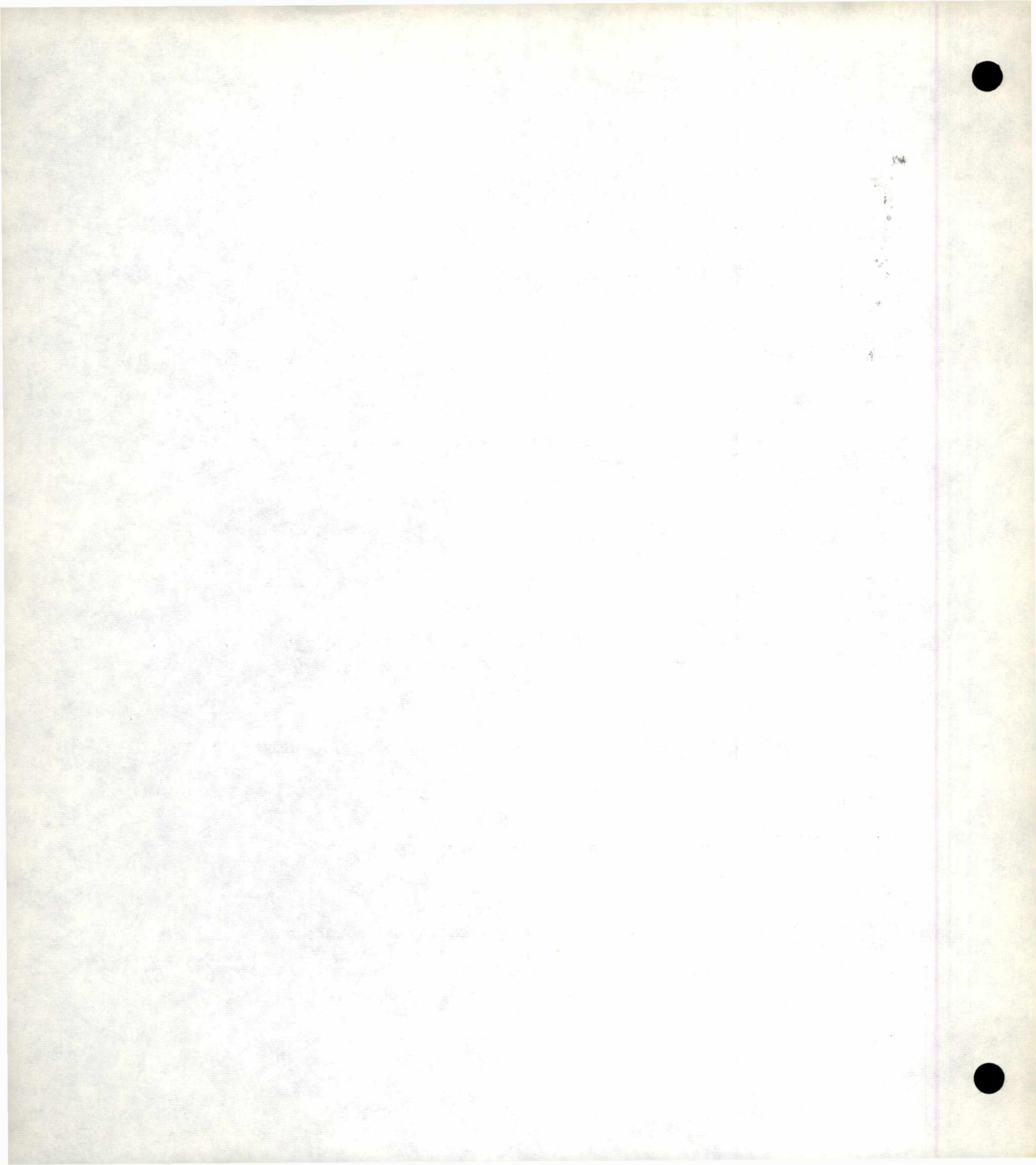
Intelligence Services of forces - function - co-op with US - Smith, Foulkes -
 pp. 534-35

October 24, 1963

Psychological warfare - Patterson, Gellner - p. 575

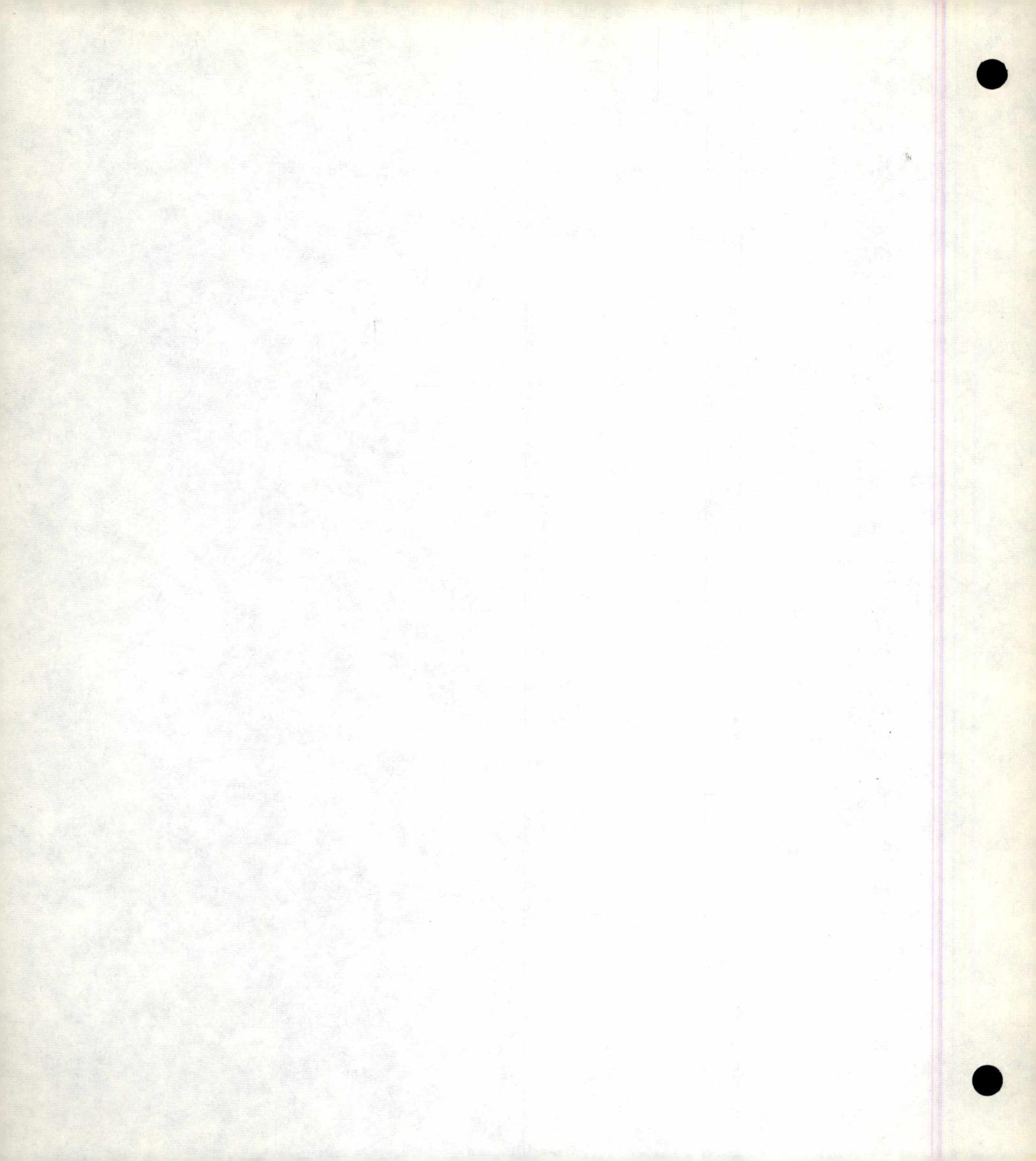
November 5, 1963

Review of policy & commitments - Navy requirements - procurement equipment
 programs - cancellation of frigate program - need of info. by Cttee. re -
 sharing of info. in camera - Winch, Hellyer, Brewin - pp. 665-67, 671, 672, 678
 Preparation of Cttee. Report in camera - Winch, Smith - p. 678



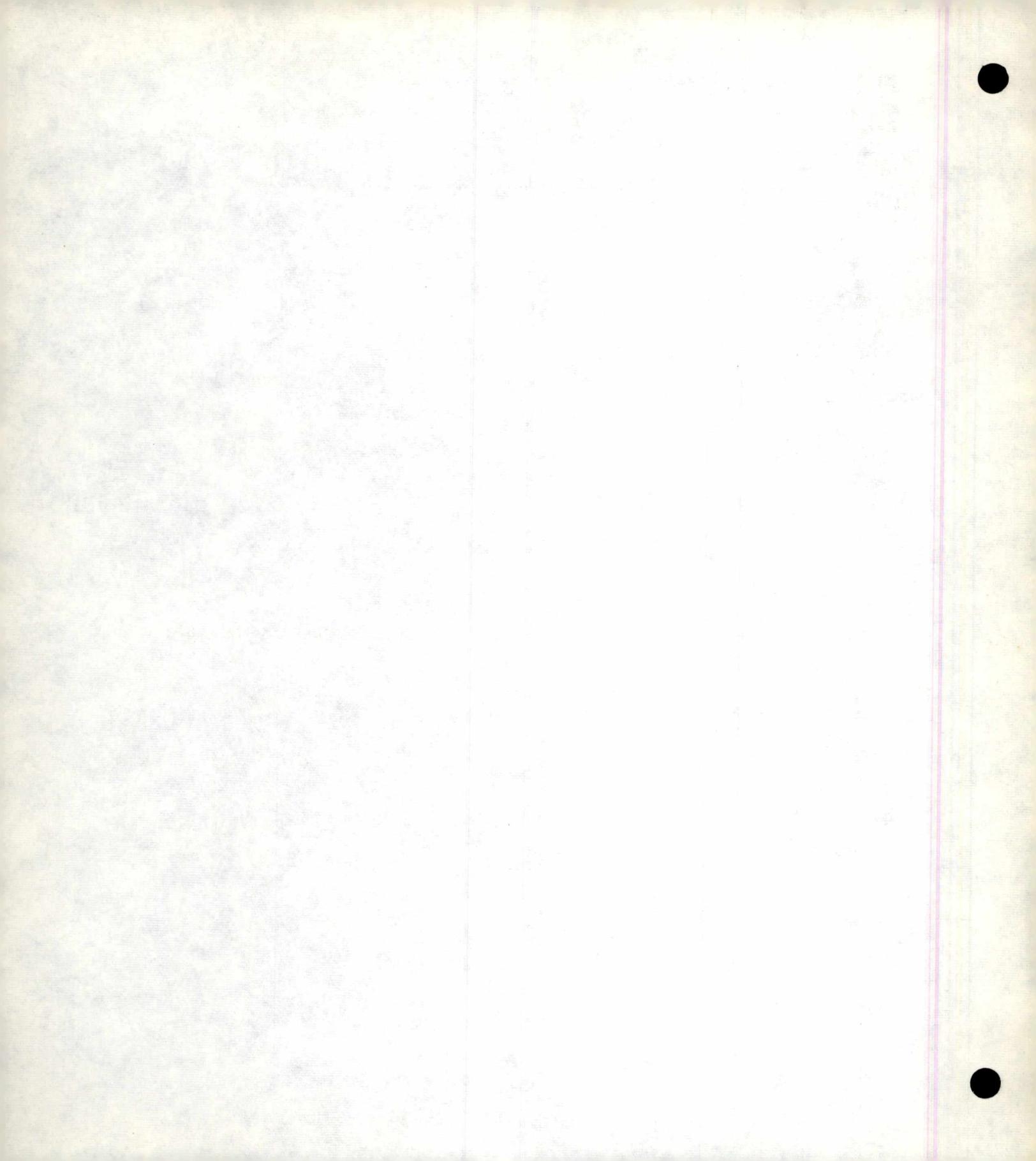
STANDARDIZATIONJuly 30, 1963

DDP - standardization of weapons in NATO - Drury - p. 276



STATUTES AND LEGAL AFFAIRSOctober 15, 1963

Boards of Inquiry - court martials, etc. - Brewin, CNS - p. 408



SURVIVAL OPERATIONSJuly 11, 1963

Army - curtailment of survival operations - CGS - p. 134
 Army survival operations - CGS - pp. 145-46
 Role of Army - CGS - pp. 145, 146
 Civil Defence Order 1959 - CGS - p. 145
 Warning through NORAD & DEW Line - CGS - p. 145
 Nuclear detonation reporting - CGS - p. 145
 Re-entry operations - CGS - p. 146
 Militia assistance - CGS - p. 146
 Civilian mobile survival columns - CGS - p. 146
 Army Militia - survival operations - CGS - p. 151

July 18, 1963

DRB - Intramural - basic & applied - survival - CDRB - p. 211
 Request for copies of "Nuclear Weapons Effect Booklet" - explosives in
 kiloton range - Lessard, CDRB - pp. 226-27

October 17, 1963

Militia role - survival - Matheson, Simonds - pp. 444-45

October 24, 1963

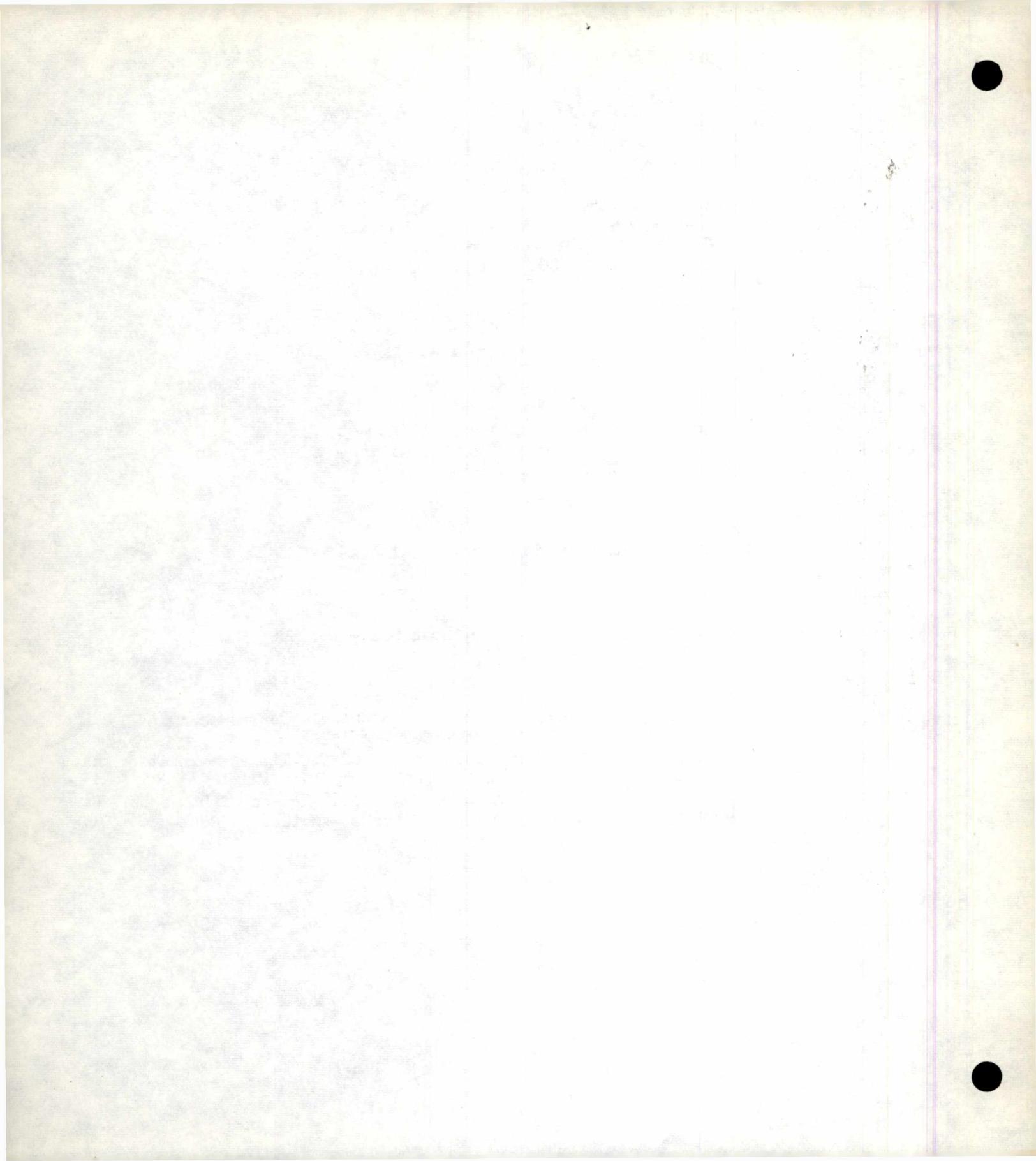
Expanded compulsory civil defence - Gellner, Deachman - pp. 560, 572, 579

October 29, 1963

Shortage of survival ops. personnel if 4th Bde. reinforced - forces assigned
 to UN taken from establishments in Canada - CGS - p. 594
 Survival ops. - tasks re - planning for - utilization of facilities - relation
 re EMO - food program re - Lessard, CGS - pp. 601-02
 Army Militia - survival role - training in military field - co-op with
 regular force - source of officers for regular force - Matheson, CGS -
 pp. 609-11

October 31, 1963

Air Force Auxiliary - function - survival role re - Hahn, CAS - p. 658



TRAININGJuly 16, 1963

NORAD - air defence training - CAS - p. 166
 Maritime Air Command - training - CAS - p. 171
 Air Transport Command - training - CAS - p. 172
 Training Command - CAS - pp. 179-80
 Responsibility - CAS - p. 179
 Unit location - CAS - pp. 179, 180
 Types of training - CAS - p. 179
 NATO training - CAS - p. 179
 Number aircrew trained - CAS - p. 179
 Training of Nigerians - CAS - p. 179
 Procurement of Tutor jet trainer - p. 180 - CAS
 Tutor Characteristics - CAS - p. 180
 Groundcrew - training - CAS - p. 180
 1 Air Div. - training - CAS - pp. 176, 177
 CF104 training - CAS - p. 166

October 8, 1963

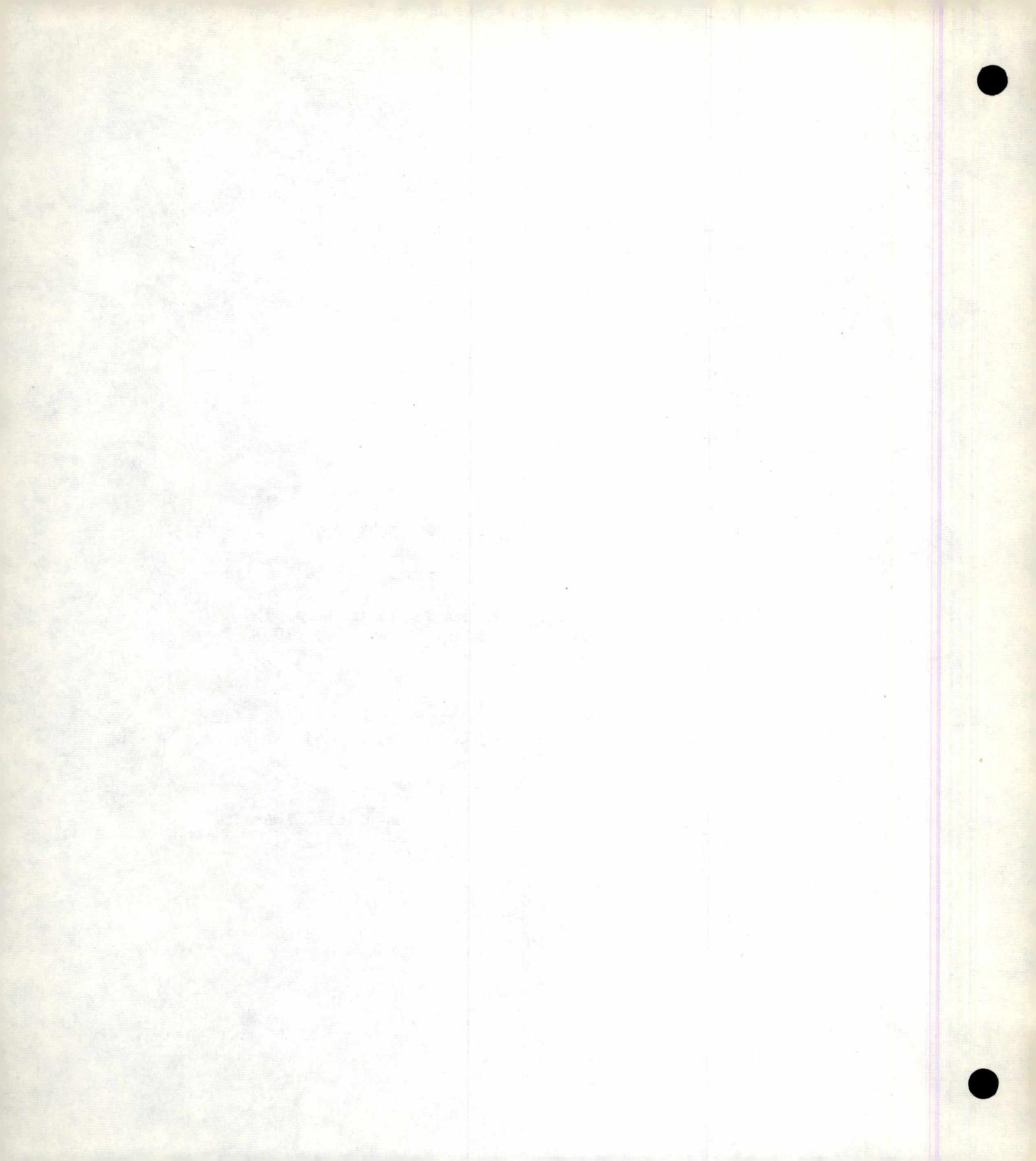
Training of personnel for frigate program - Lloyd, Hellyer, CNS - pp. 325-28
 Training subs - Oberon, etc. - Hahn, CNS - pp. 329, 331
 Sub training - Can.-U.S. & U.K. arrangements - commitment to U.K. re -
 Winch, CNS - pp. 333-34
 Navy personnel use & costs re training - Matheson, Plomer - p. 350
 Navy - training & need for reserves - Matheson, Plomer - p. 380

October 31, 1963

Individual service training establishments - re radar & signal training -
 business training specialization - Smith, CAS - pp. 653-55

November 5, 1963

Cancellation of additional CF104's - purchase of two-place CF104's re
 training - Hellyer - p. 667



TRI-SERVICEOctober 17, 1963

- Cdn. Armed Forces should be tri-service - main objective peace-keeping -
 integration of - Smith, Simonds, McMillan - Brewin - pp. 439-40, 441, 453
 Interservice rivalries - Winch, Simonds - p. 441
 Tri-service co-ordinated force similar to U.S. Marine Corps - Simonds - p. 442
 Unification of command - training for - at senior ranks - Smith, Simonds -
 p. 455
 Tri-service integration - political decisions - unification of commands -
 MacInnis, Simonds - pp. 456-57
 Tri-service college training - tri-service integration - Groos, Simonds -
 pp. 468, 469

October 22, 1963

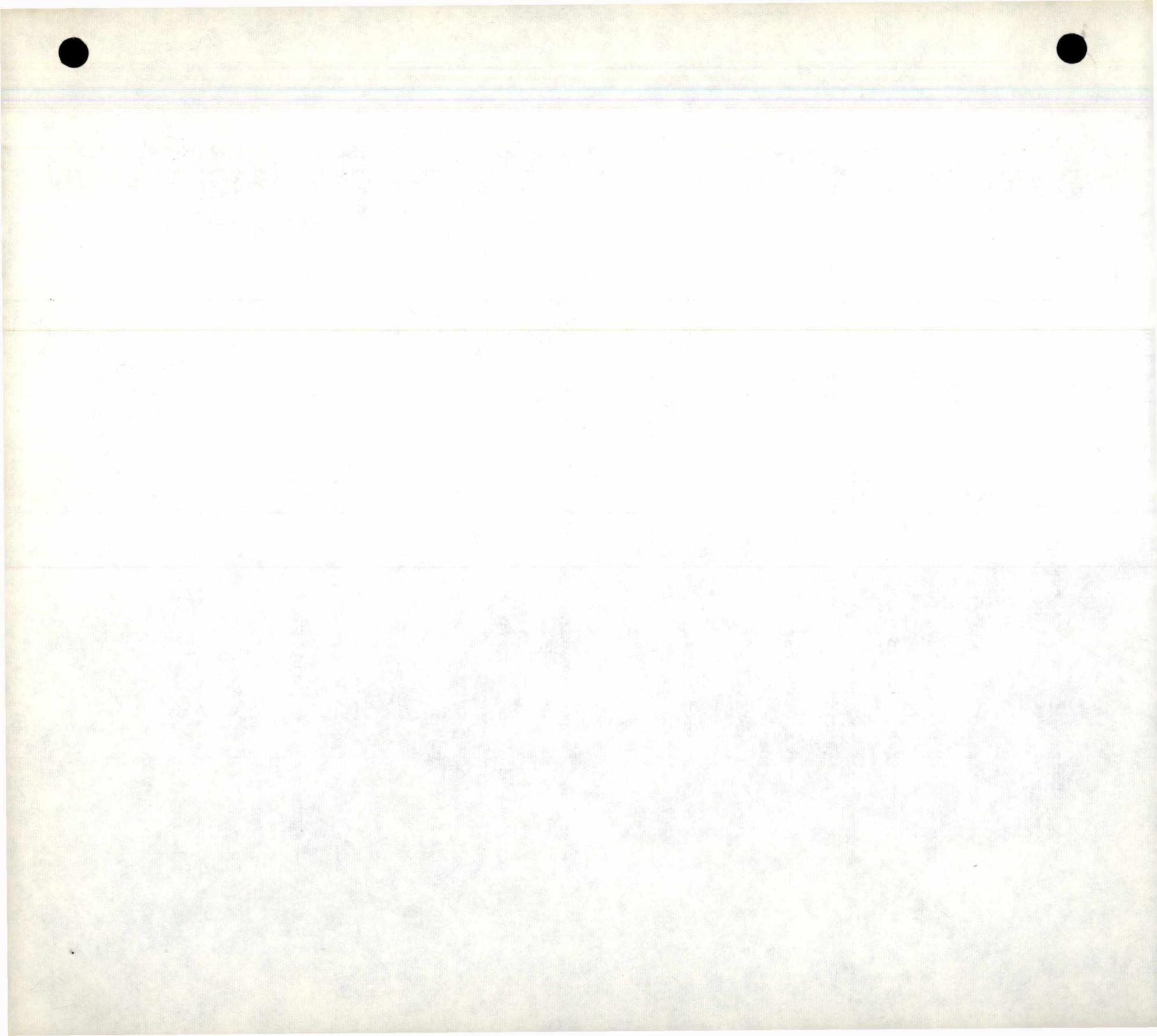
- Amalgamation of Services - attempts by Mr. Claxton - MacRae, Foulkes - p. 508
 Integration of Services - establishment of Defence Research Board for
 integration of research - defence college for tri-service senior officer
 training - interruption by Korean War and establishment of CCOS - future
 plans - interservice transfer of personnel - Winch, Foulkes - pp. 522-25
 Medical services integration - McMillan, Foulkes - pp. 527-28
 Integration of civilian personnel employed by Services - Smith, Foulkes -
 p. 535

October 24, 1963

- Unification of Services at operational level not possible because of
 specialization - possible in support & supply services & H.Q. level -
 U.S. & U.K. efforts re - Gellner - pp. 573-74

October 29, 1963

- Integration of Services - existent commands - difficulties re NATO commands,
 SACIANT, etc. - Winch, CGS - p. 614
 Unification of Chaplain & Medical Services - wiped out duplication -
 additional book work - integration re hospitals - Winch, CGS, McMillan -
 pp. 616, 617, 618
 Integration of Chiefs of Staff, medical services & chaplain services
 resulted in increase of higher ranks - Groos, CGS - p. 618
 Unification of ordnance & supply services - procurement of FN rifle - Air
 Force procurement of helicopters - food etc. - co-op with Navy & Air
 Force - common supply service - comparison to U.K. & U.S. services -
 function of D.M. & scientific advisers re - Winch, CGS, Deachman -
 pp. 616-17
 Mobility of Army - ship transport to disappear with heavy lift aircraft -
 co-op with RCAF - efficient if done on tri-service setup - Winch, CGS -
 pp. 614-15



TRI-SERVICE - (Cont'd)October 31, 1963

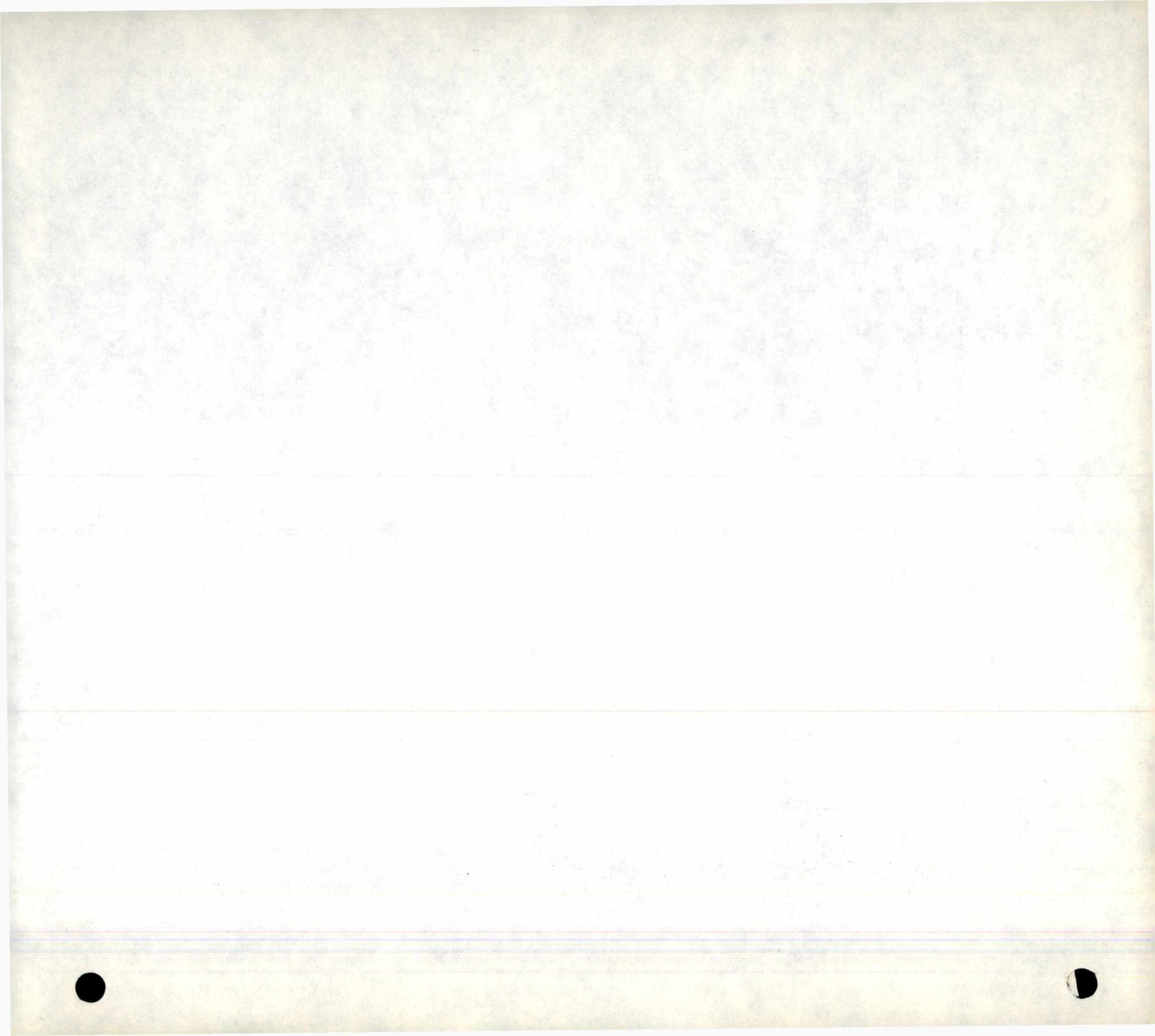
Integration - increase of personnel & costs - reduction after shakedown, i.e.,
U.K. - studies re - Joint Staff example of integration - Lambert, CAS -
pp. 655-56

Tri-Service Equivalent Board - economy re - Lambert, CAS - p. 656

Integration of Services - advantages & disadvantages - joint H.Q. staff -
present co-op of Services re - fields in which progress made - Air Force
recommendations to Minister re - uniform re - Lessard, CAS - pp. 658-60

November 5, 1963

Integration of Services - Glassco Commission suggestions re - Hellyer - p. 667



TRUCE TEAMSJune 27, 1963

Contribution to UNTSO - Hellyer - p. 18

UNTSO - function - Hellyer - p. 18

Military Observer Group in India & Pakistan - service officers in - p. 19 - Hellyer

Indo-China Truce Commission - personnel in - p. 19 - Hellyer

Battalion for in Canada - Hellyer - p. 19

July 11, 1963

Viet Nam & Laos Truce Teams - composition - CGS - p. 149

Palestine - composition - CGS - p. 149

Kashmir - composition - CGS - p. 149

Korea - composition - CGS - p. 149

October 17, 1963

Peace-keeping operations - schedule of - divided between NATO & U.N. -

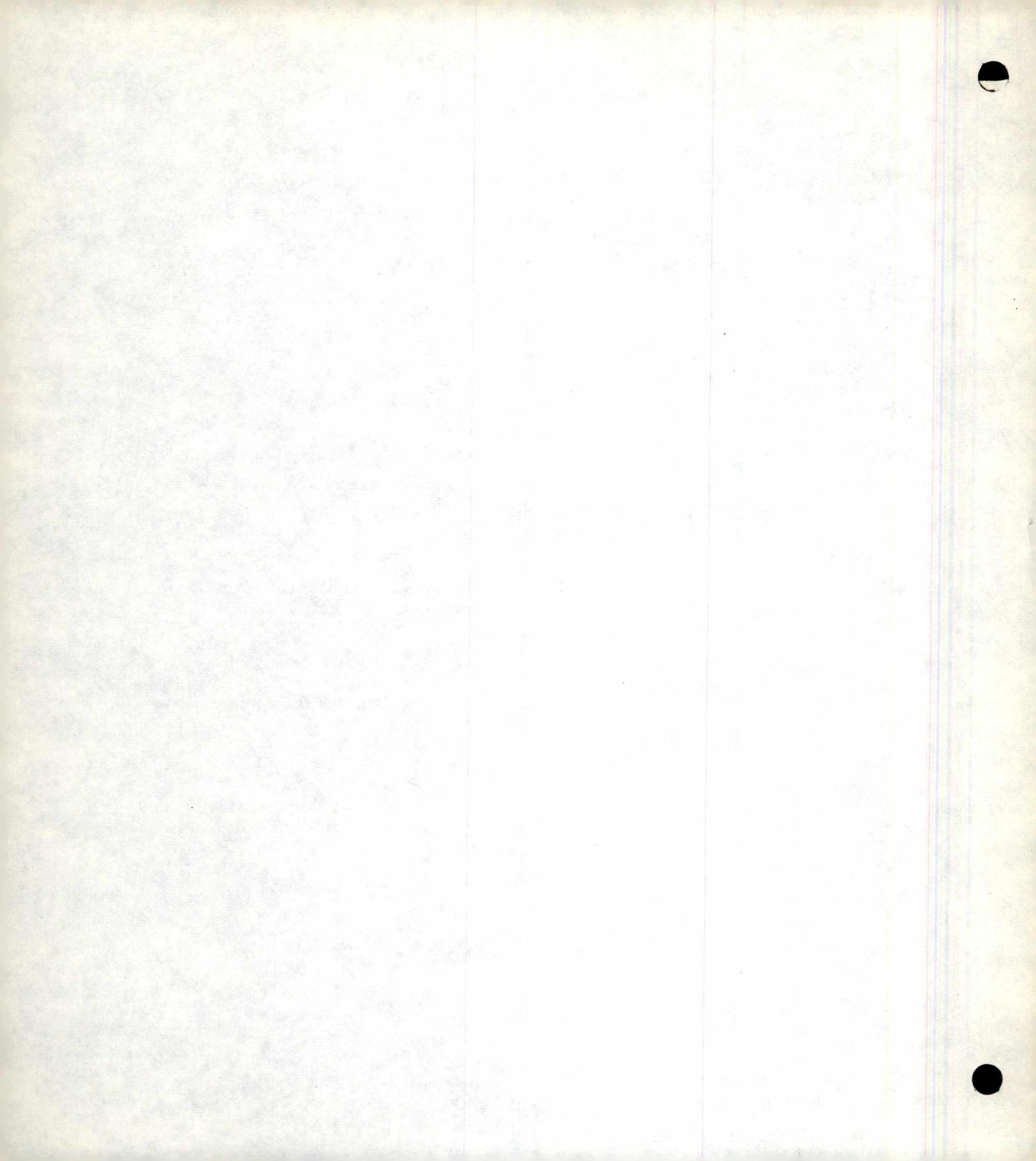
Matheson, Simonds - pp. 464-66

October 22, 1963

U.N. truce & peace-keeping activities - costs re - reimbursement by U.N. -

not necessary to withdraw from NATO to carry out U.N. activities -

Matheson, Foulkes - pp. 532-33



U.K. ARMED FORCESOctober 10, 1963

Frigates - function & capability - costs - comparison to U.S. & U.K. & NATO forces & Mackenzie Class vessel - speed - troop accommodation - purpose - helicopters for - Asselin, Matheson, Plomer, Smith, Churchill, Lloyd, Granger, Deachman - pp. 250-51-52, 359-60, 361, 365, 376-79, 380, 382-83, 384, 385-86-87.

Navy - promotions & grievances - poor morale - comparison with U.S. & U.K. - Lloyd, Brewin, Plomer, Fairweather, Hahn, MacInnis - pp. 354, 363, 367, 368, 369, 370, 374, 375.

October 15, 1963

Development of 3.70 AA gun - 5.54 gun & surface-to-air missiles - cost - use by RN & USN - MacRae, CNS, Winch - pp. 412-13.

October 24, 1963

Unification of Services at operational level not possible because of specialization - possible in support & supply services & H.Q. level - U.S. & U.K. efforts re - Gellner - pp. 573-74

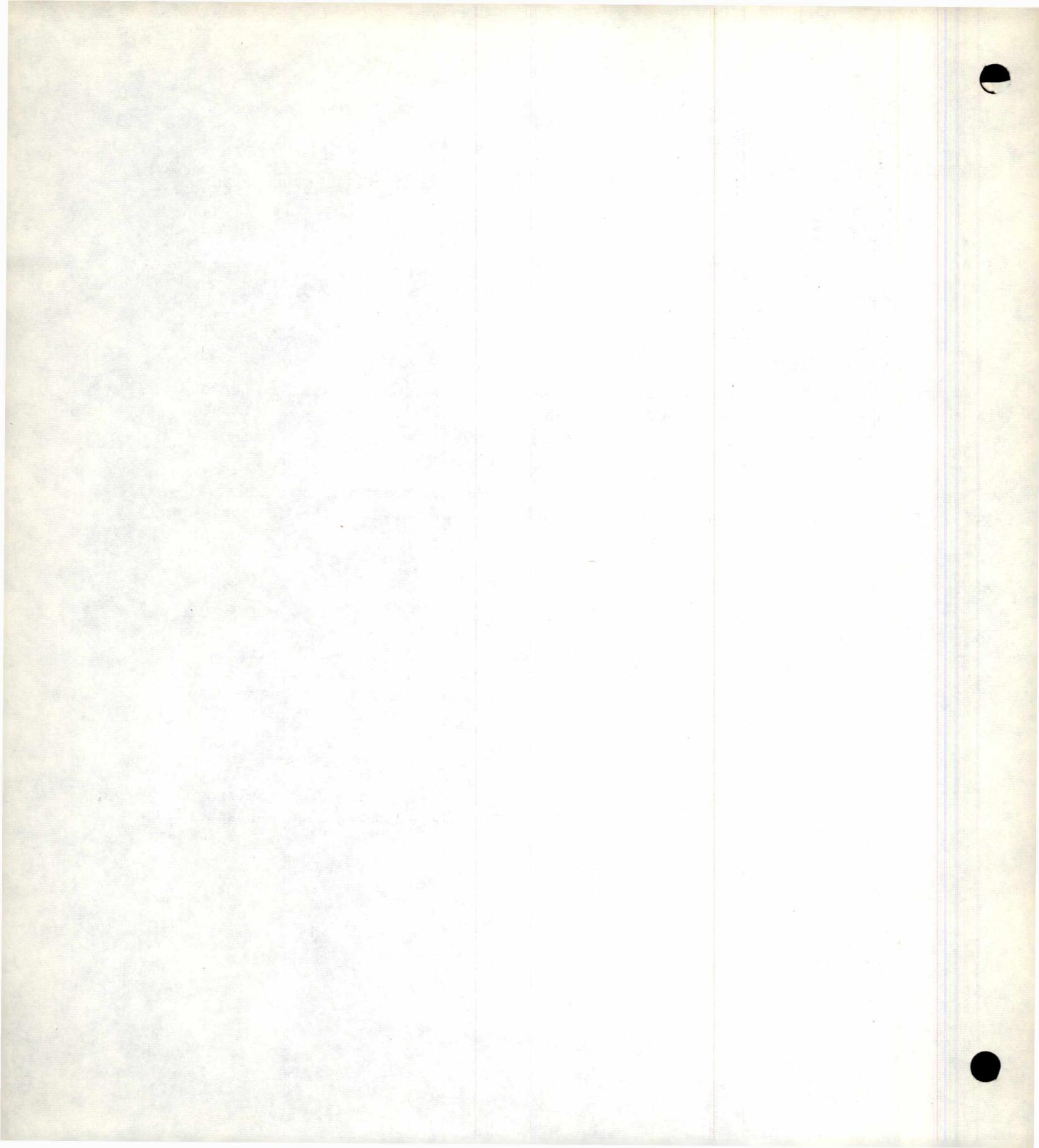
October 29, 1963

Design merchant ships for military convoy use - U.K. & U.S. - Smith, CGS - p.599

Unification of ordnance & supply services - procurement of FN rifle - Air Force procurement of helicopters - food, etc. - co-op with Navy & Air Force - common supply service - comparison to U.K. & U.S. services - Winch, CGS, Deachman - pp. 616-17

October 31, 1963

Integration - increase of personnel & costs - reduction after shakedown, i.e., U.K. - studies re - joint staff example of integration - Lambert, CAS - pp. 655-56



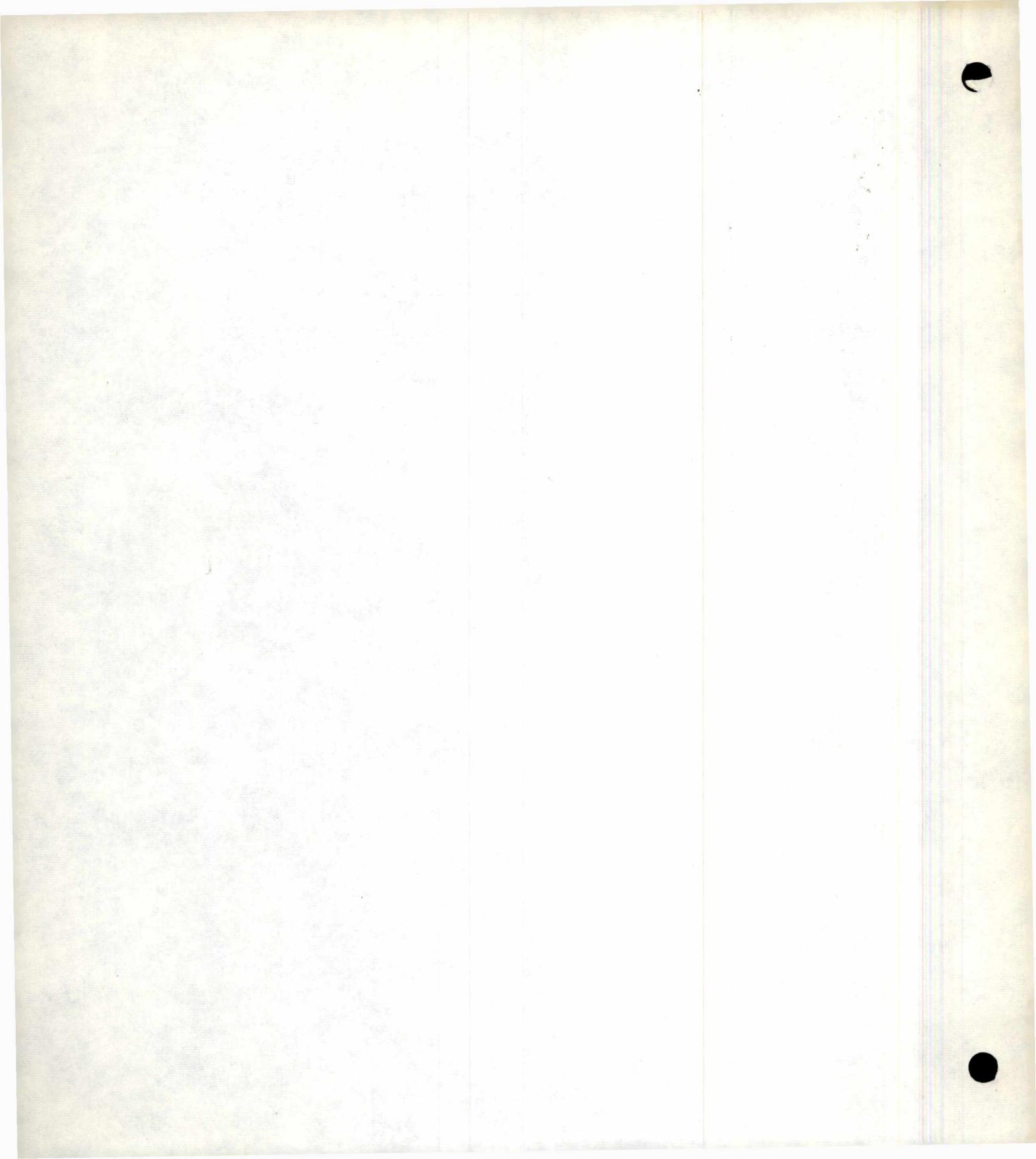
U.K. DEFENSE POLICYOctober 22, 1963

Withdrawal of Brigade to reserve position - British attitude - German acceptance - MacInnis, Foulkes - pp. 515, 516, 517

October 31, 1963

Supersonic bomber development in Russia, U.S. & U.K. - TSR-2 & TFX - Granger, CAS - pp. 641-42

Deterrent - value of tactical forces in Europe & strategic forces in U.S. & U.K. re escalation into nuclear war - Churchill, CAS - pp. 644-45



UNITED NATIONSJune 27, 1963

Contribution to UNTSO - Hellyer - p. 18
 UNTSO - function - Hellyer - p. 18
 Military Observer Group in India & Pakistan - service officers in - Hellyer -
 p. 19
 Indo-China Truce Commission - personnel in - Hellyer - p. 19
 Battalion for in Canada - Hellyer - p. 19

July 11, 1963

Army - U.N. operations - CGS - pp. 146-49
 Utilization of specialists - CGS - pp. 146-47
 Rotation & tours of personnel - CGS - p. 147
 Standby battalion (R22eR) - CGS - p. 147
 3 CIB for - CGS - p. 147
 UNEF duties & composition - CGS - p. 147
 UNCF (ONUC) - CGS - p. 147
 Composition - CGS - p. 148
 Reduction of - CGS - pp. 147-48
 Viet Nam & Laos Truce Teams - composition - CGS - p. 149
 Palestine - composition - CGS - p. 149
 Kashmir - composition - CGS - p. 149
 Korea - composition - CGS - p. 149
 Training assistance to Armed Forces of Ghana, Nigeria, Trinidad & Tobago -
 CGS - p. 149
 Army Militia - personnel for U.N. operations - CGS - p. 151

July 16, 1963

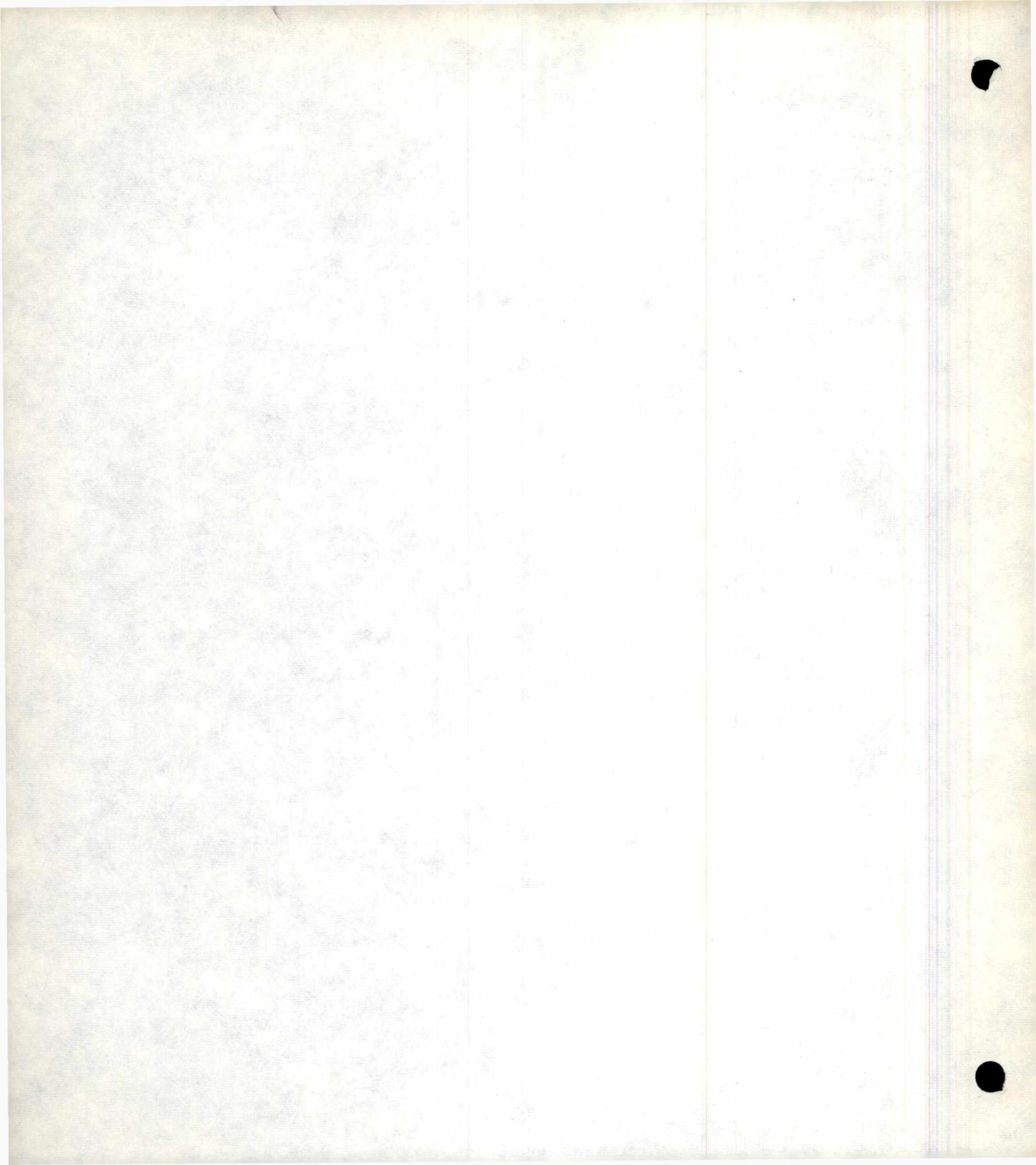
Air Transport Command - U.N. operations - CAS - pp. 172-73

July 25, 1963

Cdn. contributions to U.N. actions - DND, Ex. Aff. & U.N. co-op re -
 Martin - pp. 238, 239, 241, 242

October 15, 1963

Naval role in NATO & U.N. commitments - Matheson, CNS - pp. 424-25



UNITED NATIONS - (Cont'd)October 17, 1963

Cdn. Armed Forces should be Tri-Service - main objective peace-keeping -
 integration of - Smith, Simonds, McMillan - pp. 439-40, 441
 Cdn. contribution to U.N. - Army role - Lessard, Simonds - pp. 450-51
 Peace-keeping operations - schedule of - divided between NATO & U.N. -
 Matheson, Simonds - pp. 464-66

October 22, 1963

U.N. peace-keeping activities - Cdn. contributions to re UNEF, UNCF -
 Foulkes - pp. 504-05
 Placing of Cdn. forces at U.N. disposal unsound policy - Foulkes - p. 505
 Mobile ready reserve for NATO & U.N. - Foulkes - p. 507
 Commitments to U.N. & UNEF - Cdn. control lost - UNCF, some forces
 mishandled - Churchill, Laniel - pp. 530-31, 538
 U.N. truce & peace-keeping activities - costs re - reimbursement by U.N. -
 not necessary to withdraw from NATO to carry out U.N. activities -
 Foulkes - pp. 532-33

October 24, 1963

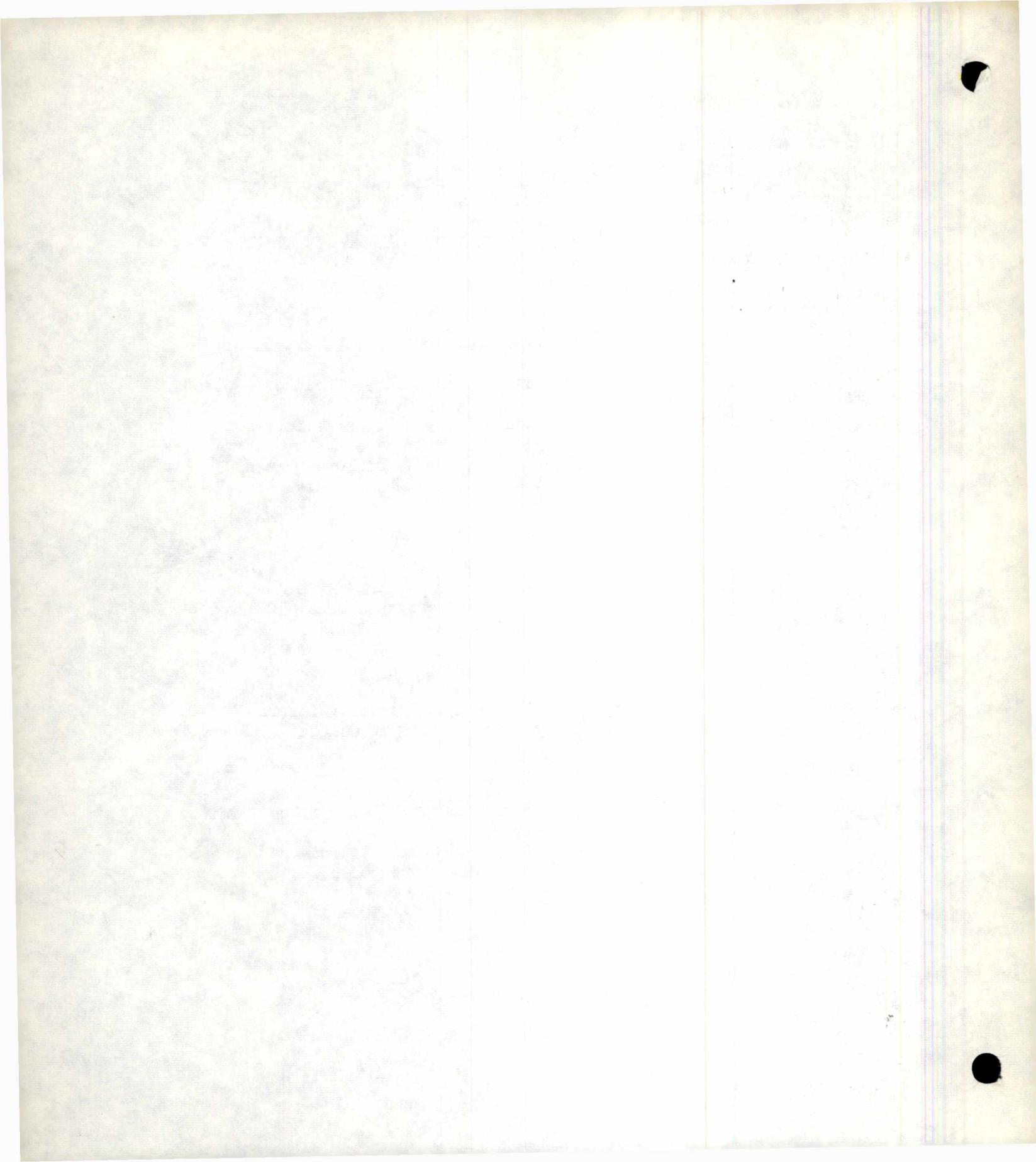
Cdn. forces - re peace-keeping roles - U.S. Marine Corps type service -
 standby battalion no value - administrative personnel need - Gellner -
 pp. 560-61, 573

October 29, 1963

Shortage of survival operations personnel if 4th Brigade reinforced -
 forces assigned to U.N. taken from establishments in Canada - CGS - p. 594

October 31, 1963

Use of aircraft for U.N. - Otter, Cariboo - need of more Cariboo - Smith,
 CAS - pp. 637-38
 Roles re Canada-U.S. region, NATO & U.N. - budget limitations re - use of
 obsolescent equipment, etc. - Patterson, CAS - pp. 661-62



UNITED NATIONS CONGO FORCEJune 27, 1963

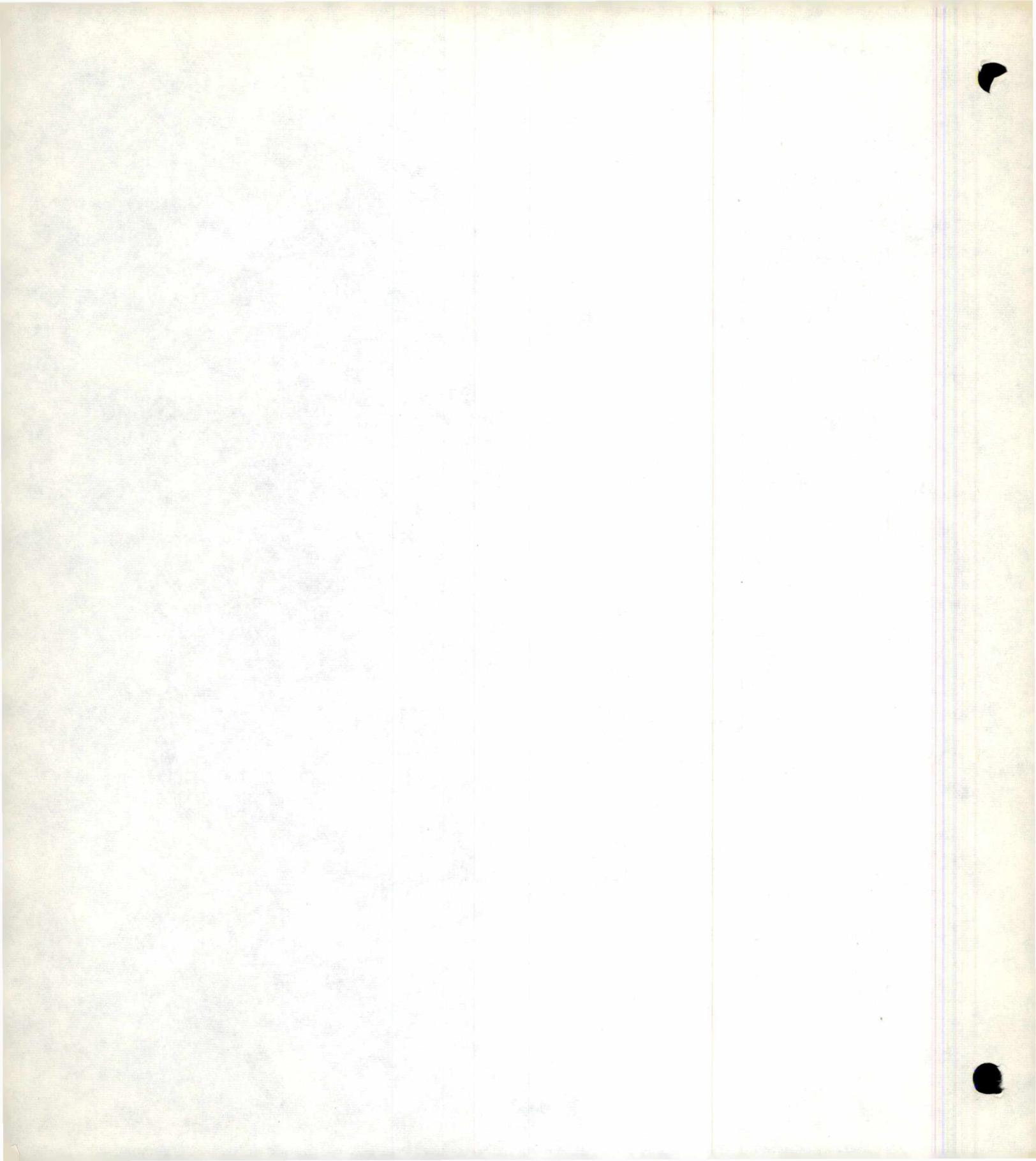
Contribution of signal unit - Hellyer - p. 18
 RCAF airlift for - Hellyer - p. 18
 Personnel at - Hellyer - p. 18

July 11, 1963

Army - U.N. operations - UNCF (ONUC) - CGS - p. 147
 - composition - CGS - p. 148
 - reduction of - CGS - pp. 147-48

October 22, 1963

U.N. peace-keeping activities - Cdn. contributions to re UNEF, UNCF -
 Foulkes - pp. 504-05
 Commitments to U.N. & UNEF - Cdn. control lost - UNCF, some forces
 mishandled - Churchill, Foulkes, Laniel - pp. 530-31, 538



UNITED NATIONS EMERGENCY FORCEJune 27, 1963

Contributions to - Hellyer - p. 18

Withdrawals from to send to Yemen - Hellyer - p. 18

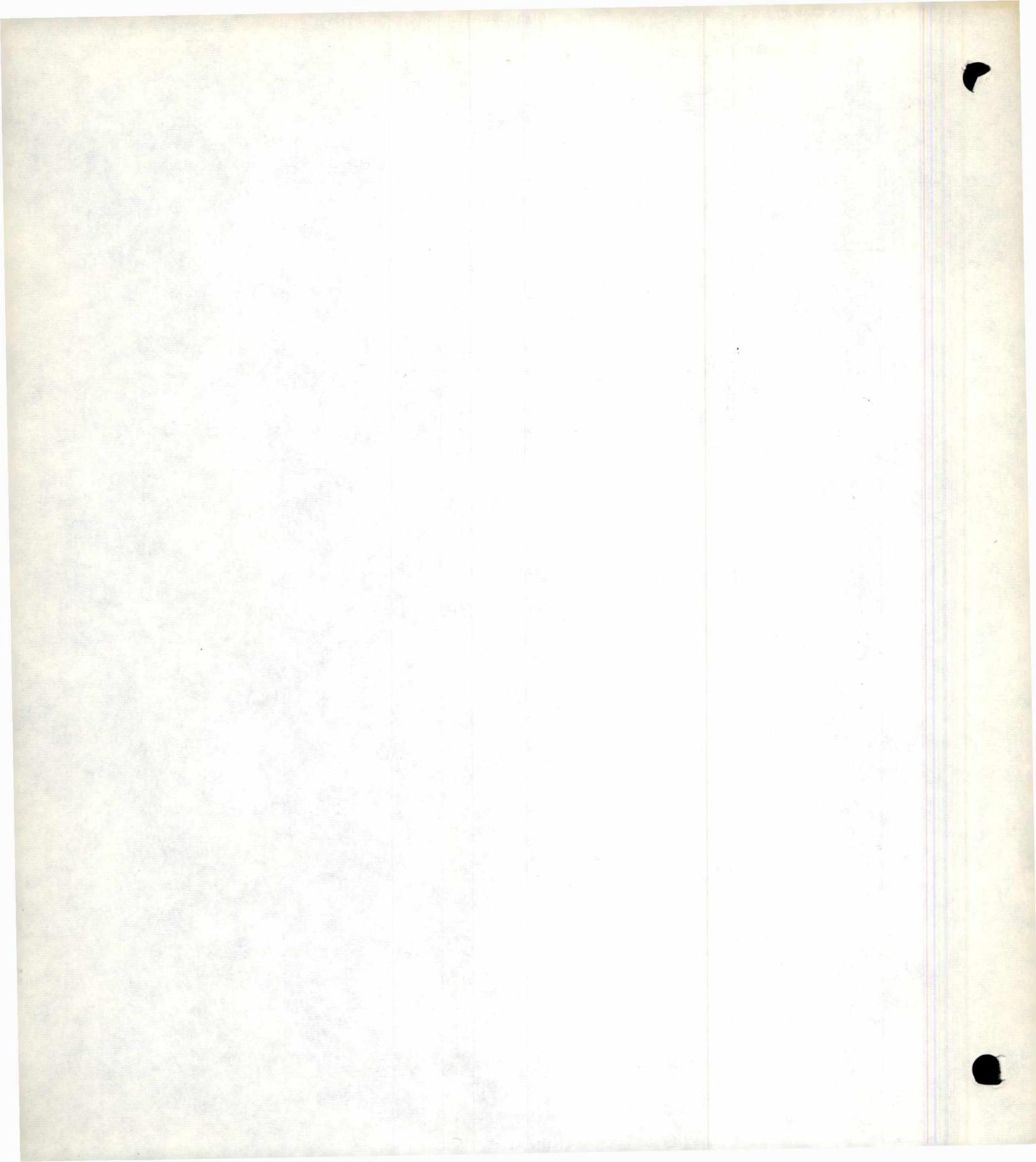
July 11, 1963

Army - U.N. operations - UNEF duties & composition - CGS - p. 147

October 22, 1963U.N. peace-keeping activities - Cdn. contributions to re UNEF, UNCF -
Foulkes - pp. 504-05

Offer of Queen's Own Regiment to UNEF - Lessard, Foulkes - p. 518

Commitments to UN & UNEF - Cdn. control lost - UNCF, some forces mishandled -
Churchill, Foulkes, Laniel - pp. 530-31, 538



U.S. ARMED FORCESJuly 4, 1963

U.S. sqdns. withdrawn from France - CCOS, Martineau - p. 67

July 9, 1963

Polaris vs Russian subs - relative capabilities - Smith, CNS - p. 118

July 16, 1963

Comparative Soviet & U.S. ICBM threat - Smith, CAS - p. 191

October 8, 1963

Speed of U.S. nuclear submarine - Temple, CNS - p. 319

Proposed frigates - speed of & comparison to U.S. - Temple, CNS, Hahn - pp. 319-20, 330

Cdn. & U.S. development of hydrofoil - Smith, CNS, Matheson, Granger - pp. 323, 333, 334-35

October 10, 1963

Frigates - function & capability - costs - comparison to U.S. & U.K. & NATO forces & Mackenzie Class vessel - speed - troop accommodation - purpose - helicopters for - Asselin, Matheson, Plomer, Smith, Churchill, Lloyd, Granger, Deachman - pp. 350-51-52, 359-60, 361, 365, 376-79, 380, 382-83, 384, 385-86-87

Navy - promotions & grievances - poor morale - comparison with USN & UK - Lloyd, Brewin, Plomer, Fairweather, Hahn, MacInnis - pp. 354, 363, 367-68, 369, 370, 374, 375

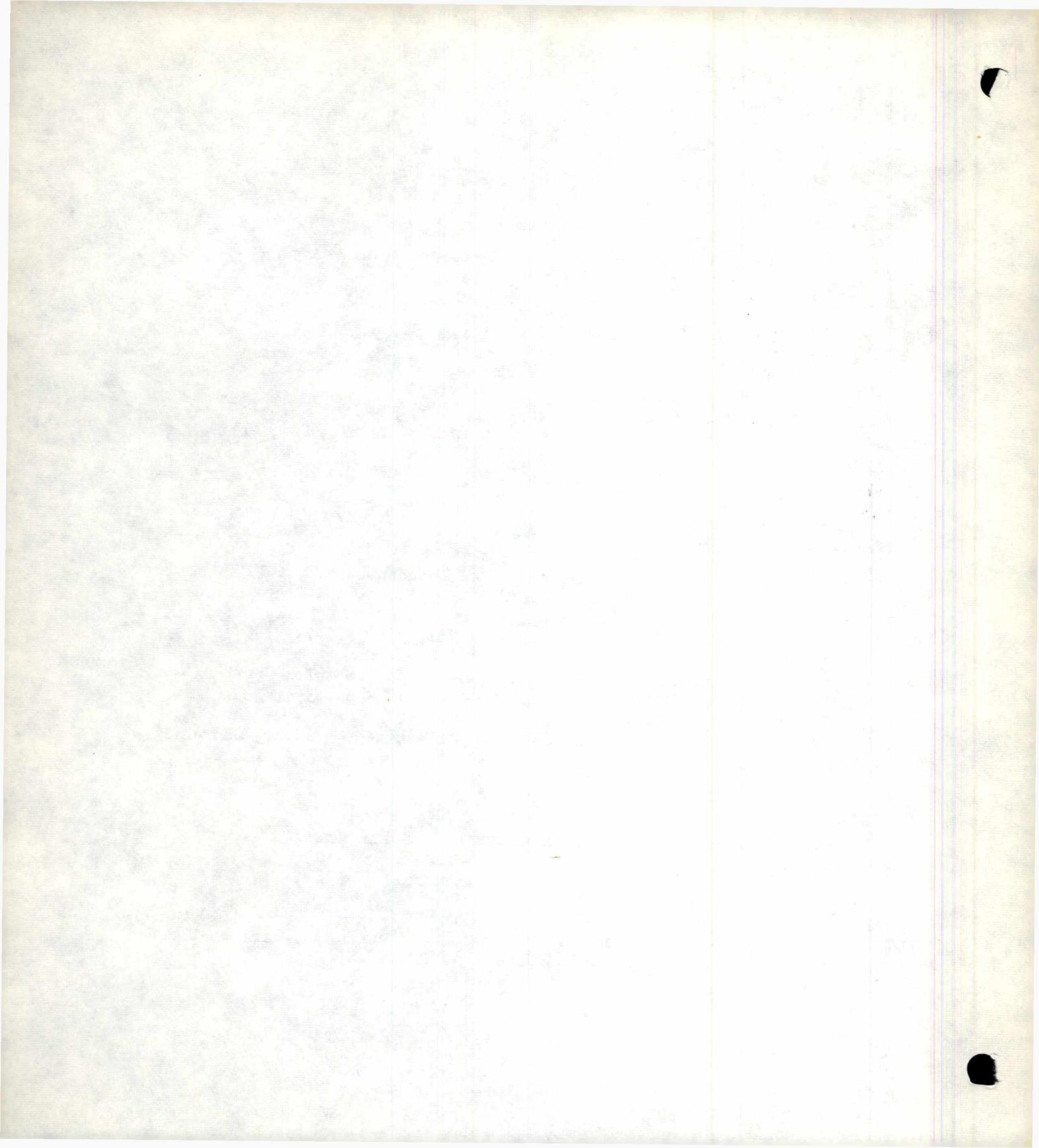
Navy - comparison of Cdn. to US & NATO ship performance - Plomer, Churchill - p. 383

October 15, 1963

Development of 3.70 AA gun - 5.54 gun & surface-to-air missiles - cost - use by RN & USN - MacRae, CNS, Winch - pp. 412-13

October 17, 1963

Mobile force - composition - modeled after U.S. Marine Corps - armament re - air transport of - Temple, Simonds - p. 477



U.S. ARMED FORCES - (Cont'd)October 24, 1963

Unification of Services at operational level not possible because of
specialization - possible in support & supply services & H.Q. level -
U.S. & U.K. efforts re - Gellner - pp. 573-74

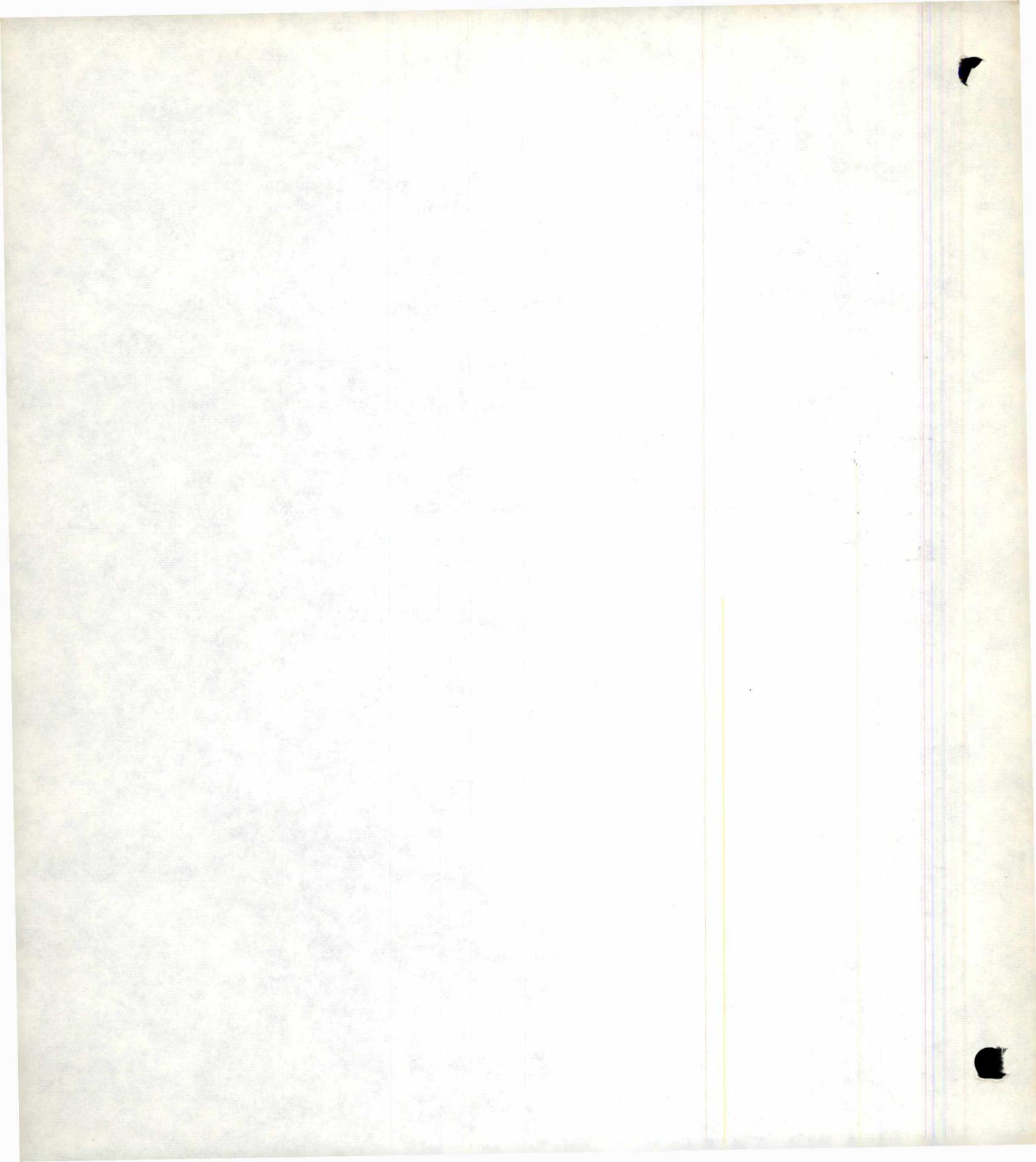
October 29, 1963

Design merchant ships for military convoy use - U.K. & U.S. - Smith, CGS -
p. 599

Unification of ordnance & supply services - procurement of FN rifle -
Air Force procurement of helicopters - food, etc. - co-op with Navy
and Air Force - common supply service - comparison to U.K. & U.S.
services - function of D.M. and scientific advisers re - Winch, CGS,
Deachman - pp. 616-17

October 31, 1963

U.S. tests re nuclear vs conventional anti-submarine arms - McMillan, CAS -
p. 648



U.S. DEFENCE POLICYJune 27, 1963

Conventional forces - need & increase - statement of U.S. Def. Min. -
 Hellyer - pp. 15, 16
 Request for cost of Bomarc program as indicated by U.S. Def. Sec. -
 Churchill - p. 23

July 2, 1963

U.S. decision not to produce anymore F101's - Smith, Hellyer - p. 52

July 4, 1963

U.S. authority re use of nuclear weapons - Hellyer, Lambert - p. 72

July 9, 1963

Increased U.S. construction of destroyer escorts - Smith, CNS - p. 118
 Statement by U.S. Assist. Def. Sec. re comparative Soviet-NATO conventional
 forces strength - Brewin - p. 123

October 17, 1963

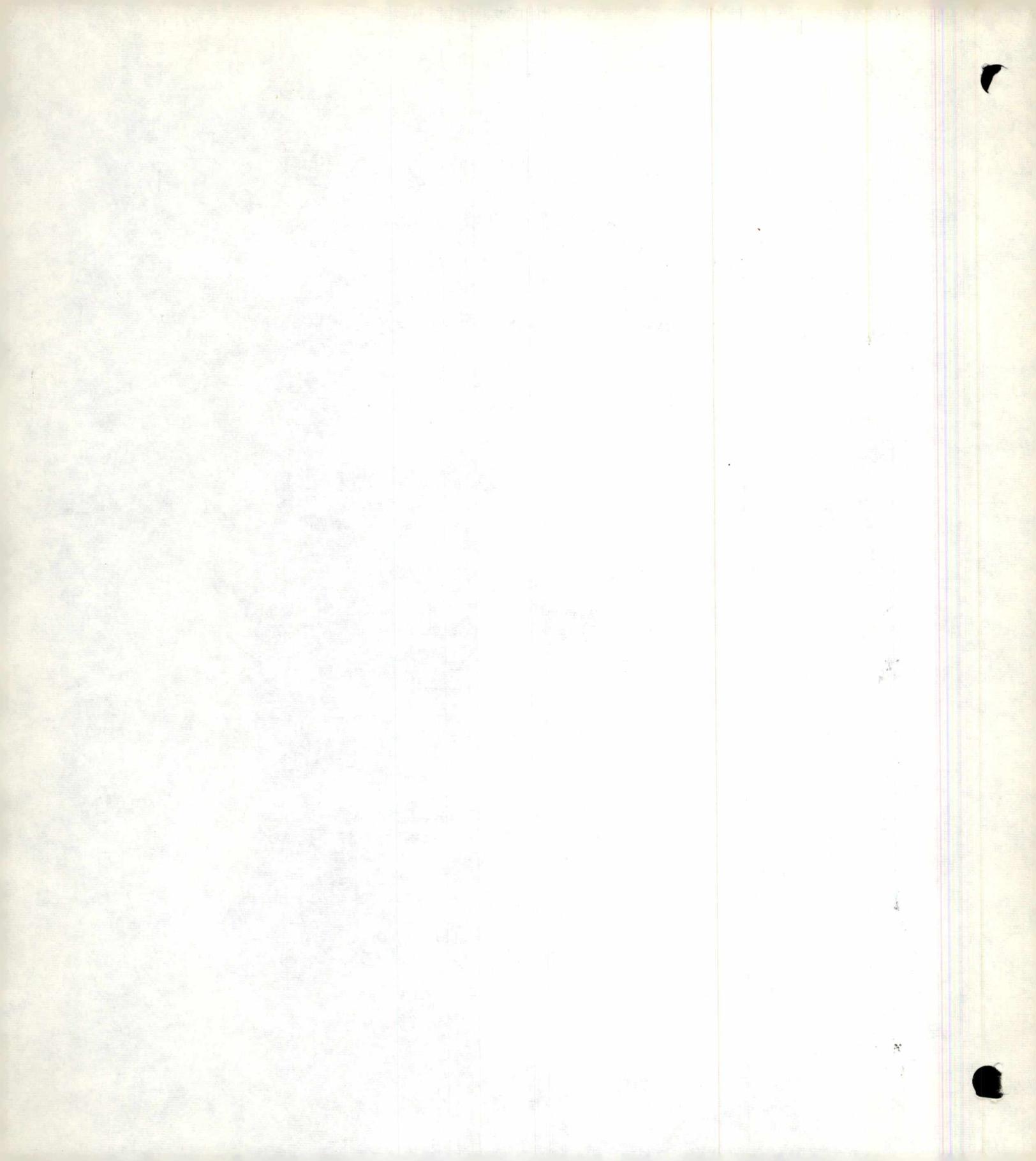
Bomarc obsolete - U.S. Def. Sec. statement - Brewin, Simonds - p. 451
 ICBM's - U.S. & Russian strengths re - Temple, Simonds - pp. 477-78

October 22, 1963

Control over nuclear arms in Europe - U.S. position re - Lessard, Foulkes -
 p. 516

October 24, 1963

Russian ICBM & missile sub threat vs U.S. retaliatory power - threat to
 NATO - deterrent - Gellner, Smith, Deachman, Granger - pp. 564-65,
 571, 580-82, 584
 U.S. control of nuclear weapons - Gellner - pp. 565-66
 Conventional war impossible - German & French view interested in absolute
 deterrence - re Greece & Turkey - Russia & U.S. would only fight nuclear
 war - stockpiling of nuclear weapons to over-kill capacity - Gellner,
 MacLean, Lambert, Deachman, Granger, Brewin - pp. 566, 567-68, 575,
 577, 580-86.

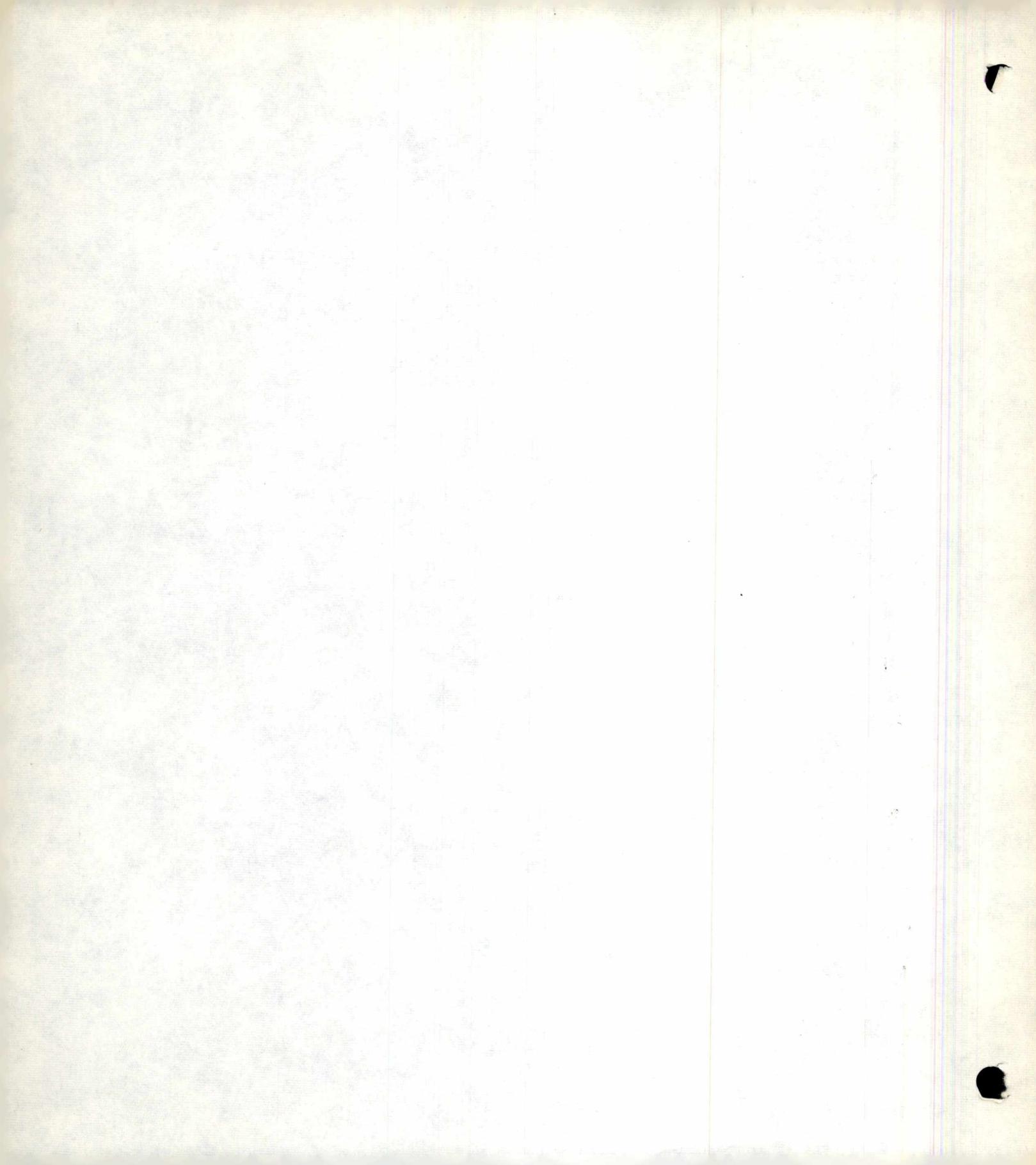


U.S. DEFENCE POLICY - (Cont'd)October 31, 1963

ICBM, ballistic missile submarine & bomber threats - degree of - statement
by U.S. Def. Sec. re - hardening of sites - accuracy of - defence
against - Churchill, CAS, MacInnis, Lambert, Hahn, Granger, Smith -
pp. 639-42

Supersonic bomber development in Russia, U.S. & U.K. - TSR-2 & TFX -
Granger, CAS - pp. 641-42

Deterrent - value of tactical forces in Europe & strategic forces in
U.S. & U.K. re - escalation into nuclear war - Churchill, CAS -
pp. 644-45



VISITSJune 27, 1963

US Gen. Lemnitzer's visit to Canada - Hellyer - p. 20

July 2, 1963

Bringing RCAF & USAF officers before cttee for briefing on Bomarc and visit to NORAD - Winch, Hellyer, Hahn - pp. 49-50, 53

July 4, 1963

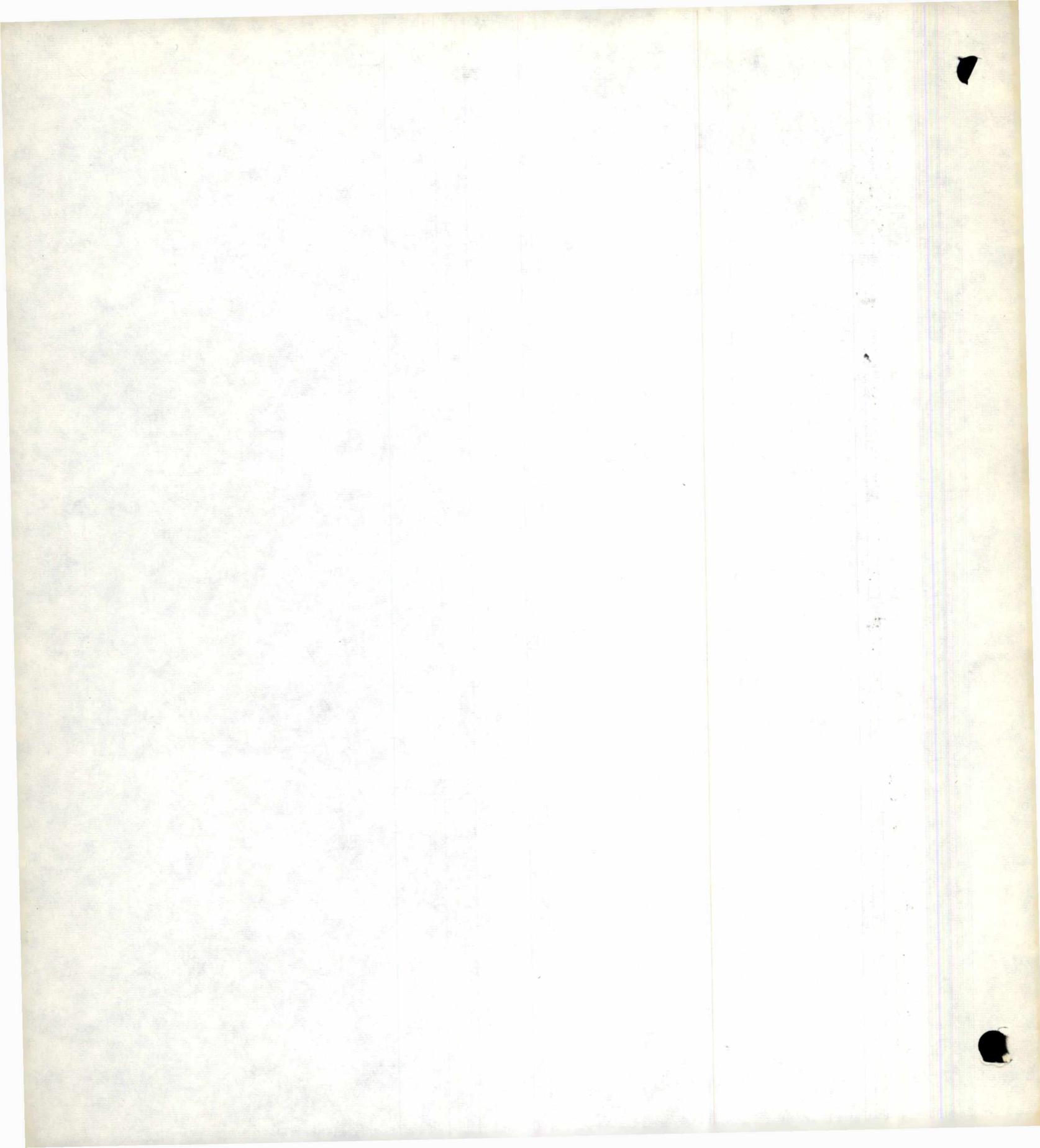
Visit to NORAD - Hellyer - pp. 76, 77

July 9, 1963

Navy - visits by RCN ships - CNS - p. 90

July 18, 1963

Visit to NORAD - pp. 201, 203



WEAPONS AND EQUIPMENTJuly 11, 1963

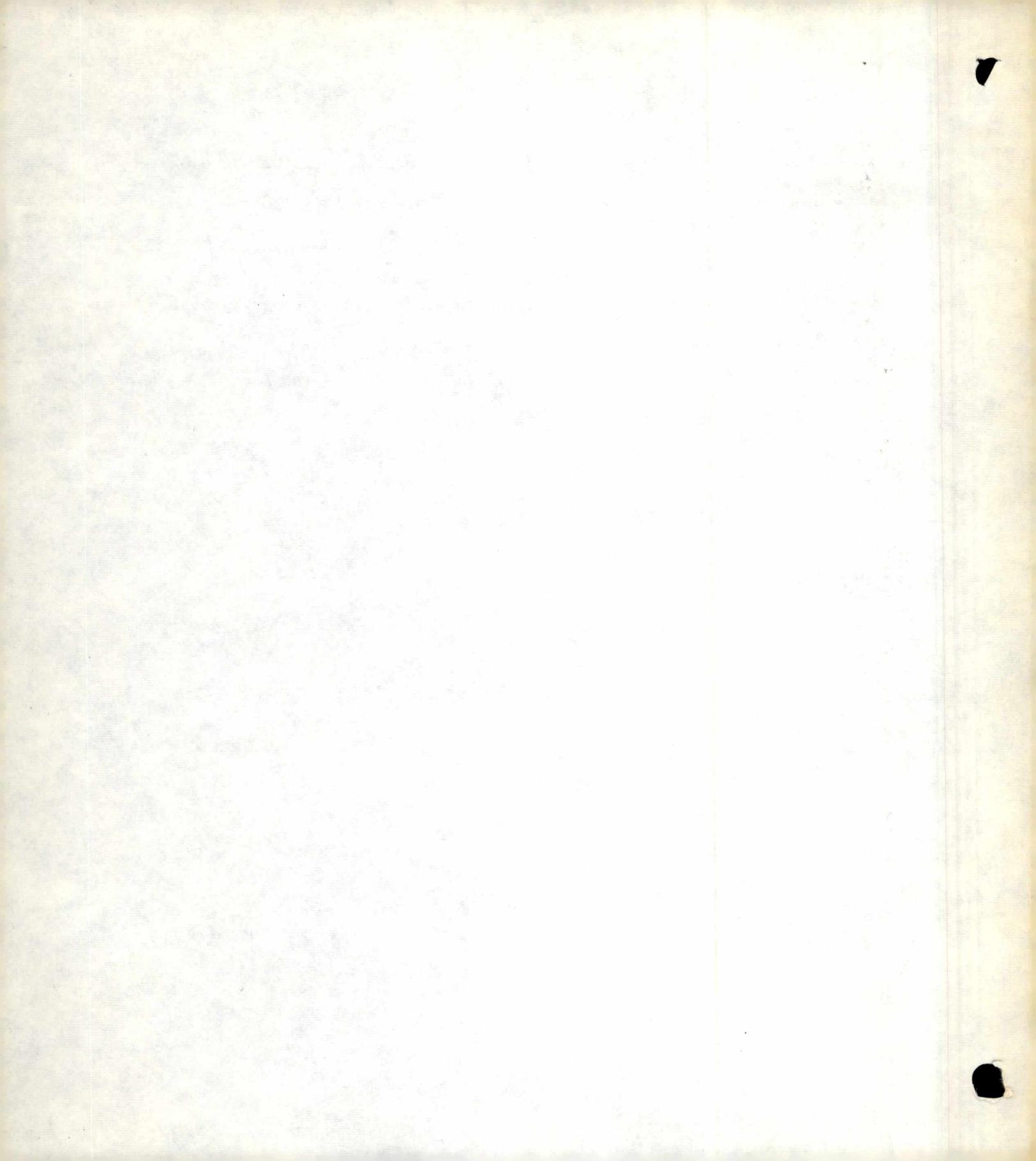
Army - Division re-inforcements - stockpiling of equipment in Europe - CGS -
p. 136

Army - acquisition & testing of SSN & ENTAC - CGS - pp. 137, 138

Army - signal eqpt. unsuitable - CGS - p. 137

October 20, 1963

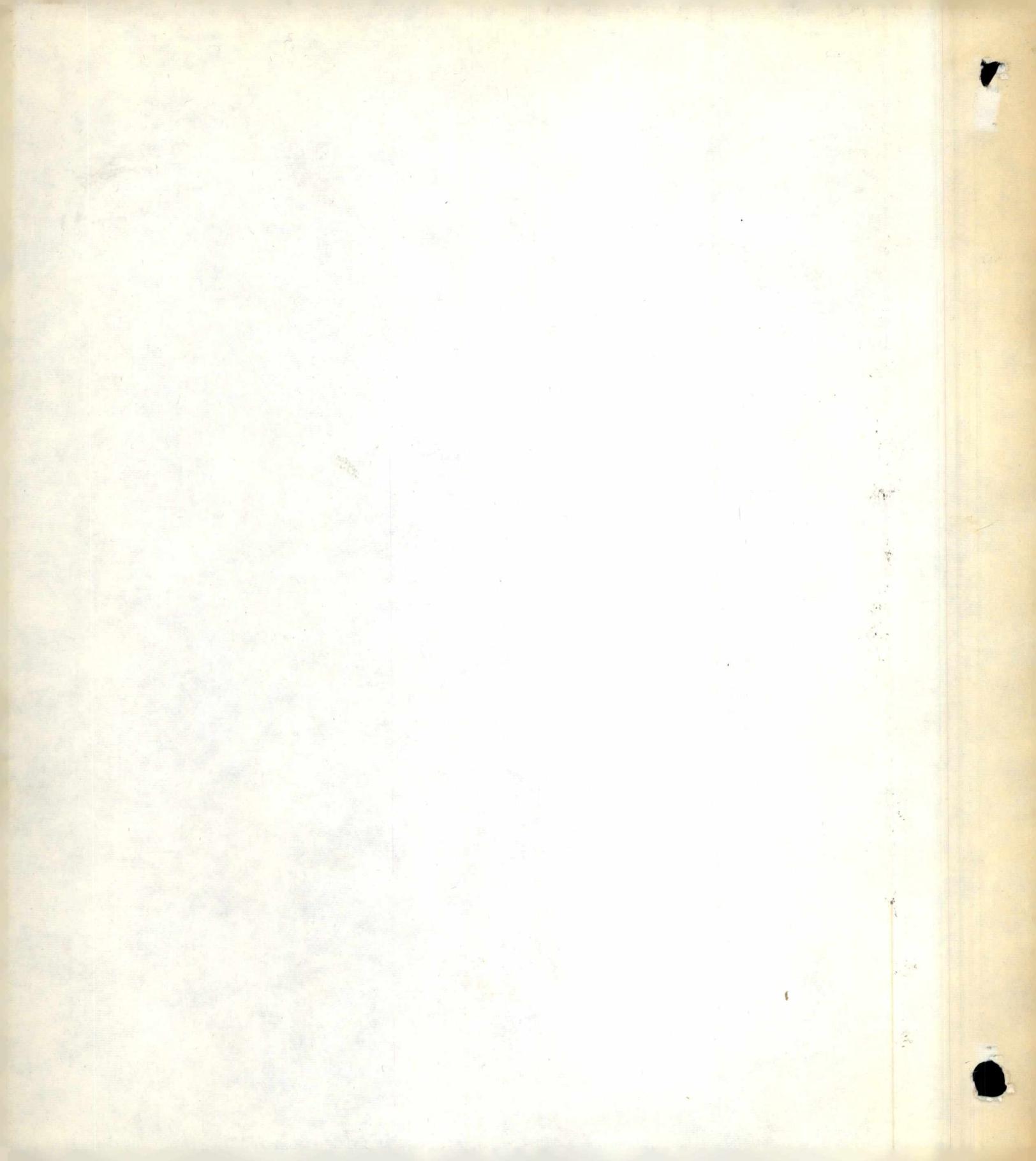
SS11 guided missile weapon & medium-range anti-tank weapons - range, etc. -
Brewin, CGS - pp. 593-94



ARMY MILITIA - Role of CMAAC - CGS - p. 151

July 11, 1953

WOMENS: SERVICES



Redi Binder
No. GW1604-H-4
Made In
All Sizes And Grades



309 Athlone Ave., Ottawa

