Veterans Administration

POW

Study of Former Prisoners of War

STUDY OF

FORMER PRISONERS OF WAR

STUDIES AND ANALYSIS SERVICE

OFFICE OF PLANNING AND PROGRAM EVALUATION

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

FOREWORD TO THE THIRD PRINTING

The mission of the Veterans Administration is to serve America's veterans and their families with dignity and compassion and to be their principal advocate in ensuring that they receive the care, support and recognition earned in service to this Nation. Former prisoners of war are a special group of veterans who have earned recognition for tribulations faced in service to their country and who have particular needs and concerns. Former POWs have endured extremely harsh and brutal conditions that have had a severe impact on their health, yet it has been difficult to attribute current disabilities to earlier POW experiences and to properly diagnose and treat these individuals without extensive knowledge of POW experiences and the disabilities prevalent among POWs. This Study of Former Prisoners of War, completed in 1980, is being reprinted and distributed to all VA regional offices and medical centers to improve the knowledge of those who adjudicate the claims of former POWs for benefits and those who treat their current health problems. This study presents original information, analyzes previously conducted studies, and provides a reference source for medical literature on diseases and disabilities prevalent among former POWs. It also was the basis for enactment of Public Law 97-37, the Former Prisoner of War Benefits Act of 1981.

As a former POW, I found this study to be factual, well written, and informative. It contains a wide range of information about the POW experience and its effects and provides a consolidated reference source that is invaluable in conducting further research. The bibliography identifies the key medical literature on the problems widely found among former POWs. I strongly recommend this study to everyone who provides service to former POWs and to anyone who is interested in the POW experience and its impact.

EVERETT ALVAREZ, JR.
Deputy Administrator of Veterans Affairs

FOREWORD TO THE THIRD PRINTING

I feel privileged to have been associated with the VA's Study of Former Prisoners of War. I provided a modest amount of advice and assistance during the conduct of the study. I reviewed the study upon its completion and testified before Congress on the study and the resulting legislation, Public Law 97-37, the Former Prisoners of War Benefits Act of 1981. I have also used the study extensively over the past year and a half as Chairman of the Advisory Committee on Former Prisoners of War. It is an extremely useful, excellent compendium that describes and evaluates the repatriation procedures, the types and severities of prevalent disabilities by areas and times, the procedures for determining eligibility for benefits, and surveys and analyzes the medical literature on health problems related to former POWs. It coalesces the studies done up to that time and adds to the increasing body of medical knowledge on the diseases and disabilities prevalent among former POWs. It provides a much clearer picture of the long term or latent physiological and psychological effects of malnutrition, wounds, serious physical abuse, apprehension and stress resulting from prolonged imprisonment.

The Advisory Committee on Former Prisoners of War has found that, although there is a considerable accumulated body of knowledge in the United States and in world literature relevant to disorders derived from deprivation and starvation, it is not widely known or accepted. This study is an outstanding reference source for continuing education. The Committee recommended that the VA reprint and redistribute the study to its regional offices and medical facilities. We are convinced that the knowledge of VA personnel who examine, treat, and adjudicate the claims of former POWs will be improved greatly by this study. Thus, they will receive more appropriate health care and compensation which are not only needed and deserved but are the spirit and intent of Public Law 97-37.

JOHN P. FLYNN
Lt. Gen., USAF (Ret.)
Chairman, Advisory Committee
on Former Prisoners of War

ACKNOWLEDGEMENTS

The study team expresses its gratitude to a number of persons whose cooperation, assistance and expertise were of inestimable value during the course of the study.

Capt. Raymond C. Spaulding, MC, USN; CDR William Berg, MC, USN; LCDR John Shale, MC, USN; Milton Richlin, Ph. D., Naval Health Research Center.

Major Harry Wetzler, USAF, MC, School of Aerospace Medicine.

Capt. Raymond Vohden, USN, Office of POW-MIA Affairs, Department of Defense.

Capt. Robert Mitchell, MC, USN, Naval Aerospace Medical Research Laboratory.

Charles F. Hill, M.D., R. Adm. Robert G. W. Williams Jr., MC, USN (Ret.) and Eugene M. Caffey, M.D., consultants.

William H. Cunliffe, National Archives and Records Service.

Robert L. Goldich, Congressional Research Service, Library of Congress.

Seymour Jablon, Abraham Simon and Robert J. Keehn, National Academy of Sciences-National Research Council.

Frank A. Sieverts, Deputy Assistant Secretary of State for Human Rights and Humanitarian Affairs, U.S. Department of State.

LTC Garland R. Mitchell, USA, Army Central Security Facility.

Jack R. Ewalt, M.D. and Stewart L. Baker, M.D., VA Department of Medicine and Surgery.

Lawrence Wheeler, Richard V. Chamberlain, Carol Wheeler and Bernice B. Weinstein, VA Department of Veterans Benefits.

Neil S. Reiter, Gerald M. Stevens, Virgil W. Hickman and John E. Siemens, Board of Veterans Appeals.

Robert S. Klear, Robert H. Feitz and Robert H. Burger, VA Office of the Controller.

Doris Mulligan and Arthur A. Hunt, VA Office of Data Management and Telecommunications.

The study team extends special appreciation to the veterans organizations, in particular the American Ex-Prisoners of War, the American Defenders of Bataan and Corregidor and the Air Force Association for their support and assistance. We would also like to thank individual former prisoners of war who provided invaluable insight, information and suggestions through their personal experiences and knowledge. In particular, we would like to thank Mr. Stanley G. Sommers, Mr. Takeshi Kumagai and Lt. Gen. John P. Flynn, USAF (Ret.), former prisoners of war of World War II, Korea and Vietnam, respectively, for their assistance and personal efforts.

EXECUTIVE SUMMARY

REQUIREMENT FOR THE STUDY

The study requirement appeared as Section 305 of the Veterans' Disability Compensation and Survivors' Benefits Act of 1978 (Public Law 95-479, enacted October 18, 1978). In part, Section 305(a) reads, "The Administrator of Veterans' Affairs, in consultation with the Secretary of Defense, shall carry out a comprehensive study of the disability compensation awarded to, and the health-care needs of, veterans who are former prisoners of war."

PURPOSE OF THE STUDY

The purpose of the study is to recommend actions necessary to assure that former prisoners of war receive compensation and health care benefits for all disabilities which may reasonably be attributed to their internment.

ELEMENTS OF SECTION 305, P.L. 95-479

As specified in the law, the areas of study include:

"... descriptions and analyses of the repatriation procedures, including physical examinations, for former prisoners of war and the adequacy of such procedures and the resultant medical records of former prisoners of war;

"... the types and severity of disabilities that are particularly prevalent among former prisoners of war in various theaters of operation at various times;

"... a description and analysis of procedures used with respect to former prisoners of war in determining eligibility for health care benefits and in adjudicating claims for disability compensation, including an analysis of the current use of statutory and regulatory provisions specifically relating to former prisoners pf war; and

"... a survey and analysis of the medical literature on the health-related problems of former prisoners of war."

The law also specified that "the report shall include recommendations for such administrative and legislative action as the Administrator considers may be necessary to assure that former prisoners of war receive compensation and health care benefits for all disabilities which may reasonably be attributed to their internment."

SCOPE OF THE STUDY

The study addresses former prisoners of war (POWs) repatriated from World War I, World War II, the Korean conflict and the Vietnam era. Of the 142,307 Americans captured and interned, 125,253 were returned to U.S. military control. The most recent estimate indicates that 98,494 former POWs were still alive on January 1, 1979.

Former POWs from World War I were excluded from formal analysis during this study but recommendations made in this report are intended to apply to them also. This group, consisting of an estimated 800 living persons, was excluded from analysis largely because of the difficulty in obtaining reliable historical data. American civilians who were captured and interned during the above conflicts were not included in the study.

MAJOR FINDINGS

One finding which is essential for understanding this entire study is that the POW experience - characterized by starvation diet, poor quality or nonexistent medical care, "death marches," executions, and torture - has historically been an extremely harsh and brutal experience.

The major finding derived from the description and analysis of repatriation procedures was that the comprehensive administrative and medical repatriation procedures written for World War II and Korea POWs were not fully implemented in the medical area. Evidence of this comes from a physician review of a representative sample of former World War II POW claims folders, which revealed that many of these records lacked repatriation examinations. Thus, the Congressional concern about the lack of repatriation examinations and resultant medical records among these former POWs is well founded. The claims folder review also demonstrated that while the medical processing of Korea POWs, as indicated by their repatriation examinations, was better than that of former World War II POWs, it was still not completely adequate. The inadequate medical processing which apparently characterized the repatriation of former World War II and Korea POWs is not an issue among former Vietnam POWs, as they received the most thorough repatriation medical examinations and follow-up care of any POW group.

The principal finding from the review of the types and severity of former POW disabilities i that former POWs have a significantly higher incidence of service-connected disability. The dat comparison demonstrated that former Pacific Theater POWs are the most disabled of the PO groups under study, followed closely by former Korea POWs. While not as disabled as Pacific an Korea ex-POWs, former European Theater POWs are still significantly more disabled than othe

World War II veterans. While conclusions about the relative disability of former Vietnam POWs must await the outcome of currently ongoing studies, it is apparent from the available morbidity and mortality data on World War II and Korea POWs that those POWs interned by an Asian captor generally received harsher treatment and suffered from more disabilities than other POWs.

The review of the types and severity of former POW disabilities also points out that the most prevalent service-connected condition of the former POWs under study, from the time of their repatriation to the present, is anxiety neurosis. A comparison of service-connected anxiety neurosis among former European Theater POWs with length of internment revealed that anxiety neurosis appears in a significantly greater amount among these former POWs than among other service-connected wartime veterans. This relationship persists regardless of the length of time in captivity.

The central finding of the analysis of law and procedures concerning former POWs is that in determining eligibility for health care benefits or in adjudicating disability compensation claims, the VA generally accords former POWs the special consideration to which they are entitled under current statutory and regulatory provisions.

The survey of the medical literature used a wide variety of sources such as national and international medical journals, follow-up epidemiological studies, personal accounts, and discussions of family and social issues to point out that the POW experience affects their current health status. The published medical literature indicates that many of the present physical problems of former POWs may be attributed to the malnutrition and brutality suffered during captivity, just as many of their present psychological problems can be attributed to the stress of internment. The medical literature review points out that psychological problems, in the form of anxiety neurosis and psychosis, are particularly prevalent among former POWs.

The conclusions presented below are based on the abovementioned principal findings. Each conclusion provides the supporting rationale for a corresponding recommendation. The recommendations include both legislative and administrative actions considered necessary to assure that former POWs receive compensation and health care benefits for all disabilities which may reasonably be attributed to their internment. The first recommendations discussed are the legislative ones; the next are the administrative ones.

RECOMMENDED LEGISLATIVE ACTIONS

Expanded Eligibility for VA Health Care

All of the information and data analyzed in this study show that a significantly greater proportion of former POWs have service-connected disabilities than other veterans who served during the same periods. The former POW has also been shown to be more severely disabled than non-POW veterans. Despite this, two factors make the adjudication decisions extremely difficult: one is the frequent absence of medical information at the time of repatriation and the second is that medical science cannot, at this time, conclusively determine on an individual basis the origins of some disabilities particularly prevalent among former POWs.

In recognition of the higher incidence of disability among former POWs and the difficulties faced when adjudicating claims by former POWs, the VA Department of Medicine and Surgery recommends that former POWs be authorized eligibility for VA hospital care and medical services (other than dental care) for any disease or neuropsychiatric disability, with the same priority as is granted a service-connected veteran seeking care for a nonservice-connected disability. This would assure that former POWs receive health care benefits for all disabilities which may be attributable to their internment.

Recommendation: That title 38 U.S.C. be amended to authorize eligibility to former POWs for VA hospital care and medical services for any disease or neuropsychiatric disability.

Service-Connection for Psychosis at Any Time After Service

Public Law 91-376 grants a presumption of service-connection for a POW related psychosis which becomes manifest to a degree of 10 percent or more within two years from the date of separation from service. The evidence presented in this study's medical literature review indicates that psychosis related to the POW experience frequently appears years after service, and not just immediately after separation. This is understandable in view of the psychological torture and "brainwashing" to which these POWs were subjected.

Recommendation: That title 38 be amended to eliminate the requirement that psychoses suffered by POWs must become manifest within two years following service separation before the rebuttable presumption of service-connection arises.

National POW/MIA Recognition Day

P.L. 95-349 designated July 18, 1979 as National POW/MIA Recognition Day. A 1979 Presidential proclamation announced this event and asked federal government agencies, state and local officials, and private organizations to observe this day with appropriate ceremonies. The VA and DOD commemorated this day with special activities throughout the nation. A special service was conducted at the National Cathedral in Washington, D.C. with participation by the Administrator of Veterans Affairs and the Joint Chiefs of Staff.

Recommendation: That a specific date be designated as an annual National POW/MIA Recognition Day to honor and recognize the extreme sacrifice made for their country by this special group of combat veterans.

RECOMMENDED ADMINISTRATIVE ACTIONS

The following recommendations for administrative action are listed without the supporting conclusions for brevity. The recommended actions include some that have been initiated during the study. Each of the recommended actions will better enable the VA to provide health care and disability compensation benefits to former POWs.

Recommendation: That the VA's forthcoming guidelines on "post-traumatic stress neurosis" include an explicit reference to former POWs as well as other combat veterans, and that these guidelines specifically be used to diagnose, treat, and rate former POWs with anxiety neurosis or similar neurotic disorders as well as other combat veterans.

Recommendation: That the VA adopt a standardized protocol for disability and compensation examinations for all former POWs similar to that developed by the military for the former Vietnam POWs, and that each VA Medical Center designate certain physicians knowledgeable about former POWs and their medical problems to conduct or supervise such examinations for purposes of follow-up treatment and research.

Recommendation: That follow-up medical treatment and research of former Vietnam POWs still on active duty be continued by DOD, and that follow-up treatment and research of former Vietnam POWs separated from the military be conducted at VA Medical Centers using military protocols, with the individual results of such examinations furnished to DOD and the statistical results published and disseminated by the VA.

Recommendation: That the VA take such action as is necessary to establish the proposed advisory committee of authorities in the types of disabilities prevalent in former POWs, use the expert opinions of the panel to assess the medical evidence on former POWs and advise the Administrator and his staff on agency policies and procedures concerning former POWs.

Recommendation: That the VA implement procedures for conducting thorough pathological material examinations (surgical, cytologic, autopsy) of former POWs whenever possible, conduct special mortality studies when sufficient data is available, and provide such data as evidence in individual cases for determination of whether the death was the result of a service-connected disability.

Recommendation: That the VA review its manual and computerized records and forms to identify those which should be identified with POW indicators, and then take the appropriate administrative actions to ensure that these records and forms are so identified.

Recommendation: That the VA periodically emphasize the special health care and compensation procedures applicable to former POWs through its agency information and education programs, and that a copy of this report be provided each VA Medical Center and Regional Office as a reference on former POWs.

Recommendation: That the VA designate certain individual(s) to be the VA Central Office coordinator(s) with the responsibility for assisting in the implementation of ongoing VA programs for former POWs; serving as liaison with individual former POWs, former POW groups, and the DOD Office of POW/MIA Affairs; and monitoring this study's recommendations.

INTRODUCTION

SUBJECT OF THE STUDY

The study of Former Prisoners of War is a comprehensive study of the health-care and compensation needs of veterans who are former prisoners of war (POWs). The study was required by the Veterans' Disability Compensation and Survivors' Benefits Act of 1978 (Public Law 95-479) enacted October 18, 1978. Section 305 of the Act contains the requirement for the study:

> (a) The Administrator of Veterans' Affairs, in consultation with the Secretary of Defense, shall carry out a comprehensive study of the disability compensation awarded to, and the health-care needs of, veterans who are former prisoners of war. The Administrator shall include in such study---
>
> (1) descriptions and analyses of the repatriation procedures, including physical examinations, for former prisoners of war and the adequacy of such procedures and the resultant medical records of former prisoners of war;
>
> (2) the types and severity of disabilities that are particularly prevalent among former prisoners of war in various theaters of operation at various times;
>
> (3) a description and analysis of procedures used with respect to former prisoners of war in determining eligibility for health-care benefits and in adjudicating claims for disability compensation, including an analysis of the current use of statutory and regulatory provisions specifically relating to former prisoners of war; and
>
> (4) a survey and analysis of the medical literature on the health-related problems of former prisoners of war.
>
> (b) The Administrator shall transmit to the Congress and to the President a report on the results of such study not later than February 1, 1980. Such report shall include recommendations for such administrative and legislative action as the Administrator considers may be necessary to assure that former prisoners of war receive compensation and health-care benefits for all disabilities which may reasonably be attributed to their internment.

There has been continuing concern over the years for the health and welfare of former POWs and the aftereffects of their incarceration. The requirement for this study reflects the current congressional concern, particularly by the Senate and House Veterans Affairs Committees, over whether the health-care and compensation needs of former POWs are being adequately met.

PURPOSE OF THE STUDY

The purpose of the study is to recommend actions necessary "to assure that former prisoners of war receive compensation and health-care benefits for all disabilities which may reasonably be attributed to their internment."[1] A principal concern is whether former POWs are able to prove service-connection for disabilities attributable to the conditions of capture and internment. Some

former POWs claim that their ability to prove service-connection for disabilities is hampered because there are inadequate medical records, they received only cursory physical and psychological examinations at repatriation, and certain disabilities which were originally considered to be minor are now progressively debilitating. Other issues include whether former POWs, when compared with their non-POW counterparts, have excessive death rates or a higher incidence of such things as cardiovascular disease, "K-Z" (concentration camp) syndrome, tuberculosis, infective and parasitic diseases, nutritional disorders, nerve disorders, intestine and liver diseases, genitourinary and bone diseases.[2] The study attempts to resolve these issues and focuses on the most current information available on the physical and psychological effects of the POW experience.

SCOPE OF THE STUDY

This study addresses former POWs repatriated from World War I, World War II, Korean Conflict and the Veteran Era. The most recent estimate indicates that there are nearly 100,000 American former POWs living today. Table I below shows the number of POWs from each conflict.

TABLE 1

NUMBER OF AMERICAN POWS

	TOTAL	WWI	TOTAL WWII	WWII PACIFIC	WWII EUROPE	KOREAN CONFLICT	PUEBLO	VIET NAM
CAPTURED & INTERNED	142,307	4,120	130,201*	34,648	95,532	7,140	80	766
STILL CLASSIFIED AS POW	7							7
DIED WHILE POW	17,026	147	14,072*	12,935	1,124	2,701		106
REFUSED REPATRIATION	21					21		
RETURNED TO U.S. MILITARY CONTROL	125,253	3,973	116,129*	21,713	94,408	4,418	80	653
ESTIMATED NO. RETURNEES ALIVE ON JAN. 1, 1979	98,494	800	93,128	16,237	76,891	3,844	80	642

*These "Total WWII" figures represent more than the sum of the corresponding "WWII Pacific" and "WWII Europe" figures - i.e., the 130,201 POWs captured and interned during WWII includes 21 POWs captured prior to arrival in the Pacific and European Theaters; the 14,072 POWs who died while held as POWs includes 13 of these 21 POWs captured enroute to the theater of operation; the 116,129 POWs returned to U.S. military control includes the remaining 8 of these 21 POWs.

Source: Charles Stenger, "American POWs in WWI, WWII, Korea, and Vietnam - Statistical Data", Veterans Administration Central Office, Washington, D. C., June 30, 1979.

Former POWs from World War I were excluded from formal analysis during this study but recommendations made in this report are intended to apply to them also. The decision to exclude this group from analysis was made largely because of the difficulty in obtaining reliable data. Contributing factors were the advanced ages and the small number of these former POWs estimated to be alive and the relatively short duration of the American involvement in the war and the period of internment.

Prisoner of War

Consistent with Section 305 of Public Law 95-479, this study covers veterans who were prisoners of war. Section 101, 38 U.S.C., defines a veteran as a "person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable." A prisoner of war for purposes of this study is defined as a member of the armed forces who was held by an enemy government or its agents during World War I, World War II, Korean conflict or the Vietnam Era.

Civilian Internee

American civilians who were captured and interned during the above conflicts were not included in this study for several reasons. First, they are not veterans who are former prisoners of war as specified in P.L. 95-479. Second, there were significant differences from the military prisoners in age, gender, health status and training prior to capture. Third, while some civilians were treated as military POWs, often they were detained separately and received markedly different treatment. Fourth, their exclusion is consistent with an earlier study which recommended that no controlled study of civilian internees be made and that the results of studies of POWs be considered as applying to civilian internees.[3] Finally the VA has the information on veterans who are former POWs in computer systems, claims folders and medical records but possesses no information on civilian internees. Thus, civilian internees were not included within the scope of the study.

ORGANIZATION OF THE REPORT

This report is organized to generally follow the objectives of the study as stated in P.L. 95-479, section 305. The Methodology section explains the methologies used in the study. The Historical Perspective and Conditions of Captivity sections provide the reader with a basic understanding of what it meant to be a POW in order to better comprehend why it caused problems later in life for the former POW. The Repatriation Procedures and Processing section describes the special procedures developed to repatriate POWs, analyzes how well they were followed, and assesses the effect on the former POWs medical records. The Types and Severity of Disabilities section assesses the information available on the types and severity of the disabilities particularly prevalent among former POWs. The Law and Procedures section reviews the statutory and procedural provisions specifically relating to providing health care and compensation benefits to former POWs. The Foreign Government POW Programs section reviews the special programs established by several governments for former POWs. The Review of Medical Literature

section reviews the medical literature relating to the POW experience and later effects. Finally, the Conclusions and Recommendations section assesses all of the information collected and analyzed in the preceeding sections, provides the overall conclusions of the study and recommends actions to be taken to "assure that former prisoners of war receive compensation and health-care benefits for all disabilities which may reasonably be attributed to their internment."

FOOTNOTES

1 Veterans' Disability Compensation and Survivors' Benefits Act of 1978, P.L. 95-479, sec. 305(b), 38 U.S.C. (1978).

2 Sen. Rep. No. 95-1054, 95th Cong., 2d sess. 35-36 (1978).

3 Effects of Malnutrition and other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II: An Appraisal of Current Information, U.S. Department of Health, Education and Welfare, 1956.

METHODOLOGY

STUDY ORGANIZATION

The Administrator assigned the responsibility for conducting this study to the Assistant Administrator for Planning and Program Evaluation in November, 1978.[1] A Steering Committee, composed of top level VA and Department of Defense representatives, was then formed to provide policy guidance, resources for the Task Force, an oversight function and top level coordination. The members of the Steering Committee are listed below:

Mr. Martin D. Carlin, Chairman(Thru February 29, 1980)
Mr. Raymond S. Blunt, Chairman (From March 1, 1980)
Assistant Administrator for Planning and Program Evaluation
Veterans Administration

Mr. John J. Leffler
Associate Deputy Administrator
Veterans Administration

Capt. Peter A. Flynn, MC, USN
Special Assistant for Professional Activities
Office of the Assistant Secretary of Defense for Health Affairs
Department of Defense

Dr. James C. Crutcher (Thru January 2, 1980)
Dr. Donald L. Custis (From January 2, 1980)
Chief Medical Director
Department of Medicine and Surgery
Veterans Administration

Miss Dorothy L. Starbuck
Chief Benefits Director
Department of Veterans Benefits
Veterans Administration

Mr Sydney J. Shuman
Chairman, Board of Veterans Appeals
Veterans Administration

Mr Guy H. McMichael
General Counsel
Veterans Administration

Mr. Conrad R. Hoffman
Controller
Veterans Administration

Mr. William R. Martin
Assistant Administrator for Data Management and Telecommunications
Veterans Administration

A Task Force, composed of members designated by Steering Committee representatives, was also established. The Task Force was the working level group, responsible for performing necessary study tasks and reporting to the Steering Committee on the study's progress. The members of the Task Force are listed below:

Mr. H. Raymond Wilburn, Jr., Project Manager
Mr. Alexander Havas
Mr. Burton L. Ziskind
Mr. Michael L. Norman
Office of Planning and Program Evaluation

Mr. Herbert B. Mars
Department of Veterans Benefits

Dr. Charles A. Stenger (Thru February 8, 1980)
Dr. Jack R. Ewalt
Department of Medicine and Surgery

Mr. Jan S. Donsbach
Board of Veterans Appeals

Mr. John H. Thompson
Mr. Ralph J. Ibson
Office of the General Counsel

Mr. Michael L. Facine
Office of the Controller

Mr. Wayne M. Sartis
Office of Data Management and Telecommunications

Mr. Doneld R. Howell
Office of Management Services

STUDY CONSTRAINTS

The relatively short time (14 months) allowed for this study limited the amount of data that could be collected and analyzed. This meant that data collection had to be restricted largely to VA computer systems and claims folders. Therefore, certain information, such as that contained in the Department of Defense disability retirement data system, was not used. Questionnaire surveys and clinical examinations of former POWs also could not be performed within the time frame allotted for this study. However, results of two questionnaire surveys of former POWs are expected to be available after the completion of this study. Congressman Norman Dicks of the State of Washington has conducted a survey of a sample of American Ex-POWs, Inc. members concerning their relationship with the VA and other aspects of their health and compensation status. This survey is supposed to be released to the Congress and the VA in early 1980.[2] A questionnaire survey of a randomly selected sample of former POWs has been planned as part of a new follow-up POW morbidity study by the National Academy of Sciences. It is expected that this new NAS/NRC study will take approximately three years to complete.[3]

Results of former POW clinical examinations should also be available after the completion of this study, in the form of a five-year follow-up study by the Naval Health Research Center of a sample of former Vietnam POWs and their matched controls.

Time limitations also prevented the analysis of some data that was collected. This was true of the nonservice-connected disabilities from the Compensation and Pension (C&P) system and the VA Patient Treatment File (PTF) information on VA hospital diagnoses for former POWs. However, it is very doubtful whether this data would have significantly contributed to the findings already presented in this report. This is because the nonservice-connected disability data includes

all disabilities which a former POW alleges, whether or not they actually are confirmed upon examination. Thus, any analysis of these nonservice-connected disabilities would fail to distinguisn between those nonservice conditions which former POWs actually have and those which are claimed but not verified by examination. By contrast, the data on service-connected conditions include only those that are clinically diagnosed. Furthermore, the PTF only consists of VA hospital inpatient diagnoses for the past 10 years (1970-1979). Considering that most veterans receive medical treatment from other than VA sources and that the bulk of former POWs were repatriated approximately 35 years ago, it is very doubtful that the PTF reveals enough diagnoses to be truly representative of disabilities suffered, or health care benefits used, by former POWs.

STUDY ACTIVITIES

Several major actions were taken in order to accomplish this study. These included extensive background research, acquiring lists of former POWs, comparison of data contained in VA computer systems on POWs with non-POWs serving during the same periods, a review of a representative sample of former POW claims folders, and a review of the medical literature on the health problems of former POWs.

Background Research

Task Force members were in contact with many former POWs. These individuals provided useful historical, medical, and other background material for this report. The most frequent type of contact was letters from former POWs and their families, which provided case histories of the physical deprivations and psychological stress former POWs endured during their internment, as well as accounts of their post-repatriation adjustment difficulties. These issues are discussed in the chapters on repatriation procedures, types and severity of disabilities, and VA compensation and health care procedures. Correspondence was answered by the staff of the Assistant Administrator for Planning and Program Evaluation. Those letters requiring action as well as acknowledgement were sent to the appropriate VA department or staff office for reply.

Letters were also received from the governments of Great Britain, France, the Netherlands, West Germany, Australia, and Canada, in response to a request for information on their former POW programs. The basis for this request was Senate Report No. 95-1054, dated July 31, 1978, which indicated that the study should include foreign benefits information in the analysis of compensation and health care procedures.[4] Foreign program information was also sought because many former POWs expressed interest in the benefits awarded former POWs in other countries. Correspondence was received from former American POW physicians, who provided their opinion of the repatriation physical examination and other repatriation procedures. Veterans service organizations also corresponded with the Task Force on the study.

Study team members acquired further information from Congressional hearings and meetings on POW matters to which they were invited as well as meetings with staff members of the Senate and House Veterans Affairs Committees. Library of Congress and National Archives staffs provided historical material and access to their collections of former POW records. Interviews were also held with staff of the Department of State (Deputy Assistant Secretary of State for Human Rights and Humanitarian Affairs) and Department of Defense (Office of POW-MIA Affairs). Task Force members visited the Naval Health Research Center, San Diego, California, and the Air Force School of Aerospace Medicine, San Antonio, Texas to interview POW research staffs and to obtain relevant POW data.

Attendance at various meetings, conventions, and ceremonies was another source of background information for this study. Representatives of various veterans organizations interested in POW matters -- e.g., American Ex-POWs, Inc., American Defenders of Bataan and Corregidor, Air Force Association -- visited with Task Force members to provide input into the study. In May, 1979, an inter-agency meeting on follow-up medical care for former Vietnam POWs involving representatives of the VA, the Department of Defense, and the National Academy of Sciences, was held at the Veterans Administration Central Office.

By Presidential proclamation, July 18, 1979 was declared National POW/MIA Recognition Day.[5] On behalf of the Administrator of Veterans Affairs, the Assistant Administrator for Planning and Program Evaluation, accompanied by some of the Task Force members, attended the National Convention of the American Ex-POWs, Inc., held in Pittsburgh, Pennsylvania July 17-21, 1979. While at the convention, the VA representatives participated in POW/MIA ceremonies and attended a medical seminar on POW health related problems. Other Task Force members attended National POW/MIA Day ceremonies held at the National Cathedral, Washington, D.C., where the Administrator of Veterans Affairs was the featured speaker.

POW Listings

The initial study task was to obtain a list of former World War II, Korea, and Vietnam POWs in order to identify the population under study. This listing was essential to accomplishment of all portions of the study, except the medical literature review.

Information on former World War II POWs was found from punched cards containing data on repatriated European and Pacific Theater POWs. These cards are presently maintained in the Modern Military Records Branch, National Archives, Washington, D.C. The cards were produced during the war by the Prisoner of War Information Bureau, Office of the Provost Marshal General, United States Army, from Red Cross cables and other international messages concerning the

status of captured American servicemen. After World War II, these cards were placed in the custody of the War Claims Commission. The National Academy of Sciences used these cards to select a representative sample of World War II POWs for its mortality and morbidity studies.

The data on these cards includes: POW name, rank, service number, arm or branch (e.g., Infantry, Artillery), dates of capture and release, race, state of residence at induction, POW camps, and detaining power (i.e., Germany or Japan). However, complete data is frequently not available for each former POW. Data items often missing are length of internment and camp location. A total of 104,743[6] cards were found for the 116,129[7] World War II POWs who were reportedly repatriated. The difference between these two totals is due to the fact that the Red Cross could not visit all the POW camps to record data for all POWs. Furthermore, many repatriated POWs did not belong to any one particular camp, and were assigned to constantly mobile agricultural, industrial, or other labor details. Many escapees are also not identified on these cards. These cards constitute the most complete listing of former World War II POWs in existence.

Data for Korea POWs was obtained from typewritten lists maintained by each military service. The data on the Korea POW list includes: POW name, service number, Social Security number, dates of capture and release, and POW camp. Many of these data elements are missing for Air Force, Marine and Navy former POWs. This listing represents all of the 4,418 former POWs officially listed as being repatriated from Korea, but does not include certain escapees who were not officially classified as POWs.[8]

Information on Vietnam POWs was obtained from a computer tape provided by the Department of Defense. Data on Vietnam POWs includes: POW name, Social Security Number, dates of capture and release, and country of capture (North or South Vietnam). This listing represents all of the 651 repatriated Vietnam POWs as of May, 1979.[9]

A listing of Pueblo POWs was obtained from the Naval Health Research Center, San Diego, California. Data on the Pueblo POWs includes: POW name, rank, service number, Social Security Number, dates of capture and release, and place of captivity (North Korea). This list includes all of the 80 repatriated Pueblo POWs and two civilian internees.[10] The compilation of the above lists was accompanied by publication of a records system notice in the Federal Register in order to comply with the Privacy Act of 1974.

Data Comparison

The abovementioned files of 109,841 POWs from World War II, Korea, and Vietnam were

compared with data on these POWs maintained in VA computer systems (the listing of Pueblo POWs was not received in time to be included in the computer match but Pueblo POWs have since been added for future research).[11] This comparison was undertaken to accomplish Section 305(a)(2), which calls for a review of the types and severity of former POW disabilities. The first such comparison was against the VA Beneficiary Identification and Records Location System (BIRLS), which contains basic identification, service verification, and claims folder information on any veteran who has dealings with any VA program, except loan guaranty. This comparison was performed on June 1, 1979, and resulted in a total of 93,168 of the 109,841 POWs being identified in BIRLS.[12] This rate (85 percent) was considered high enough so that mortality and morbidity conclusions drawn from it could be considered representative of the entire American POW population under study. The BIRLS comparison was used to produce the following demographic and mortality data on POWs of each theater: number of deaths since repatriation, average number of years after repatriation deaths occurred, number of living POWs and their current average age, average age at capture and release, and average length of internment.

A second comparison was made of those former POWs in BIRLS and those identified in the VA Compensation and Pension (C&P) System. This comparison, which was performed on September 12, 1979, produced a total of 36,241 former POWs who were on the Compensation and Pension rolls as of June 1, 1979.[13] The BIRLS/C&P comparison produced the following compensation data on POWs of each theater: number of POWs currently receiving service-connected compensation grouped by percent of disability, number of POWs in unemployable and special award categories; number of service and nonservice-connected disabilities for POWs in each length of internment category (e.g., 0-3 months, 4-6 months, etc.) and POW service-connected and nonservice-connected disabilities expressed as a percent of all former POW disability diagnoses.

The data collected through these computer data comparisons were statistically analyzed. The results of this analysis are discussed in the chapters on repatriation procedures, and compensation and health care procedures. Findings presented as "significant" in those chapters mean that there are statistically significant relationships at the level, $p < .05$.

Folder Review

Another major study task was to review a randomly selected sample of VA claims folders belonging to former POWs. This review was undertaken to accomplish Section 305 (a) (1), which calls for a description of repatriation procedures, and Section 305(a)(3), which calls for an analysis of the statutory and regulatory procedures used to determine former POW eligibility for VA health care and disability compensation benefits.

A random sample of 316 VA claims folders was selected by computer from those former World War II and Korea POWs in BIRLS. This sample was stratified to select 106 folders from the European Theater, 105 from the Pacific Theater, and 105 from Korea. The sample was intended to be representative of the entire World War II and Korea POW population. Vietnam Era POWs were not included as there are not yet enough VA claims folders belonging to Vietnam Era POWs to make up a statistically valid sample, as most are still on active duty and have military rather than VA records. The number of former POW claims folders actually retrieved and reviewed was 305: 104 from the European Theater, 99 from the Pacific Theater, and 102 from Korea.

The retrieved VA claims folders were reviewed for disability compensation information by a team of legal consultants from the VA Department of Veterans Benefits and attorneys from the Board of Veterans Appeals. The purpose of this review was not to "second guess" decisions reached previously or to reopen already adjudicated cases. Rather, in accordance with Section 305 (a) (3), its purpose was to determine how fairly former POW disability compensation cases are adjudicated. The team of legal consultants and attorneys spent several weeks during August and September, 1979, inspecting claims folders.

After the disability compensation review was completed, the claims folders were reviewed for repatriation physical examination and subsequent medical information by a team of three physicians. This team was composed of an internal medicine specialist, a psychiatrist, and a surgeon. These doctors were retired members of the VA and/or military health care systems, hired by the VA as special consultants for this project. In addition to extensive clinical experience, these physicians held senior-level health care policy-making positions in the VA and military services. The physicians reviewed only that portion of the VA claims folder which contained former POW medical records. POW medical records maintained by VA Medical Centers, military hospitals, and private sources were not used in the medical review. This portion of the folder review was accomplished in September, 1979. The data collected were keypunched and statistically analyzed. The results of this statistical analysis are discussed in the chapters on repatriation procedures and disability compensation/health care procedures.

Medical Literature Review

A review of the medical literature on the health related problems of former POWs was undertaken to accomplish Section 305 (a) (4). A comprehensive, computerized list of POW-related medical literature was obtained from the Naval Health Research Center, San Diego, California. Selected references from this list were retrieved, reviewed and summarized by the Chief, Mental Health and Behavioral Sciences Service, Department of Medicine and Surgery. These summaries were then used to write the review of the medical literature as it relates to former POWs.

Findings presented in the medical literature review as "significant" mean that there was a statistically significant relationship at the level, p .05. The sources used in this medical literature review, as well as other references used in this report, are contained in the Bibliography.

Study Files

Correspondence, memoranda for the record, and other material on the above study activities are contained in the study files and working papers presently maintained in the Office of Planning and Program Evaluation.

FOOTNOTES

[1] Administrator of Veterans Affairs, Letter to Assistant Administrator for Planning and Program Evaluation, November 13, 1978, p. 1.

[2] VA, Studies and Analysis Service, Memorandum for the Record, November 30, 1979, p. 1.

[3] Gilbert Beebe and Robert Keehn, "Proposal for Morbidity Survey of POWs from World War II, the Korean Conflict, and the Vietnam Era," National Academy of Sciences-National Research Council, Medical Follow-up Agency, Washington, D.C., July 5, 1979, p. 7.

[4] U.S. Congress, Senate, Committee on Veterans Affairs, Report to Accompany S.2828: Veterans Disability Compensation and Survivors Benefits Act of 1978, Report No. 95-1054, 95th Cong., 2nd Session, July 31, 1978, p. 35.

[5] Congress Joint Resolution, "National POW/MIA Recognition Day, 1979," August 18, 1978, p. 1.

[6] National Archives, Modern Military Records Branch, Letter to Studies and Analysis Service, August 30, 1979, p. 1.

[7] Charles Stenger, "American Prisoners of War in World War I, World War II, Korea, and Vietnam: Statistical Data", Veterans Administration Central Office, Washington, D.C., June 30, 1979, p. 1.

[8] Ibid., p. 1.

[9] Ibid., p. 1.

[10] R. C. Spaulding, "The Pueblo Incident: Medical Problems Reported During Captivity and Physical Findings At the Time of the Crew's Release," Military Medicine, September, 1977, p. 681.

[11] VA, Studies and Analysis Service, Memorandum for the Record, July 27, 1979, p. 1.

[12] Ibid., p. 1.

[13] Ibid., p. 1.

THE HISTORICAL PERSPECTIVE

INTRODUCTION

> Fighting men declare it is neither dishonorable nor heroic to be taken prisoner. In the sense that the victim does not covet it, but finds himself unable to avoid it, capture is an accident. Often, like a motor crash, it comes as a complete surprise. Often, too, it is accompanied by injury. Nearly always the upshot is painful and in the end it may prove fatal. And as is the case with many accidents, it is "bad luck."
>
> Fighting men speak of "the fortunes of war." In combat, luck cannot smile on all participants. Some are bound to lose. The man taken captive is one of the unlucky--a Soldier of Misfortune. That can be one definition for war-prisoner.[1]

The question of luck and the absence of self-determination are themes that appear continually in the literature on the prisoner of war experience. Conditions and treatment have varied throughout history and are affected by such disparate factors as: mankind's varying concept of the value of life; the economic and logistical capacities of captors; the consideration of reprisal as a "legitimate" activity; adherence to or rejection of international covenants on the rights of human beings; climate and geography; and the whim of individual captors.

The nature of capture and internment can vary within any period of war, within a particular theater of operations, from camp to camp, and even, for the individual POW, from guard to guard. "Everything depends on the individual and the circumstances involved."[2] This brief quotation, from the report of the Secretary of Defense's Advisory Committee on Prisoners of War, 1955, emphasizes the variability of effect and aftereffect on individual American military personnel who have been captured and interned as POWs.

Americans as prisoners of war have faced many tribulations in this century. Some were more unlucky than others. While this study is concerned primarily with the aftereffects of imprisonment, it is also important to iterate some of the elements of the POW experience. Prisoners of war face a sense of loss: loss of self-determination, loss of hope, loss of knowledge of home and the chances for repatriation. Many POWs have lived for months and years with a crushing sense of doom, seeing themselves and their comrades dying from myriad diseases, starvation, exposure, misguided bombardments, lack of medical care, and murder by firearm, bludgeon, bayonet and the beheading sword. They have faced forced marches on bare subsistence rations or none at all, while exposed to intense cold or heat, often brutalized along the way, prodded by bayonet or attack dogs, and left to die if too injured or weakened to keep up. They have been victims of war crimes such as torture and mutilation, beatings, and forced heavy labor under inhumane conditions. Many prisoners who were severely injured by combat prior to capture had little hope of any but the most meager medical attention, at times none at all.

Prisoners of war have lived for protracted periods under severe emotional stress, many expecting to be killed at war's end or following a turn of events in the captor's war effort. They have been targets for intense interrogation techniques and political indoctrination. Often, they faced the most severe privations because the capturing force simply had not been prepared for the maintenance of large numbers of captives or had but the barest rations for its own men. POWs have also been victims of or witnesses to murderous wholesale reprisals, sometimes initiated ostensibly as "militarily necessary."[3] In other cases, more often classified as battle casualties, no captives were "taken prisoner," but were killed shortly after capture.

EARLY PRISONERS OF WAR

The Ancients

> Prisoners of war have always had a miserable time. Primitive man and his barbarian descendants annihilated all his captured foes. Occasionally a captured headman or leader was held as a hostage. But the vanquished of the ancient world usually faced extermination . . . . In an era when it was hard enough for a man to keep himself at subsistence level, captors were apt to think of captives merely as extra mouths to be fed--and therefore better dead than alive.[4]
>
> The Greeks, who acknowledged the highest human dignity only in their own race, executed those prisoners who were of no use to them or whose death would serve as a warning to other belligerents, and sold the rest into slavery. The Romans used their captives for target practice or as gladiators, and tortured others for public amusement. Captured warriors rowed Caesar's galleys to North Africa and Britain and were killed when they could no longer pull an oar. Gradually, however, the practice of using POWs as slave labor took precedence over extermination, and the economic self interest of the captors led to an improvement in the position of the wretched captives.[5]

The Middle Ages

The Middle Ages included the rise of the code of chivalry, in which mercy was shown to a courageous opponent and his life spared. Ransom of prisoners also took place. These conditions were often mitigated, however, by the concurrent rise of religious intolerance and fanaticism, which generated pogroms, religious wars and atrocities. Moreover, "War was monopolized by one class, the nobility, who, with the professional soldier or knight, governed battle by a complex code of behavior that excluded all but warriors of this elite body. Thus, the foot troops were shown no mercy and, expecting no mercy from their conquerors, whose humanity was based on ransom, were naturally ruthless."[6] The total destruction of a foe was practiced for the next several centuries and there were few exceptions to the process of massacre and complete suppression of a city or region.

17th Century

Dutch jurist and humanist, Huit De Groot Grotius, who had himself been imprisoned, attempted to devise rules for warring nations. He presented the view that wars were to be fought for "just" causes only and he drafted laws to "humanize" warfare for the mutual advantage of the belligerents. His attempt did not meet with success, but this type of thinking had an influence on later philosophers and humanists.

18th Century Enlightment

Charles De Montesquieu, Jean Jacques Rousseau and Emmerich De Vattel helped to develop modern thinking on the treatment of prisoners of war. In their view, captors essentially had no right over prisoners except to keep them out of the fight, and war was a relationship between states, meaning that individual soldiers were enemies only so long as they were armed. "As the ideas of humanitarianism began to exert their influence, a corresponding modification of existing practices in regard to prisoners took place. As war became more humane, men and nations were prepared to accept more idealistic rules governing the treatment of the PW."[7]

The American Revolution

In addition to the usual tribulations of prisoners of war, captured Americans were considered to be revolutionaries and freedom fighters, thus without status as prisoners of war--classified as criminals. They were subject to hanging if captured on land and treated as pirates if captured at sea. Americans taken captive by the British were treated more severely than French prisoners captured during the Napoleonic wars. Ethan Allen wrote of the conditions he witnessed in New York, where many captured Americans died from starvation and exposure to cold while languishing in unspeakably unsanitary conditions. Appeal to the Crown was futile since the Americans were seen as rebels, criminals totally without recognition as POWs.[8]

The Civil War

Conditions in Federal and Confederate internment sites during the Civil War were so bad that public outcry and political pressure combined to generate Presidential action that resulted in the "Lieber Code" discussed below (1863). Prisoners, largely in consequence of overcrowding, lack of sanitation, malnutrition, and disease, had diminished chances of surviving the internment experience.

> Civil War prison camps were harsh. In Southern camps, particularly Andersonville and Florence, men suffered greatly from malnutrition and lack of medication. The union prison on Johnson's Island in Lake Erie was a bleak Alcatraz, and Union stockades at Point Lookout on the Potomac were described as 'hell holes.'[9]

World War I

World War I saw the advent of scientific intelligence warfare, psychological warfare, propaganda warfare, and political warfare. It was the first "total" war, and gentlemanly conduct and humanitarian concerns were secondary to the war effort. In general, Americans taken prisoner were more fortunate than the military POWs of the other Allied nations. Americans were late entrants into the war and, probably more importantly, ". . . .the Kaiser's military leaders foresaw the results of America's entry into the conflict. With the handwriting on the wall it was only expedient to treat captured Doughboys with lenience."[10]

DEVELOPMENT OF AN INTERNATIONAL CODE

1863

As the number of prisoners grew during the American Civil War, there was increasing political pressure for exchange and more lenient treatment of prisoners. In 1863, President Lincoln called upon Professor Francis Lieber of Columbia College to develop a set of uniform rules for treatment of prisoners of war. Issued on April 24, 1863, as U.S. War Department General Order 100, "Instructions for the Government of Armies of the United States in the Field," the "Lieber Code" was the first uniform code on treatment of POWs and was a milestone in the history of war.[11] This code was observed to the extent possible, affected by economic, military and logistical circumstances as well as by each belligerent's degree of commitment. The Lieber Code included the following rules:

> No belligerent has the right to declare that he will treat every captured man in arms . . . . as a brigand or a bandit.
>
> A prisoner of war is subject to no punishment for being a public enemy, nor is any revenge wreaked upon him by the intentional infliction of any suffering, or disgrace, by cruel imprisonment, want of food, by mutilation, death, or any other barbarity.
>
> A prisoner of war remains answerable for his crimes committed before the captor's army or people, (for crimes) committed before he was captured, and for which he has not been punished by his own authorities.
>
> A prisoner of war . . . . is the prisoner of the government and not of the captor.
>
> Prisoners of war are subject to confinement or imprisonment such as may be deemed necessary on account of safety, but they are to be subjected to no other intentional suffering or indignity.
>
> A prisoner of war who escapes may be shot, or otherwise killed in flight; but neither death nor any other punishment shall be inflicted on him for his attempt to escape, which the law of order does not consider a crime. Stricter means of security shall be used after an unsuccessful attempt of escape.

Every captured wounded man shall be medically treated according to the ability of the medical staff.

1864

The first Geneva Convention was held in 1864, for relief of wounded combatants, and marked the founding of the International Red Cross. The Convention for the Amelioration of the Wounded in Time of War provided for: immunity from capture and destruction of establishments for the sick and wounded and their personnel; impartial reception and treatment of combatants; protection of civilians giving aid to the wounded; and recognition of the Red Cross as a means of identifying persons and equipment covered by the agreement.

1874

In 1874, a conference was held in Brussels at the instigation of the Russian government. The Brussels conference considered a code based on Lieber's (1863). The code was not ratified, but it influenced the activities of the first Hague conference.

1899, 1907, 1914

In 1899, the first Hague conference, attended by 26 nations including the United States, considered disarmament proposals, a world court and the "Brussels Code" of 1874. Broadened in scope to consider other aspects of warfare, 24 nations ratified the 1899 document, which included declarations prohibiting the use of asphyxiating gases and expanding "dum dum" bullets, and discharging projectiles or explosives from balloons. Primarily "peace conferences" focusing on disarmament and arms limitation, the Hague conferences of 1899, 1907, and 1914 were hailed for establishing the concept of compulsory arbitration in time of war and the concept of continuing international conferences on the rights and duties of belligerents and neutrals. These were seen as major achievements even though the original goals on universal disarmament were not realized. Basically, prisoners of war were to be treated more humanely, in a manner similar to treatment accorded the troops of the detaining power.

1929

The Geneva Convention of 1929 had as its intention the development of a treaty which would expand upon and supersede the conventions, to make international law binding between individual states. The Convention Relating to the Treatment of Prisoners of War provided that belligerents must treat prisoners humanely, supply information about them, and permit visits to prison camps by representatives of neutral states. Forty-six nations were represented at this convention and 33 nations signed its provisions. By the time of World War II:

> Russia had not signed and Japan had not ratified. Although Japan announced her intention to observe the Geneva Conventions, she reserved the right to make changes . . .the Germans flatly denied that the 1929 conventions applied to the Russians, and the subsequent German treatment of Russian PWs bore this out . . . . It is estimated that of the five million Soviet prisoners taken by Germany in World War II, barely one million survived.[12]

1949

Due to abuses and disregard for the basic principles of the Conventions of 1929 by some of the belligerents during World War II, it was necessary to restate and reaffirm the Geneva Convention of 1929. In Geneva in 1949, the provisions were extended through four Conventions:

(1) Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field;

(2) Convention for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea;

(3) Convention Relative to the Treatment of Prisoners of War;

(4) Convention for the Protection of Civilian Persons in Time of War.

The following were forbidden: deportation of individuals or groups regardless of motive; the taking of hostages; outrages upon personal dignity; torture; collective punishment and reprisals; the unjustified destruction of property; and discrimination in treatment on the basis of race, religion, nationality or political grounds. The Convention Relative to the Treatment of Prisoners of War also required humane treatment, adequate feeding and delivery of relief supplies, and forbade pressure to supply more than minimum information.

> The Convention of 1949 is first and foremost a code of legal rules, both fundamental and detailed, for the protection of prisoners of war throughout the period of their captivity. Secondly, these rules are based upon and are designed to prevent a recurrence of the appalling experience of the recent war. Thirdly, the guiding principle underlying all the articles is that humane and decent treatment is a right and not a favor conferred on men and women of the armed forces who have been captured in the tide of war. Fourthly, there is clear recognition that prisoners of war are the victims of events and are not criminals. Fifthly, there is the acceptance that prisoners of war owe no allegiance to the Detaining Power. Sixthly, there is the detailed application of the general principle that both the legal status and the ensuing rights of prisoners of war shall be assimilated as closely as possible to those of the members of the Armed Forces of the Detaining Power. Seventhly, provision has been made for a comprehensive role to be played by the Protecting Power, the ICRC,[13] and other relief organizations. The result is a formidable legal body of rules, both realistic and humane. The legal rules[14] so established by the Convention now form part of the international law of war.

Fifty-seven nations signed the provisions of the Geneva Convention of 1949. A number of the significant articles and the obligations of detaining powers are described briefly below:[15]

Article 13 - POWs must be treated humanely and protected, reprisals against POWs are prohibited;

Article 21 - POWs are not to be held in close confinement;

Article 23 - POW camps are to marked so as to be visible from the air, and information is to be given on camp locations;

Article 26 - Sufficient food is to be provided, loss of weight is to be prevented, and account is to be taken of the normal diet;

Article 30 - Adequate medical care is to be provided;

Article 34 - Regular religious services are to be permitted;

Article 71 - POWs shall be allowed to send and receive letters and cards, not less than two letters and cards monthly;

Article 72 - POWs shall be allowed to receive parcels or collective shipments; the shipments are not to relieve the Detaining Power from obligations under the Convention;

Article 109 - Seriously sick and wounded are to be repatriated immediately, and those POWs long in captivity are to be released;

Article 120 - Full information is to be provided on deaths in captivity, including circumstances, cause, burial and grave identification;

Article 122 - The names of all POWs held are to be provided promptly;

Article 126 - Neutral inspection of all camps is to be allowed, including interviews of POWs without witnesses.

FOOTNOTES

[1] U.S. Department of Defense, POW, The Fight Continues After the Battle, The Report of the Secretary of Defense's Advisory Committee on Prisoners of War, Washington, D.C., August 1955, p. 1, hereafter referred to as "DOD, POW."

[2] Ibid., p. 1.

[3] A.J. Barker, Behind Barbed Wire, (London: B. T. Batsford Ltd, 1974), Chapter 6.

[4] Ibid., p. 5.

[5] Ibid., p. 6.

[6] E. Mowery, D. Hutchings, and B. Rowland, "The Historical Management of POWs: A Synopsis of the 1963 U.S. Army Provost Marshal General's Study Entitled 'A Review of the United States Policy on Treatment of Prisoners of War,'" paper, Naval Health Research Center, San Diego, p. 2, original study completed in 1968.

[7] Ibid., p. 4.

[8] Barker, p. 11.

[9] DOD, POW, p. 51.

[10] Ibid., p. 51.

[11] E. Mowery, et al., p. 6.

[12] Ibid., pp. 9-10.

[13] International Committee of the Red Cross.

[14] Draper, G. I. A. D., The Red Cross Conventions, (New York, Frederick A. Praeger, Inc., 1958), pp. 50-51.

[15] These articles were cited in reference to the treatment received by American POWs in Southeast Asia during the Vietnam Era in, U.S. Congress, Senate, Committee on the Judiciary, Communist Treatment of Prisoners of War:, A Historical Survey, prepared for a subcommittee, Senate Committee on the Judiciary, 92d Congress, 2d session, 1972, p. 22.

CONDITIONS OF CAPTIVITY
AMERICANS IN WORLD WAR II, KOREA, AND VIETNAM

WORLD WAR II - GENERAL

American POWs of World War II were the subject of a previous Congressional study authorized by Public Law 83-744. The inter-agency report, entitled The Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II: An Appraisal of Current Information,[1] was prepared by the U.S. Departments of: Health, Education and Welfare; Labor; Defense; and the Veterans Administration. The study clearly distinguished between the conditions of internment in the World War II Pacific and European-Mediterranean Theaters. The present study is in keeping with this distinction.

WORLD WAR II - EUROPEAN THEATER

There were 95,532 members of United States military forces reportedly captured in the European theater during World War II. The popular impression of life in German "Stalags" was that conditions in Nazi prisoner of war camps were quite humane. This impression is based primarily on accounts of International Red Cross inspections of "show" camps, used by the Nazis to impress visitors that they were abiding by the Geneva Convention, or on U.S. Army reports of camp life among downed aircrew members, who were treated with respect by the Germans because of their admiration for aviation and their use of pilots as an intelligence source.

These "show" and aviator camps frequently had educational and recreational services, such as libraries, handicraft shops, canteens, sports teams, glee clubs, and theater groups. In these camps, religious services were even allowed to be held. Furthermore, there was apparently no conscious effort to politically indoctrinate internees with the fascist philosophy.

However, the Stalags in which the average American POW - who was a foot soldier, not an aviator - was interned lacked such amenities, as most camps did not abide by even minimum standards for POW treatment set forth in the Geneva Convention, which both the United States and Germany had signed. Physical deprivation for most European Theater POWs was not quite as severe as in the Pacific Theater, which had a sparse and unfamiliar diet, tropical disease, and primitive medical care. Evidence of this fact is that the prison camp mortality rate was much lower than in the Pacific, with 1,124 (approximately one percent) of the 95,532 American POWs

captured by the Germans dying in captivity, compared to a death rate of about 37 percent in the Pacific. However, the psychological stress experienced by European Theater POWs was as severe as that endured by their Pacific Theater comrades.

Diet and Other Factors

The usual POW camp diet consisted of black bread with sawdust often used as filler, heavy sausage, and potato soup. The meager amount of calories, proteins, and other nutrients in this food resulted in chronic malnutrition, which was alleviated only by the infrequent arrival of Red Cross food parcels. Adequate medical facilities were occasionally found in the Stalags, but American POWs had to be extremely ill before they could be treated. In addition to strenuous labor, inadequate diet, and limited medical care, many European Theater POWs lived with the constant apprehension of impending death, seeing others shot or expecting to be killed at war's end. Buchenwald, Dachau, and Mauthausen, as well as other infamous Nazi concentration camps, sometimes included black and other American POWs whom the Nazis considered "undesirable."[2]

Transfers

The greatest physical deprivation for European Theater POWs frequently occurred not in camps, but during transfers between camps. The Allied advance toward Berlin resulted in forced marches of American POWs to areas still under German control. One American POW physician recounted how the men in his Stalag were made to evacuate their camp in a blizzard and march 86 days for a total of over 500 miles. These POWs had to subsist on rations of less than 800 calories per day and without sufficient water. Those sick with malnutrition and pneumonia and other stragglers were left behind to die. The rest suffered frost-bite and dysentery in the sub-zero winter weather.[3]

Another such "death march" lasted three months and travelled 150 miles. It was characterized by bayonetting, shooting over the heads of POWs, and other forms of physical brutality by German guards.[4]

Other Information

A board of inquiry accompanied the advancing Allied armies to investigate conditions of European Theater POW captivity. The board found widespread failure by the Nazis - sometimes deliberate and sometimes circumstantial - to abide by the Geneva Convention. Some repatriated American POWs were skeleton-like figures who were in no better condition than the civilian survivors of Nazi concentration camps.

As part of administrative processing during repatriation, European Theater POWs completed forms for the American War Claims Office on which they provided details of any inhumane treatment they experienced. An indexed sample of several thousand of these sheets, many of which are still on file in the National Records Center, Suitland, Maryland, was used as evidence in Nazi war crimes trials.[5]

WORLD WAR II - PACIFIC THEATER

There were 34,648 members of United States military forces reportedly captured by the Japanese as a result of the Bataan campaign, the fall of Corregidor and Pacific islands such as Wake, and other military actions in the Pacific. These men were held prisoner in camps principally in the Philippines, in Japan and in Manchuria.

The greatest physical deprivation of any group of American prisoners during World War II was suffered by Pacific Theater POWs. Evidence of this fact is that 12,935 (approximately 37 percent) of the 34,648 American POWs captured in the Pacific died prior to repatriation.[6]

The POWs captured on Bataan and Corregidor present the classic case of POW maltreatment and malnutrition. When Filipino and American forces surrendered to the Japanese on Bataan in April, 1942, their ranks were already depleted by semi-starvation due to dwindling food supplies caused by the siege. After the surrender on Bataan, the Japanese marched these troops to Camp O'Donnell, Philippine Islands. The outcome of this 100 mile, two-week experience was the infamous Bataan "Death March" in which about 17,000 men died.[7] This march was made essentially without food or water. Those stragglers suffering from dysentery and other tropical diseases were clubbed and bayonetted. Men attempting escape were frequently shot and killed in full view of their comrades. The Bataan survivors were joined by those American forces captured on Corregidor in May, 1942. The Bataan-Corregidor POWs were initially interned at Camps O'Donnell, Cabanatuan, Bilibid prison, Palawan, and Davao. What was perhaps the worst part of the harrowing Pacific Theater POW experience occurred from approximately May to October, 1942, during the period of internment at these camps. Brutal conditions resulted in the deaths of approximately 1,500 of the 8,000 Americans interned at O'Donnell during the first six months of their captivity, and approximately 2,700 dead out of the 6,500 at Cabanatuan during the first year of their internment.[8] Harsh imprisonment in the Pacific Theater was not mitigated by "show" camps for Red Cross inspection. Japan had not signed the Geneva Convention.

Of conditions in the Pacific Theater generally, the report of the study mandated by Public Law 83-744 said:

The diet provided was extremely deficient in quantity and quality so that severe loss of body weight and multiple nutritional deficiencies of extreme degree developed, which became chronic and resistant to the limited therapy available. Infectious and parasitic diseases became rampant due to the very inadequate food, crowded living conditions, primitive sanitation, and lack of medical facilities. These men received harsh, often brutal physical treatment. Many died or were killed during forced marches.[9]

Diet

The diet in POW camps was grossly inadequate, usually consisting of polished rice which was occasionally supplemented by various vegetables and some meat. Red Cross parcels arrived only on special occasions, such as Christmas, and therefore could not really improve nutrition. Many of these parcels were confiscated by the Japanese before they could get to the American POWs.

After the first six months of internment, conditions for the Bataan-Corregidor POWs improved somewhat. The POWs were being used increasingly on agricultural or work details, which meant that they were allowed to receive extra food rations. After October, 1942, the American prisoners were also allowed to purchase extra foodstuffs from the camp canteen, but this was usually limited to a can of milk or a small number of bananas or beans. Even so, with food from other sources, the daily POW diet rarely reached more than 1,000 calories.[10]

Transfers

As in Europe, some of the worst physical deprivation occurred for the POWs not while they were actually in one camp, but in the course of transfer between camps. Starting in late 1942 and early 1943, prisoners were placed on enemy ships headed for Japan or China. These ships were overcrowded and unsanitary, as many men were kept in the dark holds of the vessels without being allowed to go up on deck to exercise, defecate, or urinate. Rice and some other types of food were thrown down into the holds. Some died of these filthy conditions. Many others drowned when a few of the transport ships were mistakenly sunk by American bombers.

The prisoners who survived the trip from the Philippines faced a severe change in climate. From the tropical heat of the Philippines, they now had to endure the sub-freezing cold of a Manchurian or Japanese winter without adequate clothing or shelter and often facing conditions of forced heavy labor. The American POWs transferred to Japanese or Manchurian POW camps were frequently joined by American aircrew members who had been shot down in the Tokyo raids and other Japanese bombing missions.

Torture

Another factor that remained quite constant throughout the internment of Pacific Theater POWs was physical torture. Striking by hand, rifle, or saber was quite common. Fingernail torture, water torture and other forms of torture were used. At least ninety percent of Pacific POWs received some form of direct physical punishment from their captors, with scarcely a man escaping at least one physical beating during his internment.[11] The ultimate in cruelty was reached with beheadings, usually achieved by a long sweep of a sword striking the neck of a kneeling POW.

Medical Care

The limited amount of medical care provided by the enemy was quite primitive. One common "remedy" used by the Japanese physicians was the "fire treatment" in which a wounded body area was burned so that a surface ulcer would form, in the mistaken belief that an exposed wound would heal faster. Spinal punctures by unqualified doctors were performed against the will of patients. American physicians who were also POWs could administer care only surreptitiously, without adequate medical equipment or medicine. Patient recovery was also limited by the absence of proper nutritional support and the overall stress of internment.

Other Information

In late 1942, the Japanese began to permit prisoners in some camps to organize educational, recreational, and religious activities similar to those found in the better German Stalags. This occurred on a very limited scale, and depended entirely on the decisions of individual camp commandants. Unlike the Germans, the Japanese attempted to use these activities for political indoctrination, by showing propaganda films as part of the cultural program.

As in Europe, the repatriated POWs completed data sheets on the inhumane treatment they had received. A sample of several thousand of these sheets, many of which are still available at the National Records Center, Suitland, Maryland, was used as evidence in war crimes trials.[12]

KOREAN CONFLICT

The conditions of capture and internment in Korea were unquestionably harsh. None of the early participants in the war were signatories to the articles of the Geneva Convention of 1949. (South Korea, China and the United States signed the Convention in the years following the Korean Conflict.) Of the 7,140 American POWs captured in Korea, 2,701 (approximately 38 percent) died while in captivity.[13]

The first phase of the Korea experience began with the time of capture, continued with assignment to "temporary" camps, and ended with arrival at the "permanent" POW camps. This phase dates from approximately July 1950 to February 1951, and can be considered the worst period of internment.[14] The first group of Americans was captured by the North Koreans in July, 1950. By September 1950, some members of this group were making propaganda broadcasts from North Korea, urging American forces to surrender. Also in 1950, nineteen POWs were returned to South Korea by the Communists in the hope that they would spread Communist propaganda among the United Nations forces. Such incidents marked the beginning of the long battle of psychological warfare - consisting of group indoctrination and solitary confinement against POWs.

The second distinct phase of Korean POW captivity began with their arrival in permanent camps in approximately March 1951, when the Korean armistice negotiations had begun to make progress.[15] This phase was almost as severe as the initial stage of captivity in terms of physical and psychological suffering.

The final distinct phase of Korean POW captivity began around November 1951 and ended with repatriation in 1953.[16] This period was marked by fluctuations in captor attitudes toward American POWs, which were caused by the uneven progress of the armistice negotiations. Nonetheless, the general trend during this period was one of improvement in POW diet, clothing, and housing.

Diet

Food consisted mainly of corn or millet and this inadequate diet resulted in an average loss of forty to fifty percent of body weight. While POWs were in transit to temporary or permanent prison camps, food was supposed to supplied and prepared by local inhabitants along routes of march, but nourishment was frequently not available for several days at a time. Water was also scarce, and was often available only from sources that were contaminated, such as drainage ditches or polluted streams. Later in the war, while diet became somewhat better due to occasional meat or vegetable supplements to the basic corn and millet, malnutrition was still quite prevalent among American POWs.

Transfers

Korea, too, had its "death marches." Captives were marched off to 20 camps in the North Korean interior.

> The first ordeal the prisoner had to suffer -- and often the worst --was the march to one of these camps. The North Koreans frequently tied a prisoner's hands behind his back or bound his arms with wire. Wounded prisoners were jammed into trucks that jolted, dripping blood, along broken roads. Many of the wounded received no medical attention until they reached the camp. Some were not attended until days thereafter . . . Some Americans, with hands tied behind backs were shot by the enemy.
>
> So the journeys to the prison camps were 'death marches.' Especially in the winter of 1950-1951 when the trails were knee-deep in snow and polar winds flogged the toiling column. On one of these marches, 700 men were headed north. Before the camp was reached, 500 men had perished.[17]

In the "Sunchon Tunnel Massacre" a train in which POWs were riding, bound for Manchuria, was set on fire by the North Koreans while it was halted in a tunnel and prisoners inside were burned alive. Others who had been taken off the train were machine-gunned.

Medical Care and Shelter

During the early phases of the war, housing and clothing were so inadequate that a number of prisoners froze to death. After about a year, conditions improved somewhat. Housing was improved to the point of being sufficient for survival during the bitter cold winter, and clothing issues became more frequent. However, medical care, as practiced by the Communists, remained primitive and inadequate.

Medical care by American physician-POWs had been prohibited by the enemy shortly after arrival in the permanent camps, and thereafter treatment had to be received from enemy medics. These so-called "doctors" had received an average of one to six months medical training, and practiced very primitive folk-medicine. For example, the most widespread treatments were the needle and chicken liver techniques. The former nostrum consisted of placing a needle under the skin of various portions of the head, and then vibrating the needle. This form of "acupuncture" was supposed to be especially effective for headaches and other neurological problems. The latter procedure consisted of implanting a chicken liver under the skin, usually in the chest cavity. This implant was supposed to cure internal medicine problems. While the possibility of infection from such treatment was great, many malnourished POWs volunteered to undergo it, because their food ration would be increased if they submitted to such a procedure.

"Psychological Weakness"

A myth reached huge proportions in the United States during the period of the Korean Conflict, and for years thereafter, that psychological weakness called "give-up-itis" caused most of the deaths in Korea. Five Army physicians who had been POWs in Korea refuted this theory, as did later informed research.

> Sickness and death became so common during the first year and a half of captivity that the prisoners began to feel that any sickness would be fatal. In an attempt to overcome this attitude, the captured physicians coined a very unfortunate term, "give-up-itis." The use of this term had its desired immediate effect on the prisoners. It made them realize that an individual's fighting spirit had to be maintained at a high level for him to survive any illness. The term, 'give-up-itis,' has recently gotten wide circulation in the public press. The erroneous impression has been created that prisoners who were in good physical health gave up and died; this is not true. Every prisoner of war in Korea who died has suffered from malnutrition, exposure to cold, and continued harassment by the Communists. Contributing causes to the majority of deaths were prolonged cases of respiratory infection and diarrhea. Under such conditions, it is amazing, not that there was a high death rate, but that there was a reasonably good rate of survival.[18]

"Brainwashing"

A factor which made the Korean POW experience somewhat unique was the large-scale indoctrination and propagandizing directed at all captured military personnel. The Communists initially attempted to weaken the prisoners' physical resistance by keeping them cold and hungry, and then break down military organization by separating POWs into groups according to rank, ethnicity, or race. They next attempted to weaken POW psychological resistance through a compulsory group indoctrination program. This program consisted of all-morning lectures and discussion sessions. During these meetings, the following themes were endlessly repeated: the United States was run by racists, imperialists, and warmongers, and Communism was the only truly democratic political system.

In a later phase, the group indoctrination program shifted from a "hard sell" to a "soft sell" approach. Compulsory group indoctrination gave way to so-called "voluntary" self-study. Libraries, stocked with propaganda books and staffed by enemy appointed POW librarians, were established. Camp newspapers were also started, with enemy approved POW editors. The intent of this "soft sell" approach was to have the POWs embrace Communism by becoming logically persuaded of its advantages through reading the propaganda. Also during this period, letters were allowed to be sent home, but could not pass the censor unless they contained some propaganda message.

For those Air Force aircrew members shot down over Korea and captured by the enemy, the conditions of captivity were even more harrowing than for their Army foot soldier comrades. This was due to the constant interrogation and solitary confinement, as well as the usual inadequate food, housing and clothing, to which Air Force POWs were subjected. Aircrew members would be incessantly interrogated for up to several days at a time in a Communist effort to wrest political confessions or intelligence information from them. A frequent confession that was sought was that the American aviator had engaged in "germ" warfare by spraying chemicals or dropping

bombs. This interrogation was accompanied by solitary confinement in huts and caves for those POWs who refused to cooperate.

As a result of such abuse, 21 Americans refused repatriation.[19] This unprecedented situation, along with the accusations of collaboration leveled at returning POWs during the "McCarthy era," led to a prevailing public opinion that Korean POWs had been "brainwashed" by the enemy. A subsequent Congressional investigation concluded that no actual cases of "brainwashing" occurred in Korea - brainwashing being defined as the activity of erasing an individual's past beliefs and substituting new ones. Rather, the Congressional report stated that what had happened among Army POWs was group indoctrination and what had occurred among Air Force POWs was solitary confinement. Group indoctrination achieved only a minimal amount of success (with only 21 POWs refusing repatriation) and solitary confinement, while more closely approaching true brainwashing, was completely unsuccessful.

Other Information

An accounting of the inhumane treatment suffered by POWs in Korea, treatment which constituted gross violations of the Geneva Convention, was given in testimony by repatriated POWs before Congressional committees. Such accounts of enemy brutality also resulted in a Department of Defense study which produced a new Code of Conduct for the American fighting man.[20] While the new Code of Conduct attempted to maintain the military discipline and organizational integrity needed in the POW situation, it also recognized that more flexibility beyond the rigid "name, rank, serial number" system of past wars was needed to survive under such extremely harsh conditions as those that existed in Korea.

Repatriated POWs gave depositions for intelligence purposes and to substantiate the widespread abuse of international laws of warfare and humanitarian principles. Due to the sensitive nature of the peace talks, concern for POWs who had not yet been released, and the inconclusive nature of the conflict, war crimes proceedings were not instituted.

VIETNAM ERA

The Congressional report, Communist Treatment of Prisoners of War describes the inhumane treatment to which Vietnam Era POWs were subjected.[21] This treatment was clearly in violation of the Geneva Convention. Nonetheless, the North Korean and Vietnamese considered their actions justified on grounds that their internees were not military prisoners but "war criminals" who must be dealt with harshly and unsparingly. Americans captured during the Vietnam conflict comprised a distinctive group. The majority were officers, aviators, somewhat older and more

educated as a group than American POWs captured during other wars, and most faced much longer periods of internment than Americans in earlier wars.

The experience of American POWs in Vietnam differed according to whether they were captured in North or South Vietnam. The POWs interned in North Vietnam were mostly downed aviators, while those captured in the South were largely foot soldiers. The North Vietnamese POW experience was marked by somewhat inadequate food, housing and medical care and by severe physical and mental torture for intelligence or propaganda purposes. Approximately five percent of the POWs died in captivity.[22] By contrast, the South Vietnamese experience was characterized by severe physical deprivation, with somewhat less emphasis on torture. Approximately twenty-five percent died during internment.[23] North Vietnam had signed the Geneva Convention, as had the United States.

South Vietnam

Those American POWs captured by Viet Cong guerrilla forces in South Vietnam were held in small groups, and were continuously moved through the jungle to avoid ground and air attacks. While they suffered less torture and fewer interrogations than their comrades in the North, they were faced with the more compelling, immediate problems of daily survival. They were usually at the end of the enemy supply distribution chain, which resulted in chronic shortages of food and medicine. Starvation was averted only by catching fish, or eating plants in the jungle. The POWs were allowed to treat each other - one of them was a military physician. Interrogation of POWs in South Vietnam was generally limited to the first months of captivity. Beatings and slapping were common interrogation methods. South Vietnamese POWs were frequently placed in bamboo huts - so-called "tiger-cages" - and placed in leg irons or otherwise chained at night.

North Vietnam

Living conditions for North Vietnam POWs were relatively better than in the South, with conditions improving after 1969 as the Paris peace talks got underway.[24] POWs were in prison buildings in or near Hanoi. These prisons provided shelter, although they were poorly ventilated and without plumbing. The most infamous of these prisons was called the "Hanoi Hilton." Before 1969, the prison diet usually consisted of a half loaf of bread, or rice, and then vegetable or pumpkin soup served twice daily. Medical care was provided by paramedics. Lack of sanitation in food preparation and living conditions resulted in cases of intestinal worms and parasites. Other than aspirin or diarrhea pills, POWs rarely received medication until they were desperately ill. Once ill enough to warrant being taken to North Vietnamese hospitals, the POWs were kept there seldom more than a day or so. POWs also received immunizations to prevent the outbreak of cholera and typhoid.

The pre-1969 situation was also characterized by physical and mental torture. One frequently used method was the "ropes" in which the POW was bound in an unnatural and painful position for up to several hours. Other POWs were manacled in chains to their beds for months at a time. Still others were placed in solitary confinement ranging from several days to several years. Lengthy interrogations, beatings and slapping were also common. Fractures and other orthopedic injuries resulted from such mistreatment.

After 1969, internment conditions in the North improved. The quantity of food increased, with occasional pieces of meat being added to the diet. Also, an early morning meal consisting of bread and sweetened milk was added. Para-dental personnel began to provide rudimentary dental care to the POWs. Solitary confinement, the ropes, manacles, and interrogations became less frequent. These conditions generally continued until repatriation in 1973.

> Prisoners have been tortured, publicly paraded through the streets, pressured into making broadcasts of alleged confessions, and denied proper medical treatment. There are several documented cases of prisoners who have not been listed as POWs in accordance with the prime requirement of the Geneva Convention.
>
> Colonel Norris Overly, who was shot down over North Vietnam in October 1967 and released a year later, said that -- "The North Vietnamese have on occasion tortured some of our men -- but I think there is danger in dwelling on that particular aspect of it because the North Vietnamese are much more subtle than that. The subtle inhumanity of the whole situation was placing men in a small 8 by 10 cell and not pressuring them to do anything one way or the other, but just put them away and feed them a subsistence diet for 3, 4, 5, 6, and in several cases almost 7 years. I think we can all answer the question what kind of physical and mental condition they are going to be in when they come out of this sort of environment."[25]

The U.S.S. Pueblo

The U.S.S. Pueblo was an American naval intelligence ship that was captured by the North Koreans in January, 1968. During the boarding of the vessel, one member of the crew was killed. The treatment received by the surviving 82 crew members at the hands of the North Koreans was as severe as that of their comrades then held in Vietnam. The Pueblo crew was initially incarcerated in the North Korean capital of Pyongyang for a period of six weeks, during which time they were interrogated, beaten, and forced to sign a confession that they had intruded into the territorial waters of North Korea.

After this initial period, they were transferred to their permanent prison, which was a structure similar to the so-called "Hanoi Hilton." The officers were placed in solitary confinement and were allowed to see the other members of the crew only during daily recreation

periods. The enlisted crewmen were assigned to rooms housing four to eight people each. The new prison was damp and vermin-infested. The beatings and interrogation continued at the new prison site.

Medical care was provided by a North Korean physician and nurse who held regular "sick call" for Pueblo crew members. However, the Pueblo POWs were reluctant to report medical problems to them because of the inadequate care they provided. Typical medical treatments included were administering penicillin for hepatitis, "white tablets" for diarrhea, and some sort of white powder for urinary tract infections. Shrapnel wounds, even when reported, went unattended. The unsanitary conditions resulted in frequent cases of worms and intestinal parasites.

The crew members' diet during captivity was mostly a watery soup. Weight loss was up to 100 pounds.[26] However, no severe malnutrition was reported as those members who lost the most were slightly overweight to begin with, so that they attained their ideal minimum weight. Those who were already at the right weight did not lose enough to experience any real avitaminosis. The Pueblo crew members were repatriated in December 1968, after eleven months of internment.

PRISONER EXCHANGES

Loss of hope can be a critical element in the life of the prisoner of war. Experience has shown that captured Americans have had little reason to hope for repatriation before the end of any particular conflict, since major interim repatriations of Americans is not the norm. Being confined "for the duration," not seeing others released, experiencing the total control of the captor and not knowing the true status of the war effort are factors which have added to the dilemma of POWs.

> The experience in World War II was possibly somewhat better (than World War I) at least in the European theater, with ten major repatriations of sick and wounded as well as a smaller number of 'protected personnel,' civilian internees and merchant seamen, beginning in April 1942. These involved some 20,000 Germans and Italians and about 13,500 Allied personnel. For the most part, however, prisoners had to await the end of hostilities before being repatriated. Just as Japan refused to consider any prisoner exchanges in World War II, in the Korean conflict, North Korea and Communist China showed little interest in an exchange agreement until it suited their purposes to use discussions on the POWs as a way to begin negotiations to end the war.
>
> In the Vietnam War, as in the French-Indochina War of 1945-1954, prisoner exchanges during hostilities have been virtually nonexistent.[27]

FOOTNOTES

[1] U.S. Department of Health, Education and Welfare, Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II: An Appraisal of Current Information, Washington, D.C.: Government Printing Office, 1965. Hereafter referred to as "HEW."

[2] American Ex-Prisoners of War, Inc., The European Story, Packet No. 8, 1978, p. 8.

[3] Stan Allen, "V.A. Owes All Ex-POWs Service Connection, Says Death March Medic (Leslie Caplan)." Disabled American Veterans Magazine, January 1969, p. 29.

[4] United States Army, Office of the Surgeon General, Internal Medicine in World War II, Volume III: Infectious Diseases and General Medicine, Washington, D.C.: Government Printing Office, 1968, p. 251.

[5] Modern Military Records Branch, National Archives, "Inventory of Records of World War II American Ex-Prisoners of War in the National Archives and Federal Records Centers," 1968, p. 2. hereafter referred to as "Modern."

[6] Charles Stenger, "American Prisoners of War in World War I, World War II, Korea, and Vietnam: Statistical Data," Veterans Administration Central Office, Washington, D.C., June 30, 1979, p. 20.

[7] Eugene Jacobs, "Residuals of Japanese Prisoners-of-War - Thirty Years Later," The Quan, March, 1978, p. 1.

[8] HEW, p. 32.

[9] Ibid., p. 1.

[10] Jacobs, p. 2.

[11] HEW, p. 32.

[12] Modern, p. 32.

[13] Stenger, p. 3.

[14] Clarence Anderson, Alexander Boyson, Sidney Esensten; Gene Lam, William Shadish, "Medical Experiences in Communist POW Camps in Korea," Journal of the American Medical Association, September 11, 1954, p. 120.

[15] Ibid., p. 120.

[16] Ibid., p. 120.

[17] U.S. Department of Defense, POW, The Fight Continues After the Battle, The Report of the Secretary of Defense's Advisory Committee on Prisoners of War, Washington, D.C., August 1955, p. 5, hereafter referred to as "DOD, POW."

[18] Anderson et al., p. 120 - 122.

[19] Stenger, p. 3.

[20] DOD POW, pp. 19 - 23.

[21] U.S. Congress, Senate, Committee on the Judiciary, Communist Treatment of Prisoners of War, A Historical Survey, Committee Print, 92d Congress, 2d Session, 1972, p. 23, hereafter referred to as "Communist."

[22] William Berg, "Captivity Mortality Among Vietnam Prisoners of War," (unpublished), 1979, p. 8.

[23] Ibid., p. 8.

[24] William Berg and Milton Richlin, "Inquiries and Illnesses of Vietnam War POWs I. Navy POWs," Military Medicine, July 1977, p. 514.

[25] "Communist," p. 21.

[26] Raymond Spaulding, "The Pueblo Incident: Medical Problems Reported During Captivity and Physical Findings at the Time of the Crew's Release," Military Medicine, September 1977, p. 682.

[27] U.S. Congress, House, Committee on Foreign Affairs. Appendix II: Prisoners of War: Repatriation or Internment in Wartime -- American and Allied Experience, 1775 to Present. Hearings before a subcommittee of the House Committee on Foreign Affairs, 92d Congress, 1st session, 1971.

REPATRIATION PROCEDURES AND PROCESSING

OBJECTIVE

> P. L. 95-479, Section 305 (a) (1) - . ."descriptions and analyses of the repatriation procedures, including physical examinations, for former prisoners of war and the adequacy of such procedures and the resultant medical records of former prisoners of war.. "

INTRODUCTION

Recognizing the circumstances under which American prisoners of war of World War II, Korea, and Vietnam were interned, the military services established special procedures for their administrative evacuation from prison camps, their administrative disposition upon return to the United States, and their physical examination both overseas and stateside. These procedures - in the form of regulations, instructions, or directives -were beyond those applicable to all other veterans of those conflicts, and will be discussed here.

This discussion also includes a description of the administrative and medical processes which implemented these written repatriation procedures. The description of medical processing largely consists of an enumeration of the disabilities suffered by repatriated POWs at the time of repatriation. The disabilities suffered by POWs before repatriation are described in the chapter on conditions of captivity, while the health problems suffered by POWs since repatriation are mentioned in the chapter on the types and severity of former POW disabilities.

The Congress reflected the concern of this chapter in the Senate Committee on Veterans Affairs report on this study:

> It appears that, because of the inadequate state of medical knowledge of various hardships suffered during internment, including the long-term effect of dietary deficiencies and unsanitary conditions, and because of the strong desire of former prisoners of war to return home as quickly as possible after World War II, those repatriation camps may have discharged veterans without thorough examinations and without close attention to their potential health problems. A major problem appears to be a lack of adequate records, necessary at a later date in order to establish service connection for ailments possibly related to internment. Also, conditions which may have seemed relatively minor at the time of repatriation may have become progressively debilitating. Thus, thirty years later, a former POW suffering from a debilitating disease that may have resulted from his or her internment, may encounter extreme difficulty in proving service connection.[1]

The issues raised in the Congressional report apply especially to former World War II POWs. However, in keeping with the P.L. 95-479 mandate this chapter will also discuss these issues as they apply to former POWs of other conflicts - e.g., Korea, Vietnam. Such a discussion will offer the opportunity to compare and contrast repatriation procedures and processing among POW groups.

WORLD WAR II - EUROPEAN THEATER

GENERAL INFORMATION

There was a group of American POWs in the European Theater as early as August, 1942, when 44 American soldiers were captured by the Germans during the abortive Dieppe invasion.[2] From 1942 to 1944, several thousand American airmen later fell into the hands of the enemy when their planes were shot down during the bombing of Germany.

Some of the air crew members managed to evade the Germans entirely, while others escaped from the POW camps where they were interned. In the 1942-3 period, several thousand other Americans were also captured during the North African and Italian campaigns. These "Mediterranean Theater" POWs were initially transported to camps in Italy and then to camps in Germany and elsewhere in Central Europe, where they joined their European Theater comrades.

The largest number of European Theater POWs was captured after "D-Day". The Battle of the Bulge in late 1944 resulted in the capture of thousands of American POWs.

The average length of internment for European Theater POWs is estimated at 347 days/.95 years. This reflects the fact that most European Theater POWs were captured in the 1944-45 period. The average age at capture for European Theater POWs is estimated to have been 25 years, with the average age at release, 26 years. The table below gives the estimated average length of internment and average age at capture and release of the European Theater as well as the Pacific Theater and Korea POW groups.

TABLE 2 Estimated Average Length of Internment and Average Age at Capture and Release

	WWII Europe	WWII Pacific	Korean Conflict
Average Length of Internment (days/years)	347/.95	1,148/3.15	737/2.02
Average Age at Capture (years)	25.0	26.7	23.2
Average Age at Release (years)	26.1	29.4	25 4

Of the 95,532 American POWs captured and interned in the European Theater, 1,124 died in captivity and the remaining 94,408 were eventually returned to Unites States military control.

DESCRIPTION OF REPATRIATION PROCEDURES

Administrative Repatriation Procedures - Evacuation and Disposition

The repatriation regulation covering the evacuation, disposition, and physical examination of all World War II POWs was the War Department "Procedure for Processing, Return, and Reassignment of Recovered Personnel," dated April 21, 1945 (revised August 17, 1945.)[3] The War Department procedure specifically applicable to European Theater POWs was entitled "Repatriation, Recovery, and Rehabilitation of American POWs in Europe."[4] This document, dated October 3, 1944, was the basis for the discussion of European Theater POWs in the April 21, 1945 procedure.

These War Department regulations were implemented in the European Theater by the Supreme Headquarters Allied Expeditionary Force (SHAEF) procedure entitled "ECLIPSE Memorandum No. 8", dated March 19, 1945.[5] This Anglo-American instruction was further refined by the U. S. Army European Theater of Operations Standard Operating Procedure No. 58 (ETO SOP No. 58), dated April 3, 1945.[6]

The War Department procedures assigned primary responsibility for the evacuation of American, British, and other Allied POWs interned more than 60 days to theater commanders in SHAEF and the U.S. Army. These POWs were officially called "Recovered Allied Military Personnel" (RAMPs).[7] The above instructions did not apply to those POWs interned less then 60 days. The primary directive pertaining to this group, who were mostly evaders and escapees, was the War Department procedure entitled "Military Personnel Escaped From Enemy Territory." dated July 11, 1944,[8] and "Publicity in Connection with Escaped, Liberated or Repatriated POWs, to Include Evaders of Capture," dated March 29, 1945.[9] These instructions emphasized security, prohibiting the release of intelligence information obtained by evaders and escapees to other than military sources.

In April, 1945, the Allies and Germany concluded a "standfast" agreement. in which American POWs would no longer be transferred further into Germany with each Allied advance but would remain in their camps, with the understanding that they would not be returned to combat once recovered.[10]

ECLIPSE Memorandum No. 8 outlined the procedures to be followed by the liberating army before the POWs were to be evacuated from their prison camps. The liberating forces were to prepare a roster of all POWs in the camps they overran, and were to provide an identification card to each newly liberated POW. Former POWs were also encouraged to write home as soon as possible, although mail was to be censored to prevent the release of unauthorized casualty or intelligence information.

ECLIPSE Memorandum No. 8 provided that sick and wounded former POWs would have first priority for evacuation from forward areas, followed by the remaining former POWs. All former POWs were to be evacuated by air, or if air was not available, by train.

ETO SOP No. 58 also outlined the procedures for former POWs once they were evacuated from the battlefield. Former prisoners were to be supplied with food, clothing, bedding, and toilet articles at reception camps, and then transported as soon as possible after receiving these articles to embarkation staging areas. Intelligence screening was one of the primary functions to be performed at the staging area. This screening consisted of interviews designed to determine if there were any Nazi spies or sympathizers among the liberated POWs. Other functions to be performed at the staging area included establishing a personnel record on each former POW and providing him with advance or partial payments until final payment could be arranged. ETO SOP No. 58 also stipulated that no former POW would be allowed to embark by ship or air for the United States without presenting his I. D. card.

The War Department POW regulation dated April 21, 1945, outlined the administrative procedures to be followed by military authorities between the time the former POWs first returned to the United States and the time when they were finally discharged or reassigned. This instruction required all former POWs who did not need further medical care to report to "reception centers" near their homes. Those former POWs requiring medical treatment were supposed to report to reception centers after receiving medical care at debarkation hospitals.

At the reception stations, former POW intelligence and casualty reporting was to be completed. In this regard former POWs were directed to sign a statement agreeing not to divulge security information to parties outside the military. The former POWs were also supposed to complete forms identifying and reporting on any of their comrades who they believed died or became disabled in captivity. They also were to complete questionnaires on any atrocities they had witnessed during internment These questionnaires were intended for use in the German war crimes trials. Another function to be performed at the reception centers was promotion processing. A form was to be completed by each ex-POW on his service history. This form was to be used as the basis for consideration for promotion, which was granted on an individual, case by

case basis for both officers and enlisted men. Other functions to be performed at reception stations were the award of any decorations and final payment of all salary to which POWs had become entitled during their internment.

After reception station processing, the War Department procedure provided that former POWs could take up to 60 days leave for recuperation and recovery, which could be extended if necessary. At the end of the recuperation period former POWs were to report to "redistribution stations." The redistribution stations were to complete any administrative records needed for discharge or reassignment. Former POWs were also to be advised of their right to make any claims for personal property lost or confiscated during their internment. Finally, promotion processing was completed. Data provided on the reception center promotion forms was frequently supplemented with interviews of former POWs by redistribution station administrative personnel. The information provided by the forms and/or interviews was used to determine qualification for promotion.

Medical Repatriation Procedures - Physical Examinations

ETO SOP No.58 called for POWs to be provided with necessary first aid immediately upon liberation. This procedure also called for the newly liberated POWs to have their bodies, clothing, and baggage disinfected by spraying. This spraying was to be accompanied by a brief medical inspection to determine if the newly liberated POW was free of all infectious diseases and was ready to be moved. The spraying and inspection was to be accomplished in the forward area or at the reception camp. ETO SOP No. 58 also required a "triage" of former POWs which was to separate them into those to be evacuated through medical or nonmedical channels. Medical channels were designed for those former POWs who were litter patients or who had been hospitalized in prison camp hospitals. Nonmedical channels were designed for all ambulatory ex-POWs who did not require immediate hospitalization.

ETO SOP No. 58 also specified that all former POWs would be given a thorough physical examination "at the earliest practicable moment."[11] ETO SOP No. 58 also provided that the physical examination for all ex-POWs was to include a detailed medical history, X-rays, urinalysis, blood test, and such other laboratory tests and diagnostic aids as deemed appropriate with the facilities available. However, chest X-rays were not supposed to be taken routinely, but only when the POWs pulmonary condition - as determined by physical examination -warranted it. Particular attention was to be given to the psychiatric portion of the POW physical examination. This exam was to focus on the following areas: depression. resentment, guilt, apathy, attitude toward authority, attitude toward further military service, anxiety, self-confidence, concern over health, and domestic trouble. The psychiatric portion of the examination was to be emphasized

because it was believed that "the majority of recovered POWs suffer from significant psychological or attitudinal disturbances which make subsequent adjustment difficult."[12] The psychiatric examination was to be performed by a psychiatrist, when available. The remainder of the examination was to be accomplished by medical officers (physicians) with the assistance of other health professionals. The original repatriation physical examination form was to be filed in the ex-POW's medical records and a copy was to be forwarded to European Theater headquarters. The October 3, 1944 War Department procedure called for such records to include any necessary references to the existence of "infectious or contagious diseases and mental afflictions."[13] Appropriate reference was also to be made to "treatment furnished by the enemy and to any illnesses or injuries suffered while in captivity."[14] The ex-POW examinee was also supposed to be classified by the examining physician as a patient or as a nonpatient for future medical processing in the United States. Former POWs classified as patients were those individuals who required further medical treatment at debarkation hospitals in the United States. Former POWs classified as nonpatients were those who did not require further hospitalization. Nonpatient POWs included those individuals manifesting psychiatric disorders not sufficiently urgent to classify them as patients. The April 21, 1945 procedure specified that nonpatient POWs would receive the appropriate immunizations before transfer to the United States.

The 1945 War Department procedure also outlined those medical procedures to be followed once former POWs returned to the United States. Former POWs classified as patients overseas were to be sent to the debarkation hospital nearest their home for further treatment, and then ordered to report directly to redistribution stations for final disposition. Nonpatient former POWs were to report to redistribution stations for final disposition. For both patient and nonpatient POWs, the physicians at the redistribution stations were to complete those portions of the repatriation physical examination which were not completed overseas. These physicians were also supposed to render a final medical determination on the former POW's health status - i.e., whether he was qualified or unqualified for further military service. Another feature of redistribution station medical processing was a psychological rehabilitation program. The 1945 procedure stipulated that "Consultation with a qualified psychiatrist should be provided if indicated"[15] prior to discharge or reassignment.

DESCRIPTION OF REPATRIATION PROCESSING

Administrative Repatriation Processing - Evacuation and Disposition

The few POWs who were repatriated prior to the end of the war were primarily evaders and escapees from German prison camps. These individuals were sent to London and Paris, where they underwent intelligence interrogation at Allied headquarters. After their intelligence processing, they were reassigned.

Almost all American POWs were evacuated from POW camps during the closing months of the war - i.e., April through June 1945. Before V-E Day, the Allies interpreted the "standfast" agreement with Germany to mean that POWs recovered in camps that had been overrun were to remain in place under the command of their already appointed leaders. The reason for this policy was to allow the Allies enough time to prepare for an orderly evacuation. After V-E Day, the "standfast" agreement was interpreted to mean evacuation from the forward area as soon as possible. Reception camps to handle this new inflow of POWs were established at Reims and Epinal, France, and Namur, Belgium. The primary staging area for American POWs was Camp Lucky Strike, which was near the embarkation port of LeHavre, France.

Most of the American POWs recovered at the end of the war, were liberated by American forces and were evacuated through American reception camps and staging areas. The remainder of these American POWs were evacuated by the Soviet, British, or other allied forces. These POWs were sent to American reception camps and staging areas. American forces, in turn, returned the British and Soviet POWs they recovered to their respective forces.

Once stateside, former POWs were processed as expeditiously as possible, as the goal of administrative disposition was to return the POW to civilian life as soon as possible.

Medical Repatriation Processing - Physical Examinations

An American medical board of inquiry accompanied the advancing Allied armies to determine if the Germans had abided by the Geneva Convention in their handling of POWs. The results of their investigation clearly showed that the Nazis had either intentionally or unintentionally failed to give decent treatment to their prisoners. Some American and other Allied POWs were found to be so malnourished as to resemble the living skeletons ("Mussulman")[16] discovered in the Nazi concentration camps. The board of inquiry received sworn statements and other testimony from the newly liberated POWs. This evidence was intended for use at the German war crimes trials. The newly liberated POWs were evacuated through medical and nonmedical channels. Approximately 10 percent of European ex-POWs were evacuated through medical channels.[17] The physical examiners discovered that almost all these POW patients had severe malnutrition (avitaminosis) as a primary or secondary diagnosis. Weight loss in these POWs averaged approximately 20 to 40 pounds from the last recorded weight prior to capture.[18] Malnutrition-related diseases among hospitalized POWs included inflammation of the tongue (glossitis), the lips (cheilosis), and mouth (stomatitis), swelling of the extremities (edema), diarrhea, gastroenteritis, and pellagra. There was also evidence of tuberculosis and other pulmonary diseases in these POWs.

The remainder of these newly liberated POWs were evacuated through nonmedical channels. The physical examination of European Theater POWs evacuated through nonmedical channels revealed that the average weight loss was 14 pounds.[19] Of these POWs, approximately 43 percent showed evidence of some form of malnutrition, approximately 43 percent had nutritional edema, and approximately 26 percent complained of night blindness.[20] Outbreaks of jaundice and hepatitis were frequent. In fact, these two diseases were observed to be even more severe than in the Pacific Theater. Gastrointestinal problems - diarrhea, gastroenteritis, nausea, vomiting - constituted a major problem immediately after liberation and shortly after arrival in the staging areas. This was in large part due to the ingestion of rich foods -doughnuts, peanuts, etc - offered to the repatriates by well-meaning Red Cross and Army personnel. Camp authorities reacted to this situation by issuing warnings and directives which called for dietary restraint after so long a period of malnutrition, and the establishment of a "bland" diet in the mess halls, which was supplemented by vitamin capsules.

Those former POWs classified in patient status at the staging area were sent to debarkation hospitals upon return to the United States for further medical treatment and then to redistribution stations to complete medical processing. Those former POWs classified as non-patients at the staging area reported directly to redistribution stations to complete medical processing.

ADEQUACY OF REPATRIATION PHYSICAL EXAMINATIONS AND RESULTANT MEDICAL RECORDS

Former POW Physician Analysis of the Adequacy of the Repatriation Examination

Twelve former World War II POWs who were prison camp physicians were contacted in the course of this study to obtain their professional opinion of the adequacy of the repatriation procedures and physical examinations for former POWs. The one European Theater POW physician who replied merely indicated that his repatriation examination was "adequate", but did not elaborate on this opinion.[21] However, he did not specify whether the repatriation exam given his fellow POWs was "adequate".

Physician Reviewer Analysis of the Adequacy of the Repatriation Examination

The physicians who reviewed the sample of former European Theater POWs claims folders found that less than one fifth of those who had filed one or more claims for VA disability compensation had evidence of a repatriation examination. (Approximately one fourth of the sample had never filed a claim.) Of the few that were found, the reviewers generally thought they were satisfactory. However, the number found was too small to enable a statistical analysis.

Although there are several possible explanations for the absence of repatriation examinations, the actual causes are unknown. The examinations could have simply not been conducted, the paperwork could have been lost or the paperwork could be located elsewhere. Undoubtedly, the sheer number of POWs being repatriated (approximately 94,000), the wide geographical dispersion of the POWs and the confusion that existed in Europe in the last stages of the war all contributed to the absence of the repatriation examinations in the former POWs records.

ADDITIONAL SOURCES OF MEDICAL RECORDS

The VA claims folders normally contain the service medical records for former European Theater POWs who have filed claims for disability compensation with the VA. In addition to these VA claims folders, VA Medical Centers maintain medical records for treatment received at VA facilities for European Theater POWs. The VA Medical Centers also provide medical information to VA Regional Offices for filing in former POW European Theater claims folders.

For those former European Theater POWs who have not filed claims for disability compensation with VA, the primary source of medical information related to the POW experience are the military personnel records maintained at the National Personnel Records Center, St. Louis, Mo.

There are also several other sources of medical information related to the European Theater POW experience which can be accessed by the individual European ex-POW or his veterans service organization when VA and NPRC sources fail to yield the necessary repatriation physical or other desired medical records. For example, there are several series of records at the Modern Military Records Branch, National Archives, Washington, D.C. and the Washington National Records Center, Suitland, Md. that relate specifically to European Theater POWs. One such records series is the "Collection of Seized Enemy Records" which includes an alphabetical card listing, in English and German, of all American aircrew members shot down over Europe and North Africa between 1942 and 1945. Approximately 10,000 cards were prepared and maintained by the German High Command.[22] Each card has such entries as name, prisoner number, date of birth, rank, army serial number, date and place of capture, height and hair color, fingerprints, photograph, and pay record. Most importantly, this listing contains a brief statement of the POWs health status when captured and the hospital or camp to which he was taken. Another records series contains interrogation reports of American POWs completed by Army legal and intelligence officers. This series contains occasional references to medical care given the POW during escape or while interned in prison camp.

GENERAL INFORMATION

The first group of American POWs captured by the Japanese was taken in December 1941, shortly after the attack on Pearl Harbor. These POWs were mostly United States Marines guarding diplomatic missions in China. Within the next few months, the Japanese had overrun Wake Island, Guam, and other Pacific territories and had captured many more American POWs. The largest number of Pacific Theater POWs was captured at the surrender of American forces on Bataan and Corregidor, in April-May, 1942. Many of these internees were Regular Army forces. This was different from Europe, where most POWs were draftees. Many of the Pacific Theater POWs captured after 1942 were aircrew members who were shot down in air raids over Japan.

The average length of internment for Pacific Theater POWs was 1,148 days/3.15 years. The average age of these POWs at capture was slightly over 26 years and the average at repatriation was slightly over 29 years. Of the 34,648 POWs captured and interned in the Pacific Theater, 12,935 died in captivity and the remaining 21,713 were eventually returned to United States military control. Approximately one third of the 21,713 Pacific Theater repatriated POWs were believed to be Filipinos who had fought alongside American forces during the war.[23]

DESCRIPTION OF REPATRIATION PROCEDURES

Administrative Repatriation Procedures - Evacuation and Disposition

The 1945 War Department procedure set forth the general instructions for evacuation, disposition, and physical examination of Pacific Theater as well as European Theater POWs. The War Department directive specifically for Pacific Theater POWs was entitled "Handling and Disposition of Recovered U.S. Military Personnel Who Formerly Served on Wake, Guam, and the Philippines."[24] This procedure, dated February 19, 1945, was the basis for discussion of Pacific Theater POWs in the April 21, 1945 document.

The April 21, 1945 regulation assigned primary responsibility for the evacuation of Pacific Theater POWs to theater commanders. Pacific Theater POW evacuation procedures largely resembled those used for European Theater POWs. For example, newly liberated Pacific Theater POWs were to be listed on a roster, provided with food, clothing, bedding, and toilet articles, and encouraged to write home as soon as possible. Initial intelligence screening was to be performed. Advance and partial payments were authorized, and a personnel record was to be established as soon as possible. Theater commanders were supposed to automatically promote all POW officers

below Colonel and all enlisted POWs below Master Sergeant one grade above that held during captivity. This general promotion policy differed from the case-by-case method applicable to European Theater POWs. Finally, the War Department evacuation procedure called for Pacific Theater POWs to be sent home by ship, or if administratively or medically necessary, by air.

The April 21, 1945 procedure outlined the procedures to be followed by Pacific Theater POWs once they arrived in the United States. Within the first two or three days after arrival, all Pacific Theater POWs were supposed to be sent to debarkation hospitals for medical processing. Those POWs who did not require further hospitalization after their visit to the debarkation hospital and who had completed reception center processing, were to be granted 60 days home leave for purposes of recuperation and recovery, which could be extended if necessary. After this rest period, these former POWs were to report to redistribution stations for administrative disposition. Those POWs who required further hospitalization after their initial physical examination at the debarkation hospital were permitted up to 90 days of recuperation and recovery upon completion of further hospitalization, before they were required to report to reception, and then redistribution, centers.

The reception stations completed former POW intelligence processing (e.g., War Crimes questionnaires). The reimbursement of all back pay and the awarding of decorations was also performed at reception centers. The filing of claims for lost or confiscated property, as well as the completion of all personnel records prior to discharge or reassignment, was supposed to be accomplished at these redistribution centers.

Medical Repatriation Procedures - Physical Examinations

The April 21, 1945 War Department directive outlined the former POW physical examination procedures to be used in the overseas theater. Emergency first aid was to be provided upon recovery of POWs, followed by a physical examination which was to be conducted at the "earliest practicable moment". The extent of this physical examination was left to the directive of theater commanders. However, it usually consisted of at least height and weight measurements, an eye-ear-nose-throat examination, and dental examination. On the basis of these examinations, the medical officer was to conduct a triage of former POWs into patients or nonpatients for purposes of further medical processing. The November, 1945 "Report of the Health Survey of Repatriated American Prisoners of War From the Far East" documented the medical procedures used by the Army Surgeon General Board which was to arrange for the physical examination of Pacific Theater POWs once they arrived in the United States.[25]

The "Morgan Board" (named after its chairman, General Hugh Morgan, M.D.) report stated that its purpose was to perform a health survey of Pacific Theater POWs which would determine the best future care for these POWs, detect and prevent their diseases from spreading to their communities, and study the physical changes which occur after exposure to such harsh conditions as those endured by the Pacific Theater POWs. Thus, research as well as treatment were to be the aims of the survey. A special physical examination form was created for the survey. The original was to be filed in the former POW's medical records, and a copy was to be forwarded to the Surgeon General's office for use in the study. This form, and the instructions accompanying it, specified that the POW examination would include the following areas: medical history, height and weight, blood pressure, eyes, skin, heart, oral and dental, chest X-ray, liver, spleen, muscle, psycho-neurological functions, and laboratory tests (e.g., stool, urinalysis, blood).

The Morgan Board procedures provided that POWs classified as patients overseas would have their health survey performed on the wards of the debarkation hospital, while those classified as nonpatients were to be directed to a processing line. Those POWs discovered to require further medical treatment upon completion of the health survey were to receive this care at the debarkation hospital or the military hospital closest to their homes. After completion of their hospitalization, these former POWs were permitted up to a 90 day period of recuperation, after which they were to report to redistribution stations to complete medical processing. The April 21, 1945 instruction disclosed that those portions of the repatriation physical examination not completed overseas or during the special health survey were to be performed by physicians at the redistribution centers. Like their European counterparts, Pacific Theater POWs were also to be afforded the opportunity for further psychiatric treatment and counseling at the redistribution center.

DESCRIPTION OF REPATRIATION PROCESSING

Administrative Repatriation Processing - Evacuation and Disposition

The newly liberated Pacific Theater POWs were transferred from prison camps to depots in Japan and the Philippines for initial administrative processing. After completing those activities required by the War Department procedures, the Bataan-Corregidor POWs at the Philippines depots were allowed to go "treasure hunting" on their former battlefield in an attempt to retrieve the valuables they had buried during the siege. The "treasure hunt" did not yield much, and as a result, the POWs filed claims upon return to the United States for the monetary value of their lost possessions.

Those Filipinos who had fought with American forces on Bataan and Corregidor were also administratively processed. Most of these individuals were released by the Japanese shortly after their capture in April-May. 1942, and were then permitted to either join the local police force or resume their normal civilian occupation (e.g., farming). When the Philippines were liberated in 1945, these Filipinos rejoined American forces. At that time,they were given an intelligence affidavit to complete concerning their activities during the war, were physically examined, and then discharged and allowed to return to their homes.

Upon returning to the United States, American POWs were initially sent to debarkation hospitals, and then on to reception and redistribution centers for final disposition.

Medical Repatriation Processing - Physical Examinations

In addition to the overseas theater emergency care and physical examination required by War Department procedures, Pacific Theater POWs were also provided medical care during the trip home. This frequently consisted of vermifuging ("de-worming"), chemotherapy and whole blood and plasma transfusions aboard the returning ships.

A total of 4,618 Pacific Theater POWs were physically examined at the "Morgan Board" debarkation hospitals.[26] These hospitals, and the approximate number of POWs seen at each facility, are as follows: Letterman General Hospital, San Francisco, Calif. (3,204), Madigan General Hospital, Ft. Lewis, Wa. (886) and Camp Haan General Hospital, Camp Haan, Calif. (528). The survey began on September 1 and ended on October 22, 1945, with the final report issued shortly thereafter.

The results of this physical examination are described in the Morgan Board report. Malnutrition (avitaminosis) was the most significant finding among Pacific Theater POWs. In an effort to assess the extent of this malnutrition, the survey recorded Pacific Theater POW weights at the time of capture, the time of release, and the time of the survey examination. These measurements showed weight losses from the time of capture to the time of release ranging from 20 to 110 pounds.[27]

The survey report noted that the weight at the time of capture frequently did not reveal normal weight and the weight at time of release did not represent the lowest weight. The weight at time of capture frequently did not reflect normal weight because many POWs had lost from 30 to 50 pounds prior to capture, due to the shortage of food during the siege of Bataan and Corregidor.[28] Furthermore, the weight at time of release did not represent the lowest weight because many of the prisoners reached their lowest weights within the first six months of

imprisonment, while they were still in the Philippines. During the last month before release, many gained weight as a result of food packages dropped by American planes. As in Europe, the ingestion of such a rich American diet so soon after a long period of malnutrition often resulted in adverse reactions. These reactions were quite severe, frequently resulting in nutritional edema. The report also found that a few prisoners actually gained weight between capture and release. This phenomenon was attributed to the fact that they were either very ill at the time of capture and actually became nourished on the prison diet or they were cooks and hence in a position to purloin food more readily than their fellow prisoners.

The weight at the time of the survey often depended on the length of time between the release of the prisoner and his repatriation examination. The first prisoners were flown across the Pacific within a few days of release so their examination weight corresponded more nearly to actual weight at release. However, the remainder of Pacific POWs, who followed on ships were receiving food and medical care for more than a month before reaching the survey line and thus they gained considerable weight in the interim.

The survey report also noted that a former Pacific Theater POW could eventually regain most if not all of his pre-captivity weight without being well nourished. This was because a prisoner's new nutritional state was characterized by below normal muscular development. The regained weight was frequently confined to the former prisoner's abdomen, resulting in a protruberant "rice belly".

The survey found other results of malnutrition besides weight loss. Such conditions included pellagra; fissures around the lips (cheilosis) and mouth (stomatitis); inflammation of the tongue (glossitis) and skin (dermatitis) and severe diarrhea and dysentery. The number of repatriates suffering from some form of "avitaminosis" was estimated to be between 50 and 70 percent.[29] Beriberi was also quite prevalent in the Morgan Board patient population. A medical history of "wet" beriberi, characterized by massive edema, was evident in 77 percent of those examined.[30] A history of "dry" beriberi, characterized primarily by peripheral neuritis, was given by about 50 percent of those examined.[31] Beriberi heart disease was also discovered in many repatriates. Major neurological problems observed included optic atrophy, muscle weakness, and poor reflexes. Surprisingly, recordings of systolic and diastolic blood pressure were found to be quite normal for most Morgan Board repatriates.

The laboratory studies made during the time of the survey were quite extensive. They included stool exams for parasites, stool cultures, blood work, plasma protein, calcium and phosphorus analysis, and urinalysis. As in the case of weight loss, the report acknowledged that these laboratory tests were not truly reliable and valid measures of the severity of the POW

experience. This was because during the ocean voyage home, many Pacific POWs had received medical care, so that their condition had improved considerably by the time of examination. However, the presence of intestinal parasites was one condition that did not significantly improve by the time of the survey. The proportion of Pacific POWs found to be harboring intestinal parasites was approximately 60 to 70 percent, with many yielding from two to six different species of parasites - most commonly, ascaris and hookworm.[32] This was considered to be a conservative estimate, as it was based on only a single stool specimen rather than the standard series of three or more stool examinations. Some POWs at Letterman did not even receive a stool examination for parasites. The report recognized that this was a major shortcoming of the survey conducted at that facility. Stool culture examinations for nonparasitic microorganisms revealed the presence of Shigella and Salmonella. Due to shipboard treatment, the incidence of these particular microorganisms had significantly decreased by the time of the survey.

Blood studies were made on the Morgan Board POWs to detect the presence of malaria and anemia. The number of POWs with active malaria was surprisingly low, although the medical histories taken revealed that most Pacific Theater POW patients had malaria sometime during their internment. Over half of the early arrivals at Letterman and other Morgan Board hospitals were found to have some type of anemia. With shipboard treatment, the incidence of this disease among later arrivals diminished to about a third of those examined.[33] The plasma, calcium and phosphorus analyses, as well as urinary specimen test, did not reveal any significant deviations from a normal population. The survey also disclosed that most Pacific Theater POWs had diarrhea severe enough to be classed as true dysentery. Many still suffered from this condition at the time of examination. Some of the former prisoners showed evidence of jaundice at the time of the survey. The survey also discovered that the incidence of tooth decay was not significant, as there was little sugar in the camp diet.

The psychological picture of the repatriates that emerges from the Morgan Board report was a superficial feeling of well-being mixed with a feeling of insecurity. The feeling of well-being was evident in those POWs examined shortly after release, as they were euphoric and somewhat childlike in their reaction. However, the insecurity emerged later on in feelings of apprehensiveness about being unable to cope with all the responsibilities of civilian life. The report noted that the primary thought of the POWs during imprisonment was of food. Sex was rarely discussed or practiced. POWs interviewed as part of the survey noted that it was an intangible "will to live" that enabled them to survive after so many of their comrades died. The Morgan Board psychiatrists characterized their patients as being possessed of high morale even under the most trying circumstances, as having a never failing hope of rescue, able to repress hostility, physically adaptable to a strange environment, and willing to eat anything.

The report concluded that administrative support for the medical processing of Pacific POWs was quite adequate, except for the limited availability of medical and dental X-ray equipment. This limitation meant that not all POWs who were medically processed at Letterman received chest X-rays. At Madigan Hospital, the Board noted that while eye problems appeared to be a prevalent medical condition, no qualified opthalmologist was available to properly diagnose and treat optic atrophy and other eye diseases related to the POW experience.

ADEQUACY OF THE REPATRIATION PHYSICAL EXAMINATIONS AND RESULTANT MEDICAL RECORDS

Former POW Physicians Analysis of the Adequacy of the Repatriation Examination

Several letters concerning the medical aspects of the World War II POW repatriation examination were received from former Pacific Theater POWs physicians.

One former Pacific Theater POW physician admitted that "some 30 years after the experience my opinions may be clouded with bitterness." He then went on to state that "Repatriation examinations given by the Army to POWs returning from Japan were totally inadequate. The dominant attitude of personnel conducting these exams was that since the war was over everything would be fine, all physical complaints would disappear as we resume a normal American diet. I was medically cleared by two general hospitals prior to being separated from the service and at no time was I interviewed or examined by a senior officer. No follow-up program was established (for me)". He also added that "On return to this country we were amazed that emotional problems were undetected in the fast psychiatric shuffle offered the POWs by physicians only recently graduated".[34]

Another former Pacific Theater POW physician observed that "It appeared to be the consensus that as we were repatriated, the general euphoria of being returned to Armed Forces control caused most of the men to minimize their problems and condition. My first processing was entirely for organization and management with the issuing of identification cards and the superficial question "Do you have any major problems?" We all had as our greatest problem that of malnutrition, beriberi, and gastrointestinal disturbances. Our greatest desire was for "stateside food". . . Our main objective was to "see the town" (San Francisco) and get to our home town as soon as possible. The repatriation exam (at Letterman) was comprehensive but hurried due to the number of men being processed and the tendency of the POW to be AWOL from the scheduled routine . . . When I finally arrived (home), the exam was performed more leisurely and with greater thoroughness . . . the lab investigation was thorough . . . Nowhere along the line can I remember any questioning in regard to psychiatric problems or stress problems".[35]

Yet another former Pacific Theater POW physician, commenting on his repatriation examination, stated that "they asked me a few questions but nothing about malnutrition. They then told me I could go home, however, some of the men were given a better examination than the one I received . . . I don't think (after talking to many of my POW friends) that malnutrition or psychological problems were stressed. Most of the men were so eager to get home that they didn't bother to tell them about any problems they had . . . I think that at our examination, had it been adequate, they would have picked up many cases of stress and malnutrition among our men".[36]

Physician Reviewer Analysis of the Adequacy of the Repatriation Examination

The physicians who reviewed the sample of former Pacific Theater POWs claims folders found that approximately three fifths of those who had filed one or more claims for VA disability compensation had evidence of a repatriation examination. (Approximately one fifth of the Pacific Theater POWs had never filed a claim.) The physicians made subjective professional judgements on the repatriation examinations. They judged the overall quality and adequacy good or adequate in approximately three fourths of the exams. They also judged that approximately two thirds of the exams provided an adequate or good basis for evaluating subsequent physical or psychiatric conditions.

As with the European Theater POWs, the actual causes for the absence of repatriation examinations are unknown. The examinations could have simply not been conducted, the paperwork could have been lost or it could be located elsewhere. Filipino POWs, who made up an estimated one third of the Pacific Theater POWs and approximately one fifth of the sample, received an abbreviated examination upon rejoining the American forces that may not have been identified as a repatriation examination.

ADDITIONAL SOURCES OF MEDICAL RECORDS

The VA claims folders normally contain the service medical records for those Pacific Theater ex-POWs who have filed claims for disability compensation with the VA. A distinguishing feature of the Pacific Theater ex-POW claims folders is the large number of them belonging to the Manila, P. I. VA Regional Office (18 of 99 Pacific Theater POW folders reviewed). This high figure is understandable, in light of the fact that an estimated one third of Pacific Theater POWs were Filipinos, many of whom filed disability claims through the Manila VA Regional Office.

In addition to these VA claims folders, VA Medical Centers maintain medical records for treatment received at VA facilities for Pacific Theater POWs. VA Medical Centers also provide medical information to VA Regional Offices for filing in former Pacific Theater POW claims folders.

For those former Pacific Theater POWs who have not filed claims for disability compensation with the VA, the primary sources of medical information concerning their POW experience are the military personnel records maintained at the National Personnel Records Center, St. Louis, Mo.

When VA or NPRC records fail to contain the repatriation physical examination or other desired medical information, there are several other sources of former Pacific Theater POW medical records which are accessible to the individual Pacific ex-POW or his veterans service organization. For example, there is a handwritten medical journal compiled by Captain Frank Richardson while he was imprisoned at the Yodagawa POW camp. This diary contains entries pertaining to medical treatment of American POWs in that camp. A cross-reference to this diary has been placed in the military personnel records of those men described in the diary. Other records on Pacific Theater POWs are currently maintained in the Philippine Army Records Branch, U.S. Army Reserve Components Personnel and Administration Center (RCPAC), St. Louis, Mo. These records are collectively referred to as "Recovered Personnel Records". Shortly after World War II, military personnel specialists inventoried the records retained in the Pacific Theater during the captivity of the Pacific POWs. These records included camp rosters and diaries, casualty and death reports, general orders, and other medical and administrative documents, all of which were transferred to St. Louis in 1950-1.

KOREAN CONFLICT

GENERAL INFORMATION

A total of 3,745 Korea POWs were repatriated in two major operations - "Little Switch" (April 21 - May 3, 1953) for the 149 seriously sick and wounded POWs and "Big Switch" (August 4 - September 6, 1953) for most of the remaining POWs (3,596).[37] The average age at capture of these POWs is estimated to have been slightly over 23 years old, with the average estimated age at release slightly over 25 years. The remaining 673 Korea POWs managed to evade or escape internment prior to these two major repatriation operations. The average length of internment for Korea POWs is estimated at 737 days/2.02 years.

Of the 7,140 POWs captured and interned in Korea, 2,701 died in captivity and 4,418 were eventually returned to United States military control. There were 21 Korea POWs who refused repatriation, presumably because they had been "brainwashed" by the enemy.

DESCRIPTION OF REPATRIATION PROCEDURES

Administrative Repatriation Procedures - Evacuation and Disposition

The U S. Army handled the repatriation of all Korea POWs. The Army procedure which governed the evacuation, disposition, and physical examination of Korea POWs was "Procedure for Processing, Return and Reassignment of Exchangees in Korea", dated December 20, 1951.[38] This procedure assigned the primary responsibility for the evacuation of Korea POWs to the U.S. Army Far East Command. The command procedure which implemented the December 20, 1951 document was entitled "Standard Operating Procedure for Receiving and Processing Repatriates", dated July 20, 1953.[39]

The December 20, 1951 regulation applied to Little Switch repatriates and those individual Korea POWs who escaped or evaded capture and found their way back to American forces prior to the two major prisoner releases. This instruction initially called for identification of repatriated POWs on a roster as soon as they returned to U.S. military control. These POWs were next supposed to have their personnel records updated. They were then to be interrogated by intelligence officers, and were to read and sign security statements (which were the same ones as those used for World War II POWs) which declared that they would not improperly divulge any casualty and/or intelligence information. Theater commanders were authorized to promote enlisted and junior officer (lieutenant) former POWs one grade above that held during captivity. Former POWs were eligible for promotion only on an individual, case by case basis. After completion of administrative processing in Korea, these POWs were supposed to be flown to military hospitals in Japan for medical examination, and then flown to the United States.

Big Switch returnees were processed under both the December 20, 1951 and July 20, 1953 regulations. The July 20, 1953 SOP outlined the procedures to be followed from the time of the POW's recovery at the receiving point, to his transportation to a reception center, and then to the port of embarkation. At the receiving point, Big Switch repatriates were entered on a roster and then sent by the appropriate transportation (helicopter, ambulance, or truck) to the reception center. At the reception center, former POWs were to provide information to administrative specialists so that their personnel records could be updated. They were then permitted to meet the press for an interview concerning their POW experiences. Chaplains were also supposed to be available to offer prayers on behalf of the former POWs. Finally, POWs were to be issued food, clothing, bedding, and toilet articles.

From the reception centers, the Big Switch returnees were to be transferred to the port of embarkation by either helicopter or train. Intelligence and promotion processing were to occur before and during the voyage home. The December 20, 1951 Army procedures provided for a 30 day period of recuperation and recovery for both Little and Big Switch repatriates upon return to the United States. This rest period was to occur after completion of all hospitalization and prior to reassignment or discharge.

Those POWs who were identified in the overseas theater interrogation as particularly valuable sources of intelligence information were to be sent to Army Headquarters, Washington D.C. for further questioning as soon as medically possible after return to the United States.

Medical Repatriation Procedures - Physical Examinations

The December 20, 1951 procedure called for POWs to undergo a medical survey "immediately" upon return to American military control.[40] For Little Switch POWs, evaders and escapees, this medical survey was to be accomplished at American military hospitals in Japan.

The July 20, 1953 SOP required that Big Switch returnees would be given necessary first aid, to be followed by a triage which would sort these POWs into those litter cases requiring movement by ambulance and those ambulatory POWs who could be moved by truck to the reception center. Once at the reception center, the SOP called for returnees to be disinfected by spraying. The former POWs were supposed to proceed to showers and then report to the reception center field hospital in robe and slippers after emerging from the shower house. A medical record was to be initiated on these former POWs as soon as they entered the hospital. The former POWs were then to undergo laboratory tests and a dental examination, to be followed by chest and other X-rays. On the basis of this preliminary examination, the former POWs were classified into patients and nonpatients. Patients were to be treated just like the Little Switch POWs, i.e., aeromedically evacuated to military hospitals in Japan for further physical examinations and then flown to military hospitals in the United States for follow-up care. Nonpatients were to complete their repatriation physical examination aboard ship returning to the United States.

Findings of the repatriation physical examination were to be recorded on standard military lab, X-ray, and physical exam forms. A master form was also used to summarize and supplement the data on the standard forms. Both master and standard forms were supposed to be made part of the individual POW's medical records.

The medical exam was to include the following areas: medical history, neurological function, oral and dental exam, lab tests (i.e., urinalysis, serology and blood analysis, malaria smear, stool test for parasites, stool culture), chest X-ray, distance vision, height and weight measurements, blood pressure reading, skin exam, internal medicine (heart, liver, spleen) exam. The psychiatric examination was to include in-depth interviews. The following exams were not supposed to be routinely accomplished: electrocardiogram (EKG), blood type and Rh factor, refraction and near vision visual test, audiometer test, blood pressure at other than "sitting", "after exercise" and "two minute after" positions.

DESCRIPTION OF REPATRIATION PROCESSING

Administrative Repatriation Processing - Evacuation and Disposition

The Big Switch POW receiving point was at the armistice negotiation site at Panmunjon. The reception center located at Munsan-Ni was called "Freedom Village". The port of embarkation was Inchon. The ocean voyage home lasted approximately two weeks. During this period, shipboard intelligence teams thoroughly interrogated the Big Switch POWs. This emphasis on security was due to the fact that 21 Korea POWs were reported to have refused repatriation, which led to allegations that they had been "brainwashed" by the enemy. The interrogations were conducted in order to determine what caused the defection, and how it could be prevented in the future.

An active public information program was also part of the ocean voyage. Former POWs received booklets describing events that had occurred during their incarceration. Films and books were also available for their use.

Medical Repatriation Processing - Physical Examinations

Little Switch returnees were medically evacuated from Japan to Travis AFB, Calif., and from there to the military hospital closest to their home.

Those Big Switch POWs classified as patients were medically evacuated from Japan to Letterman General Hospital, San Francisco, Calif. for further medical care. Afterwards, these patient POWs were sent to the military medical center or hospital nearest their home for appropriate general or special followup medical care.

Nonpatient POWs were physically examined during the two week ocean voyage to the United States. The psychiatric portion of the examination was emphasized, with both group therapy sessions, as well as the required in-depth individual interviews taking place The psychiatric examination was conducted in conjunction with the intelligence interrogation as part of a program to identify and prevent any possible future defectors among returning POWs.

These repatriation physical examinations demonstrated that Little Switch returnees experienced 20 to 34 pounds weight loss, while Big Switch repatriates experienced 14 to 45 pounds weight loss.[41]

Furthermore, the examinations showed that most Korea POWs did not have any major eye, mouth, lip, or skin diseases. Among those POWs that did exhibit such problems, bleeding from the lip or mouth (gingivitis), atrophy of the tongue, and skin infections were the principal conditions diagnosed.

Twelve former prisoners had malaria.[42] While the results of chest X-ray examinations were mostly negative, two percent of all Korea POWs did have active tuberculosis and another two percent were diagnosed as having other respiratory diseases at the time of repatriation.

Stool culture examinations revealed that approximately 40 percent of all Korea POWs harbored parasites,[43] which were usually either ascaris, amoebae or hookworms. Shigella and salmonella were the most common nonparasitic microorganisms discovered among these POWs.

Approximately 80 percent of all repatriates were reported to be in good mental health and had high morale.[44] Approximately 19 percent of the repatriates were neurotic with only one percent of returnees diagnosed as psychotic.[45]

ADEQUACY OF REPATRIATION PHYSICAL EXAMINATIONS AND RESULTANT MEDICAL RECORDS

Physician Reviewer Analysis of the Adequacy of the Repatriation Examination

The physicians who reviewed the sample of former Korea POWs claims folders found that approximately eighty five percent of those who had filed one or more claims for VA disability compensation had evidence of a repatriation examination. (Approximately one fourth of the former Korea POWs had never filed a claim.) The physicians made subjective professional judgements on the repatriation examinations. They judged approximately ninety percent of the

examinations adequate or good for overall quality and adequacy. They also judged that approximately eighty-five percent of the repatriation examinations provided an adequate or good basis for evaluating subsequent physical or psychiatric conditions.

ADDITIONAL SOURCES OF MEDICAL RECORDS

The VA claims folders normally contain the service medical records for Korea as well as World War II ex-POWs who have filed claims for disability compensation with the VA. In addition to these VA claims folders, VA Medical Centers maintain medical records for treatment received at VA facilities for Korea POWs. VA Medical Centers also provide medical information to VA Regional Offices on Korea as well as World War II ex-POWs for filing in former POW claims folders.

For those former Korea POWs as well as World War II POWs, who have not filed claims for disability compensation with the VA, the primary source of medical information concerning their POW experience are the military personnel records maintained at the National Personnel Records Center, St. Louis, Mo.

Other records containing medical information on former Korea POWs are maintained at the Fort Meade, Md., Army Records Center. They are mostly "intelligence debriefing" reports which were compiled by the military intelligence teams accompanying the Korea POWs home on ship. These files are still classified.

VIETNAM ERA

GENERAL INFORMATION

The group of Vietnam POWs was distinct from American POWs of previous conflicts in several respects. First, it was the smallest group of POWs - 653 returned to United States military control, almost all during "Operation Homecoming" (January 27 to April 4, 1973). Second, almost all were career servicemen rather than draftees. Third, most were officers rather than enlisted men. Fourth, most were pilots or aircrew members rather than foot soldiers. Fifth, they were on the average older upon capture - usually in their late 20's or early 30's - and upon release - usually in their 30's - than American POWs of other wars. Finally, they were held longer than any other POW group - up to seven years.

In addition to the American POWs held in Vietnam, the 82 crew members of the naval intelligence ship U.S.S. Pueblo were captured by North Korea in January, 1968.[46] These POWs were released in December, 1968, after a period of internment of eleven months.[47] Although a state of war did not exist between the United States and North Korea at the time of their capture, these crew members are nonetheless considered POWs of the Vietnam Era.

DESCRIPTION OF REPATRIATION PROCEDURES

Administrative Repatriation Procedures - Evacuation and Disposition

The evacuation procedures used for Vietnam POWs are summarized in "Operation Homecoming - Medical Report" issued in 1973 by USAF Hospital, Clark AFB, P.I.[48] This procedure called for Vietnam POWs to be taken from Vietnam to Clark by air transport. Physicians and other health professionals were to be aboard the aeromedical evacuation planes to provide emergency first aid. Immediately upon arrival at Clark, the former POWs were to be given the opportunity to telephone their next of kin. Intelligence officers were then supposed to debrief the former POWs.

POWs were promoted based on individual date of rank. The new rank, along with appropriate decorations, were to be issued to the repatriated POWs along with their new uniforms. Former POWs were also to be authorized partial payments of back pay, and were to be furnished with legal and financial counseling. Chaplains were to be available to provide for spiritual welfare. Finally, former Vietnam POWs were to be provided with a booklet which summarized all the major events that had occurred during their incarceration.

The Veterans Administration established a procedure for the administrative handling of former POWs once they had returned to the United States. This procedure was entitled "POW/MIA Returnee Program", DVB Circular 20-72-94 , dated December 8, 1972.[49] A special identification card (VA Form 23-8680) was to be completed by the military on each repatriated POW and forwarded to the VA. With the use of this card, Veteran Benefits Counselors were to locate repatriated POWs hospitalized in military facilities, and advise them on how to file for disability compensation or obtain a VA home loan. VA counseling psychologists were also supposed to be available to assist former POWs in establishing an education or rehabilitation training program.

Medical Repatriation Procedures - Physical Examinations

The physical examination procedures to be followed for former Vietnam POWs were outlined in the Clark Hospital "Medical Report" and the 1972 "Initial Medical Examination Form" and its accompanying instructions.[50] The "Medical Report" noted that upon arrival at Clark, former

POWs were to be "triaged" into patients and nonpatients. Nonpatients were to be initially examined at Clark and sent stateside to a military medical center near their home, where that portion of the treatment form not finished at Clark was to be completed.

Those former POWs classified as patients were to remain at Clark for an extended period of medical care. Family members of these patients were authorized travel to Clark to be with their sons or husbands. The repatriation physical examination was to be conducted using a computer-coded volume called the Initial Medical Examination Form (IMEF). This examination was to include a complete medical history (pre, during, and post captivity), nutritional assessment, height and weight measurements, neck and thyroid tests, eye-ear-nose-and-throat exam, orthopedic exam, chest X-ray, pulmonary function test, cardiac, abdomen, rectum, and skin tests, and psychiatric examinations and interviews. After reporting in to the stateside military hospital, former POWs were authorized liberal leave (e.g. 30 to 60 days) from the hospital to home in order to be reunited with family and friends. As part of stateside medical processing, former POWs, their wives, and children were offered family counseling by military social workers. In a May 22, 1973 memorandum, the Department of Defense also authorized all Vietnam POWs - both those separating from the military and those remaining in the service - the use of military medical facilities for a five-year period following repatriation (1973-1978).[51]

DESCRIPTION OF REPATRIATION PROCESSING

Administrative Repatriation Processing - Evacuation and Disposition

Most of the Vietnam POWs were picked up in Hanoi and flown to Clark AFB. After remaining at Clark an average of two to three days (for nonpatients), they were flown to Travis AFB, Calif. and then to their respective stateside military hospitals.

Administrative processing proceeded according to plan. A feature of the process was the clamor for news of the POWs from national and hometown news media, as well as from understandably anxious friends, relatives, and interested citizens. This situation occasionally resulted in difficulties for public affairs personnel, who were handling the release of information on the status of former POWs.

The repatriation administrative procedures and processing for the crew of the U.S.S. Pueblo was not as extensive as that for the POWs held in Vietnam. When they were released in December, 1968, the Pueblo POWs were aeromedically evacuated to the San Diego Naval Regional Medical Center for a repatriation physical examination. After this examination was completed in January 1969, all military crew members were found fit for limited duty assignments. In early

1969, a Naval Board of Inquiry was convened to investigate the Pueblo incident. Upon completion of the Board of Inquiry, the Pueblo crew was reexamined at the San Diego hospital in March, 1969. As a result of this reexamination, four crew members were found unfit for full duty and were placed in limited duty status.[52]

Medical Repatriation Processing - Physical Examinations

Emergency first aid was available to those Vietnam POWs who required it during the flight from Vietnam to Clark. The IMEF form was initiated at Clark. During the two or three days nonpatient POWs remained at Clark, the medical history, dental, lab (e.g., stool, urinalysis, blood count, malaria smear), X-ray, EKG, and skin portions of the IMEF were usually completed. The remainder of the IMEF was completed at the stateside hospital.

The POW physical picture that emerged from the IMEF was in some respects similar to that of American POWs interned by other Asian captors in prior conflicts. Most of the POWs were found to harbor some form of intestinal parasite, usually worms. The next most common diagnosis was fractures, caused by either ejection at the time of shoot-down or by torture in prison. Several cases of malaria were evident during the time of repatriation. Nutritional diseases appeared in approximately 12 percent of returnees.[53] Dental disease, related to malnutrition, was also quite evident. Peripheral neuropathy, especially "burning feet" was also present in the patient population, but not to the degree found in the World War II Pacific Theater POWs. The POW psychological picture was somewhat better than in previous conflicts, as only about six percent of returnees were found to be suffering from any type of psychiatric problem, with most psychiatric disorders diagnosed as neurotic rather than psychotic.[54]

Although the IMEF was not used to process them, the Pueblo POWs also had an extensive repatriation physical examination. Principal findings were similar to those of other American POWs captured by an Asian power -intestinal parasites, peripheral neuropathy, respiratory problems, and skin inflammations. After three weeks of examination and treatment, all crew members were found fit for limited duty assignments. When the crew members were reexamined at San Diego, four members were found unfit for full duty due to diagnoses of optic atrophy and obsessive-compulsive neurosis.[55]

ADEQUACY OF REPATRIATION PHYSICAL EXAMINATIONS AND RESULTANT MEDICAL RECORDS

The physician review of a sample of former POW claims folders did not include Vietnam Era POWs because of the statistically insignificant number of these POWs who have VA claims folders (64). Most Vietnam Era POWs are still on active duty. Consequently, the primary source of

medical information on Vietnam Era POWs is the active duty military medical record. These medical records are supplemented by the computerized medical data obtained from the IMEF. The IMEF data, as well as other Vietnam mortality and morbidity information, on Army, Navy, and Marine POWs is currently maintained at the Naval Health Research Center, San Diego, Calif. Auxiliary medical information on Air Force POWs is currently maintained at the School of Aerospace Medicine Brooks AFB, Tex.

SUMMARY

ANALYSIS OF THE ADEQUACY OF REPATRIATION PROCEDURES

The review conducted of the procedures developed specifically to repatriate the POWs of World War II, Korea and Vietnam found that the procedures were generally thorough and comprehensive. They reflected the objectives of the War Department and the Department of Defense to promptly evacuate the POWs, provide effective medical care, and expeditiously process the POW administratively. They reflected "state of the art" medical knowledge and technique. They demonstrate that, even prior to release, it was anticipated and expected that the POWs would have special physical and psychological problems because of the hardships they had endured. The detailed instructions for physical and psychological examinations attest to this expectation. As early as the Morgan Board survey of Pacific POWs, one objective of the repatriation procedures was to determine the best future care for POWs and provide a base for studying the effect of the POW experience.

The repatriation procedures have placed progressively more emphasis on the psychological aspects of the former POW's health from war to war. The increased emphasis on the psychological aspects in the Korea procedures partially reflect the concern over "brainwashing" and alleged collaboration. Mostly they reflected the increased knowledge of the effects of stress. The Vietnam procedures recognized the effects of separation on the families of the POWs and included family counseling.

Overall, the repatriation procedures appear to have been adequate and, if followed, would have provided the former POWs with adequate records.

ADEQUACY OF REPATRIATION EXAMINATIONS AND RESULTANT MEDICAL RECORDS

The most important thing from the viewpoint of the former POW is not the adequacy of the procedures but how well they were implemented and the degree to which the resultant medical records were adequate. Adequacy has been assessed in terms of availability, quality and the

degree to which the examinations provide a basis for determining whether disabilities becoming manifest later are the result of the POW experience.

The review of a sample of former POW VA claims folders by physicians found that less than one fifth of the European Theater POWs who had filed one or more claims for VA disability compensation had evidence of a repatriation examination. The figure rose to approximately three fifths for Pacific Theater POWs and approximately eighty five percent for Korea POWs. The physicians made subjective professional judgements on the examinations. The few European Theater examinations found were judged as generally satisfactory but no statistical analysis could be made. The physicians judged that approximately three fourths of the Pacific POW examinations, were good or adequate in terms of overall quality and adequacy. Approximately ninety percent of Korea exams were so judged. The physicians judged approximately two thirds of the Pacific exams as providing a good or adequate basis for evaluating subsequent physical or psychiatric conditions. Approximately eighty-five percent of Korea exams were so judged.

The physicians also found some omissions from the examinations found which either made other portions of the examinations difficult to understand or contributed to the examination being judged less than good or adequate. Over half of the examinations contained either no medical history prior to capture or a poor history. Approximately one third of the examinations had inadequate evaluations of the POWs mental status and psychiatric conditions.

As mentioned earlier, no review of former Vietnam Era POW claims folders was performed. However, there is every indication that the examinations they received were very adequate in terms of quality and each former POW was examined.

While there are many possible explanations for repatriation examinations not being available in the former POWs medical records, the fact is that a review of a representative sample of former POW claims folders found that the examination is often not available for adjudicating claims for VA disability compensation. When the repatriation examination is not available when adjudicating a claim, the decision whether the claimed disability is related to the POW experience has to be made without the advantage of this crucial evidence.

FOOTNOTES

[1] U.S. Congress, Senate, Committee on Veterans Affairs, Report to Accompany S.2828: Veterans Disability Compensation and Survivors Benefits Improvements Act of 1978, Report No. 95-1054, 95th Cong., 2nd Session, July 31, 1978, p. 35.

[2] American Ex-Prisoners of War, Inc., The European Story, Packet No. 8, 1978, p. 4.

[3] War Department, "Procedure for Processing, Return, and Reassignment of Recovered Personnel (Short Title: POW), Washington, D.C., 21 April 1945 (revised 17 August 1945), pp. 1-52, hearafter referred to as "World War II POW".

[4] War Department, "Repatriation, Recovery, and Rehabilitation of American POWs in Europe", Washington, D.C., 3 October 1944, pp. 1-8., hereafter referred to as "Europe POW".

[5] Supreme Headquarters Allied Expeditionary Force (SHAEF), "ECLIPSE Memorandum No. 8", 19 March 1945, pp. 1-20.

[6] United States Army, "European Theater of Operations - Standard Operating Procedure No. 58", 3 April 1945, pp. 1-20.

[7] United States Army, Office of the Chief Historian, European Command, RAMPs: The Recovery and Repatriation of Liberated Prisoners of War, Frankfurt, Germany, 1947, pp. 17-18.

[8] War Department. "Military Personnel Escaped From Enemy Territory", Washington, D.C., 11 July 1944, pp. 1-2.

[9] War Department, "Publicity in Connection with Escaped, Liberated, or Repatriated POWs, to Included Evaders of Capture", Washington, D.C., 29 March 1945, pp. 1-2.

[10] RAMPs, pp. 17-18.

[11] United States Army, "European Theater of Operations-Standard Operating Procedure No. 58", Change No. 4, 24 May 1945, p. 1.

[12] Ibid., p. 2.

[13] Europe POW, p. 4.

[14] Ibid., p. 4.

[15] World War II POW, p. 43.

[16] Paul Thygesen, Knud Hermann, and Rolf Willanger, "Concentration Camp Survivors in Denmark: Persecution, Disease, Disability, Compensation", Danish Medical Bulletin, Vols. 17, Nos. 3-4 (March-April, 1970), pp. 65-106.

[17] RAMPs, p. 26.

[18] United States Army, Office of the Surgeon General, Internal Medicine in World War II, Volume III: Infectious Disease and General Medicine, Washington, D.C.; Government Printing Office, 1968, p. 250.

[19] Ibid., p. 250.

[20] Ibid.

[21] Thomas Barks, M.D., Letter to VA Assistant Administrator for Planning and Program Evaluation, June, 1979, p. 2.

[22] National Archives, Modern Military Records Branch, "Inventory of Records of World War II American Ex-POWs in the National Archives and Federal Records Centers", July, 1968, p. 1.

[23] I. Wright and A. van Ravenswaay, Report of the Health Survey of Repatriated American Prisoners of War From the Far East, November, 1945, p. 1.

[24] War Department, "Handling and Disposition of Recovered U.S. Military Personnel Who Formerly Served on Wake, Guam, or in the Philippines", Washington, D.C., 19 February 1945, pp. 1-3.

[25] Wright, and van Ravenswaay, Report of the Health Survey, p. 1.

[26] H. Morgan, I. Wright and A. van Ravenswaay, "Health of Repatriated POWs from the Far East", Journal of the American Medical Association, Vol. 130, No. 13, (April 13, 1946), p. 995.

[27] United States Army, Office of the Surgeon General, pp. 274-275.

[28] Morgan, Wright, and van Ravenswaay, p. 996.

[29] United States Army, Office of the Surgeon General, p. 274.

[30] Ibid., p. 274.

[31] Ibid.

[32] Wright and Van Ravenswaay, p. 25.

[33] United States Army, Office of the Surgeon General, p. 274.

[34] Thomas Hewlett, M.D., Letter to VA Assistant Administrator for Planning and Program Evaluation, May, 1979, pp. 1-2.

[35] Mark Herbst, M.D., Letter to VA Assistant Administrator for Planning and Program Evaluation, May 25, 1979, pp. 1-2.

[36] Alvin Poweleit, M.D., Letter to VA Assistant Administrator for Planning and Program Evaluation, May 4, 1979, pp. 1-2.

[37] F. A. Reister, Battle Casualties and Medical Statistics: U.S. Army Experience in the Korean War, Washington, D.C.: Government Printing Office, 1973, p. 87.

[38] War Department, "Procedures for Processing, Return, and Reassignment of Exchangees in Korea (Short Title: POW-K)", Washington, D.C., 20 December 1951, pp. 1-8, hereafter referred to as "Korea POW".

[39] United States Army, Headquarters Munsan-Ni Provisional Command, "Standard Operating Procedure for Receiving and Processing Repatriates", South Korea, 20 July, 1953, pp. 1-5.

[40] Korea POW, p. 2.

[41] Reister, F. A., pp. 87-88.

[42] Ibid., pp. 89, 91.

[43] Ibid., pp. 89, 90.

[44] Ibid., pp. 88, 90.

[45] Ibid.

[46] R. C. Spaulding, "The Pueblo Incident: Medical Problems Reported During Captivity and Physical Findings At the Time of the Crew's Release" Military Medicine, September, 1977, p. 681.

[47] Ibid., p. 682.

[48] United States Air Force, Clark AFB Hospital, Operation Homecoming -Medical Report, Clark AFB, P.I., 1973, pp. 1-170.

[49] VA Department of Veterans Benefits, "POW/MIA Returnee Program" DVB Circular 20-72-94, Veterans Administration Central Office, Washington, D.C., pp. 1-15.

[50] Department of Defense, Initial Medical Examination Form (IMEF), Washington, D.C., 1973, p. 1.

[51] Richard Wilbur, M.D., Assistant Secretary of Defense (Health and Environment), "Follow-Up Medical Care of Returned Military POWs", Washington, D.C., May 22, 1973, p. 1.

[52] Spaulding, Pueblo Incident, p. 682.

[53] United States Air Force, Office of the Surgeon General, "Diagnostic Conditions of Repatriated POWs", Vol. 24, No. 11, (November, 1973), p. 46.

[54] Ibid., p. 46.

[55] Spaulding, Pueblo Incident, pp. 682-683.

TYPES AND SEVERITY OF DISABILITIES

OBJECTIVE

Public Law 95-479, Section 305 (a) (2) - ". . the types and severity of disabilities that are particularly prevalent among former prisoners of war in various theaters of operation at various times."

INTRODUCTION

This chapter describes the disabilities prevalent among former prisoners of war from the time immediately following their repatriation to the present. The disabilities suffered by former POWs at the time of repatriation, as well as during captivity, are discussed in the chapters on repatriation procedures and conditions of captivity.

Recent Congressional concern regarding disabilities suffered by former POWs was expressed in the Senate Committee on Veterans Affairs recommendation for this study: "Recently, the Committee has become concerned about claims, particularly by former prisoners of war (POWs) from World War II who were interned in the Pacific Theater, of long-lasting and progressive physical and psychological damage attributable to the conditions of internment experienced by former POWs....Former prisoners of war may have a higher incidence of particular types of diseases."[1]

Evidence of prior Congressional interest in this area was the HEW/VA/Labor/Defense written report entitled Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II, dated January 12, 1956. This study was authorized by Section 202, P.L. 83-744, which stipulated that the report should include an analysis of former POW mortality and morbidity in order to determine whether their abnormally high rates of death and disease were directly "attributable to the malnutrition and other hardships suffered by them while held as POWs."[2]

This chapter employs both mortality and morbidity measurements to describe the types and severity of disabilities suffered by former POWs of various theaters at various times. Mortality data can be used as an indirect measure of disability if it is assumed that premature death was caused by certain disabilities. Morbidity data is a more frequently used measure of disability, since there is usually a direct relationship between illness or injury and disability.

WORLD WAR II - EUROPEAN THEATER

BACKGROUND

Shortly after World War II, the War Claims Commission conducted a survey on the current health status of living former POWs from the European Theater. In 1950, the Commission sent out thousands of questionnaire forms to veterans and civic organizations, requesting that they provide these survey forms to any of their members who had been prisoners of war of the Germans. The survey replies received from European as well as Pacific Theater POWs were used in preparing a report on World War II POWs. Excerpts from this Commission report were printed as part of the Congressional hearings on a bill to provide for a study of the types and severity of disabilities among former World War II POWs.

Many respondents cited in the Commission report and Congressional hearings complained of the aftereffects of malnutrition or gastrointestinal problems, and inability to earn a steady living due to fatigue and/or illness arising out of these conditions. Particularly revealing were the replies received from the European Theater POW physicians. One former POW physician stated that "As a doctor. . . it is my opinion that physical and/or mental sequelae may be present, but masked, in many former patients. From my own experience I know that many of the patients I had in Germany later were hospitalized with mental and physical ailments following their return to the United States."[3]

Another European Theater POW physician responded that "No doubt there were many prisoners in German POW camps who suffered a reasonable degree of hardship but hardly enough to account for a permanent disability. On the other hand, there were certainly thousands of American prisoners of war in Germany who suffered tremendously, and it would be very reasonable to expect a prolonged disability as a result. . . Since practically all POWs suffered from some degree of malnutrition, gastritis, dysentery, respiratory diseases, skin diseases, arthritis, frostbite, exposure, and/or nervous conditions, I feel that every POW should automatically be service connected for those ailments or any related to them."[4]

In addition to replies from the prisoners and their physicians, the Commission report and Congressional hearings cited the opinions of several non-POW medical experts on the residuals of the World War II POW experience. These physicians were asked the question: "Do you believe that the average American physician, because of the comparative rarity of malnutrition here, would have difficulty in recognizing the residuals of malnutrition for what they are?" The unanimous reply from the physician experts was "Yes." Another question asked was: "Do you

believe that because of the paucity of available knowledge on the long-term effects of malnutrition, and because of difficulty of diagnosis, that former POWs should receive the benefit of presumption of service-connected disability with the attendant privilege of entering a veterans hospital?" The physician respondents all answered "Yes."[5]

The above Congressional hearings resulted in the initiation of a contract between the Veterans Administration and the National Academy of Sciences/National Research Council to do mortality and morbidity studies on former POWs. These scientific studies, performed by the NAS/NRC's Medical Follow-Up Agency, used representative samples of ex-POWs and carefully matched control groups of veterans from the same theater of operation. Records and questionnaires, rather than physical examinations, were used to collect data for these analyses.

TYPES AND SEVERITY OF DISABILITIES SINCE REPATRIATION

Mortality As A Measure of the Types and Severity of Disabilities

The first NAS/NRC study on the mortality of former World War II POWs was written by Dr. Bernard Cohen, NAS/NRC, and Dr. Maurice Cooper, VA, and covered the six year period immediately following repatriation.[6] The Cohen and Cooper study found that the mortality rates of former European Theater POWs were not significantly different from that of other World War II veterans during the study period.

The Cohen and Cooper study was used as the basis for the P.L. 83-744 mandated inter-agency report to the Congress on the mortality and morbidity of former World War II POWs. In the area of mortality, the P.L. 83-744 report noted that "a search was made at the Armed Forces Institute of Pathology for autopsy protocols." In the course of this research, "autopsy records were found for only nine Pacific prisoners and two European. In no case was the autopsy record informative as to findings indicative of possible residuals of the effects of imprisonment other than tuberculosis." The P.L. 83-744 report recommended further analysis of former POW mortality.[7]

Acting on the P.L. 83-744 recommendation for further mortality study, the NAS/NRC completed another follow-up study in 1970.[8] This mortality study, written by Dr. Dean Nefzger, included an analysis of a sample of former European Theater POWs until 1965, comparing them with the mortality of several types of other European Theater veterans groups -e.g., combat riflemen, POWs hospitalized for malnutrition upon repatriation, and veterans discharged before the end of the war. For the period 1953-1965, Nefzger confirmed Cohen and Cooper's finding of no significant excess mortality among former European Theater POWs as compared to other veterans

of that theater.

However, Nefzger pointed out that the former European POWs hospitalized for malnutrition had all increased mortality rates due to trauma, tuberculosis, and cirrhosis - a situation similar to that found among the Pacific Theater and Korea former POWs included in his analysis.

In 1979, another NAS/NRC POW follow-up mortality study was completed by Mr. Robert Keehn.[9] Data from this study, which is expected to be published in final form shortly, will be cited below. This study included an analysis of a sample of World War II European Theater POWs and their controls through 1975.

Morbidity As A Measure of the Types and Severity of Disabilities

The Cohen and Cooper study analyzed the morbidity as well as mortality of former World War II POWs. The study discovered relatively higher rates of malnutrition, psychoneurosis, and gastrointestinal disorders among the former European Theater POWs than among their controls.

Based upon such findings, the P.L. 83-744 study recommended that the VA thoroughly examine former European Theater and other World War II POWs for residuals of such disorders. The report further recommended that the VA devise procedures and standards to ensure that such examinations were carried out.

The P.L. 83-744 report also called for follow-up morbidity studies on former World War II POWs, which would focus on malnutrition, psychiatric problems, and other prevalent residuals of the POW experience. Accordingly, Dr. Gilbert Beebe of NAS/NRC completed a follow-up morbidity study of former POWs, which included an analysis of a sample of European Theater POWs and a World War II veteran control group through 1965.[10]

TYPES AND SEVERITY OF DISABILITIES AT THE PRESENT TIME

Mortality As A Measure of the Types of Disabilities

Keehn's study constitutes the most recent epidemiological data on the causes of mortality among former European Theater POWs. Keehn confirmed the Cohen-Cooper and Nefzger findings of no significant excess of deaths among former European Theater POWs through 1975. While the mortality differences discovered between the former POWs and all other World War II veterans were not statistically significant, Keehn nonetheless observed more deaths during certain follow-

ıp intervals among former European Theater POWs due to such causes as trauma, tuberculosis, ınd cirrhosis than among the World War II veteran control group.

Mortality As A Measure of the Severity of Disabilities

Keehn confirmed the Cohen-Cooper and Nefzger mortality findings that European Theater POWs did not have significantly higher death rates than their controls.

Keehn's study also noted that approximately 14 percent (291 out of 2,035) of the repatriated European Theater POWs, as opposed to approximately 15 percent (165 out of 1,063) of other European Theater veterans in his sample had died as of January 1, 1976. These repatriated POWs died an average of almost 21 years after repatriation (1966).[11]

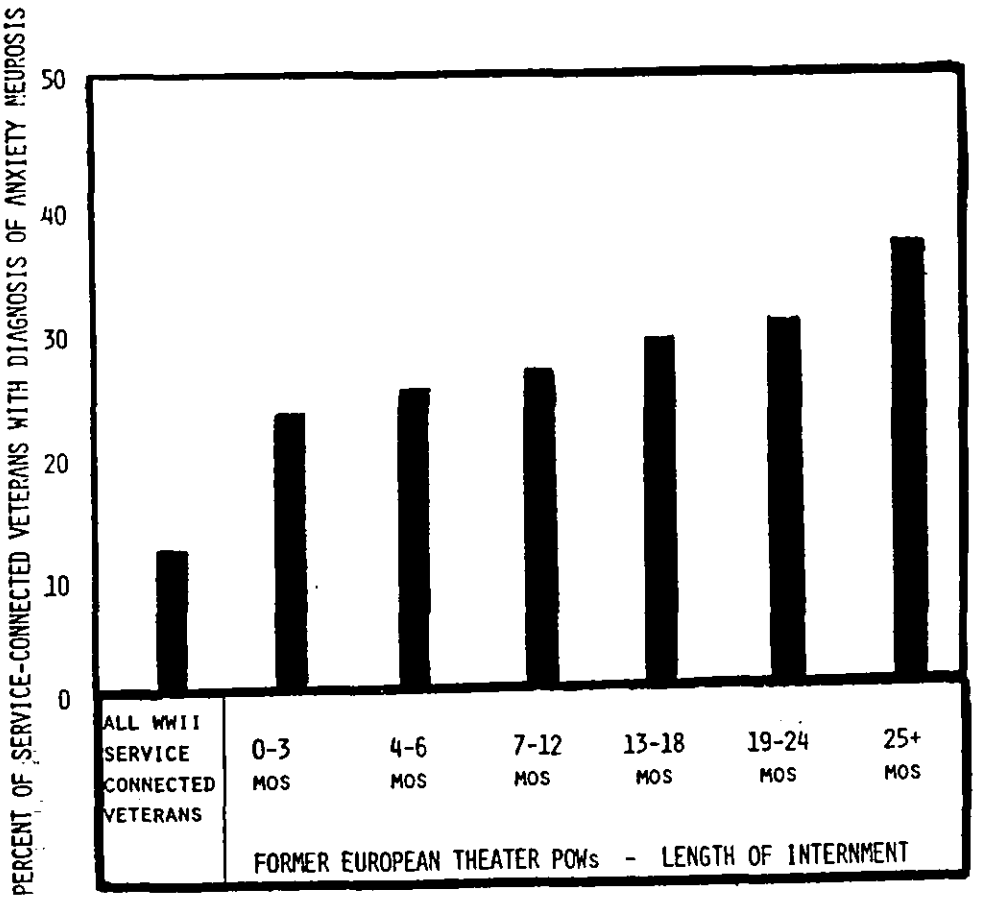
In an effort to update these mortality findings, 1979 mortality data on World War II POWs was collected through a comparison of a list of repatriated World War II POWs obtained from the National Archives with data maintained on these former prisoners in VA computer systems. The data produced indicated that approximately 15 percent (13,582 out of 85,385) of the repatriated European Theater POWs in VA computer systems had died as of June 1, 1979. These deceased European Theater POWs died an average of slightly over 24 years after repatriation (1969). The approximately three year difference between the Keehn and VA comparison dates of death can be largely explained by the time difference in data collection for the Keehn study (through 1975) and the VA comparison (to 1979). When this difference is accounted for, the VA data generally supports Keehn's information on the average number of years after repatriation former European Theater POWs survived. The table below presents this mortality data for former European Theater POWs, as well as Pacific and Korea ex-POWs.

TABLE 3 Former POW Mortality Data

NAS/NRC (Keehn-1975)/VA Comparison (1979)	WW II Europe	WW II Pacific	Korean Conflict
POWs in NAS Sample/POWs Identified in VA Comparison	2,035/85,385	3,147/19,160	3,932/4,418
Deceased POWs in NAS Sample/VA Comparison	291/13,582	668/4,494	382/499
Percent of POWs Who Died in NAS Sample/VA Comparison	14.3/15.9	21.2/23.5	9.7/11.2
Number of Years Survived Since Repatriation - NAS Sample/VA Comparison	20.76/24.40	18.51/22.52	13.20/16.19

of European ex-POWs with anxiety neurosis as opposed to all other service-connected World War II veterans - persists among those European ex-POWs interned longer periods of time (e.g., 4-6 months, 7-12 months, etc.). Thus, there does not appear to be a specific minimum length of internment which must be attained before anxiety neurosis really appears in former European Theater POWs; this disability occurs in a significant number of the POWs interned a few days just as certainly as it does among those interned several years. This relationship is illustrated in the following table.

TABLE 6 PERCENT OF SERVICE-CONNECTED FORMER EUROPEAN THEATER POWs WITH DIAGNOSIS OF ANXIETY NEUROSIS CORRELATED WITH LENGTH OF INTERNMENT



WORLD WAR II - PACIFIC THEATER

BACKGROUND

Like their European Theater comrades, the former Pacific Theater POWs queried in the 1950 War Claims Commission survey complained of malnutrition and gastrointestinal problems, as well as the inability to earn a steady living due to fatigue and/or illness arising out of these conditions. In addition to these complaints, the former Pacific Theater POWs mentioned residuals of tropical

and parasitic diseases, which were incurred while serving in the Pacific.

Survey replies received from Pacific Theater POW physicians were similar to those given by their European Theater professional colleagues. One Pacific Theater POW physician stated that "It is my opinion that virtually none of the released POWs of the Japanese who underwent internment for three to three-and-one-half years escaped without some residual impairment of their health. This may vary from minor mental or physical symptoms to gross crippling disease."[13] Yet another Pacific Theater POW physician declared that "It is my opinion that no one who suffered the prolonged starvation, degradation, and physical suffering experienced by this group has been able to make a full recovery, either physical or emotional. It is also my opinion that one who has not experienced such a situation has no concept of the problem presented by these men."[14]

The medical experts consulted as part of the War Claims Commission report gave the same answers concerning Pacific Theater POWs as they did concerning European Theater POWs - namely, that the average American physician would have difficulty in recognizing the residuals of malnutrition and that former POWs should receive the presumption of service-connected disability with the accompanying benefit of entering a veterans hospital. These physicians also identified optic atrophy, peripheral neuropathy, and beriberi as being residuals of the Pacific Theater POW experience.[15]

TYPES AND SEVERITY OF DISABILITIES SINCE REPATRIATION

Mortality As A Measure of the Types and Severity of Disabilities

The Cohen and Cooper study found that the principal causes of a significantly higher percent of deaths among former Pacific Theater POWs during the study period (1946-1952) were tuberculosis and trauma. The authors suggested that the greater number of tuberculosis deaths might be either a direct result of infection during imprisonment or an indirect effect of a lowered post-repatriation resistance to infection. Trauma - accidents, suicide, homicide - was a statistically significant cause of death which the authors hypothesized might be due to underlying psychiatric problems arising out of the POW experience. Cohen and Cooper also found that former Pacific Theater POWs had a significantly higher number of deaths for the first two years after liberation (1946-1947) and a slightly diminished, yet still excessive, death rate for the remaining four years of their study (1948-1952).

The P.L. 83-744 report which cited Cohen and Cooper's findings recommended follow-up mortality studies of former World War II prisoners, especially former Pacific Theater POWs, as they had the highest mortality rate of all World War II POWs.

In this regard, the P.L. 83-744 report stated: "Further, it is recommended that a centrally directed systematic program be initiated to obtain, whenever possible, complete autopsies in all future deaths, accidental or otherwise, of these former prisoners. In addition to gross and microscopic procedures usually employed, special attention should be given to the central and peripheral nervous system, and to the nerves and vascular system of the lower extremities. The immediate autopsy examinations, which may be done in hospitals through the country, should be supplemented by sending the complete medical records, autopsy report, and appropriate blocks of tissue to a central laboratory where further histologic studies should be done and all facts evaluated."[16]

The Nefzger POW mortality study confirmed Cohen and Cooper's finding of trauma and tuberculosis as being the principal causes of death among former Pacific Theater POWs for the 1953-1965 follow-up period. Nefzger also found a significantly greater number of deaths due to cirrhosis. Nefzger found no evidence to support the Cohen and Cooper hypothesis that tuberculosis among former Pacific Theater POWs might be due to lowered resistance to infection which occurred after repatriation. Like Cohen and Cooper, Nefzger implied that excess death due to trauma might be due to underlying psychiatric problems (e.g., anxiety neurosis). Nefzger also suggested that a significantly higher percent of deaths due to cirrhosis might have its origin either in malnutrition during imprisonment or a "different standard or manner of living since repatriation" (e.g., alcohol abuse).[17]

Nefzger also discovered that the excess mortality of former Pacific Theater POWs relative to other World War II Pacific Theater veterans diminished with time. After 1953, the mortality rate of former Pacific Theater POWs was indistinguishable from that of the other World War II Pacific veterans in his study.

Keehn's study traced mortality among former Pacific Theater POWs through 1975. The findings from this soon to be published study are discussed below.

Morbidity As A Measure of the Types and Severity of Disabilities

Cohen and Cooper discovered that former Pacific Theater POWs exhibited a wide variety of malnutrition, gastrointestinal, cardiovascular, and psychoneurological diseases which occurred far in excess of the amount of these diseases found among other World War II veterans or former European Theater POWs.

The P.L. 83-744 report recommended further morbidity studies of World War II prisoners, especially former Pacific Theater POWs, as they had the highest morbidity rates of all World War II POWs. In this regard, the P.L. 83-744 report declared: "Psychological and psychiatric studies should be conducted to determine the extent to which psychological consequences of imprisonment, perhaps unrecognized by the individual, may have impaired mental adjustment and physical efficiency, the extent to which present and past physical illness and the observed high rate of accidental deaths can be explained on a psychological basis, and to separate complaints of organic orgin from those due to psychological causes."[18]

The Beebe follow-up morbidity study generally confirmed Cohen and Cooper's findings of greater morbidity among former Pacific Theater POWs due to a variety of causes. In particular, Beebe found that through 1965, former Pacific Theater POWs sustained a higher morbidity rate from tuberculosis and other infective and parasitic diseases, as well as nerve inflammation (neuritis), peripheral neuropathy, and gastrointestinal, genitourinary, and orthopedic problems. Beebe found that arteriosclerotic heart disease was also quite prevalent among former Pacific Theater POWs.

TYPES AND SEVERITY OF DISABILITIES AT THE PRESENT TIME

Mortality As A Measure of the Types of Disabilities

Keehn confirmed Nefzger's report of a significantly higher amount of mortality due to trauma, tuberculosis, and cirrhosis in former Pacific Theater POWs than in his Pacific Theater veteran control group. Like Nefzger, Keehn found no evidence (in the form of excess deaths from tuberculosis through 1975) which supported the Cohen-Cooper hypothesis that tuberculosis might be due to a chronic post-repatriation lowered resistance to infection as well as to an acute infection occurring during imprisonment. Like Cohen-Cooper and Nefzger, Keehn suggested that a significantly higher number of former Pacific Theater POWs deaths due to trauma could have its origin in underlying psychiatric problems arising out of the stress of internment. Like Nefzger, Keehn suggested that former Pacific Theater POW mortality due to cirrhosis could be due to post-liberation alcohol abuse as well as to malnutrition suffered during internment.

Mortality As A Measure of the Severity of Disabilities

Keehn confirmed Nefzger's finding of no significantly higher amount of mortality among former Pacific Theater POWs after the mid-1950s.

Keehn's study also noted that approximately 21 percent (668 out of 3,147) of the repatriated Pacific Theater POWs as opposed to approximately 19 percent (407 out of 2,175) of the other Pacific veterans in his sample had died as of January 1, 1976. The repatriated POWs died an average of 19 years after repatriation (1964).[19]

The VA comparison conducted as part of this study updated these mortality findings to 1979. Approximately 23 percent (4,494 out of 19,160) of repatriated Pacific Theater POWs in VA computer systems had died as of June 1, 1979. These repatriated Pacific Theater POWs died an average of more than 22 years after repatriation (1967). The approximately three year difference between the Keehn and VA comparison dates of death can be largely explained by the time difference in data collection for the Keehn study (through 1975) and the VA comparison (to 1979). When this difference is accounted for, the VA comparison generally supports Keehn's information on the average number of years after repatriation that Pacific Theater ex-POWs survived.

Morbidity As A Measure of the Types of Disabilities

The most recent NAS/NRC morbidity study found that former Pacific Theater POWs were suffering from a significantly greater amount of service-connected disabilities due to the following conditions: musculoskeletal problems (arthritis and back disorders), systemic diseases (avitaminosis, beriberi, pellagra, malaria), eye diseases (conjunctivitis), respiratory problems (sinusitis, bronchitis, tuberculosis), cardiovascular symptoms (residuals of frozen feet), gastrointestinal diseases (peptic ulcer, gastritis, amebiasis, dysentery, hemorrhoids, hepatitis), genitourinary problems (prostate gland infection), skin diseases (scars, dermatophytosis), neurological disorders (peripheral neuropathy), and psychiatric problems (anxiety neurosis, coded as "anxiety reaction" and "anxiety state"). Beebe noted that the significant amount of arteriosclerotic heart disease among the living Pacific Theater ex-POWs in his sample should be monitored in a follow-up study to determine if it would result in a significantly higher amount of deaths from heart disease among these POWs in future years. The most prevalent of the service-connected disabilities in Beebe's sample of former Pacific Theater POWs was malaria (27.0 percent), closely followed by anxiety neurosis (25.8 percent). Furthermore, Beebe found that the percent of his former Pacific Theater POW sample suffering from these two disabilities was

significantly greater than the percent of his Pacific Theater veteran control group compensated for these disabilities (11.2 percent with malaria, 5.0 percent with anxiety neurosis).[20]

The VA comparison updated this morbidity information to 1979. Malnutrition and systemic diseases (malaria, avitaminosis, beriberi, and pellagra), amebiasis and other gastrointestinal disorders, and anxiety neurosis were found to be the statistically significant service-connected disabilities among Pacific Theater POWs currently receiving disability compensation. Anxiety neurosis was the most prevalent of these service connected conditions, accounting for 11.4 percent of all former Pacific Theater POW service-connected diagnoses. Also as in Beebe's study, this disability occurred in a significantly greater amount among former Pacific POWs (11.4 percent) than other service-connected World War II veterans (6.9 percent).

Another NAS/NRC morbidity study, such as the one currently underway, could reconcile the significant former Pacific POW disabilities mentioned in the Beebe study with those in the VA comparison, thereby determining if all of Beebe's significant disabilities are still statistically significant, or if as the VA comparison data suggests, some of these disabilities are no longer statistically significant.

Morbidity As A Measure of the Severity of Disabilities

The extent of former Pacific Theater POW disability can be seen from the VA comparison, which provides data on the percent of living Pacific Theater ex-POWs currently receiving service-connected disability compensation and the average degree of their disability.

Significantly, 50.6 percent of living Pacific Theater ex-POWs are receiving service-connected disability compensation as compared with all other living World War II veterans (9.6 percent) or former European Theater POWs (41.2 percent). Furthermore, the average disability rating for the former Pacific Theater POWs (40.3 percent) is significantly greater than for all other service-connected World War II veterans (27.9 percent) or former European Theater POWs (27.0 percent).

An examination of former Pacific Theater POWs using other indices of disability severity - percent of those with serious disability (over 50 percent) and unemployability ratings - shows that there are significant differences between former Pacific Theater POWs and other World War II veterans and former European Theater POWs. Almost half (48.8 percent) of living Pacific Theater ex-POWs receiving disability compensation are rated at 50 percent or more, which is much greater than the amount of all other seriously disabled World War II veterans (21.9 percent)

or seriously disabled former European Theater POWs (20 1 percent). The following table compares the percent of living service-connected World War II and Korea ex-POWs with the percent of other living seriously disabled veterans of those conflicts.

TABLE 7 Percent of Living Service-Connected Disabled Rated 50% or Greater

	POWs	All Veterans
WW II European Theater	20.1	
WW II Pacific Theater	48.8	
Total WW II	25.9	21.9
Korea	34.7	25.5
Total WW II and Korea	26.4	22.1

Furthermore, a significantly greater number (22.0 percent) of living Pacific Theater ex-POWs have unemployability ratings - an assignment of total disability made when a veteran has a service-connected disability rated at less than 100 percent which renders him unable to hold a job - as compared to all other living World War II veterans (5.4 percent) and former European Theater POWs (5.3 percent). The following table compares the percent of living service-connected World War II and Korea ex-POWs rated unemployable with the percent of other living service-connected veterans of those conflicts.

TABLE 8 Percent of Living Service-Connected Disabled Rated Unemployable

	POWs	All Veterans
WW II European Theater	5.3	
WW II Pacific Theater	22.0	
Total WW II	8.7	5.4
Korea	8.9	6.3
Total WW II and Korea	8.7	5.3

Comparing the extent of anxiety neurosis with variations in length of internment was not statistically relevant for former Pacific Theater POWs because most Pacific Theater POWs were held for the same long period of time (over three years). This fact made meaningful comparisons between former Pacific Theater POWs interned shorter lengths of time - i.e., 0-3 months, etc. - statistically unreliable.

KOREAN CONFLICT

TYPES AND SEVERITY OF DISABILITIES SINCE REPATRIATION

Mortality As A Measure of the Types and Severity of Disabilities

The Nefzger study provided the first opportunity to scientifically examine the mortality of former Korean Conflict POWs. Nefzger discovered that the increased mortality from trauma - accidents, suicide, homicide - was significant among former Korea POWs. Nefzger hypothesized that as with former World War II POWs, psychological factors might be the underlying cause of death in such cases. He also discovered that the mortality trend of Korea POWs was quite similar to that of former Pacific Theater POWs, in that a significant excess of deaths in the years immediately after repatriation all but disappeared by the end of 1965. Keehn followed up Nefzger's analysis of former Korea POWs through 1975. Keehn's soon to be published study will be discussed below.

Morbidity As A Measure of the Types and Severity of Disabilities

Beebe's study provided the first opportunity to scientifically examine morbidity among former Korea POWs. Beebe found that the most prevalent service-connected residual among former Korea POWs, as with former World War II POWs, was anxiety neurosis. Beebe also observed that former Korea POWs suffered from most of the same types of other service-connected disabilities - e.g., avitaminosis, beriberi, amebiasis - as former Pacific Theater POWs.

TYPES AND SEVERITY OF DISABILITY AT THE PRESENT TIME

Mortality As A Measure of the Types of Disabilities

Keehn provides the most recent scientific description of mortality among former Korea POWs. Keehn confirmed Nefzger's finding of a significant excess of mortality among former Korea POWs due to trauma. Like Nefzger, Keehn also hypothesized that this significantly higher amount of death might be due to underlying psychological problems. Keehn also found a significant number of former Korea POW deaths due to cirrhosis. He suggested that this excess might be due to either malnutrition during internment or stress-related alcohol abuse in the post-repatriation years.

Mortality As A Measure of the Severity of Disabilities

Keehn confirmed Nefzger's finding of an early significant excess of deaths among former Korea POWs in the years immediately following repatriation which all but disappeared by the mid-1960s.

Keehn's study noted that approximately 10 percent (382 out of 3,932) of the repatriated Korea POWs as opposed to approximately 8.5 percent (335 out of 3,940) of other Korea veterans in his sample had died as of January 1, 1976. These repatriated POWs died an average of 13 years after repatriation (1966).[21]

The VA comparison updated these mortality findings to 1979. Approximately 13 percent (499 out of 3,944) of the repatriated Korea POWs in the VA comparison had died as of June 1, 1979. These repatriated Korea POWs died an average of 16 years after repatriation (1969). The approximately three year difference between the Keehn and VA comparison dates of death is largely attributable to differences in dates of data collection between Keehn (through 1975) and the computer match (to 1979). Thus, the most recent VA data generally confirms Keehn's information on the average number of years after repatriation the Korea ex-POWs survived.

Morbidity As A Measure of the Types of Disabilities

The most recent NAS/NRC morbidity study discovered that former Korea POWs suffered from a variety of service-connected disabilities similar to those found to be significant among former Pacific Theater POWs. Beebe found that the significant service-connected disabilities among former Korea POWs were: musculoskeletal disorders, eye disease (conjunctivitis), malnutrition and systemic diseases (avitaminosis and beriberi), respiratory diseases (bronchitis and tuberculosis), cardiovascular disease (residuals of frozen feet), gastrointestinal disorders (peptic ulcer, amebiasis, dysentery, hemorrhoids, hepatitis), skin disorders, (dermatophytosis), and psychological problems (anxiety neurosis, coded as anxiety state or anxiety reaction). As with former World War II POWs, the most prevalent service-connected disability in Beebe's sample of former POWs was anxiety neurosis (19.2 percent). Furthermore, Beebe found that the 19.2 percent of Korea ex-POWs in his sample compensated for anxiety neurosis was significantly greater than the 4.8 percent of his Korea veteran control group compensated for this disability.[22]

The VA comparison updated this morbidity information to 1979. Malnutrition and systemic diseases (malaria, avitaminosis, beriberi, and pellagra), residuals of frozen feet, amebiasis, scars, and anxiety neurosis were found to be the significant service-connected disabilities among former

Korea POWs currently receiving compensation. Anxiety neurosis was the most prevalent of these service-connected conditions, accounting for 11.1 percent of all service-connected diagnoses. Also as in Beebe's study, this disability occurred in a significantly greater amount of Korea ex-POWs (11.1 percent) than other service-connected Korea veterans (2.6 percent).

The NAS/NRC morbidity study currently underway could reconcile the significant former Korea POW disabilities mentioned in the Beebe study with those in the VA comparison, thereby determining if all of Beebe's significant disabilities are still statistically significant, or if as the VA comparison information suggest, some of these disabilities are no longer statistically significant.

Morbidity As A Measure of the Severity of Disabilities

The VA comparison also supplied current data on the percent of living Korea ex-POWs receiving service-connected disability compensation. This amount (59.2 percent) was significantly greater than that for all other living Korea veterans (5.1 percent), or of any other POW group under study. The average disability rating for living Korea ex-POWs (36.1 percent) is significantly greater than that for all other living Korea ex-POWs (30.6 percent), and is exceeded only by the average disability rating of living Pacific Theater ex-POWs (40.3 percent).

An examination of ratings for serious disability (over 50 percent) and unemployability provides further evidence of the severity of former Korea POW service-connected disabilities. Approximately one-third (34.7 percent) of living Korea ex-POWs receiving service-connected disability compensation are rated at 50 percent or more, which is much greater than the number of all other living seriously disabled Korea veterans (25.5 percent). Furthermore, a greater amount of living Korea ex-POWs (8.9 percent) have unemployability ratings relative to other Korea veterans (6.3 percent). A comparison of former Korea POW anxiety neurosis with length of internment was not statistically relevant because most Korea POWs were interned for more than one year. This fact made meaningful comparisons between former Korea POWs interned shorter lengths of time - i.e. 0 - 3 months, 4 - 6 months, etc. - unreliable.

VIETNAM ERA

TYPES AND SEVERITY OF DISABILITIES FROM REPATRIATION TO THE PRESENT

The available mortality and morbidity information on Vietnam Era POWs is too recent to draw any definitive conclusions as to the types and severity of their post-repatriation disabilities. Since the bulk of the Vietnam POWs were released in 1973, the military services have been

engaged in collecting data which can be used in long-term research and treatment.

The Naval Health Research Center has conducted a five year (1973-1978) follow-up study of the health status of a representative sample of former Vietnam POW Navy aviators and a matched control group.[23] The data from this study, which consists mostly of the results of annual physical examinations of these repatriated POWs and their controls performed at the Naval Aerospace Medical Research Laboratory, Pensacola, Florida, are currently being assembled by the Naval Health Research Center. Results of these examinations will be presented in a soon-to-be-completed study by the Naval Health Research Center.

The Naval Health Research Center also has conducted a follow-up study of Pueblo POWs.[24] The results of this 1977 study, which used a mail questionnaire, indicated that the most prevalent medical problem observed among these former POWs was in the psychoneurological area.

The Air Force Vietnam POW follow-up consists of examinations of those former POWs who have voluntarily visited the School of Aerospace Medicine for physical examinations. The observations from the examinations conducted to date are that neurological and orthopedic disabilities are the most prevalent disabilities among these Air Force POWs.[25]

Since 1973, there have been periodic inter-agency meetings where the results of former Vietnam POW follow-up studies have been discussed. At the most recent inter-agency meeting, held in May, 1979, a proposal was presented by VA Department of Medicine and Surgery representatives which provided for VA physical examinations for those former Vietnam POWs who had separated from the military. This proposal called for the parent military service to initially identify these POWs to the VA, then for the VA to offer these former POWs an examination using medical treatment protocols provided by the military, and then have the VA forward the results of these examinations to the appropriate military service. A copy would be forwarded to the appropriate Navy or Air Force POW research center for use in follow-up studies. The results of these follow-up studies would then be shared with the VA, which would be responsible for publishing the findings of such examinations.[26]

SUMMARY

The available mortality and morbidity data on the types and severity of former POW disabilities from repatriation to the present time indicates that the Congressional concern about former POWs, especially those of the World War II Pacific Theater, having a significantly higher incidence and greater variety of diseases attributable to internment is well founded. Evidence to substantiate this concern comes from National Academy of Sciences and VA mortality/morbidity

data, concerning the severity of former POW disabilities which show that Pacific ex-POWs are the most severely disabled POW group, followed closely by former Korea POWs. While former European POWs are not as disabled as former Pacific or Korean POWs, they are more disabled than other World War II veterans. The relative disability of former Vietnam POWs, who were held longer than any other group of POWs under study, must await the completion of currently ongoing studies.

These findings provide support for the contention that captivity in an Asian environment was generally harsher than captivity elsewhere. However, this contention applies only on a general, theater-wide level. Any attempt to apply it to all individual cases would be mistaken, as conditions varied from camp to camp, thus resulting in a wide spectrum of disability even within the same theater.

The most remarkable finding of the review of the types of former POW disabilities is that anxiety neurosis is the most prevalent disability among former POWs from the time of repatriation to the present. The significance of this disability relative to veterans controls remains regardless of the length of internment. This is especially apparent among former European Theater POWs, in which those POWs interned less as well as more than six months exhibit significantly higher rates of anxiety neurosis compared to other service-connected World War II veterans.

Another important finding of the review of the types of former POW disabilities is that systemic and malnutrition related diseases -e.g., malaria, beriberi, pellagra - are prevalent among former POWs, especially those interned in Asia

The types of statistically significant former POW disabilities discussed in this review are summarized in the following table. The length of the service-connected disability lists presented in the table indicates the relative severity of disability among the former POW groups under study -i.e., the longer the list, the more severely disabled the POW group is.

TABLE 9 Statistically Significant Service-Connected Disabilities Among Former POWs (1946-1979)

WW II Europe	WW II Pacific	Korea Conflict	Vietnam Era
anxiety neurosis	anxiety neurosis	anxiety neurosis	currently being studied
avitaminosis	avitaminosis	avitaminosis	

arthritis	arthritis	arthritis
frozen feet residuals scars	frozen feet residuals scars	frozen feet residuals scars
	skin diseases	skin diseases
	beriberi	beriberi
	pellagra	pellagra
	malaria	malaria
	eye diseases	eye diseases
	respiratory diseases	respiratory diseases
	gastrointestinal diseases	gastrointestinal diseases
	genitourinary diseases	
	psychoneurological diseases	
	cardiovascular diseases	

FOOTNOTES

[1] U.S. Congress, Senate, Committee on Veterans Affairs, Report to Accompany S. 2828: Veterans Disability Compensation and Survivors' Benefits Act of 1978, Senate Report No. 95-1054, 95th Congress, 2nd Session, July 31, 1978, p. 35.

[2] U.S. Department of Health, Education, and Welfare, Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II: An Appraisal of Current Information, Washington, D.C.: Government Printing Office, 1965, pp. 1-69, hereafter referred to as "HEW."

[3] U.S. Congress, House, Committee on Veterans Affairs, Hearings on H.R. 8848: A Bill to Provide for a Study of the Mental and Physical Sequelae of Malnutrition and Starvation Suffered by Prisoners of War and Civilian Internees During World War II, 81st Congress, 2nd Session, September 15, 1950, p. 1846. Hereafter referred to as "POW Hearings."

[4] Ibid, p. 1846.

[5] Ibid, p. 1848.

[6] Bernard Cohen and Maurice Cooper, A Follow-Up Study of World War II Prisoners of War, Washington, D.C.: Veterans Administration Medical Monograph, September, 1954, pp. 1-81.

[7] HEW, p. 12.

[8] Dean Nefzger, "Follow-Up Studies of World War II and Korean War Prisoners, I. Study Plan and Mortality Findings," American Journal of Epidemiology, Vol. 91, No. 2, 1970, pp. 123-138.

[9] Robert Keehn, "Follow-Up Studies of World War II and Korean War Prisoners, III: Mortality to 1 January 1976." accepted for publication in American Journal of Epidemiology, 1980.

[10] Gilbert Beebe, "Follow Up Studies of World War II and Korean War Prisoners, II. Morbidity, Disability, and Maladjustments," American Journal of Epidemiology, Vol. 101, No. 5, 1975, pp. 400-422.

[11] Robert Keehn, Letter to VA Studies and Analysis Service, October 11, 1979, p. 1.

[12] Beebe, Gilbert, p. 417.

[13] POW Hearings, p. 1843.

[14] Ibid, p. 1845.

[15] Ibid, pp. 1847-9.

[16] HEW, p. 43.

[17] Nefzger, p. 137.

[18] HEW, pp. 42-3.

[19] Robert Keehn, Letter to VA Studies and Analysis Service, October 11, 1979, p. 1.

[20] Beebe, p. 417.

[21] Robert Keehn, Letter to VA Studies and Analysis Service, October 11, 1979, p. 1.

[22] Beebe, p. 417.

[23] R. C. Spaulding, L. E. Murphy, and J. Phelon, A Comparison Group for the Navy Repatriated POWs from Vietnam: Selection Procedures Used and Lessons Learned, Report No. 78-22, San Diego, CA: Naval Health Research Center, 1978, pp. 1-14.

[24] R. C. Spaulding, The Pueblo Incident: A Follow-Up Survey Conducted Eight Years After the Release of the U.S.S. Pueblo Crew From North Korea, Report No. 78-37, San Diego, CA: Naval Health Research Center, 1978, pp. 1-28.

[25] Harry Wetzler, "Status of Air Force POWs - Five Years Post-Repatriation," Medical Service Digest, Vol. 30, No. 6, 1979, pp. 26-28.

[26] Stewart Baker, Letter to Project Manager, POW Study Task Force, May 21, 1979, pp. 1-3.

LAW AND PROCEDURES

OBJECTIVE

Public Law 95-479, Section 305 (a) (3) - ". . . a description and analysis of procedures used with respect to former prisoners of war in determining eligibility for health care benefits and in adjudicating claims for disability compensation, including an analysis of the current use of statutory and regulatory provisions specifically relating to former prisoners of war;"

INTRODUCTION

This section traces the development of law and VA procedures which assist former POWs in obtaining health care and disability compensation. The material includes frequent references to items of veteran-wide (as opposed to POW-specific) applicability, to the extent that they facilitate former POWs' ability to establish claims. An analysis of the procedures and their application follows the opening discourse on historical development. The administrative VA issuances referred to throughout the text include:

Memoranda. Internal instructions of a permanent or temporary nature, initiated by officials at any level within the VA.

Information Bulletins, Program Guides. News, information aids and suggestions for the guidance of personnel within a specific technical or program area. Not directive or of a policy-making nature. Supplementary.

Service Letters. Directive in nature. Not in use after 1945.

Circulars. Directive material only, in the form of preliminary instructions which interpret laws, later issued in more permanent form such as VA Instructions or Regulations; or preliminary procedures to be issued in final form in Manuals.

Technical Bulletins. New instructions and information pertaining to technical matters and professional techniques; a temporary medium, later incorporated in Manuals for permanent effect.

Instructions. Issued upon the passage of a new law for the purpose of putting the provisions of the law into effect. A temporary medium. When refined and crystallized, the information appears in final form as a Regulation or as part of a Manual.

Regulations. Legally binding rules promulgated by the Administrator for the implementation of statutes, Executive Orders and legal precedents.

Manuals. Material of a permanent nature requiring separate treatment by subject, promulgating basic doctrine with respect to organization, procedures and techniques.

General Description of VA Compensation and Health Care Benefits

Briefly stated, disability compensation is payable under chapter 11 of title 38, United States Code, for physical and mental infirmity resulting from injuries or diseases either incurred or aggravated during military service. The monthly rates of payment vary with the level of disability, and disability levels are assigned on the basis of a rating schedule (Part 4 of title 38, Code of Federal Regulations) designed to reflect the average degree of earning impairment to be expected from various disorders. Financial need per se does not affect the rates of payment, although additional amounts are payable to certain married veterans, those with children and those with financially dependent parents. Special presumptions in law for former POWs make easier their establishing service-connection for certain disorders.

The survivors of those veterans whose deaths are service related, i.e., whose service-connected disabilities contributed to their deaths, and the survivors of certain other veterans whose service-connected disabilities rendered them totally disabled prior to death, are eligible for "dependency and indemnity compensation" payable under chapter 13 of title 38.

Eligibility and priority for health care benefits under chapter 17 of title 38 rests in large measure on a veteran's status as service-connected or nonservice-connected disabled. The primary mission of the health care system is the provision of medical care to the service-connected veteran. The VA is authorized to furnish on a priority basis such hospital care or outpatient treatment as a veteran requires for a service-connected disability. The nonservice-connected veteran under age 65 is eligible for care, and then on a space available basis, only if unable to defray its expense. While chapter 17 eligibility provisions single out the former prisoner of war in only one limited instance, i.e., expanded outpatient dental care eligibility, the special liberalizing presumptions under chapter 11 of title 38 which facilitate the former prisoner's task of establishing service-connection for certain conditions expand somewhat the individual's eligibility for VA health care benefits.

Public Law 91-584 of December 24, 1970 authorized educational assistance to wives and children, and home loan benefits to wives, of members of the armed forces listed as missing in action, captured by a hostile force, or interned by a foreign government or power. No retroactive entitlement was created and application must be made while the serviceman is listed in one of the qualifying categories. With the exception created by that Act, no special benefit programs exist for family members of prisoners of war.

Overview of POW-Specific Procedures

In the early years of World War II, VA procedures for determining compensation and health care eligibility did not address former prisoners of war as a distinct group. Provisions which applied to their special circumstances were usually inclusive of "combat" veterans in general, veterans who had experienced wartime conditions which often made substantiation of service incurrence of disabilities difficult due to such things as lack of opportunity to establish records of treatment at the time of injury, or loss of those records which were made. It is also noteworthy that Congress was aware that certain combat veterans may have declined treatment to avoid being separated from their units. This is similar to decisions reported by some former prisoners of war not to chronicle aches and pains after repatriation so as not to delay the homecoming process.

Congress also sought to assure that all veterans, but especially combat veterans, submitting compensation claims for service incurrence were to receive due consideration for the places, types, and circumstances of service. This policy was emphasized in legislation, Public Law 77-361, approved December 20, 1941. Due consideration was also to be given to the history of each organization in which a veteran served, his medical records, and all pertinent medical and lay evidence.

The difficulties experienced by military prisoners of war were not universally known until the end of World War II, as with civilians and others interned in concentration camps in Europe. This is reflected in the evolution of VA procedures specifically for prisoners of war. World War II POWs returned at a time when knowledge of the effects of internment was not as extensive as it became in later years.

NON-VA PAYMENTS TO FORMER POWS

In addition to Veterans Administration (VA) disability compensation for service-connected disabilities, former prisoners of war are eligible for certain other payments related to the POW

experience. Information on these benefits is presented here briefly as a point of reference for the reader and to indicate other forms of recognition of the hardships suffered by prisoners of war.

Foreign Claims Settlement Commission

Inadequate Food Rations - World War II

Originally called the War Claims Commission, the Foreign Claims Settlement Commission was established under the War Claims Act of 1948 (Public Law 80-896) to pay compensation out of seized enemy assets to military prisoners, civilian internees and others who had suffered at the hands of the Axis powers during World War II.[1] Section 6 (b) of the War Claims Act of 1948 authorized payment to former Pacific Theater and European Theater POWs of one dollar per day for every day they remained in confinement, deprived of adequate food rations in violation of the terms of the Geneva Convention.

Survey

In 1950, the Commission conducted a sample survey of the former POWs of World War II. The survey served to ascertain their physical status and to inform them of the one dollar per day benefit. The Commission received approximately 7,000 replies, most of which described in detail the disabilities these former POWs suffered during internment and which still plagued them after repatriation. One physician who was a POW replied to the survey, "No one who suffered the prolonged starvation, degradation, and physical suffering experienced by this group has been able to make a full recovery, either physical or emotional."[2] When informed of the one dollar per day payment, another former POW replied, "The money would be fine, but I'd trade it all just to feel really good for one whole day."[3]

Forced Labor and Inhumane Treatment - World War II

As a result of its survey, the Commission recommended that additional payments be made to former POWs on the basis of the forced labor and inhumane treatment they experienced through violations of the provisions of the Geneva Convention. The Congress added Section 6 (d) to the War Claims Act to provide payment of $1.50 per day for each day of this treatment. Widows, children, and parents of deceased POWs were also eligible for the Section 6 (b) and 6 (d) payments. Claims arising under these provisions had to be filed within two years from the passage of the War Claims Act legislation. Approximately 170,000 claims from living POWs or survivors of dead

POWs were paid. These claims included either Section 6 (b) payments of one dollar per day for inadequate rations or Section 6 (d) payments of $1.50 per day for inhumane treatment, or payments of $2.50 per day for both types of violations.

Korean Conflict

In 1954, the Congress authorized payments of $2.50 per day to Korean conflict POWs or their immediate survivors for each day of internment during which they experienced inadequate rations or inhumane treatment prohibited by the Geneva Convention. Also in 1954, the War Claims Act was amended to provide for payments of $2.50 per day to Americans serving in the Armed Forces of any Allied country during World War II for each day of internment during which they experienced inadequate rations or inhumane treatment.

Vietnam Era

Approved 1970, Public Law 91-289 provided for payments to former POWs of the Vietnam era. Compensation was payable at the rate of $5.00 per day -- $2.00 per day for each day of inadequate rations and $3.00 per day for each day of inhumane treatment. As with World War II former POWs, widows, children, and parents were eligible to file claims for such payments on behalf of deceased POWs. Public Law 91-289 applied to all POWs of the Vietnam era, including members of the U.S.S. Pueblo.

Military Disability Retirement

Service personnel, including former prisoners of war, may be medically retired or separated on the basis of disability incurred while in the military. The person usually has the option of selecting either military disability retired pay or VA disability compensation or a combination of the two (but cannot receive the full value of both; see title 38 U.S.C., 3104, 3105). There is presently no practical method of determining from manual and automated records the exact number of former POWs receiving part or all of their disability payment from the military rather than the VA. The VA data system does identify veterans and former POWs who were eligible for military disability payment but elected to receive VA disability compensation instead.[4]

Former prisoners of war from certain theaters of operation are more likely to have received military disability payments. For example, many of the Pacific Theater POWs captured on Bataan and Corregidor were regular Army personnel who had enlisted prior to America's entry into

World War II. A significant number probably remained in the military after the war and were retired later with disabilities incurred during or after the POW experience.

Most Vietnam era prisoners of war were career Air Force and Navy aviators who remained in the military after their repatriation. It is not known whether those who incurred disabilities will receive disability payments through the form of military retirement or as VA disability compensation.

Non-Federal Benefits

While it was not the purpose of this study to compile a comprehensive list of special benefits for former prisoners of war provided by some states and local jurisdications, examples of such benefits are waiver of fees for motor vehicle, hunting and fishing licenses, and exemption from state or local income taxes.

DEVELOPMENT OF LAW AND VA PROCEDURES - A CHRONOLOGY

Determinations as to which disabling conditions have resulted from injuries or diseases incurred or aggravated in service often require judgements which, depending upon the nature of the disability and quality of documentary evidence, can prove difficult to make. It has long been recognized that certain disabling diseases are typically so insidious in development that their point of onset cannot be documented. The burden of proving the relationship of these disabilities to military service often proved difficult for veterans to bear. The following chronology also includes references to laws and procedures which do not address prisoners of war specifically. These are included to show early recognition of special circumstances of service, which led to such things as special provisions for constitutional diseases and presumption of service relatedness for certain diseases or injuries in the absence of documentation for the period of service. POW-specific procedures became evident from 1945, reflecting the acknowledgement of the special circumstances of internment experienced by POWs of World War II.

1921

Enactments to mitigate the difficulty of proving service-relatedness date to August 9, 1921, with approval of Public Law 67-47. This measure amended section 300 of the War Risk Insurance Act of 1917 (39 Stat. 1199, March 4, 1917) to provide that World War I veterans with active pulmonary tuberculosis or neuropsychiatric disease developing to a degree of at least ten percent disability within two years after active service separation would be considered to have acquired or aggravated the disability in service.

The Veterans' Bureau promptly followed the public law with Regulation No. 11 (November 12, 1921), under which "constitutional" diseases other than active pulmonary tuberculosis or neuropsychiatric diseases were afforded a rebuttable presumption of service incurrence or aggravation if becoming manifest within one year of service separation. Promulgation of this regulation was followed one month later by issuance of a memorandum from the Medical Service cataloging the following as constitutional:

Acidosis
Anaemia Primary (all types)
Arterio-Sclerosis
BeriBeri
Diabetes Insipidus
Diabetes Mellitus
Gout
Haemochromatosis
Hemoglobinuria (paroxysmal)
Hemophilia
Hodgkins Disease
Leukemia (all types)
Obesity
Ochronosus
Pellagra
Polycythemia (Erythremia)
Purpura
Rickets
Scurvy
Endocrinopathies

1924-1933

The 1921 regulation and interpretive listing remained effective until 1933. Additionally, Section 200 of the World War Veterans' Act of 1924 permitted a presumption of service-connection for "neuropsychiatric disease, an active tuberculous disease, paralysis agitans, encephalitis lethargica, or amoebic dysentery" developing to a degree of ten percent disability prior to January 1, 1925, for World War I veterans.

Approval of the Act of March 20, 1933 (Public Law No. 73-2) and issuance of Veterans Regulation Number 1, part I, paragraph I (C) (March 31, 1933) authorized a presumption of service incurrence or aggravation for "a chronic disease" becoming manifest to a degree of ten percent within one year of separation from a period of 90 days of more active wartime service. Section 17 of the Act repealed all public laws granting compensation, and required the Administrator to review all claims of World War I veterans previously allowed to authorize continued payment only when the new requirements were met. Restoration to the rolls of those dropped as a result, at 75 percent of the rate otherwise payable was provided by the Act of March 28, 1934. (One hundred percent entitlement was restored by Public Law 81-339, October 10, 1949.)

Provision for outpatient dental care benefits stem from Veterans Regulations (V.R.) Number 7 (a), effective July 28, 1933, an Executive Order promulgated under Public Law No. 2, 73d Congress. V.R. 9 (a) authorized the Administrator "to furnish . . . such medical, surgical, and dental services as may be found to be reasonably necessary" for service-connected disabilities. Prior to World War II and the Korean conflict, the basic authority was liberally interpreted to provide for recurrent and progressive treatment of service-connected noncompensable dental conditions.

1941

In 1941, the House Committee on World War Veterans' Legislation reported its concern for difficulties which veterans can encounter in establishing service incurrence of disabilities, noting that combat veterans in particular often would have the least documentation of injury or disablement within the records of service:

> . . . It was emphasized in the hearings that the establishment of records of care of treatment of veterans in other than combat areas, and particularly in the States, was a comparatively simple matter as compared with the veteran who served in combat. Either the veteran attempted to carry on despite his disability to avoid having a record made lest he might be separated from his organization or, as in many cases, the records themselves were lost.
>
> The committee realized that the Administration has made pronouncements and set forth policies which are substantially the same as the procedures made mandatory by this bill; but believes that considerable difficulty has been encountered in securing uniform application of such policies and procedures.
>
> It is the intention of this committee that this legislation should make a matter of law the pronounced policies of the Veterans' Administration and make clear the obligation of employees engaged upon duties pertaining to determination of service-connection the necessity for the fullest consideration of all evidence and formulation of decisions in line with the policies to which this bill, if enacted, will give legislative sanction. Such policies will be for application in any cases reviewed as well as in new claims.[5]

Public Law 77-361, approved December 20, 1941, provided:

> . . . in each case where a veteran is seeking service-connection for any disability due consideration shall be given to the places, types, and circumstances of his service as shown by his service record, the official history of each organization in which he served, his medical records, and all pertinent medical and lay evidence.
>
> In the case of any veteran who engaged in combat with the enemy in active service with a military or naval organization of the United States during some war, campaign, or expedition, the Administrator of Veterans' Affairs is authorized and directed to accept as sufficient proof of service-connection of any disease or injury alleged to have been incurred in or aggravated by service in such war, campaign or expedition, satisfactory lay or other evidence of service incurrence or aggravation of such injury

> or disease, if consistent with the circumstances, conditions, or hardships of such service, notwithstanding the fact that there is no official record of such incurrence or aggravation in such service, and, to that end, shall resolve every reasonable doubt in favor of such veteran: provided, that service-connection of such injury or disease may be rebutted by clear and convincing evidence to the contrary. The reasons for granting or denying service-connection in each case shall be recorded in full.[6]

Regulations and Procedures, paragraph R-1031 (D), later emphasized for prisoner of war cases by Circular No. 277 (1946), provided for: "the establishment of service-connection by satisfactory lay or other evidence, if consistent with the circumstances, conditions, or hardships of such service, notwithstanding the fact that there is no official record of such incurrence, unless service-connection is rebutted by clear and convincing evidence. The benefit of every reasonable doubt is resolved in favor of the veteran."

Regulations and Procedures, paragraph R-1077 (B) provided that: "in determining service-connection due consideration shall be given to the places, types, and circumstances of service, the history of each organization in which the veteran served, his medical records, and all pertinent medical and lay evidence."

December 28, 1943

The Veterans Administration Service Letter of this date stressed expeditious adjudication of claims for disability compensation, then called "disability pension," based on combat and other clearly service-connected injuries. This letter stressed that when incomplete records were received from the service department (military) which showed that a veteran had a disability that was clearly service-connected and he was honorably discharged, that phase of the claim was to be immediately adjudicated.

> Particular care will be exercised in informing the veteran concerning the award action at this point that the action is based upon incomplete service records and any further adjudicative action warranted will be taken after complete service and medical records are received.
>
> After receipt of full service data reconsideration will be accorded the claim, including scheduling of a future physical examination under current procedure and appropriate action taken.[7]

1945

Promulgation of the 1945 Schedule for Rating Disabilities included issuance of the following instructions, which are especially germane in the adjudication of POW claims:

Resolution of Reasonable Doubt. It is the defined and consistently applied policy of the Veterans' Administration to administer the law under a broad interpretation, consistent, however with the facts shown in every case. When after careful consideration of all procurable and assembled data, a reasonable doubt arises regarding service origin, the degree of disability, or any other point, such doubt will be resolved in favor of the claimant.

By reasonable doubt is meant one which exists by reason of the fact that the evidence does not satisfactorily prove or disprove the claim, yet a substantial doubt and one within the range of probability as distinguished from pure speculation or remote possibility. It is not a means of reconciling actual conflict or a contradiction in the evidence; the claimant is required to submit evidence sufficient to justify a belief in a fair and impartial mind, that his claim is well grounded. Mere suspicion or doubt as to the truth of any statements submitted, as distinguished from impeachment or contradiction by evidence or known facts, is not a justifiable basis for denying the application of the reasonable doubt doctrine if the entire, complete, record otherwise warrants invoking this doctrine. The reasonable doubt doctrine is also applicable even in the absence of official records, particularly if the basic incident allegedly arose under combat, or similarly strenuous conditions and is consistent with the probable results of such known hardships.[8]

Complete Medical Examination of Injury Cases. The importance of complete medical examination of injury cases at the time of first medical examination by the Veterans Administration cannot be overemphasized. When possible, this should include complete neurological and psychiatric examination, and other special examinations indicated by the physical condition, in addition to the required general and orthopedic or surgical examination. When complete examinations are not conducted covering all systems of the body affected by disease or injury, it is impossible to visualize the nature and extent of the service-connected disability. Incomplete examination is a common cause of incorrect diagnosis, especially in the neurological and psychiatric fields, and frequently leaves the Administration in doubt as to the presence or absence or disabling conditions at the time of the examination.[9]

Dysentery and Tropical Service. Great weight must be assigned to tropical service and to imprisonment or internment under unsanitary conditions, or food deprivation, in the service-connection of dysentery, tropical or bacillary, and other gastro-intestinal diseases with regard to which such service may have been the etiological or aggravating factor.[10]

Page 12 of the 1945 Rating Schedule provided for six month convalescent ratings of 100 percent or 50 percent, depending upon the conditions, for disabilities in the absence of, or in lieu of, ratings prescribed elsewhere in the schedule. The higher rating was to be given if the veteran required hospitalization or if the average person would be unable to pursue a substantially gainful occupation. The lower rating was given in less severe cases or if partial employment was feasible and advised.

March 9, 1946

In 1946, as a temporary measure in response to a tremendous increase in the number of claims of returning service personnel, service departments began furnishing the Veterans

Administration with original medical cards relating to examinations and treatment service personnel had received. This was a change from the earlier practice of forwarding photographic prints of medical cards to the VA, and was described in Circular No. 56, March 9, 1946. In most cases, the original medical material remained within veterans' VA records.

August 23, 1946

Veterans Administration Instruction No. 2 of this date, included the following:

> . . . particular attention should be given to pathology resulting from burns, frozen feet and other effects of exposure. Symptomatology consequent upon avitaminosis, malnutrition, metabolic changes, and other circumstances of prisoner of war experience requires special consideration.[11]

December 2, 1946

Section I of Circular No. 277 of this date provided direction for the equitable evaluation of claims of former prisoners of war. Because of its significance, especially in reference to examinations, history, evidence, and ill-defined disabilities, Section I is quoted in its entirety below.

> I. -- SERVICE CONNECTION AND EVALUATION OF DISABILITIES IN RELATION TO PRISONER OF WAR EXPERIENCE -- 1. Purpose. The circumstances surrounding the confinement of our military and naval personnel while prisoners of war require special attention in adjudication of claims based upon service of which such confinement was a substantial part. Accordingly, the purpose of this section is to facilitate the equitable adjudication of compensation claims based on disabilities traceable to prisoner of war experience.
>
> 2. Service Department Records. Where Service Department clinical records pertaining to the veteran's condition subsequent to repatriation are not in file, such records will be requested.
>
> 3. Examinations. Rating Action which will result in denying monetary benefits will not be accomplished in prisoner of war cases until complete examination by the VA has been obtained. Complete examination will be ordered "at once" following rating action resulting in the allowance of monetary benefits except in cases where such action is accomplished on the basis of Service Department clinical records as well as report of examination at discharge or on VA examination. Examinations and if necessary the first reexamination will also be ordered without the requirement of medical evidence in cases where the veteran expresses dissatisfaction with his rating. Priority of examination will be accorded these cases under R. & P. 6469 (A) 1. In this connection neuropsychiatric examination will be accomplished in each case in special reference to manifestations of metabolic origin, neurasthenoid character, or other syndrome consequent to malnutrition, avitaminosis, exposure, or other circumstances under which the veteran was held as a prisoner of war. Such additional special examinations as may be found indicated will be made. Examiners will be instructed to report definitely the existence or nonexistence of any general debility, flabby musculature, or the like complained of, and likely to be attributable to imprisonment, whether or not classified as a clincial entity.

4. Adjudication. a. Histories of injury sustained or disease suffered during confinement are usually but not invariably reported in the clinical records following termination of confinement and the return of the veteran to our forces. This evidence is of primary importance and denial of the claim will not be effected until such clincial records are obtained. The omission of reference, in these clinical records, to a disability for which service-connection is now claimed, is not determinative, particularly if there is submitted evidence by the veteran, or by his comrades in support of the incurrence of the disability during the period of confinement as a prisoner of war.

b. Special attention will be given to any disability, especially if ill-defined and not obviously of intercurrent origin, first reported after discharge. The circumstances attendant upon the individual veteran's confinement as a prisoner of war and the duration of such confinement will be associated with pertinent medical principles in determining whether a disability manifested subsequent to service is in etiology related to his prisoner of war experience. In this connection attention is invited to paragraph 2 on page 88 of the 1945 Schedule. The proximity of the manifestation of a disability to the date of discharge from service and the evidentiary showing of the circumstances of imprisonment or continuity of significant symptomatology will be given careful consideration under the provisions of R. & P. R-1031 (D).

December 4, 1946

Technical Bulletin TB 8-3 of this date directed priority of examinations in prisoner of war cases. Examiners were reminded of the special obligation to ascertain sources of complaints of reduced efficiency. The weakness and fatigability which often persist even after a former prisoner of war has regained weight were to be reported. Examiners were instructed that retinitis is not an uncommon residual of malnutrition. Tests for intestinal parasites were to be made routinely if the former POW suffered an intestinal disease or was inexplicably underweight. Any chronic disease which may have been associated with the circumstances of imprisonment were to be reported. These provisions were later specified in VA Regulations and Procedures R-1185 (C) (3).

December 22, 1946

The special procedures for handling prisoner of war cases, as described in Circular No. 277, were publicized by the Veterans' Administration through a release to all news media on December 22, 1946. This release informed all former prisoners of war that if they believed they were suffering from a disability resulting from their confinement, they should file a claim with the nearest Veterans' Administration office. Those who had had their claims denied were informed that they could have their claims reopened by applying to the nearest Veterans' Administration office.

1947

Since 1947 to the present, VA Form 21-2507 "Request for Examination" has included a block designated "POW" for checking by the Regional Office when requesting examination of a claimant by a VA medical facility. The block appeared in the section entitled "Purpose of Examination" (currently "Priority of Examination"). Research conducted during this study could not determine whether the POW indicator had appeared on Form 21-2507 prior to 1947.

May 19, 1948

In a report to the House Committee on Veterans' Affairs, the Administrator described the special considerations given in claims of former POWs. He referred to Regulations, Circular No. 277, the Rating Schedule and procedures that apply in claims of former POWs after making the following opening comments:

> Special consideration has been given by the Veterans' Administration to disability claims filed by veterans who were interned in enemy prison camps during World War II. Procedures for adjudicating these claims were adopted in December 1946, following a thorough study of the effects of malnutrition of former American prisoners of war. These studies showed that while most of the more than 125,000 servicemen who were repatriated from prisoner-of-war camps received special treatment and care after they were freed and apparently regained their health, some continued to suffer from the aftereffects of their confinement. The near-starvation diets to which American prisoners of war were subjected in certain enemy prison camps impaired their internal organs and caused nervous disorders.
>
> In many cases the effects of such malnutrition would escape detection in ordinary physical examinations because some symptoms are not as detectible as they are in such disorders as beriberi and pellagra. In other cases, the effects of malnutrition do not show up until long after the prisoners of war have been released from confinement.

June 23, 1948

Claims Information Bulletin IB 8-6 of this date emphasized the importance of special consideration for former POWs and made reference to existing procedural issuances relating to the adjudication of claims. Section I of Circular No. 277, 1946, was quoted in full, as were the aforementioned procedures regarding examinations in prisoner of war cases.

June 24, 1948

With the approval of Public Law 80-748 (62 Stat. 581, June 24, 1948), the statutory list of "chronic diseases" for which service-connection was to be presumptively granted was expanded to include the following:

> . . . anemia, primary; arteriosclerosis; arthritis, bronchiectasis; calculi of the kidney, bladder, or gallbladder, cardiovascular-renal disease, including hypertension, myocarditis, Buerger's disease and Raynaud's disease; cirrhosis of the liver; coccidiomycosis; endocarditis; diabetes mellitus; endocrinopathies; epilepsies; Hodgkin's disease; leukemia, nephritis; osteitis, deformans; osteomalacia; organic diseases of the nervous system, including tumors of the brain, cord, or peripheral nerves; encephalitis lethargica residuals; schleroderma; tuberculosis, active; tumors, malignant; ulcers, peptic (gastric or duodenal) and such other chronic diseases as the Administrator of Veterans' Affairs may add to this list . . .

The agency promptly added psychotic disorders to the list by regulation.

This post-World War II enactment also created for the first time a conclusive presumption of service-connection for certain tropical diseases suffered by wartime veterans. The following were to be presumed service-connected when shown to exist within one year of service separation: " . . . tropical diseases, such as cholera; dysentery; filariasis; leishmaniasis; leprosy; loiasis; malaria; black water fever; onchocerciasis; oroya fever; dracontiasis; pinta; plague; schistosomiasis; yaws; yellow fever and others and the resultant disorders or diseases originating because of therapy, administered in connection with such diseases, or as a preventative thereof . . . "

The same act provided a rebuttable presumption of service incurrence for these tropical diseases when suffered by veterans with peacetime service of at least six months' duration.

April 18, 1949

Technical Bulletin TB 8-113 of this date emphasized the part which lay affidavits can play in determinations of whether disabilities are service-connected, stressing that these are of particular importance in prisoner of war cases. Reference was made to the applicable regulations. In part, paragraph 2 of TB 8-113 stated:

> . . . While histories of injury sustained or disease suffered during confinement are usually reported in the clinical records following termination of confinement and the return of the veteran to our forces, the omission of reference, in these clinical records, to a disability for which service-connection is now claimed, is not determinative, particularly if there is submitted evidence by the veteran or by his comrades in support of the incurrence of the disability during the period of confinement as a prisoner of war.

1950-1969

December 26, 1950

Claims Information Bulletin IB 8-51 of this date presented instruction as to cases involving issues of service-connection for chronic diseases first manifested after the presumptive period. Paragraph 1 included the following sentence:

. . . Veterans whose claims are denied by reason of manifestation after this period should be fully informed that any medical or lay evidence which they may be able to secure of any illness or disturbance of function of any part of organ during service or within the presumptive period may be considered in determining the propriety of service-connection.

April 12, 1951

Paragraph 11 of Claims Information Bulletin IB 8-55 of this date discussed the importance of lay evidence.

. . . Question has been raised concerning the acceptance of lay evidence, particularly with regard to this evidence constituting claim for increase. Evidence testifying to facts within the competence of the lay person and showing increase in severity of the veteran's disability when confirmed by VA examination constitutes claim for increase, and the date of the receipt of this evidence by the VA establishes the date of claim. There should be no failure to accept competent lay evidence.

Paragraph 14 of Information Bulletin IB 8-55 emphasized that cirrhosis is associated with nutritional deficiency, and that presumption of misconduct is unwarranted:

. . . It is always to be borne in mind that no presumption of misconduct origin attaches to cirrhosis, and that the fact must be established by the evidence. This disease of the liver is a deficiency disease, and to attribute it to excessive use of alcoholic beverages requires a long history of excessive indulgence, other than occasional admissions by the veteran himself, and other evidences of inadequate nutrition, such as neuritis, loss of weight, etc.

Congressional enactments extended to three years the presumptive period of service-connection for active pulmonary TB (Pub. L. No. 81-573, June 23, 1950) and "all other types of active tuberculosis" (Pub. L. No. 83-241, August 8, 1953), and, for entitlement to treatment only, the presumptive period for active psychoses was set at two years for World War II and Korean conflict veterans. (Pub. L. No. 82-239, October 30, 1951).

January 25, 1954

Paragraph 2 of Technical Bulletin TB 8-254 of this date specified that, "Whenever the evidence indicates that the veteran was a prisoner of war, the legend 'POW' will be used in the "Remarks" block . . . " of the Dental Rating Sheets.

June 16, 1955

As previously noted, prior to World War II and the Korean conflict, the basic authority for dental services was liberally interpreted to provide for recurrent and progressive treatment of service-connected noncompensable dental conditions. With those wars, the volume of applications

for dental treatment exceeded the agency's capability to provide the benefits. Analysis indicated that repeat care of service-connected noncompensable dental disabilities was a major factor in the size and cost of the program. In 1954 and 1955 appropriation acts, Congress responded to that situation and imposed limitations on the availability of appropriations, which effectively imposed a requirement that applications for the treatment of noncompensable dental conditions be submitted within certain time limits after a person's discharge. VA administrative directives issued during that period provided for one-time satisfactory completion of dental treatment for noncompensable service-connected conditions but established exceptions permitting recurring treatment for the following categories: (1) veterans with disabilities resulting from combat injury or service trauma, and (2) beneficiaries with prisoner-of-war status.

In part, Public Law 83, 84th Congress, approved June 16, 1955, enacted the appropriation act limitations on dental treatment into permanent law. Public Law 83 also incorporated the VA-initiated exceptions to those limitations, essentially unchanged in title 38 U.S.C., paragraph 612 (b). (Dental services for former POWs were later expanded through P.L. 96-22 of June 13, 1979, discussed below.)

The one year presumptive period for multiple sclerosis was increased first to two years (Public Law 82-175, October 12, 1951), then to three years (P.L. 86-187, August 25, 1959), and finally to the current seven years (P.L. 87-645, September 7, 1962). A three year presumptive period for Hansen's disease was provided by Public Law 86-188 (August 25, 1959).

March 3, 1966

Originally limited to cases involving veterans with wartime service, presumptions in law of service-connection for chronic diseases were extended to cases involving active peacetime service after January 31, 1955 by Public Law 89-358 of this date.

May 27, 1966

Paragraph 2 of Program Guide 21-1, Change 61, Section N-11, presented definitions of importance to claims of those captured during periods of peacetime.

> . . . The term "combat" includes conflict with hostile forces during wartime or peacetime service. The term "prisoner of war" may be applied to any person who while on active service is captured by hostile forces, regardless of whether a war has been declared. Capture by guerrilla forces is included.

PG 21-1 emphasized existing provisions for those captured by hostile forces during periods of formally undeclared wars, such as the Korean and Vietnam conflicts.

August 12, 1970

Section 3 of the Act of August 12, 1970, Public Law 91-376, offered the first special provisions in statute for POW compensation determinations:

> Sec. 3. (a) Section 312 of title 38, United States Code, is amended by . . . adding the following new subsections:
>
> (b) For the purposes of subsection (c) of this section, any veteran who, while serving in the active military, naval, or air service, was held as a prisoner of war for not less than six months by the Imperial Japanese Government or the German Government during World War II, by the Government of North Korea during the Korean conflict, or by the Government of North Korea, the Government of North Vietnam or the Viet Cong forces during the Vietnam era, or by their respective agents, shall be deemed to have suffered from dietary deficiencies, forced labor, or inhumane treatment in violation of the terms of the Geneva Conventions of July 27, 1929, and August 12, 1949.
>
> (c) For the purposes of section 310 of this title and subject to the provisions of section 313 of this title, in the case of any veteran who, while serving in the active military, naval, or air service and while held as a prisoner of war by an enemy government, or its agents during World War II, the Korean conflict, or the Vietnam era, suffered from dietary deficiencies, forced labor, or inhumane treatment (in violation of the terms of the Geneva Conventions of July 27, 1929 and August 12, 1949), the disease of --
>
> (1) Avitaminosis,
> Beriberi (including beriberi heart disease),
> Chronic dysentary,
> Helminthiasis,
> Malnutrition (including optic atrophy associated with malnutrition), Pellagra, or
> Any other nutritional deficiency, which became manifest to a degree of 10 percentum or more after such service; or
>
> (2) Psychosis which became manifest to a degree of 10 percentum or more within two years from the date of separation from such service;
>
> shall be considered to have been incurred in or aggravated by such service, notwithstanding that there is no record of such disease during the period of service.

The recorded legislative history of these provisions gives no indication as to why or how the six month minimum internment requirement was decided upon.

The provisions of Public Law 91-376 were discussed in DVB Circular 20-70-73, Appendix C, of January 7, 1971.

December 24, 1970

Public Law 91-584 of this date authorized educational assistance to wives and children, and home loan benefits to wives, of members of the Armed Forces missing in action, captured by a hostile force, or interned by a foreign government or power during the Vietnam era. VA Circulars, among them 20-71-19 and 20-73-11, used in conjunction with title 38 of the U.S. Code implemented the provisions of the law.

October 1971

Beginning with the printing of October 1971, VA Form 21-526, "Veteran's Application for Compensation or Pension" included items 10E through 10G for indicating whether the veteran had ever been a prisoner of war and, if so, the name of the country and dates of confinement.

October 19, 1972

In a letter to heads of departments, staff offices and field stations, the Administrator stressed a special obligation to veterans who are prisoners of war or missing in action, and to their families:

> The purpose of this letter is to emphasize that we must match the sacrifices of these Americans with the unequivocal commitment on our part that the resources of the Veterans Administration will be made available in a timely, responsive, and compassionate manner. This must be done without any incident of administrative delays, impersonal treatment, restrictive interpretation of benefits, or fragmented, incomplete delivery of services.

February 22, 1973

Circular 10-73-33 of this date focused on "Medical Care for Servicemen Who Were Prisoners of War or Missing in Action During the Vietnam Era." It emphasized the appropriate provisions of title 38, U.S. Code, to provide aid and assistance regarding VA benefits and services, as well as information on other Government programs such as medical care under the CHAMPUS program administered by the Department of Defense. Each former POW and returned MIA was to be accorded individualized attention, with key members of the VA medical facilities having monitoring and coordinating responsibilities. Personalized processing of paperwork was called for in this circular. Short term counseling or supportive psychiatric treatment, when urgently needed, were to be furnished to families as part of the care provided the serviceman. Medical records of these servicemen were to be clearly labeled, "Expedite. POW-MIA CASE."

May 3, 1973

Circular 20-72-94 of this date established procedures by which the Veterans Administration would respond to the compensation, education and other needs of those persons who were "Prisoners of war in Southeast Asia and elsewhere, listed as missing in action but are repatriated as prisoners of war, forcibly detained or interned by a foreign government or power as civilians but have veteran status, and dependents of service personnel listed as missing in action."

The circular stressed that personalized assistance should be extended to the returning servicemen and dependents and stressed the need for sensitivity and thoroughness in handling claims, benefits counseling, monitoring claims processing, and providing information on other government benefits. All returnee and survivor claims were given "top priority" for expeditious processing. Applications and claim folders were to be identified with a "POW/MIA" label. The circular contained instructions for administrative, adjudicative, counseling, loan guaranty and insurance elements of the Department of Veterans Benefits. Special provisions were included for cooperative efforts with the military in providing information to the repatriated POWs.

May 31, 1974

Originally limited to cases involving veterans wtih wartime service, presumptions in law of service-connection for chronic diseases were first extended to cases involving active peacetime service after January 31, 1955 by Public Law 89-358 (March 3, 1974). The list of chronic diseases as currently constituted (38 C.F.R. 3.309) is as follows:

Anemia, primary
Arteriosclerosis
Arthritis
Atrophy, Progressive muscular
Brain hemorrhage
Brain thrombosis
Bronchiectasis
Calculi of the Kidney, bladder, or gallbladder
Cardiovascular-renal disease, including hypertension
Cirrhosis of the liver
Coccidioidomycosis
Diabetes mellitus
Encephalitis lethargica residuals
Endocarditis (This term covers all forms of valvular heart disease.)
Endocrinopathies
Epilepsies
Hansen's disease
Hodgkin's disease
Leukemia
Myasthenia gravis
Myelitis

Myocarditis
Nephritis
Other organic diseases of the nervous system
Osteitis deformans (Paget's disease)
Osteomalacia
Palsy, bulbar
Paralysis agitans
Psychoses
Purpura idiopathic, hemorrhagic
Raynaud's disease
Sarcoidosis
Scleroderma
Sclerosis, amyotrophic lateral
Sclerosis, multiple
Syringomyelia
Thromboangitis obliterans (Buerger's disease)
Tuberculosis, active
Tumors, malignant, or of the brain or spinal cord or peripheral nerves
Ulcers, peptic (gastric or duodenal) (A proper diagnosis of gastric or duodenal ulcer (peptic ulcer) is to be considered established if it represents a medically sound interpretation of sufficient clinical findings warranting such diagnosis and provides an adequate basis for a differential diagnosis from other conditions with like symptomatology; in short, where the preponderance of evidence indicates gastric or duodenal ulcer (peptic ulcer). Whenever possible, of course, laboratory findings should be used in corroboration of the clinical data.)

Program Guides October 12, 1972 through August 27, 1976

The claims of former prisoners of war were the subject of several Program Guides issued during the period of October 1972 to August 1976.[12] The major elements of the Program Guides are summarized below:

o There is a frequent paucity of records in POW claims; where a disability is first diagnosed after service, special attention should be given to POW experiences in determining the relationship of the disability to service.

o The duration and circumstances of imprisonment will be associated with pertinent medical principles in these determinations.

o While liberal application is given, there must be a reasonable basis for establishing service-connection in these cases.

o If it is alleged that debriefing records contain relevant information, request for records will be sent to the service department, but only where favorable adjudicative action is expected.

o Few medical records will be available regarding treatment during imprisonment.

o The burden of proof as to occurrence of the POW episode in such claims has been shifted from the claimant to the government.

o When residual disability is found, it should be accepted without question that POWs were subject to tropical diseases (Pacific Theater and Southeast Asia), hardship and malnutrition.

o The veteran's statement as to wounds and injury just prior to imprisonment will be accepted as proof of actual incurrence when residual disability attributable to service is found.

o Presumptions are rebuttable under VA Regulation 1307 (D) when there is affirmative evidence to the contrary.

o The unusual hardship and isolation from society resulting from POW life means that an extended period of readjustment to ordinary conditions of life is essential.

o In claims for individual unemployability when the threshold disability percentage for this benefit is not met, the issue should be submitted to VA Central Office.

June 13, 1979

As previously described, limitations on dental treatment for veterans were established in 1955. Exceptions were permitted for treatment for two categories: (1) veterans with disabilities resulting from combat injury or service trauma, and (2) beneficiaries with prisoner of war status. Under section 612 (b) (3) of title 38, U.S. Code, a former POW could receive outpatient dental care without limitation for any service-connected dental condition attributable to internment. For other veterans, such unlimited outpatient dental care was otherwise only available for noncompensable service-connected conditions if they resulted from combat wounds or other service trauma. These circumstances provided exception for former POWs to the requirement which would otherwise apply that the service-connected dental condition be compensable in degree or that, if noncompensable, application for treatment be made within one year after discharge or release from active service.

Public Law 96-22, June 13, 1979, included provisions which expanded the extent of dental care benefits for former prisoners of war. Effective October 1, 1979, P.L. 96-22 provides that veterans who have a service-connected disability evaluation of 100 percent or who were prisoners of war during World War I, World War II, the Korean conflict or the Vietnam era for not less than six months, are eligible for any needed dental care from the Veterans Administration.

September 21, 1979

Department of Veterans Benefits (DVB) Circular 21-79-12 of this date provided direction for the implementation of the new dental care benefits for former POWs enacted by P.L. 96-22. Department of Medicine and Surgery Interim Issue 10-79-42 of the same date advised field facilities of the provisions of the new law and provided instructions for implementation.

November 13, 1979

Department of Medicine and Surgery Circular 10-79-272 of this date provided information to field facilities on the development of a microfiche listing of former POWs developed during the course of this study. The listing, which has names and other information on former POWs of World War II, Korea and the Vietnam era, is to be used to verify POW status in connection with dental care benefits authorized by P.L. 96-22.

January 15, 1980

Department of Medicine and Surgery Circular 10-80-7 of this date called for the use of a pressure-sensitive "POW" label to be affixed to the medical and related administrative records of VA patients identified as former prisoners of war. The 2 1/2" by 5/8" label has the letters "POW" printed in green on a white background with a matching green border. The circular also discussed forthcoming distribution of a one-time, computer-generated listing of former POWs containing the names of former POWs who appear in the computerized Patient Treatment File.

January 18, 1980

Department of Medicine and Surgery Circular 10-80-11 of this date discussed use of the application for Medical Benefits, VA Form 10-10 revised in January 1979, to indicate not only POW status, as before, but also the theater of war in which the former POW was interned. The circular directed that medical staff members who have limited experience in examining and treating patients who endured severe and prolonged stress and physical deprivation are expected to make full use of the expertise of other staff members or consultants in these matters. The circular described establishment of a former POW registry at the Armed Forces Institute of Pathology (AFIP), and directs that all pathological material (surgical, cytologic, and autopsy) from former POWs is to be examined and reported at each VA medical center and a duplicate set of slides, blocks, etc., forwarded to the AFIP.

March 1980

In an effort to address the issue of internment or combat related anxiety and stress, the VA Departments of Veterans Benefits and Medicine and Surgery are preparing guidelines on how to diagnose, treat, and rate anxiety neurosis appearing among former POWs and other combat veterans, especially those returned from Vietnam. These guidelines presently do not include a specific reference to former POWs, although they generally refer to stresses induced by combat or "internment under inhumane conditions." These guidelines use the term "post-traumatic stress neurosis" (a term due to become part of the VA's official diagnostic classification system October 1, 1980) to describe such anxiety neurosis. The draft DM&S guideline describes "post-traumatic stress neurosis" in terms of many of the same symptoms used to characterize the "K-Z syndrome" - e.g., startle reaction, insomnia, survivor guilt, memory lapses. The draft DVB guidelines point out that when such symptoms are found to be present upon examination, they are to be diagnosed and accepted for rating purposes as "post-traumatic stress neurosis" and coded as "anxiety neurosis," using the VA rating schedule. The draft DVB guidelines also note that when "post-traumatic stress neurosis" or a similar disorder is recorded in combat veteran military medical records, the disability should be service-connected even though it does not become clinically apparent until long after military service.

ANALYSIS OF PROCEDURES AND THEIR APPLICATION

General

Over the years, the Veterans Administration has changed its approach to the adjudication of claims of former prisoners of war, gradually developing flexibility in such areas as substantiation of claims in the absence of medical records for periods of internment and presumption of service incurrence for certain disabilities. This approach reflects the evolution of law and implemental VA procedures. The degree of flexibility has roughly coincided with advancements in medical knowledge concerning the serious health impairments which can result from imprisonment.

The largest group of repatriated prisoners of war is the group from World War II. As the effects of captivity became more widely known, later groups of POWs received more complete repatriation examinations, but the World War II POWs returned at a time when knowledge of the effects of internment was not as extensive as it became in later years. Thus, the least was known when the most returned. The review of claims files conducted in connection with this study demonstrated that former prisoners of war generally have received special consideration in keeping with statutory and procedural provisions in terms of medical evaluation and disability compensation.

Application of Procedures

Although former prisoners of war are often among those veterans who have the least documentation of injury or illness during military service, and many did not receive repatriation examinations, they are a group which has received service-connected disability ratings to a greater degree than war veterans in general. Based on comparisons of veterans and former prisoners of war on VA compensation rolls, less than 10 percent of war veterans receive compensation, compared with 43.6 percent for former prisoners of war. Fifty-nine percent of former POWs from Korea receive service-connected compensation, while the figure is 50.6 percent for Pacific Theater POWs and 42.2 percent for European Theater POWs.

Of those POWs who did receive repatriation examinations, over half had inadequate medical histories for the period prior to capture, according to the physicians who reviewed a sample of claims folders. Thus there were often few benchmarks for later assessment of possible POW-related disabilities. Other statistics which reflect the application of procedures in the rating of service-connected disabilities also show differences among theaters of operation. Veterans with severe disability (ratings of 50 percent or more disabled) constitute 22.2 percent of all veterans with service-connected disability ratings. Former POWs with severe disability ratings constitute 26.4 percent of former POWs with service-connected disability ratings. Of compensable former World War II POWs of the European Theater, 20.1 percent have severe disability, while the percentage is 48.8 of former World War II POWs of the Pacific Theater and 34.7 of former POWs of the Korean conflict. The average degree of service-connected disability is 28.5 percent for all compensable veterans and 29.7 percent for all compensable prisoners of war. The average disability rating for compensable European POWs is 27 percent, for Pacific POWs 40.3 percent and for Korean POWs 36.1 percent.

The review of randomly selected claims folders, conducted by representatives of the Board of Veterans Appeals and the Department of Veterans Benefits, revealed that between 75 and 80 percent of the folders of POWs from each theater -- the Pacific and European Theaters of World War II and Korea -- contained one or more claims for service-connected disability compensation. For the European Theater, about 70 percent of those who filed compensation claims were rated as having service-connected disabilities. Approximately 85 percent of the former POWs of the Pacific Theater and about 90 percent of former POWs of Korea who filed claims were rated as having service-connected disabilities. The review also showed that a fairly small number, less than 10 percent, of the former prisoners of war who filed compensation claims exercised their right of appeal through the Board of Veterans Appeals.

Time constraints of the study did not permit an in-depth analysis of the history of each of the many service-connected disabilities claimed, diagnosed, established or denied beyond determining that former POWs have generally received special consideration in keeping with statutory and procedual provisions. An indication of the quality of regional office claims adjudication was also provided by an analysis of those sample folders which had gone through the appeals process with the Board of Veterans Appeals. Of the appeals reviewed by the Board, the great majority were denied, upholding the decisions of regional offices, and approximately 15 percent of the appeals were allowed. This ratio of allowances/denials is consistent with the ratio for all veterans whose claims are reviewed by the Board of Veterans Appeals. Similarly, an analysis of data for all appeals of former POWs reviewed by the Board in 1978 showed that the great majority of appeals were denied, thus upholding decisions made by regional offices. About 12 percent of the appeals of former POWs were allowed in 1978, which is within the normal allowance rate for all veterans whose claims are reviewed by the Board of Appeals.

When asked whether evidence from sources other than VA and repatriation examinations -- including buddy statements, lay statements and private physician or hospital reports -- had been considered by the VA in reaching its decisions on compensation claims, the reviewers of the sample of claims folders responded overwhelmingly in the affirmative.

Anxiety Neurosis and Unemployability

The later assessment of POW-related mental status or psychiatric conditions was made more difficult since not all former POWs received repatriation examinations. Also, physicians who reviewed a sample of claims folders noted that psychiatric and mental status was not thoroughly evaluated in about one third of the repatriation examinations. However, of the 35 most common diagnostic conditions for which former prisoners of war have been rated, the single most prevalent condition is anxiety neurosis which accounts for 12.7 percent of all service-connected conditions of former POWs. This is three times the rate for all veterans receiving compensation. While former POWs make up only 1.4 percent of the veterans on the compensation rolls and their total diagnostic conditions form only 1.7 percent of all service-connected diagnoses, the diagnosis of service-connected anxiety neurosis for former POWs constitutes 5 percent of all service-connected anxiety neurosis conditions for all veterans on the compensation rolls.

Total disability ratings based upon unemployability are assigned those veterans unable to secure and follow a substantially gainful occupation by reason of service-connected disabilities even though the disabilities are deserving of less than total ratings under the rating schedule. Unemployability ratings are assigned after many factors are taken into consideration. Level of education, prior job experience and skills, physical and mental limitations and aptitude are

considered. Veterans with unemployable status constitute 5.3 percent of all veterans on the compensation rolls. Former prisoners of war with unemployable status constitute 8.7 percent of all former POWs on the compensation rolls. Of compensable former World War II Pacific POWs, 22 percent have unemployable status. Of former World War II POWs of the European Theater, 5.3 percent have unemployable status, while the figure is 8.9 percent for Korean conflict POWs on the compensation rolls.

Medical Examinations

As the history of development of VA procedures demonstrates, there were correspondingly fewer reminders to VA medical examiners than to adjudicators concerning special circumstances of POW claimants. Generally, a compensation examination is limited to a specific condition claimed by the veteran to be service-connected. If it is not clear to the examiner that the patient is a former prisoner of war or if the examiner is unfamiliar with or unaware of the possible significance of general debility or "reduced efficiency" in connection with former POWs, there is a likelihood that the examination will be limited.

The review of a sample of claims folders by physicians in connection with this study showed that almost 90 percent of VA examinations for specifically claimed medical conditions in question were thorough. When asked if the information from VA examinations permitted a reasonable judgement of whether the medical conditions found may be attributable wholly or in part to the POW experience, physician-reviewers noted that the information was adequate or very good for such judgement in approximately three-fourths of cases reviewed.

Service medical records appeared as evidence of record in approximately three-fourths of the sample of claims folders reviewed. About one quarter of all former POWs who had filed claims had non-VA/non-military hospital reports as evidence of record. A similar number had private physician reports. The physicians who reviewed the folders believed that other pertinent medical information in the claims folders -- such as VA outpatient and hospital reports, private physician statements, and medical histories -- led to a better understanding of the former POW's health status and existing medical condition in the majority of folders in which such information was found.

Circular No. 277 of December 2, 1946, Technical Bulletin 8-3 of December 4, 1946, and special provisions later appearing as VA Regulations and Procedures R-1185 (C) (3) specified priority of examinations in prisoner of war cases and emphasized the importance of ascertaining causes of reduced efficiency, general debility and ill-defined disabilities. However, one factor which naturally comes into play in determinations of service-connection of disabilities is how soon

after service separation the condition becomes manifest. Serious limitations in knowledge as to the delayed effects of such stresses and deprivations as experienced by prisoners of war is a major obstacle for decisionmakers.

OTHER ITEMS

The Six Month Period

Section 3 of the Act of August 12, 1970, Public Law 91-376, offered the first special provisions in statute for compensation determinations of former POWs. A key phrase in this legislation -- section 3.(b) -- is that which specifies that it applies to a veteran who, meeting other conditions of the law, " . . . was held as a prisoner of war for not less than six months . . . "

Nowhere in the recorded legislative history of the provision for presumption of service-connection for certain POW-related conditions, Section 3 (b) of P.L. 91-376, is there discussion as to how it was decided that a minimum 180 days internment would be required before a former POW would be presumed to have undergone dietary deficiency, forced labor or inhumane treatment. Any former POW who suffered from one of these three deprivations is entitled to a presumption of service-connection for certain diseases specified in 38 U.S.C., 312(c).

Besides presumption concerning service-connection for certain diseases created by P.L. 91-376, the only other statutory VA benefit provision especially designed for former POWs is the authorization for all necessary dental care created by P.L. 96-22. A minimum six-month internment period is also required for eligibility under this provision. The legislative record culminating in the enactment of P.L. 96-22 does reflect congressional consideration of the significance of imposing, as a condition of the eligibility for the new benefit, a minimum period of POW internment. In granting only certain former POWs comprehensive dental care, congressional reports expressly note that nutritional deficiencies among POWs which led to gum disease and long-term effects on oral and dental health resulted from a prolonged state of deprivation. In setting a time limit to reflect that finding, Congress accepted the six-month period in section 312 as an appropriate period to apply to eligibility for the new benefit.

"Buddy Statements"

Some lay evidence which is used in the consideration of all procurable and assembled data in support of a veteran's claim is popularly referred to as the "buddy statement." The comments of other former POWs who were interned with the claimant are useful to corroborate the incurrence

or aggravation of an injury or disease. Reviewers of the sample of claims folders of former POWs noted that buddy statements, when submitted, were considered in reaching decisions on claims and in some cases formed the basis for granting service-connection. Less than 10 percent of the sample who had filed claims for disability compensation had submitted buddy statements. Buddy statements which merely state that a former POW was in the same location at the same time as the claimant and do not specify that the comrade witnessed a disease or trauma incurred by the claimant have less value as supportive evidence.

While it can prove very useful to have corroborative evidence of any kind, and while it is acknowledged that decisons are made on the basis of all assembled data, former prisoners of war can encounter difficulty in locating former comrades to assist them long after service separation. With the possible exception of organizations of former prisoners of war which maintain membership lists -- members comprise a relatively small proportion of all surviving former POWs -- there is no reliable locating method. In discussions former POWs had with VA personnel during the study, they often spoke of not having contact with comrades or knowing of their whereabouts. Chance encounters reunite comrades, but generally former POWs and many other veterans do not maintain contact with former comrades for any length of time after separation from service.

Records - Other Information

The lack of documentary evidence of service incurrence or aggravation of disabilities can be a problem for former prisoners of war. The most helpful information is obtained from military records, particularly records of medical treatment.

Shortly after midnight on July 12, 1973, a fire was discovered at the Military Personnel Records Center, Overland, Missouri. The fire burned for five days and did severe damage to many records of former service personnel. Approximatley 17.5 million folders of Army personnel discharged between November 1, 1912 and December 31, 1959 were destroyed. About one million records of Air Force personnel whose surnames begin with letters "I" through "Z" who were discharged between September 25, 1947 and December 31, 1963; and about 2,000 records of Army personnel discharged between January 1, 1973 and the time of the fire were destroyed. It is not known how many of these records were for former prisoners of war. However, the majority of former prisoners of war who have filed claims with the VA did so prior to the time of the fire. In those cases, any service medical records extant would routinely have been retrieved and placed within claims files.

In 1946, as a temporary measure, service departments began furnishing the Veterans Administration with original medical cards relating to treatment individuals received during their

military service. Prior to that time, photostatic copies had been furnished to the VA. As noted in Circular No. 56, when the War Department requested return of the cards, the original medical cards were to be returned for copying by the War Department and the VA was not required to make photostatic copies for its own files. It can only be speculated, but this exchange of cards could also have resulted in occasional loss of pertinent information.

Uniformity Among Regional Offices

Some former prisoners of war and other veterans maintain that certain VA Regional Offices (ROs) are more difficult than others to convince of service-connection in compensation claims. While a separate study of this issue was not possible within the time limitations of this study, a similar inquiry was previously conducted by the General Accounting Office (GAO) in 1974-1975. The GAO sent a selected sample of veterans' claims folders to three other ROs after the cases had been rated in one regional office. The GAO found occasional variances in disability percentages granted among the four ROs, but no differences as to granting service-connection. This finding was reported verbally to VA representatives in a meeting with the GAO when the inquiry was completed in 1975. A formal study was not conducted.

Uniformity of granting of service-connection is also supported by random selection quality review done in VA Central Office. A selection of cases from each regional office Adjudication Division is reviewed each six months for procedural and regulatory correctness. In addition, regional office Adjudication Divisions and Veterans Services Divisions request advisory opinions from VA Central Office for guidance on specific cases. This guidance and quality review is provided by the VA Compensation and Pension Service and includes cases of all categories of veterans who file claims with the VA, not specifically POWs. The Compensation and Pension Service also operates an intensive continuing training program, "Venture in Progress" for all of its staff, including rating board members, to keep them informed and knowledgeable of current regulations and procedures.

SUMMARY

VA procedures for former prisoners of war emerged from recognition of special circumstances regarding support of claims by veterans who experienced extraordinary circumstances of service, such as combat and internment. Sensitivity toward the "places, types and circumstances" of service were specified in legislation in 1941. The particularly severe effects of internment were acknowledged and POW-specific procedures appeared toward the end of World War II. These were emphasized in the years following. As more information on the POW experience was gained, procedures were expanded or stressed in response to other armed conflicts,

public law and the development of medical knowledge. The first special provisions in statute for service-connected compensation determinations appeared in 1970 with Public Law 91-376 and reflected recognition of the rigors of dietary deficiencies, forced labor and inhumane treatment.

Former prisoners of war generally have received special consideration in keeping with statutory and procedural provisions in terms of medical evaluations and disability compensation. Limitations in knowledge as to the long term effects of the stresses and deprivations experienced by prisoners of war is a major obstacle for decisionmakers.

FOOTNOTES

[1] Foreign Claims Settlement Commission of the United States, Annual Report to the Congress for 1977, Washington, D.C., 1978, pp. 50-51.

[2] "Wars Damaged Goods," Newsweek, June 19 1950, reprinted in, U.S. Congress, House, Committee on Veterans' Affairs, H.R. 8848: A Bill to Provide for a Study of the Mental and Physical Sequelae of Malnutrition and Starvation Suffered by Prisoners of War and Civilian Internées During World War II, hearings before a subcommittee of the House Committee on Veterans' Affairs. 81st Congress, 2d session, 1950, p. 1862.

[3] Ibid.

[4] "POW Computer Match - DOD Disability Retirement Records," memorandum in connection with P.L. 95-479, Veterans Administration, Washington, D.C., April 2, 1979.

[5] U.S. Congress, House, Committee on World War Veterans' Legislation, Facilitating Standardization and Uniformity of Procedure Relating to Determination of Service Connection of Injuries or Diseases Alleged to have been Incurred in or Aggravated by Active Service in a War, Campaign or Expedition, Report No. 1157, 77th Congress, 1st Session, 1941, p. 83.

[6] Public Law 361, 77th Congress, (chapter 603 -- 1st Session) An Act: to facilitate standardization and uniformity of procedure relating to determination of service-connection of injuries or diseases alleged to have been incurred in or aggravated by active service in a war, campaign, or expedition, approved December 20, 1941.

[7] Veterans Administration Service Letter, Administrator's Office. "Expeditious Adjudication of Claims for Disability Pension Based on Combat Injuries," December 28, 1943, Paragraph 1(a) and 1(b).

[8] Veterans Administration, Schedule for Rating Disabilities, 1945 edition, U.S. Government Printing Office, Washington, D.C., 1945, pp. 1-2, paragraph (3).

[9] Ibid., p. 13, paragraph 3.

[10] Ibid., p. 88, paragraph 2.

[11] Instruction No. 2, "Instructions Relating to the Rating of Combat Incurred Disabilities," Veterans Administration, Washington, D.C., August 23, 1946.

[12] Program Guides: PG 21-1, Change 184, Section N-25, October 12 1972; PG 21-1, Change 185 Section N-26, December 6, 1972; PG 21-1, Change 239, Section N-13, August 27, 1976.

FOREIGN GOVERNMENT POW PROGRAMS

The governments of several foreign countries were contacted for information concerning benefits available to their citizens who have been held as prisoners of war. Although such an analysis was not required by Section 305 of P.L. 95-479, there has been some sentiment in Congress for a comparison of "the treatment accorded former POWs under the veterans benefits programs of other governments."[1] Interest in a comparison of this type has also been expressed by organizations of former prisoners of war during the course of the study. Of the countries contacted, Canada has the most extensive benefit provisions specifically for former prisoners of war, and these programs have generated the most interest within organizations of former prisoners of war in the United States.

The following brief, non-technical narrative describing existing programs in Great Britain, Norway, Denmark, France, West Germany, Australia and Canada is intended to lend at least some perspective on foreign programs. The decision for its inclusion was made despite the possibility that it may invite superficial judgements regarding the adequacy of U.S. programs. It should be noted that thorough comparisons of programs of different sovereign nations require careful consideration of the unique socioeconomic and political contexts in which they exist. The scope of this study does not permit the exhaustive analysis required for a meaningful comparison of this type.

CANADA

As an official of the Canadian government pointed out, in comparison with the United States, "The number of Canadians who were taken as prisoners of war was not only much smaller numerically, but also proportionally,"[2] The Canadian program for former prisoners of war can be viewed as a two-part program, one for former prisoners of the Japanese in World War II (about 1,000) and the other for former prisoners of war of "other powers" about (6,000). Compensation provisions for former prisoners of the Japanese originated in 1946, while provisions to include former POWs of other powers stem from legislation enacted in 1976.

Pension and Health Care Entitlement 1946-1975

In 1946, the Canadian Pension Commission granted pensions (a term which equates to service-connected VA disability compensation in the United States) to all former POWs of the Japanese. These forces were captured at Hong Kong at about the same time as the Bataan-

Corregidor American POWs, and were held for about as long (an average of 44 months). The pension was based on a presumption of vitamin deficiency (avitaminosis) during internment, which was quite prevalent among the Hong Kong POWs. In addition, former POWs of the Japanese were granted medical and hospital treatment for the diagnosis and treatment of any illness not a compensable condition unless it was specifically stated by the medical authority that it was not related to the service-connected disability.

In 1964, a government study of these POWs was commissioned and was conducted by Dr. H. J. Richardson.[3] Richardson compared the health and social status of a sample of 100 Canadian Japanese POWs with a matched control group of their brothers who were non-POW veterans. The study concluded that the former POWs were in a poorer position than their brothers, who also had wartime experience, in social, economic and medical areas.

In 1971, Canada enacted legislation which provided that disabled former POWs of the Japanese who were interned 12 months or more be paid at a minimum of the 50 percent rate. Because the Pension Commission had ruled that these POWs suffered from avitaminosis and were all disabled to a degree of at least 5 percent, in effect they were all entitled to payment at a rate of 50 percent (at a minimum). Former POWs with ratings of over 50 percent were not paid an additional amount by reason of the new law. Under Canadian Pension Law, the wife of any disability pensioner whose pension is paid at 50 percent or more is automatically eligible for widow's pension on the death of her spouse. This legislation resulted not just from the findings of the Richardson study, but from general public pressure to provide special compensation to former POWs of the Japanese.[4]

In 1975, another Canadian government study on POWs was commissioned.[5] The study, the report of which was written by J. Douglas Hermann, M.D., concerned the Canadian World War II POWs of the European Theater. Many of these Canadian POWs were captured as early as 1942, during the abortive Dieppe invasion. Canadian European Theater POWs were held longer, on the average, than their American counterparts. The Hermann report found that these Canadian POWs suffered from more disabilities than their European Theater non-POW comrades.

In 1976, Canada enacted legislation which extended the compensation paid Canadian Japanese POWs, and provided, for the first time, for compensation to be paid to Canadians held by other powers. This law, which is the policy currently in effect, provides for the following types of payments in addition to any service connected disability compensation otherwise being paid: 50 percent compensation to all of the Canadian POWs of the Japanese who were held captive for twelve months or more, 20 percent compensation to all former POWs of the Japanese who were held from three to twelve months, 10 percent compensation for POWs of other powers held from

three to eighteen months, 15 percent compensation to those POWs of other powers held eighteen to thirty months, and 20 percent compensation to those POWs of other powers held more than thirty months. These rules also apply to Canadians who evaded capture for the above mentioned periods of time, or who served in an allied force at the time of capture. In all cases, additional compensation is payable for dependents. POW and other benefits may be combined in determining widows' pension eligibility.

For all Canadian veterans, claims for compensation are sent to the Canadian Pension Commission, which examines the veteran's records to verify his entitlement. If the claim is substantiated, the payment is made. If the claim is not substantiated, the veteran can appear before the Entitlement Board of the Commission, which is similar to a hearing at a Veterans Administration Regional Office, at which time he or his legal counsel can present his case for reconsideration. If the claim is rejected as a result of such a hearing, the veteran has the opportunity to present a final appeal to the Canadian Pension Review Board, which is analogous to the Board of Veterans Appeals in this country.

As in the United States, disability compensation paid to former POWs is not dependent on service rank or level of income, nor is it taxable. The rates of payment for former POWs and other Canadian veterans are higher in Canada than those applicable to POWs and other veterans with the same percentage ratings in the United States. However, dollar rates are not compared in this report because the basis for the percentage ratings which are applied vary between Canada and the United States. The same schedule for rating disabilities is not used in both countries.

GREAT BRITAIN

The British veterans benefit program does not include special provisions for former prisoners of war. Compensation for disabilities incurred as a result of the internment experience is paid at the same rate as compensation awarded for other service connected disabilities. As in the United States and Canada, "reasonable doubt" as to service incurrence is to be resolved in favor of the veteran.

Also as in the United States and Canada, there are appeals bodies, which in Britain are called Appeals Tribunals. A distinctive feature of the British appeals system is the use of an ombudsman who can be consulted by the veteran or by his veterans service organization. The British Ombudsman presides over an independent office which examines complaints of bureaucratic injustice and attempts to resolve them. The Ombudsman is occasionally utilized to assist claimants with their appeals of adverse rulings. Compensation for veterans is paid by the Department of Health and Social Security. No special health care benefits exist for veterans under the British National Health Service system.[6]

NORWAY AND DENMARK

Norway and Denmark have compensation programs for their World War II veterans interned in Nazi concentration camps. These individuals were mostly resistance fighters, who can be considered "prisoners of war" because they were part of irregular military forces engaged in combat against the Germans when captured and interned by the enemy. These two Scandinavian countries - as well as many other European countries (e.g., France, Netherlands) occupied by the Nazis during World War II - have also established programs for civilian internees. These civilians were usually interned either because of their political opposition (e.g., democrats, socialists) or for their religious/ethnic background (e.g., Jews).

Norway

Eitinger and Strom[7] have described Norway's POW program. Norway's POW population consisted of resistance fighters and seamen whose ships were sunk by the Germans. Norwegian civilian concentration camp internees receive the same benefits as the country's POWs. A common adjudication procedure is followed.

Norway enacted its POW/civilian internee legislation in 1946. That law stipulated that the National Insurance Institute would process disability claims arising out of World War II imprisonment. The claims filing procedure called for the applicant to submit a doctor's certification of a claimed disability to the Institute. If this certification appeared to be valid, the Institute requested a medical specialist's opinion. If the specialist's opinion confirmed the initial certification, then the disability compensation was paid.

In 1968, Norway first enacted legislation which provided for a "reasonable doubt" doctrine to be applied in the case of certain employable former POWs and civilian internees. The new law stated that those POWs or civilian internees who had been interned at least six months and who had experienced the "unusually severe trauma" of Nazi concentration camps or similar German prisons would be eligible for a disability compensation payment if their work capacity had been reduced at least 50 percent, and if the claimed disability could reasonably be attributed to the POW experience. Those POWs and civilian internee applicants whose working capacity was not reduced to such an extent would continue to be processed under the 1946 law, with its requirement for "high probability" of causality rather than "reasonable doubt."

Arve Lonnum's Delayed Disease and Ill Health[8] clinically described the manifold residuals of the POW concentration camp experience. The publication and dissemination of this work by the Norwegian Association of Disabled Veterans at the same time as the Norwegian POW program was being debated in the country's legislation had a decisive impact on the passage of the 1968 law.

Denmark

Thygesen[9] describes the Danish Program for former Danish POWs. The Danish POW population was composed mostly of resistance fighters and police officers. As in Norway, compensation payable to these POWs also applies to Danish civilian internees.

In 1945, Denmark passed its first POW/civilian internee related legislation. Disability claims were to be processed by the Directorate of Accident Insurance, an agency whose primary purpose was administration of a workmen's compensation system. The 1945 act required only that a claimed disability be reasonably attributable to the POW experience. However, there was a two-year statute of limitations. Claims filed after1947 were allowed only in exceptional cases. The number of exceptions became quite large as it became evident that the sequelae of the POW experience were not short term.

Largely as a result of Thygesen's study of the "K-Z syndrome," Denmark amended its legislation in 1957 to provide for more liberal compensation procedures for former POWs and civilian internees. As in Norway, "reasonable doubt" was resolved in favor of the claimant and the burden of proof shifted to the government in cases where there was a reduction in working capacity of 50 percent or more and where there was no intervening cause for a disability claimed to be a result of internment. In 1966, Denmark further amended its legislation to remove the statute of limitations on disability cases arising out of the internment experience.

FRANCE

In France, ministerial decrees of January 18, 1973, and September 20, 1977, established a special presumption of service connection for certain disabilities for former prisoners of war interned in a number of specific camps during World War II and in camps in Indochina. The presumptions apply to certain disabilities arising within four to ten years following separation from service, depending on the type of disability. Disability ratings ranging from 20 percent to 100 percent are assigned, based upon the type of disability. The disabilities named in the decree for which presumptive periods exist are pulmonary tuberculosis, rheumatoid arthritis, gastrointestinal disorders, cardiovascular disorders, endocrine and genitourinary disorders, parasitic and tropical disorders, and nervousness.

On the basis of a law enacted in November 1973, former prisoners of war can be awarded a pension between the ages of 60 and 65 on the basis of the maximum rate normally attained at age 65. The amount of this pension depends upon the length of military service and length of internment of the individual.

WEST GERMANY

West Germany provides a number of disability compensation and health care benefits to certain groups of war victims, including former prisoners of war, and their dependents or survivors.[10] There are no POW-specific provisions, however. These benefits arose from post-war legislation enacted to mitigate the effects of the extensive amount of disability and death among the general German population that occurred during World War II.

Health care services for war victims include physician and hospital care, home nursing, drugs, dental care, orthopedic braces, and therapeutic gymnastics for service connected conditions of former POWs and for certain other disabled war victims. These health care services are also available to the dependents of the severely disabled members of this group. This care can be obtained in private as well as public facilities, with the government sharing the costs.

Disability compensation for war victims is payable for loss of income or unemployability arising from an acute service-connected condition. Compensation is payable only as long as the temporary condition exists, and is usually limited to no more than 18 months. Pension is payable for permanently disabling conditions relating to the period of war. The basic monthly pension is payable to the victim or his survivors. Pension payments are based on loss of income potential or unemployability rather than on current financial position or level of income.

In the case of severely disabled war victims, the basic monthly pension can be supplemented by additional payments for business loss arising from the disability and through an aid and attendance allowance. Death benefits include burial allowance and payments to survivors. A distinguishing feature of the German program is the existence of a tax-free foundation which supplements government payments. This foundation, established to safeguard war victim health and welfare, pays emergency aid and offers loans to this group.

AUSTRALIA

Australia has no special legislation for former prisoners of war. Former POWs are eligible for a broad range of health care benefits and disability compensation on the same basis as other Australian veterans.[11]

Claims for service connected disability compensation are initially processed and, if approved, paid by Repatriation Boards. As in the United States, Canada, and Great Britain, there are appeals bodies - first the Repatriation Commission and then the Repatriation Review Tribunal. Similar to West Germany, the Australian system provides for resort to the courts if the veteran is not satisfied with his treatment by the administrative appeals bodies.

As in Britain and the United States, Australian ex-POWs are compensated at the same rate for their service-connected disabilities as other veterans. The compensation payments are not related to level of income and are non-taxable. As in the United States, a pension is payable to those former POWs who meet certain age (60) and need (unemployable) requirements. These pensions are taxable. Disability compensation and pension can be paid concurrently.

Veterans receiving compensation or pension are also eligible for government health care benefits. Totally service-connected veterans are eligible for free medical and hospital care for all conditions, payable by the Australian government. Those veterans less than totally disabled are only entitled to receive free treatment for service-connected conditions. Pensioners are also eligible for government-provided free medical care if their income is below a certain level.

INTERNATIONAL CONFERENCES

1961

The International Conference on the Later Effects of Imprisonment and Deportation, organized by the World Veterans Federation, included the participation of the Netherlands Government, the International Committee of the Red Cross, the League of Red Cross Societies, the International Committee of Military Medicine and Pharmacy, and the World Council for the Welfare of the Blind.

The Conference was held at The Hague from November 20 to 25, 1961 and was attended by 70 participants from 12 countries, including 40 medical and legal experts. The conference reached several conclusions, which are summarized briefly in its report:

> In conclusion, the conference was of the opinion that there exist ailments and disabilities which appear long afterwards among persons who were interned or imprisoned in concentration camps.
>
> These effects can become manifest at any time after liberation, and no time limit can be set for their appearance.
>
> Similar effects can be observed among persons who have lived under dangerous and stress conditions as a result of their fight against Nazism.
>
> These effects can also be found among former prisoners of war who lived under exceptional conditions of stress.
>
> The conference recommends, in general, the adoption in the various countries of a system of reparations based on the principles set down above.[12]

The Fourth International Conference on Legislation Concerning Veterans and War Victims was held in London from April 2 to 6, 1979. The conference was sponsored by the United Kingdom Government, the World Veterans Federation (WVF) and the British Members' Council of the WVF, and was attended by representatives from 32 nations, 4 international organizations, and U.S. representatives from the Disabled American Veterans and the Military Order of the Purple Heart. In relation to former prisoners of war, the conference approved a recommendation that, "... governments should automatically award a pension to former prisoners of war, deportees and internees at a certain age, in order to compensate them for deprivation and/or premature aging arising from their captivity or from similar causes."[13]

CONCLUDING COMMENT

Comparisons based on information in this report regarding benefits and programs administered by foreign governments for former prisoners of war can at best be only tenuous. A full comparison between U.S. and foreign programs would necessarily be an extensive effort, with analyses of economic data, the broad scheme of social welfare legislation in each country, and analysis of the philosophy behind each country's veteran and POW-specific statutory programs.

FOOTNOTES

[1] Senate Report No. 94-1054, Report of the Committee on Veterans Affairs United States Senate, to Accompany S. 2828, 95th Congress, Washington, D.C.: Government Printing Office, July 31, 1978, pp. 35-6.

[2] A. O. Solomon, Chairman, Canadian Pension Commission, Letter to VA Assistant Administrator for Planning and Program Evaluation, June 14, 1979.

[3] H. J. Richardson, Report of a Study of Disabilities and Problems of Hong Kong Veterans, 1964-5, Canadian Pension Commission, 1965, pp. 3-74.

[4] A. O. Solomon, Chairman, Canadian Pension Commission, speech to National Convention of American Ex-Prisoners of War, Inc., Pittsburgh, July 18, 1979. Information on the Canadian program was presented in this speech and was also summarized in Mr. Solomon's letter to VA Assistant Administrator for Planning and Program Evaluation, June 14, 1979, which forwarded informational material on Canadian benefits.

[5] J. Douglas Hermann, Report to the Minister of Veterans Affairs of a Study on Canadians Who Were Prisoners of War in Europe During World War II, Ottawa, 1973.

[6] J. C. Andrews, Chief Librarian, British Ministry of Defense, Letter to VA Assistant Administrator for Planning and Program Evaluation, July 25, 1979.

[7] Leo Eitinger and Axel Strom, Mortality and Morbidity After Excessive Stress, New York: Humanities Press, 1973, pp. 9-150.

[8] Arve Lonnum, Delayed Disease and Ill Health, Norwegian Association of Disabled Veterans, 1969, pp. 9-107.

[9] Paul Thygesen, Knud Hermann, and Rolf Willanger, "Concentration Camp Survivors in Denmark: Persecution, Disease, Disability, Compensation," Danish Medical Bulletin, Volume 17, Nos. 3-4, March - April 1970, pp. 65-106.

[10] Federal Minister for Labour and Social Affairs. Survey of Social Security in the Federal Republic of Germany, Bonn, 1972, pp. 197-214. Other information on West German program was provided by M. Trometer, Minister for Labor and Social Affairs, Letter to VA Assistant Administrator for Planning and Program Evaluation, September 11, 1979.

[11] R. Kingsland, Secretary, Australian Department of Veterans' Affairs, Letter to VA Assistant Administrator for Planning and Program Evaluation, August 13, 1979.

[12] World Veterans Federation, International Conference on the Later Effects of Imprisonment and Deportation, report, The Hague, November 21-25, 1961, p. 16.

[13] United Kingdom Government, World Veterans Federation, and British Members' Council of the WVF, Fourth International Conference on Legislation Concerning Veterans and War Victims, General Report, London, April 2-6, 1979, Recommendation 8.3 (b).

REVIEW OF MEDICAL LITERATURE

OBJECTIVE

Public Law 95-479, Section 305 (a) (4) - ". . . a survey and analysis of the medical literature on the health-related problems of former prisoners of war."

INTRODUCTION

This review of the medical literature on the health-related problems of former prisoners of war discusses both the physical and psychological conditions characteristic of former American POWs from World War II, Korea, and Vietnam. A division between "soma" and "psyche" was made solely for purposes of improving report organization and enhancing reader convenience. This division should not be interpreted to mean that physical and psychological problems should be treated distinctly. Rather, these problems are considered interdependent, with the health of former POWs being viewed holistically. This "whole person" concept is consistent with the current trend in the general medical literature, which recognizes the reciprocal influence of "mind" and "body" on patient health.

A distinctive characteristic of the discussion of the physical problems of former POWs is that it includes eyewitness accounts by physicians who were themselves POWs or reports of those who participated in the repatriation process. However, these accounts often do not employ experimental methodology - i.e., randomly selected samples, carefully matched comparison groups - upon which valid inferences about entire POW populations can be made. Furthermore, even when these studies use the correct methods, they usually describe particular POW physical problems only at one point in time - generally, at a time shortly after repatriation.

Of greater scientific value are the long-term follow-up studies of former POWs, which describe mortality and morbidity conditions of entire POW samples and carefully matched controls over a period of years. These follow-up studies largely rely on questionnaires, interviews, and other indirect observations, rather than direct, clinical examination of former POWs and their controls in a scientific setting.

A salient feature of the section on the psychological problems of former POWs is its reliance on studies of concentration camp inmates with an analogy being made to POWs. This analogy should always be carefully qualified, as concentration camp victims suffered a greater degree of trauma than did POWs. This was due to the fact that concentration camp inmates faced a much

higher probability of death than POWs, as the ultimate purpose of the concentration camps was extermination rather than incarceration. Furthermore, unlike POWs, concentration camp inmates had to deal with the uncertain fate of family and friends, who might have been interned elsewhere or were already dead. Despite such differences, the analogy between concentration camp inmates and POWs remains valid, as the literature shows that both populations suffered - and are still suffering - from the same kinds of disabilities. Another important characteristic of the psychological problems section is that it deals with former POW social and family problems. Thus sociological, as well as purely psychological effects of the POW experience are discussed.

Another relevant characteristic of the psychological literature is that it implies, but does not confirm, a role that psychological factors play in causing excess POW mortality and morbidity. For example, excess trauma - accidents, suicides, and homocides - among POWs relative to controls could well be due to behavior caused by captivity. A significantly higher amount of cirrhosis due to alchohol abuse could well be due to the psychological stress of the POW experience which drives one to drink. Definitive answers to these questions are not presently known, and must await further study.

POW PHYSICAL PROBLEMS

Accounts of Captivity Disabilities

The bulk of the medical studies on POW physical problems experienced during captivity comes from American and other allied physicians who were prisoners of war, or who observed and treated specific injuries, malnutrition-related diseases and tropical diseases in newly repatriated prisoners. Furthermore, most of these studies were written about POWs interned in Asian theaters of operation.

Hocking points out the difference between the dietary deficiency suffered in Asian POW camps and that suffered in the concentration and POW camps of Europe.[1] He notes that in European concentration and POW camps the prominent features of malnutrition were lack of sufficient calorie intake without the clinical manifestations of vitamin deficiency. Thygesen, in a study of concentration camp survivors, describes the extreme form of this malnutrition as the "Mussulman"---a skeleton-like figure, manifesting no growth of hair or nails, generally disfigured by infested chafe sores and ulcers, pale, and virtually inanimate.[2] Hocking notes that the Asiatic type of malnutrition is characterized by vitamin deficiency (usually the vitamin B complex or vitamin A) with calorie intake occasionally approaching normal levels. Although the calorie-vitamin composition was different in the Orient than in Europe, the ultimate product of such malnutrition was much the same--a Mussulman-like skeleton.

Observations by individual POW physicians usually focused on one particular disease. POW Pacific Theater physician Hibbs studied beriberi, which he believes is the most important of all the malnutrition-related diseases suffered by American POWs, in that it was directly responsible for more disability and death during captivity than any other vitamin dificiency disease.[3] Hibbs estimates that nearly everyone in his camp suffered some form of beriberi. Nardini, another Pacific POW physician, also observed that most of the POWs in his camp suffered from beriberi.[4] Hibbs identified two general types of beriberi - wet and dry. Wet beriberi was chiefly characterized by swelling (edema) of the feet. Pacific Theater POW physician Katz calls this edema "painful feet" or "burning feet".[5] Katz observes that the onset of this neurological symptom is initial swelling of the ankles, followed by increased sweating of the feet, and intense redness of the toes. The soles of the feet became extremely tender, with even the slightest touch causing great pain. Hibbs described the principal symptoms of dry beriberi as being nerve inflammation (neuritis), beriberi heart disease, and gradual diminution of vision (optic atrophy). Fisher described the neurological symptoms of this disease in terms of loss of reflexes and impaired sensation.[6]

Hibbs identified three types of beriberi heart disease. The first type was characterized by an irregular heart beat, acute attacks of shortness of breath, and congestive heart failure. This type was the most common among Pacific Theater POWs, accounting for approximately 95% of diagnosed cases. Alleman and Stollerman also described this type of beriberi heart disease.[7] The second and third types of beriberi heart disease - ventricular disease and coronary edema - accounted for the remaining five percent of diagnosed conditions. Hibbs observed that left and right ventricular disease was a chronic condition that usually resulted in death after repatriation. On the other hand, Hibbs declared that swelling of the heart muscles (coronary edema) was an acute condition which usually resulted in death shortly after the onset of the swelling. He reported that POWs suffering from this condition would be walking around at one moment, and at another moment they would collapse and die. This type of death struck all ages -- the young as well as the middle-aged -- in prison camp. The sudden death of even young prisoners from this disablility was noted by Lewis.[8]

In a study of repatriated Pacific Theater POWs, Fischbach provides a dissenting view to the generally accepted medical opinion outlined above, by stating that there was not a significant amount of beriberi heart disease or other coronary problems in the Pacific POWs he examined shortly after repatriation.[9]

With regard to optic atrophy, Bloom, Merz, and Taylor did a study on American POWs liberated from Japanese camps and found that malnutrition due to a diet deficient in vitamin B can cause optic atrophy.[10] Bell and O'Neill reported finding optic atrophy in a significant number

of Canadian World War II Pacific Theater POWs liberated at Hong Kong.[11] In another study of Canadian Pacific Theater POWs, Baird and MacDonald discovered that if treatment is not instituted early enough, this eye condition becomes irreversible.[12] In a study of American Pacific Theater POWs, Musselman reported that symptoms of optic atrophy and neuritis appeared in more than half the prisoners he examined.[13]

Katz examined over 1,000 allied Pacific Theater POWs who were suffering from cerebral malaria.[14] The severe headaches which accompanied this type of malaria were not amenable to any form of treatment except spinal puncture, which reportedly offered spontaneous relief. In some cases, spinal puncture for POWs suffering from this disease was necessary once every two or three months for the entire three year period of their captivity.

Katz also described the effects of another neurological syndrome in Pacific Theater POWs -- "dengue fever".[15] This condition was characterized by symptoms of weakness in the muscles of the extremities, severe pains in the head, eyes, and joints, and sore throat. Katz described a POW walking along with his head drooping forward, and his eyes propped open with his fingers in order to see where he was going. Katz believed that this POW was suffering from sequelae of the "dengue fever".

Pacific Theater POW physician Gottlieb reported on malnutrition-related liver disease resulting in fatty changes in the liver, a high incidence of infectious hepatitis, and cirrhosis in young men who had no antecedent alcoholic condition.[16] Jacobs, another Pacific Theater American POW physician noted the occurrence of breast enlargement (gynecomastia) as a result of liver destruction.[17]

Jacobs also coined the term "oculo-oro-genital syndrome" to describe the malnutrition-related and tropical skin disorders among his fellow POWs.[18] This syndrome consisted of inflammation of the eyes (conjunctivitis) and mouth (stomatitis) and the skin of the scrotum (scrotal dermatitis). Simons confirmed many of Jacobs' findings in his study of dermatitis among Pacific Theater POWs.[19]

Jacobs also reported that malnutrition in Pacific POWs caused a loss of libido and normal functioning of the male sex organs. Prolonged malnutrition produced the "castration syndrome" characterized by atrophy of the hair follicles, loss of hair, thinning and loosening of the skin and atrophy of the sebaceous glands, which indicated a decrease in sex hormone production.[20] These sexual disorders diminished with adequate diet upon repatriation.

Starkey and Poole[21] and Williams[22] noted the existence of significant amounts of intestinal infections caused by parasites in a study of Canadian Pacific Theater POWs. The wide variety of worms, amoebae, and other micro-organisms found in these Pacific POWs was due to their unsanitary living conditions in the Pacific POW camps. Nardini noted the presence of severe diarrhea leading to dysentery in these camps.[23]

Unlike the abovementioned studies of particular diseases conducted by POW physicians, some of the studies performed at repatriation reported on the whole array of physical conditions discovered during the repatriation physical examination. For example, Wright and Van Ravenswaay described most of the above mentioned diseases, as well as others, in their summary of the findings of the "Morgan Board", which described the results of the repatriation examination given American POWs returning from the Pacific Theater.[24] The existence of most of these malnutrition-related diseases is also chronicled by McDaniel in his report of the physical examinations conducted on American aviators newly liberated from prison camps in Japan.[25] The existence of most of these same diseases (as well as other disorders such as spastic paraplegia and anemia) were also noted by Smith and Woodruff in their comprehensive study for the British government of the physical effects of captivity on English and Australian troops detained in Japanese POW camps during World War II.[26] Burgess' account of the physical disabilities of POWs on Singapore provides another thorough reference to the physical effects of internment upon British Commonwealth POWs.[27] In their studies of repatriated Vietnam POWs, Berg and Richlin not only discuss most of the above mentioned POW illnesses, but also described POW injuries.[28] Examples of such injuries are fractures and dislocations sustained by Vietnam POWs during aircraft ejection at the time of shoot-down or during torture while in prison.

Follow-Up Studies of Residual Disabilities

The POW physician authors of many of the abovementioned studies acknowledged that they had conducted only one-time studies which needed to be followed-up if definitive conclusions were to be drawn on the ultimate residuals of particular POW-related physical disabilities. However, many of these follow-up studies of particular diseases never materialized. Consequently, information on the long-term effects of POW physical disabilities is currently found not in detailed studies of certain diseases in specific POW groups but rather in broad epidemiological studies of a host of physical problems conducted on large, representative samples of entire POW and/or concentration camp populations.

One such follow-up analysis was the report of the World Veterans Association 1961 International Conference on the Later Effects of Imprisonment and Deportation which identified a process of "premature aging" - characterized by memory deficits, decreased powers of

concentration, and increased fatigue - in former World War II concentration camp inmates and POWs. After analyzing a wide variety of studies on representative samples of concentration camp inmate and POW-populations, the report declared: "In conclusion, the Conference was of the opinion that there exists ailments and disabilities which appear long afterwards among persons who were interned or imprisoned in concentration camps. . .These effects can also be found among former POWs who lived under exceptional conditions of stress. The conference was of the opinion, on the basis of the above medical conclusions, that it is necessary to eliminate for the persons concerned all legal time limits for submitting applications in connection with disabilities."[29] Delayed Disease and Ill Health, a book published in 1969 by the Norwegian Association of Disabled Veterans, was another follow-up analysis which outlined the variety of long-term physical disabilities which are manifest in survivors of concentration and POW camps.[30]

In a 20 year follow-up study of Norwegian political prisoners deported to Germany during World War II, Eitinger and Strom found a significantly higher morbidity and mortality in the prisoner group as compared to the Norwegian general population control group.[31] In particular, significantly higher morbidity rates for the prisoners were found for diseases of the nerves, lungs, digestive tract, muscles, and bones. The most excessive cause of death among the prisoners, as compared to controls, was tuberculosis.

Eitinger and Strom concluded that the higher mortality and morbidity resulted from the excessive stress that the former prisoners experienced, as it lowered their resistance to infection, and permanently lessened their ability to adjust to environmental changes. They contend that to this day the former prisoners are vulnerable to all kinds of stress which can upset their equilibrium and result in a manifest illness. They stated that, "the limited sentence that internment in a concentration or prison camp was intended to be has thus become a life-long sentence, affecting both the prisoners' life spans and their health".

Thygesen surveyed the long-term physical effects of incarceration on Danes who were deported to Germany for being resistance fighters.[32] He described the physical effects of their internment in terms of an abnormal incidence of such symptoms as wrinkled face and pale skin, weight loss, muscle and joint pains, periodic diarrhea, gastrointestinal diseases such as ulcers, excessive nocturnal sweating, heart palpitations, headaches, dizziness, dermatitis, reduction in libido, and recurrent infections. Thygesen confirmed the existence of one or more of the above problems in approximately one-half of the former prisoners more than 20 years after liberation. Thygesen also contends that while the Nazi concentration camp internment which his Danish population experienced was much more severe than that undergone by POWs, the two experiences were comparable in kind if not in degree. Thygesen also points out that there were pathological

conditions in the POW camps which, in many respects, were similar to those to which concentration camp inmates were subjected.

Several long-term mortality and morbidity studies address the physical effects of imprisonment on Canadian troops in the Far East during World War II. Fisher found spinal degeneration in post-mortem examinations of 11 Canadian POWs performed four to seven years after liberation.[33] Adamson, in a study of 482 Canadian POWs completed over 10 years after their repatriation, reported an excessive amount of gastrointestinal, neurological, and cardiovascular problems in his sample of POWs.[34] The post-mortem studies done on those POWs in the sample who died before the completion of the study, showed a significant amount of spinal degeneration and optic atrophy.

Coke studied 391 former Canadian POWs for 12 years after repatriation. Each former prisoner was given a physical examination at least annually.[35] Coronary artery disease was the most common cause of death, particuarly in the younger age groups. The incidence of cirrhosis of the liver was also found to be excessive.

Richardson, in a 19 year follow-up study of Canadian POWs of the Japanese, matched 100 former prisoners with their brothers, who had wartime service but were not POWs.[36] Of the 100 prisoners, 95 had been granted pension entitlement by the Canadian Pension Commission for avitaminosis with residual effects associated with their captivity. It was found that the former prisoners had more peptic ulcers and their dental health was inferior. However, no significant difference was found in the rate of cardiovascular disease between the former prisoners and their controls.

Richardson also compared causes of death of former Canadian POWs with those of Canadian males of roughly the same age. The number of deaths of former POWs over the follow-up period was not significantly greater than the number expected in the Canadian male population. However, there was a significant excess of deaths from heart disease. There was also a significantly higher number of POW deaths from accidents, violence, and poisoning over the entire follow-up period. Mortality from pulmonary tuberculosis was excessive in the early post-war years, but thereafter it was similar to that of other Canadian males.

In another Canadian POW study conducted 28 years after liberation, Hermann compared the morbidity of Canadian POWs held in Europe during World War II with a control group of Canadian non-POW veterans.[37] The control group was comprised of a number of Dieppe veterans who returned from the operation of 1942 and went on to serve until the end of World War II. Dieppe veterans who were taken POW were included as part of the group. In the questionnaire survey, it

was found that significantly more former POWs reported premature aging as being responsible for deterioration in their health than did the non-POWs. The former prisoners of war also showed a significantly higher death rate at an earlier age than did their controls. The Dieppe POWs had a mortality rate higher than the non-POWs and the rest of the POW group. The death rate from cardiovascular disease was much higher for the Dieppe POWs than for other POWs or non-POWs.

An Australian study by Freed and Stringer compared the mortality among 14,000 repatriated Australian POWs of the Japanese with that of the general Australian male population of the same age.[38] It was found that, during the period 1946-1963, there was no significant difference between the overall mortality of the former POWs and the Australian male population. However, there was a greater than expected mortality in the younger POWs, with excessive deaths from suicides and accidents. The excess of deaths among the former POWs from pulmonary tuberculosis and cirrhosis of the liver was also highly significant.

The National Academy of Sciences-National Research Council (NAS-NRC) has conducted four follow-up studies of American POWs. The first of these studies was by Cohen and Cooper.[39] Their analysis of mortality data, covering the first six years after liberation, showed that American POWs of the Japanese, when compared with controls, experienced a marked excess of mortality during the first two years after liberation and a diminished but apparently persistent excess during the following four years. Tuberculosis and accidents were the causes of death principally responsible for the excess mortality. American POWs who were held in European POW camps showed no excess mortality during the six-year follow-up period. The European POWs did not exhibit a great deal more illness than their controls. However, they did show a relative excess of malnutrition residuals, psychoneurosis, and gastrointestinal disorders.

Cohen and Cooper also found that Pacific POWs exhibited a wide variety of diseases which occurred far more frequently than those exhibited by their controls. The conditions which were noticeably more frequent and persistent among the Pacific POWs were tuberculosis, residuals of malnutrition, psychoneurosis, opthalmological changes, gastrointestinal disorders, and cardiovascular conditions. Nefzger extended Cohen and Cooper's mortality follow-up of World War II POWs through 1965.[40] He found that the mortality rate among Pacific POWs of World War II, which had been significantly greater than the rate among controls during the immediate post-war years (1946-1949), diminished so that by the mid-1950s, mortality of the Pacific POWs and their controls was virtually indistinguishable. The early excess of mortality among the Pacific POWs was the result of trauma -- suicides, homicides, accidents -- tuberculosis, and cirrhosis of the liver. Nefzger also observed that Pacific POW deaths from chronic and degenerative diseases -- arteriosclerosis, malignancies -- were not significantly different from that of controls.

Nefzger explained how each of these significant causes of Pacific POW death could be due to the POW experience. He noted that the excess of tuberculosis deaths was probably due to malnutrition during imprisonment. He also implied that the excess of trauma could be due to the stress of the Pacific POW experience. Finally, he noted that the excess cirrhosis could be due to malnutrition during imprisonment or post-repatriation alcohol abuse related to stress of internment.

Nefzger discovered that European Theater POWs had no significant excess mortality through 1965. Nefzger also found that Korea POWs which he had added to the Cohen and Cooper sample, experienced a substantial early excess of deaths relative to their controls, with a disappearance of this excess in later years. Trauma was the most common cause of excess death among the younger Korea POWs.

In the third NAS-NRC follow-up study, Beebe found that in addition to psychiatric residuals, the former Pacific and Korea POWs suffered far more from tuberculosis and other infective and parasitic diseases than did their controls or the European POWs.[41] The former Pacific Theater POWs also sustained a significant excess of morbidity from nutritional disorders in every four-year follow-up interval between 1946 and 1965. Diseases discovered included neuritis, peripheral nerve, eye, and related disorders; diseases of the intestines, liver, and other digestive organs; genito-urinary tract diseases; and bone diseases during most of the intervals. During the last interval (1962-1965), the admission rate for arteriosclerosis was higher among the former Pacific POWs than among their controls. This finding caused Beebe to remark that the extent of arteriosclerosis in former POWs and controls should be carefully monitored by further studies to determine to what extent it can be considered POW-related. Finally, Beebe found no significant difference between POW and control groups as to the amount of organic brain dysfunction.

The most recent NAS-NRC follow-up study by Keehn has extended the previous mortality surveillance by Cohen and Cooper and Nefzger through 1975.[42] In his yet to be published study, Keehn noted that the increased death rate in Pacific POWs relative to their controls was attributable to trauma, tuberculosis, and cirrhosis, and for Korea POWs, trauma and cirrhosis. Former European POWs did not have a significantly excessive death rate relative to controls. Among Pacific and Korea POWs, the most important cause of excess death appeared to be trauma. Suicide apparently was the cause for two-thirds of the excess trauma among the former Pacific POWs, with accidents and homicide being responsible for the remainder. Among the former Korea POWs, accidents and homicides seem to be responsible for the increased number of deaths due to trauma. Keehn reiterated many of Nefzger's explanations concerning the connection of excess trauma and cirrhosis to the POW experience. Keehn confirmed Nefzger's finding that the

remaining amount of POW deaths, those due mainly to malignancies and other chronic and degenerative diseases, was not significantly different from that of controls.

POW PSYCHOLOGICAL PROBLEMS

Concentration Camp Literature

The bulk of the medical evidence on the psychological effects of the POW experience comes from studies of Nazi concentration camp victims. While the concentration camp was certainly different in degree from the POW camp, as the former was designed for extermination while the latter was intended for incarceration, it is also recognized in the literature that the two experiences can be classed as being of the same kind. As Segal points out: "By common consensus, concentration camp survivors endured an experience unique in the annals of human history. Nevertheless, the behavioral consequences of concentration camp trauma can be seen as reflecting problems of readaptation which all former prisoners share".[43] Baker supports this line of reasoning when he notes that "Studies of prisoners held in military prisons or in concentration camps in World War II and onward to the present, have revealed an impact on health and behavior from captivity which is relatively constant across nations, wars, and cultures".[44]

"K-Z Syndrome"

Most of the medical literature in this area is of a long term nature, as the first major articles on concentration camp problems did not appear in the medical literature until about 15 years after the end of World War II, when concentration camp survivors had returned to their own countries or had attempted to find a new life elsewhere.[45]

Scientific studies, based on clinical observations and experimental control group research designs, were conducted in such countries as Israel,[46] Denmark,[47] Norway,[48] Canada,[49] and the United States.[50] These studies all suggested an abnormally high incidence of psychiatric disorders among Holocaust survivors. The descriptions of these disorders focused on various aspects of what has come to be known as the "concentration camp (K-Z) syndrome". This condition was first called "repatriation neurosis", but was subsequently replaced by the term "concentration camp syndrome" or "K-Z syndrome". "K-Z" is taken from the German abbreviation for concentration camp (Konzentrationslager).

Chodoff[51] and Eitinger[52] have provided the most thorough summary of the various symptoms of the K-Z syndrome. It is characterized by general anxiety, accompanied by instability, restlessness, nervousness, and a startle reaction to such ordinary stimuli as the ring of

a telephone. These anxiety symptoms are usually worse at night, and are accompanied by insomnia and nightmares that are "acted out" recollections of traumatic prison camp experiences.

Krystal confirms these symptoms by reporting that concentration camp survivors suffer a marked reduction in general level of functioning and a pronounced tendency to insomnia and nightmares.[53] In some cases, the general anxiety is focused on a particular object, resulting in a specific phobia, e.g., fear of crowds or closed-in rooms. The K-Z syndrome is also characterized by psychosomatic complaints, such as headaches, fatigue, and gastro-intestinal or cardiovascular pains. Haas confirms this finding by observing widespread fatigue among concentration camp inmates and military prisoners of World War II.[54] Frequent lapses of memory and concentration are also characteristic for the K-Z syndrome.

The victim may be obsessed with his past, either through constant recollections of his imprisonment or frequently idealized imaginings of pre-incarceration days. Two very common symptoms are depression and apathy, which usually manifest themselves in loss of initiative. The "K-Z syndrome" also features "moodiness" and emotional instability, which results in swings from apathy and passivity to aggression and hostility and back again. Yet another symptom is a feeling of insufficiency, i.e., an inferiority complex.

Yet, another K-Z symptom is associated with what Chodoff has called "survivor guilt", a feeling of guilt the victim has for having survived when so many others close to him have died.[55] The 1961 International Conference on the Later Effects of Imprisonment and Deportation, as well as the publication Delayed Disease and Ill Health, document the overall psychological effect of the K-Z syndrome on the former concentration camp inmate in terms of premature aging, which is associated with memory deficits, a decreased capacity for concentration, and increased fatigability.

The onset of the K-Z syndrome is usually shortly after liberation, although in some cases its remains latent, not becoming apparent until years later. Meerloo has described the clinical progression of the condition--an initial, acute attack of anxiety, apathy, depression, aggression and/or psychosomatic complaints followed by an "incubation" period in which these feelings are suppressed.[56] This phase--which may last years--is called the "bridge period". The psychological defense mechanisms used for emotional suppression during this period eventually disappear, culminating in a reappearance of the original anxiety and related symptoms in chronic form. Baker estimates that as many as 80 percent of former concentration camp inmates still suffer from residuals of the K-Z syndrome.[57]

. The K-Z syndrome has manifested itself not only among Scandinavian and Jewish concentration camp inmates, but also among various prisoner of war populations, including Canadian, French and American POWs. A study by Kral of World War II Canadian POWs 20 years after their internment revealed a high incidence of anxiety, depression, nervousness, irritability, and poor memory.[58] A study by Juillet and Moutin of French POWs from World War II showed them to be suffering from depression and related psychiatric problems.[59]

The studies of the K-Z syndrome and related psychological residuals among American veterans have focused on POWs from the World War II Pacific Theater. Brown, himself a former Pacific Theater POW, describes the severe and chronic post-repatriation anxiety experienced by this group as the "Japanese POW Syndrome".[60] Brill, in a psychological analysis of World War II Pacific Theater POWs, observes that "overt anxiety was by far the most common single symptom presented".[61] He notes that the anxiety increased, rather than diminished, with the passage of time after liberation. He further describes this "Japanese POW Syndrome" in terms of apathy, listlessness, lack of initiative and spontaneity in the returnees. Strassman and Schein observed many of the same symptoms in repatriatiated Korea POWs.[62] They describe an "apathy syndrome" characterized by listlessness, lack of initative and spontaneity, and slowed reactions. They declared that this "apathy syndrome" (also called "Zombie reaction")[63] continues to be apparent in the individual even when he is no longer in the stressful environment of captivity.

Another K-Z syndrome symptom--emotional moodiness--manifested itself in former Korean POWs.[64] The initial apathy gave way, after a few days of freedom, to feelings of euphoria, which in turn were replaced by chronic anxiety. The course of this behavior conforms to the usual progression of the K-Z syndrome--initial apathy and anxiety, followed by an emotional "bridge period", and then the reappearance of the original anxiety. Emotional instability in Korea POWs was also noted by Lifton in psychiatric interviews conducted during the ocean voyage home.[65] Lifton presents the initial reaction of the liberated POWs as being surprisingly unenthusiastic immediately following release. This initial apathy was followed by expression of overt hostility towards associates and superiors. This behavior was described by Lifton as an attempt at emotional "muscle flexing", i.e., an attempt by the former POW to regain the full range of his emotions after months of emotional suppression.

Wolf and Ripley noticed the symptoms described by Lifton in repatriated World War II Pacific Theater POWs.[66] Their study noted that the repatriated POWs were first quite selective and taciturn, and that this attitude eventually turned into resentment and hostility directed toward peers and superiors. The fact that this aggression was directed toward friends rather than the enemy was a sign of emotional displacement, as directed hostility shown to the captor could have resulted in severe disciplinary measures or even death.

Brainwashing

A unique form of stress to which American POWs in Korea were subjected was known as "brainwashing". Called "thought reform" by the Koreans and Chinese, it was an attempt to politically indoctrinate American POWs in Korea through isolation and torture in order to get them to produce confessions and otherwise cooperate with the Communist cause. Chodoff contends that, "Although differing from each other in important respects, brainwashing and Nazi oppression are both unmistakable instances of coercive force pushed to its utmost extent against defenseless individuals confined within tightly controlled environments".[67] Chodoff's statement demonstrates that victims of this type of treatment - inmates of the Nazi concentration camps, as well as American POWs in the World War II European and Pacific Theaters - shared an experience not unlike that of American POWs in Korea.

"Brainwashing" in Korea was apparently severe enough that 21 American POWs in Korea were reported to have refused repatriation. Mayer popularized the notion that this was evidence that the mental and moral fiber of the American fighting man had been eroded due to failure of the pre-military environment--home, school, church--to instill patriotic values in the citizenry.[68] This hypothesis was further publicized by Kinkead in his book In Every War But One.[69] Kinkead noted that other United Nations forces, such as the Turks, maintained stronger descipline and did not "break". Biderman refuted this Mayer-Kinkead hypothesis in March to Calumny, in which he pointed out that the percentage of American "turncoats" was no larger in Korea than in any other of this country's wars, and that, furthermore, given the extreme psychological stress of the Korean POW "brainwashing" experience, American POWs performed better than could be expected under the circumstances.[70] Biderman explained the greater steadfastness of Turkish and other U.N. forces by pointing out that they were recruited from elite all-volunteer units in countries with largely homogeneous populations. By contrast, the average American POW was much more apt to be a draftee and was part of a racially and ethnically mixed force which reflected the diverse American population from which it came.

Social and Family Problems

Difficulty in social readjustment is a definite residual of the POW experience. Repatriated American POWs held by Korea were initially stereotyped as "turncoats" by the general population, based on those few who chose not to return. As Biderman points out, Korea POWs experienced difficulty in social readjustment emanating from this stigma.[71] Segal has observed how Vietnam POWs often experienced an initial period after repatriation when adaptation to the existing culture was difficult, as political, moral, and social mores had changed significantly during their period of captivity, which was the longest period of internment of any group of American POWs.[72]

Such social readjustment problems result in greater demand for psychiatric hospitalization and compensation payments. Eitinger and Strom contend that this is certainly the case with former concentration camp inmates, as they show that in Norway, former inmates suffered an abnormal amount of psychological illness for which they filed a disproportionate amount of disability claims.[73] A similar conclusion was reached in studies by Hermann and Richardson of World War II Canadian POWs from Europe and the Pacific. These Canadian studies found higher rates of unemployment among POWs than for their controls, stemming from their psychological inability to readapt to the work environment.

Beebe's follow-up morbidity study of American World War II and Korea POWs cites psychiatric residuals resulting in significantly increased hospitalization rates among POWs as compared to controls. These psychological residuals were also responsible for a higher amount of VA disability compensation being awarded POWs relative to their non-POW veteran controls. Beebe concluded, based upon responses to a questionnaire concerning psychological maladjustment, that former American POWs of the Japanese and Koreans had significantly higher hospital admission rates for psychoneurosis and psychosis (schizophrenia). European Theater POWs did not have as high an admission rate for these conditions, although they did not go "unscathed".[74] In Nefzger's follow-up morbidity study of American World War II and Korea POWs, it was suggested that the significantly higher amount of POW deaths due to trauma and cirrhosis could well be related to the psychological stress of the POW experience.[75]

Further research is needed to confirm whether the psychosocial residuals of the POW experience include alcoholism and a concomitant likelihood of sudden or violent death, as well as higher unemployment and hospitalization rates.

The former POW relationship with his immediate family, as well as with society as a whole, can also be adversely affected by his internment. Sigal reported that a sample of children of concentration camp survivors had more behavioral problems than controls.[76] McCubbin, Hunter, and Benson conducted a study of the families of American World War II and Korea POWs.[77] They discovered that the former POW's heightened irritability, chronic fatigue, and emotional instability made it increasingly difficult for him to assume the traditional role of father as family disciplinarian. Family studies on Vietnam POWs are still underway, and no substantive conclusions have as yet been reached concerning the effects, if any, of the Vietnam POW's internment upon his wife and children.

Psychological Survival Factors

Despite all the personal, social, and family psychological problems that former concentration camp inmates and former POWs have endured, many of them have not only been

able to survive but also adjust satisfactorily to their post-repatriation environment. Matussek points out that those concentration camp inmates who survived were more socially active than their fellow inmates, accommodated themselves better to the guards, and had a pre-internment background characterized by a stable, harmonious family life.[78] Ford and Spaulding, in a study of U.S.S. Pueblo POWs, discuss those psychological defense mechanisms which helped American POWs to survive such an ordeal.[79] These defense mechanisms include not only the repression of direct hostility toward the captor but also the emergence of a schizoid tendency towards denial and rationalization, reliance on religious faith, stoicism, and a sense of irony or humor.

Nardini, himself a former Pacific Theater POW, notes that among his fellow prisoners it was the inability to take the "emotional shock"[80] of suddenly finding oneself a prisoner (Stenger calls this phenomenon "Life-style shock",)[81] coupled with the reactive depression that sets in once the impact of one's changed status became apparent, that caused a POW to lose the "will to live". Former Korea POW physician Anderson noted that the Korea POWs called this "give-up-itis".[82] The loss of this will to live led to apathy, withdrawal and a general inability to care for oneself, with death as the result. Strassman and Schein contend that, while a certain amount of withdrawal is a necessary defense mechanism to maintain personality integration in the face of the psychological stress of the POW experience, the manifestation of an extreme degree of apathy will probably lead to the loss of the will to live and eventually death.[83]

Eitinger has discussed those personality factors which enable former concentration camp inmates and other prisoners to adjust beyond the period of captivity.[84] He notes that it is devotion to a cause which enabled concentration camp survivors like himself to bear their psychological burden and to work productively in the years following captivity. Whether it was art, music, or religious faith that they used as their "escape valve", those captives who saw beyond the immediate pain to a better day managed to ward off psychological collapse and rebuild their lives.

Antonovsky further elaborates on this point by stating that concentration camp survivors who made successful adaptations to post-war life had either an initial underlying strength, a subsequent environment which provided opportunities to reestablish a satisfying existence or had undergone a "hardening" process which allowed the survivor to view current stress with equanimity.[85] Kushner, the sole Vietnam POW physician, notes that one view of the POW experience is that it serves to strengthen character and put life in perspective.[86] Despite such testimonials of mental resiliency, the bulk of the medical evidence emphasizes the harsh effects of the concentration camp/POW experience on the average inmate or POW, who usually does not have such uniquely strong psychic resources.

Even when the former concentration camp inmate or POW manages to successfully adapt to his post-repatriation environment, he still bears what Segal has termed the "psychic scars" of his experience.[87]

SUMMARY

This literature review of the health problems of former POWs includes eyewitness accounts of disabilities during captivity as well as epidemiological follow-up studies, analyses of concentration camp as well as POW populations, and discussions of former POW family and social problems. All of these references point out that residuals of physical and psychological disabilities suffered during captivity still affect the current health status of these former POWs.

This literature on former POW physical problems shows that they manifested a significantly higher amount of particular types of diseases - e.g., beriberi, optic atrophy, malaria, parasitic infection - upon repatriation which were related to the malnutrition, torture, climatic exposure, and other deprivations of internment. Epidemiological follow-up studies of former POWs indicate that residuals of these and other disabilities have persisted until the present time, accounting for significantly higher post-repatriation mortality and morbidity rates among former POWs relative to other veterans and control groups.

The literature on the psychological problems of former POWs, especially those of World War II, demonstrates that their mental state closely resembles that of another type of World War II victim - concentration camp survivors. The international studies in this area indicate that former POWs have many of the following symptoms of the concentration camp survivor "K-Z syndrome": general anxiety and nervousness, "startle" reaction, insomnia and nightmares, phobias, psychosomatic complaints, memory lapses, moodiness, inferiority complex, obsession with the past, depression, apathy, and "survivor guilt." The psychological literature also indicates that the "K-Z syndrome," "brainwashing," and other forms of psychic stress during internment has resulted in a signigicantly higher amount of family and social maladjustment as evidenced by inadequate functioning in father/parent roles, and higher rates of unemployment and disability compensation.

While the literature on former POW health problems is helpful in pointing out the relationship between their current physical and psychological problems and the malnutrition and stress of their internment, it still leaves unanswered many important questions - e.g., Is the excess number of deaths due to trauma and cirrhosis directly related to the POW experience? Is arteriosclerosis in former POWs directly related to the stress of internment? Questions such as these can be definitively answered only by further scientific study.

The nature of former POW physical and psychological problems - and the interdependence of both in affecting the overall health status of former POWs is best summarized in the following observation by Segal:

> "The environment of POW captivity typically combines a potent blend of physical hardship and deprivation, on the one hand, and enormous psychological stress and trauma on the other. It would be foolhardy indeed to distinguish the relative impact of each of those factors on the post-captivity health status of repatriates, but it is clear in any case that survivors of the POW experience, are at risk for a staggering range of physical disabilities and (psychological) symptoms that can be ascribed to the overall captivity episode."[88]

FOOTNOTES

[1] F. Hocking, "Starvation: Social and Psychological Aspects of a Basic Biological Stress," Australian Medical Association, Archdall Medical Monograph No. 6, 1969, pp. 1-20.

[2] Paul Thygesen, Knud Hermann, and Rolf Willanger, "Concentration Camp Survivors in Denmark: Persecution, Disease, Disability, Compensation," Danish Medical Bulletin, Vol. 17, Nos. 3-4, (March - April, 1970), pp. 65-106.

[3] R. Hibbs, "Beriberi In Japanese Prison Camp," Annals of Internal Medicine, Vol. 25, No. 2, (August, 1946) pp. 270-282.

[4] John Nardini, "Vitamin Deficiency Diseases in Allied Prisoners of the Japanese," Naval Medical Bulletin, Vol. 47, No. 2, 1947, pp. 273-8.

[5] C. J. Katz, "Neuropathologic Manifestations Found in a Japanese Prison Camp," Journal of Nervous and Mental Diseases, Vol. 103, No. 5, (May, 1946), pp. 456-465.

[6] M. Fisher, "Residual Neuropathological Changes in Canadians Held Prisoners of War by the Japanese," Canadian Services Medical Journal, Vol. 11, (March, 1955), pp. 157-199.

[7] Russell Alleman and Gene Stollerman, "The Course of Beriberi Heart Disease in American Prisoners of War in Japan," Annals of Internal Medicine, Vol. 28, 1948, pp 948-961.

[8] Robert Lewis, "Painful Feet in American Prisoners of War," U.S. Armed Forces Medical Journal, 1950, pp. 146-157.

[9] William Fischbach, "Cardiac and EKG Observations on American POWs Repatriated From Japan," Naval Medical Bulletin, Vol. 48, No. 1, (January- February, 1948), pp. 69-74.

[10] Samuel Bloom, Earl Mertz, and William Taylor, "Nutritional Amblyopia in American Prisoners of War Liberated From the Japanese," American Journal of Opthalmology, Vol. 29, No. 12, 1946, pp. 48-57.

[11] P. G. Bell and J. C. O'Neill, "Optic Atrophy in Hong Kong Prisoners of War," Treatment Services Bulletin, Canadian Department of Veterans Affairs, September, 1947, pp. 43-47.

[12] J. Baird and D. Macdonald, "Survey of Optic Atrophy in Hong Kong POWs After Ten Years," Canadian Services Medical Journal, Vol. 12, 1956, pp.485-493.

[13] M. Musselman, "Nutritional Diseases in Cabanatuan," War Medicine, Vol. 8, 1945, pp. 325-332.

[14] Katz, Neuropathological Manifestations, pp.456-465.

[15] Ibid., pp. 456-465.

[16] M. L. Gottlieb, "Impressions of a POW Medical Officer in Japanese Concentration Camps," Naval Medical Bulletin, Vol. 46, No. 5, (May, 1946), pp. 663-673.

17 E. C. Jacobs, "Gynecomastia Following Severe Starvation," Annals of Internal Medicine, Vol. 28, 1948, pp. 792-796.

18 E. C. Jacobs, "Oculo-Oro-Genital Syndrome: A Deficiency Disease," Annals of Internal Medicine, Vol. 35, 1951, pp. 1049-1054.

19 R. Simons, "Nutritional Disorders of the Skin Among Prisoners of War in the Far East," British Journal of Dermatology, Vol. 61, 1949, pp. 210-215.

20 E. C. Jacobs, "Effects of Starvation on Sex Hormones in the Male," Journal of Clinical Endocrinology, Vol. 8, 1948, pp. 227-232.

21 H Starkey and J. Poole, "Survey of Intestinal Parasites in Repatriated POWs from Hong Kong," Treatment Services Bulletin, Canadian Department of Veterans Affairs, Vol. 11, No. 8, 1947. pp. 1-15.

22 T. Williams "Intestinal Parasites - A Survey of Repatriated Hong Kong POWs," Treatment Services Bulletin, Canadian Department of Veterans Affairs, April, 1947, pp. 24-25.

23 Nardini, Vitamin Deficiency Diseases in Allied Prisoners, pp. 273-278.

24 H. Morgan, I. Wright and A. van Ravenswaay, "Health of Repatriated Prisoners of War From the Far East," Journal of the American Medical Association, April 13, 1946, pp. 995-999.

25 F. McDaniel, B. White, and C. Thompson, "Malnutrition in Repatriated Prisoners of War," Naval Medical Bulletin, Vol. 46, (June, 1946), pp. 793-810.

26 Dean Smith and Michael Woodruff, Deficiency Diseases in Japanese Prison Camps, Medical Research Council: Special Report Series No. 274, (London: His Majesty's Stationery Office, 1951), pp, 168-172.

27 R. C. Burgess, "Deficiency Diseases in Prisoners of War at Changi, Singapore," Lancet, September 1946, pp. 411-418.

28 William Berg and Milton Richlin, "Injuries and Illnesses of Vietnam War POWs I. Navy POWs," Military Medicine, July, 1977, pp. 514-518.

29 World Veterans Association, "Proceedings of the International Conference on the Later Effects of Imprisonment and Deportation," The Hague, November 20-25, 1961, pp. 10-11.

30 Arve Lonnum, Delayed Disease and Ill Health, Norwegian Association of Disabled Veterans, 1969, pp. 9-107.

31 Leo Eitinger and Axel Strom, Mortality and Morbidity After Excessive Stress, New York: Humanities Press, 1973, pp. 9-150.

32 Thygesen, Hermann, and Willanger, Concentration Camp Survivors in Denmark, pp. 65-106.

33 Fisher, Residual Neuropathological Changes in Canadians, pp. 157-199.

34 J. D. Adamson and D. Brereton, "Ultimate Disabilities in Hong Kong Repatriates," Treatment Services Bulletin, Canadian Department of Veterans Affairs, April, 1948, pp. 5-10.

35 L. Coke, "Late Effects of Starvation," Canadian Medical Services Journal, Vol. 17, May 1961, pp. 313-324.

36 H. J. Richardson, Report of a Study of Disabilities and Problems of Hong Kong Veterans, 1964-65, Canadian Pension Commission, 1965, pp. 3-82.

37 J. Hermann, Report to the Minister of Veterans Affairs of a Study on Canadians Who Were Prisoners of War in Europe During World War II, Ottawa, 1974, pp. 4-56.

38 George Freed and Peter Stringer, "Comparative Mortality Experience 1946-63 Among Former Australian Prisoners of War of the Japanese," Medical Research Bulletin, December. 1968, pp. 4-28.

[39] Bernard Cohen and Maurice Cooper, A Follow-Up Study of World War II Prisoners of War, Washington D. C.: Veterans Administration Medical Monograph. September, 1954, pp. 1-81.

[40] Dean Nefzger, "Follow-Up Studies of World War II and Korean War Prisoners, I. Study Plan and Mortality Findings," American Journal of Epidemiology, Vol. 91, No. 2, 1970, pp. 123-138.

[41] Gilbert Beebe, "Follow-Up Studies of World War II and Korean War Prisoners, II: Morbidity, Disability, and Maladjustments," American Journal of Epidemiology, Vol. 101, No. 5, 1975, pp. 400-422.

[42] Robert Keehn, "Follow-Up Studies of World War II and Korean War Prisoners, III: Mortality to 1 January 1976," accepted for publication in American Journal of Epidemiology, 1980.

[43] Julius Segal, Edna Hunter, and Zelda Segal, "Universal Consequences of Captivity: Stress Reactions Among Divergent Populations of Prisoners of War and Their Families," International Social Journal, Vol. 28, No. 3, 1976, p. 599.

[44] Stewart Baker, "Traumatic War Disorder," in Comprehensive textbook of Psychiatry, Baltimore, 1980, pp. 57-8.

[45] Julius Segal, Long-Term Psychological and Physical Effects of the POW Experience: A Review of the Literature, Report No. 74-2, San Diego, Ca: Naval Health Research Center, 1974, p. 7.

[46] H. Klein, J. Zellermayer, J. Shanon, "Former Concentration Camp Inmates in a Psychiatric Ward," Archives of General Psychiatry, Vol. 8, 1963, pp. 334-42.

[47] Thygesen, Hermann, Willanger, Concentration Camp Survivors in Denmark, pp. 65-106.

[48] Axel Strom, "Examination of Norwegian Ex-Concentration Camp Prisoners," Journal of Neuropsychiatry, Vol. 4, 1962.

[49] V. A. Kral, "Psychiatric Observations Under Severe Chronic Stress," Canadian Services Medical Journal, September 1951, pp. 185-192.

[50] E. C. Trautman, "Fear and Panic in Nazi Concentration Camps: A Biosocial Evaluation of the Chronic Anxiety Syndrome," International Journal of Social Psychiatry, Vol. 10, pp. 134-41.

[51] Paul Chodoff, "Late Effects of the Concentration Camps as a Psychological Stress," Archives of General Psychiatry, Vol. 8, 1963, pp. 323-333.

[52] Leo Eitinger, "Pathology of the Concentration Camp Syndrome." Archives of General Psychiatry, Vol. 5, pp. 371-9.

[53] "Prisoner-Camp Syndrome Found Widespread," Medical World News, April 2, 1965, p.53.

[54] Ibid, p. 52.

[55] Chodoff, Late Effects of the Concentration Camps as a Psychological Stress, pp. 323-333.

[56] J. Meerloo, "Persecution Trauma and the Reconditioning of Emotional Life: A Brief Survey," American Journal of Psychiatry, Vol. 125, 1969, pp. 1187-1191.

[57] Baker, Traumatic War Disorder, p. 68.

[58] V. A. Kral, L. H. Pazde, B. Wigdor, "Long-Term Effects of a Prolonged Stress Experience," Canadian Psychiatric Association Journal, Vol. 12, pp. 175-181.

[59] P. Juillet and P. Moutin, Psychiatrie Militaire, Paris: Masson, 1969, p. 209-13.

[60] Charles Brown, "The Japanese POW Syndrome," Diseases of the Nervous System, Vol. 10, No. 11, (November, 1949), p. 1.

[61] N. Q. Brill, "Neuropsychiatric Examinations of Military Personnel Recovered from Japanese Prison Camps," Bulletin U.S. Army Medical Department, Vol. 5, 1946, pp. 429-38.

62 Harvey Strassman, Margaret Thaler, and Edgar Schein, "A Prisoner of War Syndrome: Apathy as a Reaction to Severe Stress," American Journal of Psychiatry, Vol. 112, 1955, pp. 998-1003.

63 H. A. Segal. "Initial Psychiatric Findings of Recently Repatriated Prisoners of War," American Journal of Psychiatry, Vol, 111, 1954, pp. 358-363.

64 Ibid., pp. 358-363.

65 R. J. Lifton, "Home By Ship: Reaction Patterns of American Prisoners of War Repatriated From North Korea," American Journal of Psychiatry, Vol. 110, 1954, pp. 732-9.

66 S. Wolf and H. S. Ripley, "Reactions Among Allied Prisoners of War Subjected to Three Years of Imprisonment and Torture By the Japanese," American Journal of Psychiatry, Vol. 104, 1947, pp. 180-193.

67 Paul Chodoff, "The German Concentration Camps As a Psychological Stress," Archives of General Psychiatry, Vol. 22, 1970, pp. 78-87.

68 W. Mayer, "Why Did So Many GI Captives Give In?" U.S. News and World Report, February 24, 1956, pp. 56-72.

69 Eugene Kinkead, In Every War But One, New York: W. W. Norton 1959, p. 1-5.

70 Albert Biderman, March to Calumny, New York: MacMillan, 1963, pp. 1-13.

71 Ibid., p. 13.

72 Segal, Hunter, and Segal, Universal Consequences of Captivity, pp. 601-606.

73 Eitinger, and Strom, Mortality and Morbidity after Excessive Stress, pp. 112-118.

74 Beebe, Follow-up Studies of World War II and Korean War Prisoners, II:, pp. 400-422.

75 Nefzger, Follow-up Studies of World War II and Korean War Prisoners, I., pp. 123-138.

76 J. Sigal, D. Silver, V. Rakoff, and B. Ellin, "Some Second-Generation Effects of Survival of the Nazi Persecution," Journal of Orthopsychiatry, Vol. 43, (April, 1973), pp. 320-327.

77 E. J. Hunter, H. I. McCubbin, Benson, The Former POW as the Family Patient, 1976.

78 P. Matussek, "Concentration Camp Survivors," Nervenarzt, Vol. 32, 1961, pp. 538-47.

79 C. Ford and R. Spaulding, "The Pueblo Incident: A Comparison of Factors Related to Coping With Extreme Stress," Archives of General Psychiatry, Vol. 29, 1973, pp. 340-343.

80 John Nardini, "Readjustment Problems of Returned Prisoners of War," Medical Service Digest, Vol. 24, 1973, pp. 17-19.

81 Charles Stenger, "Life-Style Shock," Washington, D. C.: Veterans Administration Central Office, December, 1972.

82 Clarence Anderson, Alexander Boysen, Sidney Esensten, Gene Lam, William Shadish "Medical Experience in Communist POW Camps in Korea," Journal of the American Medical Association, September 11, 1954, pp. 120-21.

83 Harvey Strassman. M. B. Thaler, Edgar Schein, "A Prisoner of War Syndrome: Apathy a a Reaction to Severe Stress," American Journal of Psychiatry, Vol. 112, June, 1956, pp. 998-1003

84 Leo Eitinger, "Concentration Camp Survivors in the Post War World," American Journal of Orthopsychiatry, Vol. 32, 1962, pp. 367-75.

85 A. Antonovsky, B. Maoz, N. Douty, H. Wirsenbeek, "Twenty-Five Years Later: Limited Study of the Sequelae of the Concentration Camp Experience," Social Psychiatry, Vol. 1971, pp. 186-193.

[86] F. Kushner, "To Live or to Die," AMEDD Spectrum; U.S. Army Medical Department, Vol. 1, 1974, pp. 16-21.

[87] Segal, Hunter, and Segal, Universal Consequences of Captivity, p. 598.

[88] Ibid., pp. 594-595.

CONCLUSIONS AND RECOMMENDATIONS

OBJECTIVE

> Public Law 95-479, Section 305 (b) - ". . . . Such report shall include recommendations for such administrative and legislative action as the Administrator considers may be necessary to assure that former prisoners of war receive compensation and health-care benefits for all disabilities which may reasonably be attributed to their internment."

INTRODUCTION

This study of former POWs includes the following: a description of the repatriation procedures, including physical examinations, for former POWs and an analysis of the adequacy of such procedures and the resultant medical records; a review of the types and severity of disabilities of former POWs in various theaters at various times; an analysis of former POW health care and compensation procedures; and a survey of the medical literature on the health problems of former POWs. Original data (in the form of a data comparison and claims folder review) and published information were used to arrive at certain findings concerning each of these study areas.

MAJOR FINDINGS

One finding which is essential for understanding this entire study is that the POW experience - characterized by starvation diet, poor quality or nonexistent medical care, "death marches," executions, and torture - has historically been an extremely harsh and brutal experience.

The major finding derived from the description and analysis of repatriation procedures was that the comprehensive administrative and medical repatriation procedures written for World War II and Korea POWs were not fully implemented in the medical area. Evidence of this comes from a physician review of a representative sample of former World War II POW claims folders, which revealed that many of these records lacked repatriation examinations. Thus, the Congressional concern about the lack of repatriation examinations and resultant medical records among these former POWs is well founded. The claims folder review also demonstrated that while the medical processing of Korea POWs, as indicated by their repatriation examinations, was better than that of former World War II POWs, it was still not completely adequate. The inadequate medical processing which apparently characterized the repatriation of many former World War II and Korea POWs is not an issue among former Vietnam POWs, as they received the most thorough repatriation medical examinations and followup care of any POW group.

The principal finding from the review of the types and severity of former POW disabilities is that former POWs have a significantly higher incidence of service-connected disability. The data comparison demonstrated that former Pacific Theater POWs are the most disabled of the POW groups under study, followed closely by former Korea POWs. While not as disabled as Pacific and Korea ex-POWs, former European Theater POWs are still significantly more disabled than other World War II veterans. While conclusions about the relative disability of former Vietnam POWs must await the outcome of currently ongoing studies, it is apparent from the available morbidity and mortality data on World War II and Korea POWs that those POWs interned by an Asian captor generally received harsher treatment and suffered from more disabilities than other POWs.

The review of the types and severity of former POW disabilities also points out that the most prevalent service-connected condition of the former POWs under study, from the time of their repatriation to the present, is anxiety neurosis. A comparison of service-connected anxiety neurosis among former European Theater POWs with length of internment revealed that anxiety neurosis appears in a significantly greater amount among these former POWs than among other service-connected wartime veterans. This relationship persists regardless of the length of time in captivity.

The central finding of the analysis of law and procedures concerning former POWs is that in determining eligibility for health care benefits or in adjudicating disability compensation claims, the VA generally accords former POWs the special consideration to which they are entitled under current statutory and regulatory provisions.

The survey of the medical literature used a wide variety of sources such as national and international medical journals, followup epidemiological studies, personal accounts, and discussions of family and social issues to point out that the POW experience affects their current health status. The published medical literature indicates that many of the present physical problems of former POWs may be attributed to the malnutrition and brutality suffered during captivity, just as many of their present psychological problems can be attributed to the stress of internment.

The conclusions presented below are based on the abovementioned principal findings. Each conclusion provides the supporting rationale for a corresponding recommendation. The recommendations include both legislative and administrative actions considered necessary to assure that former POWs receive compensation and health-care benefits for all disabilities which may reasonably be attributed to their internment. The first recommendations discussed are the legislative ones; the next are the administrative ones.

Expanded Eligibility for VA Medical Care

Conclusion: The data comparison conducted as part of this study shows that a significantly greater proportion of living former POWs have service-connected disabilities than do other living veterans who served during the same period of time. Living former European Theater POWs are more than four times as likely to have service-connected disabilities, and former Pacific Theater POWs are more than five times as likely to have them as other living World War II veterans. Living former POWs of the Korean Conflict are more than 11 times as likely to have service-connected disabilities than are other living veterans of that conflict.

Our data comparison also indicates that a significantly higher proportion of living former POWs are more severely disabled - i.e., rated 50% disabled or greater - than other living veterans. Living former European POWs are about as likely to be severely disabled, but living former Pacific POWs are more than twice as likely to be severely disabled, as other living World War II veterans. Living former POWs of the Korean Conflict are almost one-and-a-half times as likely to be severely disabled as other living veterans of the Korean Conflict.

This finding of a significantly greater amount of disability among former POWs relative to other veterans is supported by the medical literature, especially the NAS/NRC epidemiological studies. The NAS/NRC data shows that former POWs generally have higher mortality and morbidity rates than their veteran controls.

The fact that former POWs have a significantly higher incidence of service-connected disabilities indicates that the former POW generally receives the benefit of the doubt when claims for service-connected disability compensation are adjudicated. However, two factors make the adjudication decisions extremely difficult: one is the frequent absence of medical information at the time of repatriation and the second is that medical science cannot, at this time, conclusively determine on an individual basis the origins of some disabilities particularly prevalent among former POWs.

In recognition of the higher incidence of disability among former POWs and the difficulties faced when adjudicating claims by former POWs, the VA Department of Medicine and Surgery recommends that former POWs be authorized eligibility for VA hospital care and medical services (other than dental care) for any disease or neuropsychiatric disability, with the same priority as is granted a service-connected veteran seeking care for a nonservice-connected disability. This would assure that former POWs receive health-care benefits for all disabilities which may be attributable to their internment.

The effect of such a proposal would be to allow all living ex-POWs to receive comprehensive inpatient and outpatient VA medical care for all service and nonservice-connected disabilities. This proposal would remove access barriers to VA medical care for those former POWs currently classified in a lower than 50% service-connected priority category, many of whom are presently authorized to receive treatment for service-connected disabilities, and for nonservice-connected disabilities for which they cannot defray the expenses. This can occur even when nonservice-connected disabilities are their most significant medical problems. The expansion of eligibility would be only for purposes of receiving VA health care benefits, and not for purposes of eligibility for VA disability compensation.

Recommendation: That Title 38 U.S.C. be amended to authorize eligibility to former POWs for VA hospital care and medical services for any disease or neuropsychiatric disability.

Service-Connection for Psychosis at Any Time After Service

Conclusion: Besides creating a presumption concerning service-connection for certain malnutrition and tropical diseases related to the POW experience, Public Law 91-376 also qrants a presumption of service-connection for a POW related psychosis which becomes manifest to a degree of 10 percent or more within two years from the date of separation from service. The evidence presented in this study's medical literature review indicates that psychosis related to the POW experience frequently appears years after service, and not just immediately after separation. Beebe's follow-up morbidity study noted that as of 1965, former American POWs of the Japanese and Koreans had significantly higher hospital admission rates for psychosis (schizophrenia). This is understandable in view of the psychological torture and "brainwashing" to which these POWs were subjected. Beebe also observed that while as of 1965, European Theater POWs did not have quite as high an admission rate for psychosis as the other POW groups, they did not go "unscathed." Further evidence of a significant amount of psychosis among former POWs many years after repatriation comes from the NAS/NRC follow-up studies published between 1946 and 1980, which suggest that the significantly higher amount of POW deaths from the time of repatriation to the present attributable to suicides, accidents, and other forms of trauma could well be due to the extreme psychological stress of the POW experience.

Recommendation: That title 38 be amended to eliminate the requirement that psychoses suffered by POWs must become manifest within two years following service separation before the rebuttable presumption of service-connection arises.

OTHER RECOMMENDED LEGISLATIVE ACTION

National POW/MIA Recognition Day

Conclusion: P.L.95-349 designated July 18, 1979 as National POW/MIA Recognition Day. A 1979 Presidential proclamation announced this event and asked federal government agencies, state and local officials, and private organizations to observe this day with appropriate ceremonies. The VA and DOD commemorated this day with special activities throughout the nation. A special service was conducted at the National Cathedral in Washington, D. C. with participation by the Administrator of Veterans Affairs and the Joint Chiefs of Staff.

Recommendation: That a specific date be designated as an annual National POW/MIA Recognition Day to honor and recognize the extreme sacrifice made for their country by this special group of combat veterans.

RECOMMENDED ADMINISTRATIVE ACTIONS

Service-Connection for Neurotic Disorders

Conclusion: Former POWs have experienced a wide range of psychological problems. The medical literature indicates that former POWs have many of the same symptoms as the concentration camp survivor: general anxiety and nervousness, startle reaction, insomnia and nightmares, phobias, psychosomatic complaints, memory lapses, moodiness, inferiority complex, obsession with the past, depression, apathy and survivor guilt. The literature also suggests that psychological problems might be the underlying cause of death from such primary causes as accidents, trauma and cirrhosis. Anxiety neurosis, also known previously as anxiety reaction and anxiety state, has been the most prevalent service-connected disability among former POWs from the time of repatriation to the present. Both the Cohen-Cooper and Beebe studies provide epidemiological evidence, and current VA compensation data confirms, that anxiety neurosis not only has been the most prevalent disability of former POWs but it occurs at a significantly greater rate than among other veterans of the same periods of service.

An analysis of anxiety neurosis with length of internment reveals that it remains a statistically significant service-connected disability among former POWs relative to other veterans regardless of the amount of time in prison camp. This is indicated by the fact that the percentage of former POWs of the European Theater with service-connected anxiety neurosis is significantly higher than that of all service-connected veterans of World War II regardless of the POW's length of internment.

Reports of epidemiological studies, other medical literature, and this study's comparison of current VA compensation data all identify psychological problems as the most prevalent disabilities affecting former POWs and demonstrate that they occur at a significantly higher rate than that experienced by other wartime veterans. However, these types of disabilities may be difficult to link to the POW experience in some cases, especially when the condition first becomes noticeable many years after repatriation. The stress experienced as a POW can predispose the former POW to later psychological disorders. The disorders can appear long after the POW is repatriated, with no manifestly apparent connection to the POW experience. Often there is no recorded history of the disorder in the intervening years. Clinically, it may be difficult to conclusively determine whether the disorder is the result of the stress of the POW experience.

In an effort to address the issue of internment or combat related anxiety and stress, the VA Departments of Veterans Benefits and Medicine and Surgery are preparing guidelines on how to diagnose, treat, and rate anxiety neurosis appearing among former POWs and other combat veterans, especially those returned from Vietnam. These guidelines presently do not include a specific reference to former POWs, although they generally refer to stresses induced by combat or "internment under inhumane conditions." These guidelines use the term "post-traumatic stress neurosis" (a term due to become part of the VA's official diagnostic classification system October 1, 1980) to describe such anxiety neurosis. The draft DM&S guideline describes "post-traumatic stress neurosis" in terms of many of the same symptoms used to characterize the "K-Z syndrome" - e.g., startle reaction, insomnia, survivor guilt, memory lapses. The draft DVB guidelines point out that when such symptoms are found to be present upon examination, they are to be diagnosed and accepted for rating purposes as "post-traumatic stress neurosis" and coded as "anxiety neurosis," using the VA rating schedule. The draft DVB guidelines also note that when "post-traumatic stress neurosis" or a similar disorder is recorded in combat veteran military medical records, the disability should be service-connected even though it does not become clinically apparent until long after military service.

Recommendation: That the VA's forthcoming guidelines on "post-traumatic stress neurosis" include an explicit reference to former POWs as well as other combat veterans, and that these guidelines specifically be used to diagnose, treat, and rate former POWs with anxiety neurosis or similar neurotic disorders as well as other combat veterans.

VA Medical Treatment and Research of All Former POWs

Conclusion: The previous report to the Congress on former POWs, Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States POWs and Civilian Internees, dated January 12, 1956, declared that "in conformity to the stated policy of the VA and

the Bureau of Employment Compensation each eligible claimant who has developed, or who develops, a disease or disability which appears to be a consequence of the malnutrition or other hardships suffered during World War II should receive a thorough examination and evaluation, medically, physically, mentally, and functionally. Particular attention should, of course, be paid to possible disabilities resulting from prolonged malnutrition and to other conditions shown by the NAS/NRC study to exist in higher incidence in Pacific POWs than in the control group. Attention should also assuredly be given to the group of complaints which cannot today be evaluated by objective measurements or test, although this is admittedly a very difficult area."

Many former POWs have complained that their VA medical treatment does not include such a thorough examination. They have attributed such allegedly inadequate treatment to the lack of a uniform, special examination procedure for former POWs. (The Air Force and Navy currently use their own standard protocols for examination of former Vietnam POWs.) These former POWs also attributed such treatment to VA physicians who are allegedly unfamiliar with or unsympathetic to former POW medical problems.

The review of a sample of former World War II and Korea POW claims folders revealed that VA examinations for compensation were thorough for specifically claimed medical conditions. However, when asked if the information from VA examinations permitted a reasonable judgment of whether the medical conditions found may be attributable wholly or in part to the POW experience, the physician reviewers noted that the information was adequate or very good in approximately three-fourths of the cases reviewed.

Further, the 1956 report recommended that the VA engage in clinical research as well as treatment of former POWs. "Psychological and psychiatric studies should be made to determine the extent to which mental adjustment, physical efficiency, present and past physical illness can be explained on a psychologic basis, and to separate organic and functional complaints. . . a study should be made of a group with the frequent, troublesome vague complaints such as easy fatigability, mental inefficiency, and irritability by complete medical examinations and the group should be followed to determine the evolution of such conditions . . ." This clinical research, which was to involve actual medical examinations, rather than questionnaires or interviews of former POWs, was never performed by the VA or its agents (e.g., NAS/NRC).

Recommendation: That the VA adopt a standardized protocol for disability compensation examinations for all former POWs similar to that developed by the military for the former Vietnam POWs, and that each VA Medical Center designate certain physicians knowledgeable about former POWs and their medical problems to conduct or supervise such examinations for purposes of followup treatment and research.

Conclusion: With the repatriation of the bulk of Vietnam POWs in 1973, there arose a need to not only provide for their followup medical care, but to conduct epidemiological research similar to that accompolished by the NAS/NRC on repatriated World War II and Korea POWs. Followup medical care for former Vietnam POWs is largely provided in military health care facilities, since most of these former POWs are still on active duty. Research on the former Vietnam POWs still on active duty has been performed at the Naval Health Research Center, San Diego, Calif. and the Air Force School of Aerospace Medicine, Brooks AFB, Texas. The Naval Health Research Center has conducted a five-year followup study of a group of Navy aviator former Vietnam POWs and a matched comparison group. The results of this study, which was based on annual examinations of the POW and comparison groups at the Naval Aerospace Medical Research Laboratory, Pensacola, Fla., will be released soon. The Air Force School of Aerospace Medicine has collected data on those Air Force former Vietnam POWs who have voluntarily submitted to physical examinations at the School.

While the above efforts have provided for medical treatment and research of the former Vietnam POWs still on active duty, there is presently no VA or DOD plan in effect which would provide such treatment and research on those former Vietnam POWs who have separated from the military. In 1973, DOD authorized medical care for separated former Vietnam POWs in military medical facilities for the years immediately following repatriation. However, this authorization ended in 1978.

Since 1973, periodic interagency meetings have been held to discuss former Vietnam POW medical treatment and research. The most recent of these meetings was held in 1979 at the VA Central Office, and was attended by representatives of the VA, DOD, and the NAS/NRC. Those present agreed in principle to a VA Department of Medicine and Surgery proposal for followup treatment and research on those former Vietnam POWs who have separated from active duty. This proposal called for the military services to notify the VA of those former Vietnam POWs who have separated or are separating from active duty. The VA would then invite these former Vietnam POWs to a VA Medical Center for a followup examination using medical protocols provided by the military. The VA would furnish the results of individual examinations to the military, and publish and disseminate the epidemiological findings derived from all examinations. The proposal also called for the VA and DOD to designate representatives to attend a workshop on implementation of this followup medical treatment and research plan.

Recommendation: That followup medical treatment and research of former Vietnam POWs still on active duty be continued by DOD, and that followup treatment and research of former Vietnam

POWs separated from the military be conducted at VA Medical Centers using military protocols, with the individual results of such examinations furnished to DOD and the statistical results published and disseminated by the VA.

Formation of a POW Advisory Committee

Conclusion: The review of the literature on the health related problems of former POWs indicates that there are still unanswered questions on the service-connected nature of many alleged former POW disabilities (e.g., are significantly higher ex-POW mortality rates due to trauma and cirrhosis related to the malnutrition and stress of internment? Is a relatively higher amount of arteriosclerotic heart disease in former POWs caused by the stress of internment?) The review of the types and severity of former POW disabilities also raises the question of whether the most recently published NAS/NRC morbidity data on former POW disabilities is still valid in light of currently available VA data on former POW disabilities.

In 1978, the VA Department of Medicine and Surgery proposed that a "blue ribbon" panel, composed of widely respected authorities in such fields as psychiatry, psychology, internal medicine, nutrition, and epidemiology, be formed which could assess the medical evidence on these and related questions and render expert advisory opinions to the Administrator of the VA and his staff concerning these issues.

In 1979, the VA submitted a request to the General Services Administration for formation of an Advisory Committee on Repatriated Prisoners of War. This request noted that such a "blue ribbon" panel was necessary not only because VA medical professionals needed the assistance of such a committee in assessing the medical evidence on former POWs, but also because the convening of such a body of experts would lend considerable credibility and prestige to the VA decisionmaking process concerning former POWs. The request stated the purpose of the committee would be to draw conclusions on existing information concerning the residual effects of internment, review new statistical and clinical information on former POWs (such as the latest POW morbidity study currently being conducted by the NAS/NRC) and identify for the Administrator and his staff those areas where changes in former POW policy might be warranted. The VA is currently negotiating with the OMB to form such a committee.

Recommendation: That the VA take such action as is necessary to establish the proposed advisory committee of authorities in the types of disabilities prevalent in former POWs, use the expert opinions of the panel to assess the medical evidence on former POWs and advise the Administrator and his staff on agency policies and procedures concerning former POWs.

Pathological Materials Registry

Conclusion: The previous report to the Congress on former POWs, Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States POWs and Civilian Internees, dated January 12, 1956, included a search made at the Armed Forces Institute of Pathology (AFIP) for former POW autopsy protocols. Autopsy records were found for only nine Pacific and two European POWs. In no case was the autopsy record indicative of possible residuals of the effects of imprisonment other than tuberculosis. As a result of these limited findings, the 1956 report recommended that "a centrally directed systematic program be initiated to obtain, whenever possible, complete autopsies in all future deaths, accidental or otherwise, of these former prisoners." This central registry was envisioned as a source of data for former POW mortality studies which might determine if death due to accidents or other causes (e.g., cirrhosis) was related to the POW experience.

In response to a 1978 inquiry from a group of former POWs, the AFIP indicated that it would be willing to serve as the central laboratory for the collection and registration of autopsy examinations on former POWs. In 1979, the VA and the AFIP held meetings which resulted in an agreement for the AFIP to act as the central laboratory for the collection and registration of all pathological material (surgical, cytological, autopsy) on former POWs. DMS Circular 10-80-11, issued January 18, 1980, outlined the autopsy and clinical tissue examination procedure to be followed at VA facilities. This circular called for pathological materials examinations to be as complete as possible, with particular attention directed toward evidence of disability related to stress, malnutrition, or parasitic diseases. Whenever possible, the examination is suppose to include the brain, spinal cord, retina, peripheral nerves, skeletal system, and digestive tract. Such examinations are important to those wives and dependents of former POWs who must rely on the results of such an examination in many instances to prove service-connection for former POW disabilities.

Recommendation: That the VA implement procedures for conducting thorough pathological material examinations (surgical, cytologic, autopsy) of former POWs whenever possible, conduct special mortality studies when sufficient data is available, and provide such data as evidence in individual cases for determination of whether the death was the result of a service-connected disability.

POW Indicators in VA Manual and Computerized Records

Conclusion: Certain VA actions have already been taken, or are currently underway, to accomplish the following objectives: 1) identify a veteran as a former POW, 2) notify VA

staff that special consideration should be given to the veteran because of his POW status, and 3) collect data for further research on former POW health related problems.

Actions that have already been initiated or accomplished by the VA include indicating former POW status on VA medical folders, revising VA health care and compensation forms to include a POW indicator and producing listings of former POWs eligible for VA dental care benefits and establishing a POW indicator in VA computer systems. According to DM&S Circular 10-80-7, published January 15, 1980, a computerized listing of former POWs from each VA Medical Center who were discharged from that facility, as well as a set of "POW" labels (VA Form 10-5558) have been prepared. This listing will be used to identify those VA medical folders on which a "POW" label is to be placed. In 1979, the Application for Medical Benefits, VA Form 10-10, was revised to include space for indicating if the veteran applying for admission to a VA medical facility was a POW, and if so, of what conflict. Furthermore, the POW indicator in the computerized Patient Treatment File has been expanded to identify period of conflict. The Application for Pension or Disability Compensation, VA Form 21-526, also indicates POW status, so that the veteran's status is apparent at the time he files a disability claim. According to DVB Circular 20-72-94, published December 8, 1972, the VA claims folders of former Vietnam POWs are to be identified with a "POW/MIA" label.

The above actions have partially enabled the accomplishment of the three objectives listed above. However, there are certain actions which still need to be taken to completely fulfill the objectives. One such action would be to identify former World War II and Korea POW claims folders with a "POW" label identical or similar to that being placed on all VA medical records of former POWs or that has already been placed on former Vietnam POW claims folders. An inspection of the sample of former World War II and Korea POW claims folders used in this study's claims folder review determined that virtually none of these claims folders had any POW indicator on their outside jackets. Further action is also necessary in the medical area, as the VA Gains and Losses Sheet, embossed patient card, and outpatient routing slips currently do not have POW indicators on them. POW identification also needs to be included in the computerized Beneficiary Identification and Records Location System (BIRLS).

Recommendation: That the VA review its manual and computerized records and forms to identify those which should be identified with POW indicators, and then take the appropriate administrative actions to ensure that these records and forms are so identified.

Information Program

Conclusion: The 1956 Congressional report recommended that the "appropriate government agencies ascertain that their employees, and in necessary instances, private physicians, are

informed of the new information contained in the NAS/NRC study and of other pertinent information as it becomes available."

Many former POWs believe that VA medical professionals, adjudicators, and other personnel are still not sufficiently informed of what the POW experience means and what physical health and psychological adjustment problems are likely to have resulted from it. .They believe that this lack of information means that VA personnel do not recognize the need for special consideration for this group of veterans.

Recommendation: That the VA periodically emphasize the special health care and compensation procedures applicable to former POWs through its agency information and education programs, and that a copy of this report be provided each VA Medical Center and Regional Office as a reference on former POWs.

POW Coordinator(s) in the VA

Conclusion: The VA and the DOD have demonstrated their interest in POW matters by designating certain offices or individuals to handle this subject. The DOD currently has an Office of POW/MIA Affairs staffed with several full-time military and civilian personnel which deals with Vietnam Era POWs and MIAs. In the VA Central Office, a coordinator for former POWs of all conflicts was previously located in the Department of Medicine and Surgery (Mental Health and Behavioral Sciences Service). The implementation of recently established VA programs on former POWs (e.g., P.L. 96-22 dental care, labelling of VA medical records and forms, pathological materials registry) and the handling of correspondence between the VA and former POWs or POW organizations will require that VA Central Office coordinator(s) for former POW matters once again be designated. Another important duty of the coordinator(s) would be the monitoring of the recommendations in this study to ensure that they are not overlooked as some of the recommendations in the 1956 report to Congress were.

Recommendation: That the VA designate certain individual(s) to be the VA Central Office coordinator(s) with the responsibility for assisting in the implementation of ongoing VA programs for former POWs; serving as liaison with individual former POWs, former POW groups, and the DOD Office of POW/MIA Affairs; and monitoring this study's recommendations.

BIBLIOGRAPHY

Adamson, J. D., and Brereton, D. "Ultimate Disabilities in Hong Kong Repatriates," Treatment Services Bulletin 3:5-10, April, 1948.

Alleman, Russell, and Stollerman, Gene. "The Course of Beriberi Heart Disease in American Prisoners of War in Japan," Annals of Internal Medicine 28:949-962, May, 1948.

Allen, Stan. "V. A. Owes All Ex-POWs Service Connection, Says Death March Medic," Disabled American Veterans Magazine 29:9+, January, 1969.

American Ex-Prisoners of War, Inc. National Medical Research Committee, The European Story, Packet No. 8, [1978].

_____. The Japanese Story, Packet No. 10, [1979].

_____. The Korea Story. Packet No. 9, [1979].

American National Red Cross. Report of Joint Red Cross Team Operation in Korea. Washington, D. C., 1953.

Anderson, Clarence L.; Boysen, Alexander M.; Esensten, Sidney; Lam, Gene N.; and Shadish, William R. "Medical Experiences in Communist POW Camps in Korea," Journal of the American Medical Association 156:120-122, September 11, 1954.

Antonovsky, A.; Maoz, B.; Douty, N.; and Wirsenbeek, H. "Twenty-Five Years Later: A Limited Study of the Sequelae of the Concentration Camp Experience." Social Psychiatry 6:186-193, 1971.

Baird, James T., and MacDonald, D'arcy. "Survey of Optic Atrophy in Hong Kong Prisoners of War After Ten Years," Canadian Services Medical Journal 12:485-493, June, 1956.

Baker, Stewart, "Traumatic War Disorder," in Comprehensive Textbook of Psychiatry. 3rd. ed. Edited by Alfred M. Freedman; Harold I. Kaplan; and Benjamin J. Sadock. Baltimore: Williams and Wilkins, 1980.

Barker, A. J. Behind Barbed Wire. London: B. T. Batsford, 1974.

Beebe, Gilbert. "Follow-Up Studies of World War II and Korean War Prisoners. II. Morbidity, Disability, and Maladjustments," American Journal of Epidemiology 101:400-422, May, 1975.

Beebe, Gilbert, and Keehn, Robert. "Proposal for Morbidity Survey of POW's from World War II, the Korean Conflict, and the Vietnam Era." Washington, D. C.: National Academy of Sciences, 1979.

Bell, Percy G. and O'Neill, J. C. "Optic Atrophy in Hong Kong Prisoners of War," Treatment Services Bulletin 2:43-47, September, 1947.

Berg, William, and Richlin, Milton. "Injuries and Illnesses of Vietnam War POWs: I. Navy POWs," Military Medicine 142:514-518, July, 1977.

_____. "Injuries and Illnesses of Vietnam War POWs: II. Army POWs," Military Medicine, 142:598-602, August, 1977.

_____. "Injuries and Illnesses of Vietnam War POWs: III. Marine Corps POWs," Military Medicine 124:678-680, September, 1977.

_____. "Injuries and Illnesses of Vietnam War POWs: IV. Comparison of Captivity Effects in North and South Vietnam," Military Medicine 124:757-761, October, 1977.

Biderman, Albert D. "Dangers of Negative Patriotism," Harvard Business Review 40:93-99, November-December, 1962.

_____. March to Calumny. New York: MacMillan. 1963.

Bloom, Samuel M.; Mertz, Earl H.; and Taylor, William Wickham. "Nutritional Amblyopia in American Prisoners of War Liberated From the Japanese," American Journal of Ophthalmology 29:1248-1257, 1946.

Bressi, Art. "Public Law 95-479 and the Ex-POW," The Quan 33:5, February, 1979.

Brill, N. Q. "Neuropsychiatric Examinations of Military Personnel Recovered from Japanese Prison Camps," Bulletin U. S. Army Medical Department 5:429-438, April, 1946.

Brown, Charles. "The Japanese POW Syndrome," Diseases of the Nervous System 10:1, November 1949.

Burgess, R. C. "Deficiency Diseases in Prisoners-of-War at Shanghi, Singapore," Lancet, 2: 411-418, September 21, 1946.

Chodoff, Paul. "Late Effects of the Concentration Camps as a Psychological Stress," Archives of General Psychiatry 8:323-333, April, 1963.

_____. "The German Concentration Camps as a Psychological Stress," Archives of General Psychiatry 22:78-87, January, 1970.

Cohen, Bernard, and Cooper, Maurice. A Follow-Up Study of World War II Prisoners of War. Veterans Administration Medical Monograph. Washington, D.C.: U. S. Government Printing Office, 1954.

Coke,L. R. "Late Effects of Starvation," Canadian Services Medical Journal 17:313-324, May 1961.

"Diagnostic Conditions of Repatriated POWs," Medical Service Digest 24:46, November, 1973.

Diem, C., and Richlin, M. Dental Problems in Navy and Marine Corps Repatriated Prisoners o War Before and After Captivity. Report No. 76-23. San Diego: Naval Health Researcl Center, 1976.

Draper, Gilbert I. A. D. The Red Cross Conventions. New York: Frederick A. Praeger, 1958.

Eitinger, Leo. Concentration Camp Survivors in Norway and Israel. London: Allen and Unwir 1964.

_____. "Concentration Camp Survivors in the Post War World," American Journal c Orthopsychiatry 32:367-375, April, 1962.

_____. "Pathology of the Concentration Camp Syndrome," Archives of General Psychiatry 5:371-379, October, 1961.

Eitinger, Leo; and Strom, Axel. Mortality and Morbidity After Excessive Stress. New York: Humanities Press, 1973.

"Ex-POWs: Their Continuing Ordeal," Disabled American Veterans Magazine 21:8-9, July, 1979.

Fischbach, William M. "Cardiac and Electrocardiographic Observations on American Prisoners of War Repatriated from Japan," U.S. Naval Medical Bulletin 48:69-74, January-February, 1948.

Fisher, Miller. "Residual Neuropathological Changes in Canadians Held Prisoners of War by the Japanese," Canadian Services Medical Journal 11:157-199, March, 1955.

Ford, C., and Spaulding, R. C. "The Pueblo Incident: A Comparison of Factors Related to Coping With Extreme Stress," Archives of General Psychiatry, 29:340-343, September, 1973.

_____. "The Pueblo Incident: Psychological Reactions to the Stresses of Imprisonment and Repatriation," American Journal of Psychiatry 129:17-26, July, 1972.

Freed, George, and Stringer, Peter. "Comparative Mortality Experience 1946-63 Among Former Australian Prisoners of War of the Japanese," Medical Research Bulletin, 2:4-28, December, 1968.

Gottlieb, Mack L. "Impressions of a POW Medical Officer in Japanese Concentration Camps," U.S. Naval Medical Bulletin, 46:663-675, May, 1946.

Hermann, J. Douglas. Report to the Minister of Veterans Affairs of a Study on Canadians Who Were Prisoners of War in Europe During World War II. Ottawa, Canada: Information Canada, 1974.

Hewlett, Thomas H. "Nightmare Revisited." Address to American Defenders of Bataan and Corregidor. St. Louis, August, 1978.

Hibbs, Ralph E. "Beriberi In Japanese Prison Camp," Annals of Internal Medicine 25:270-282, August, 1946.

Hocking, Frederick. Starvation: Social and Psychological Aspects of a Basic Biological Stress. Mervlyn Archdall Medical Monograph. No. 6. Sidney, Australia: Australasian Medical Publishing, 1969.

Hunter, Edna J., ed. Prolonged Separation: The Prisoner of War and His Family. Reports Nos. 77-26 through 77-29. San Diego: Naval Health Research Center, 1977.

_____. The Vietnam POW Veteran: Immediate and Long-Term Effects of Captivity. Report No. 77-18. San Diego: Naval Health Research Center, 1977.

Jacobs. Eugene C. "Effects of Starvation on Sex Hormones in the Male," Journal of Clinical Endocrinology 8: 227-232, March, 1948.

_____. "Gynecomastia Following Severe Starvation," Annals of Internal Medicine 28 : 792-796, April, 1948.

_____. "Oculo-Oro-Genital Syndrome: A Deficiency Disease," Annals of Internal Medicine 35: 1049-1054, November, 1951.

_____. "Residuals of Japanese Prisoners-of-War----Thirty Years Later," The Quan 32: 4-6, March, 1978.

Juillet, P., and Moutin, P. Psychiatrie Militaire Paris: Masson, 1969.

Katz, Charles J. "Neuropathologic Manifestations Found in a Japanese Prison Camp," Journal of Nervous and Mental Diseases 103:456-465, May, 1946.

Keehn, Robert. "Follow-Up Studies of World War II and Korean Conflict Prisoners. III. Mortality to January 1, 1976." American Journal of Epidemiology 111:194-211, February, 1980.

Kinkead, Eugene. In Every War But One. New York: W. W. Norton, 1959.

Klein, H.; Zellermayer, J.; and Shanon, J. "Former Concentration Camp Inmates in a Psychiatric Ward," Archives of General Psychiatry 8: 334-342, April, 1963.

Kral, V. A.; Pazder, L. H.; and Wigdor, B. T. "Long-Term Effects of a Prolonged Stress Experience," Canadian Psychiatric Association Journal 12: 175-181, April, 1968.

Kral, V. A. "Psychiatric Observations Under Severe Chronic Stress," Canadian Services Medical Journal 7: 185-192, September, 1951.

Kushner, F. "To Live or To Die." AMEDD Spectrum, 1: 16-21, 1974.

Lewis, Robert. "Painful Feet in American Prisoners of War," U.S. Armed Forces Medical Journal 1: 146-157, February, 1950.

Lifton, R. J. "Home By Ship: Reaction Patterns of American Prisoners of War Repatriated From North Korea," American Journal of Psychiatry 110: 732-739, April, 1954.

Lonnum, Arve. Delayed Disease and Ill Health. Oslo, Norway: Norwegian Association of Disabled Veterans, 1969.

McCubbin, Hamilton I.; Dahl, Barbara; Lester, Gary R.; and Ross, Beverly A. "The Returned Prisoners of War: Factors in Family Reintegration." San Diego: Naval Health Research Center, January, 1975.

McCubbin, Hamilton I.; Dahl, Barbara B.; Meters, Philip J., Jr.; Hunter, Edna J.; and Plag, John A., eds. Family Separation and Reunion: Families of Prisoners of War and Servicemen Missing in Action. [Report No. 74-70.] San Diego: Naval Health Research Center, [1974].

McCubbin. Hamilton . I.; Hunter, Edna J.; and Dahl, Barbara B. "Residuals of War: Families of Prisoners of War and Servicemen Missing in Action," Journal of Social Issues 31: 95-109, April, 1975.

McDaniel. Frederick. L.; White, Benjamin V., Jr.: and Thompson, Charles M. "Malnutrition In Repatriated Prisoners of War," U.S. Naval Medical Bulletin 46: 793-810, June, 1946.

Matousek, William C. "Operation Big Switch," Medical Bulletin of the U.S. Army Far East 2:10, January, 1954.

Matussek, P. "Concentration Camp Survivors," Nervenarzt 32:538-547, 1961.

Mayer, William E. "What Happened To Our P. O. W.'s in Korea?," The Baylor Line, 2-11, July-August, 1957.

_____. "Why Did So Many GI Captives Give In?," U.S. News and World Report 40: 56-62+, February 24, 1956.

Meerloo. J. "Persecution Trauma and the Reconditioning of Emotional Life: A Brief Survey," American Journal of Psychiatry 125: 1187-1191, March, 1969.

Morgan, Hugh J.; Wright, Irving S.; and van Ravenswaay, Arie. "Health of Repatriated Prisoners of War From the Far East," Journal of the American Medical Association 130:995-999, April 13, 1946.

Mowery, E.; Hutchings, C.; and Rowland, B. "The Historical Management of POWs: A Synopsis of the 1968 U.S. Army Provost Marshal General's Study Entitled 'A Review of the United States Policy on Treatment of Prisoners of War.' " San Diego: Naval Health Research Center, 1968.

Musselman, M. "Nutritional Diseases in Cabanatuan," War Medicine 8: 325-332, November-December, 1945.

Nardini, John E. "Readjustment Problems of Returned Prisoners of War," Medical Service Digest 24: 17-19, November, 1973.

_____. "Vitamin-Deficiency Diseases in Allied Prisoners of the Japanese," U.S. Naval Medical Bulletin 47: 272-278, March-April, 1947.

"National Legislative Officer Earl Derrington," Ex-POW Bulletin 36: 9-11, November, 1979.

"National News: Recalling Comrades," Ex-POW Bulletin 36: 5, August, 1979.

Nefzger, M. Dean. "Follow-Up Studies of World War II and Korean War Prisoners. I. Study Plan and Mortality Findings," American Journal of Epidemiology 91: 123-138, February, 1970.

Nice, D. Stephen. "Children of Returned POWs: Are There Really Second Generational Effects?" San Diego: Naval Health Research Center, 1974.

"POW Medsearch," Ex-POW Bulletin 36: 13-15, December, 1979.

"Prisoner-Camp Syndrome Found Widespread," Medical World News 6: 53, April 2, 1965.

Reel, A. F. The Case of General Yamashita. Chicago: University of Chicago Press, 1949.

Reister, Frank A. Battle Casualties and Medical Statistics: U.S. Army Experience in the Korean War. Washington, D. C.: Surgeon General, Department of the Army, 1973.

Richardson, H. J. Report of a Study of Disabilities and Problems of Hong Kong Veterans, 1964-65. Ottawa., Canada: Canadian Pension Commission, 1965.

Russell, Edward Frederick Langley. (Lord Russell of Liverpool) The Knights of Bushido: A Short History of Japanese War Crimes. London: Cassell, 1958.

_____. The Scourge of Swastika: A Short History of Nazi War Crimes. London: Cassell,1954.

Schewe, Dieter; Nordhorn, Karlhugo; and Schenke, Klaus. Survey of Social Security in the Federal Republic of Germany. Bonn Germany: Federal Minister for Labour and Social Affairs, 1972.

Segal, H. A. "Initial Psychiatric Findings of Recently Repatriated Prisoners of War," American Journal of Psychiatry 111: 358-363, November, 1954.

Segal, Julius. "Long-Term Psychological and Physical Effects of the POW Experience: A Review of the Literature." Report No. 74-2. San Diego: Naval Health Research Center, 1974.

Segal, Julius; Hunter, Edna J.; and Segal, Zelda. "Universal Consequences of Captivity: Stress Reactions Among Divergent Populations of Prisoners of War and Their Families." International Social Science Journal 28: 593-609, 1976.

Sigal, J. J.; Silver, D.; Rakoff, V.; and Ellin, B. "Some Second-Generation Effects of Survival of the Nazi Persecution," Journal of Orthopsychiatry 43: 320-327, April, 1973.

Simons, R. D. G. "Nutritional Disorders of the Skin Among Prisoners of War in the Far East," British Journal of Dermatology 61: 210-215, 1949.

Smith, Dean A., and Woodruff, Michael F. A. Deficiency Diseases in Japanese Prison Camps. Medical Research Council Special Report Series No. 274. London: His Majesty's Stationery Office, 1951.

Spaulding, R. C. The Pueblo Incident: A Follow-Up Survey Conducted Eight Years After the Release of the U.S.S. Pueblo Crew From North Korea. Report No. 78-37. San Diego: Naval Health Research Center, 1978.

_____. "The Pueblo Incident: Medical Problems Reported During Captivity and Physical Findings at the Time of the Crew"s Release," Military Medicine 124: 681-684, September, 1977.

Spaulding. R. C.; Murphy. L. E.; and Phelan, J. A Comparison Group for the Navy Repatriated POWs from Vietnam: Selection Procedures Used and Lessons Learned. Report No. 78-22. San Diego: Naval Health Research Center, 1978.

Spaulding, R. C.; Richlin, M.; and Phelan, J. D. A Method For Qualifying A Mental Status Examination. Report No. 78-19. San Diego: Naval Health Research Center, 1978.

Starkey, H.; and Poole, J. "Survey of Intestinal Parasites in Repatriated POWs from Hong Kong," Treatment Services Bulletin 2: 11-15, October, 1947.

Stenger, Charles. "American Prisoners of War in WWI, WWII, Korea and Vietnam: Statistical Data." Washington, D. C.: Veterans Administration, June 30, 1979.

Strassman, Harvey; Thaler, Margaret; and Schein, Edgar. "A Prisoner of War Syndrome: Apathy as a Reaction to Severe Stress," American Journal of Psychiatry 112: 998-1003, June, 1956.

Strom, Axel. "Examination of Norwegian Ex-Concentration Camp Prisoners." Journal of Neuropsychiatry 4: 43-62, September-October, 1962.

Strom, Axel, ed. Norwegian Concentration Camp Survivors. New York: Humanities Press, 1968.

Thygesen, Paul; Hermann, Knud; and Willanger, Rolf. "Concentration Camp Survivors in Denmark: Persecution, Disease, Disability, Compensation," Danish Medical Bulletin 17: 65-108, March-April, 1970.

Trautman, E. C. "Fear and Panic in Nazi Concentration Camps: A Biosocial Evaluation of the Chronic Anxiety Syndrome," International Journal of Social Psychiatry 10: 134-141, 1964.

U.S. Air Force. Clark Air Force Base Hospital. Operation Homecoming - Medical Report. Manila, P.I., [1973.]

U.S. Army. Army Forces Western Pacific. American and Allied Personnel Recovered From Japanese Prisoners. Manila, P.I., 1945.

_____. Center of Military History. "Bibliography on U.S. Prisoners of War, 1776-1973." Washington, D. C. July, 1973.

_____. Headquarters, European Theater of Operations. "Standard Operating Procedure, No. 58: Reception, Processing, Maintenance and Disposition of Recovered Allied Military Personnel," April 3, 1945.

_____. Headquarters, Munsan-Ni Provisional Command. "Standard Operating Procedure for Receiving and Processing Repatriates," July20, 1953.

_____. Office of the Adjutant General. "Procedures for Processing, Return, and Reassignment of Exchangees in Korea." Washington. D. C., · December 20, 1951.

_____. Office of the Chief Historian, European Command. "RAMPS: The Recovery and Repatriation of Liberated Prisoners of War." Frankfurt, Germany, 1947.

_____. Office of the Surgeon General. Internal Medicine in World War II, Volume III: Infectious Disease and General Medicine. Washington, D. C.: U.S. Government Printing Office, 1968.

_____. Supreme Headquarters Allied Expeditionary Force. (SHAEF.) "The Care and Evacuation of Prisoners of War in Germany Under 'ECLIPSE' Conditions." ECLIPSE Memorandum No. 8., March 19, 1945.

U.S. Congress. House. Committee on Foreign Affairs. Appendix II: Prisoners of War: Repatriation or Internment in Wartime -- American and Allied Experience, 1775 to Present. Report. 92d Congress, 1st Session. 1971. Washington, D. C.: U.S. Government Printing Office, 1971.

_____. House. Committee on World War Veterans' Legislation, Facilitating Standardization and Uniformity of Procedure Relating to Determination of Service-Connection of Injuries or Diseases Alleged to have been Incurred in or Aggravated by Active Service in a War, Campaign, or Expedition, House Report No. 1157. 77th Congress, 1st Session. 1941.

_____. House. Select Committee on Missing Persons in Southeast Asia. Americans Missing in Southeast Asia: Summary, Conclusions, and Recommendations. Committee Print. 93rd Congress, 2nd Session. December, 1976. Washington, D. C.: U.S. Government Printing Office, 1976.

_____. House. Committee on Veterans Affairs. A Bill to Provide for a Study of the Mental and Physical Sequelae of Malnutrition and Starvation Suffered by Prisoners of War and Civilian Internees During World War II. Hearing. 81st Congress, 2nd Session. September 15, 1950. Washington, D. C.: U.S. Government Printing Office, 1950.

U.S. Congress. Joint Resolution. National P.O.W.-M.I.A. Recognition Day Designation. Pub. L. 95-349, 95th Congress, 2nd. Session. August 18, 1978.

_____. Senate. Committee on Government Operations. Communist Interrogation, Indoctrination, and Exploitation of American Military and Civilian Prisoners. Senate Report No. 2832. 84th Congress, 2nd Session. December 31, 1956. Washington, D. C.: U.S. Government Printing Office, 1957.

_____. Senate. Committee on Government Operations. Korean War Atrocities. Senate Report No. 848, 83rd Congress, 2nd Session. January 11, 1954. Washington, D. C.: U.S. Government Printing Office, 1954.

_____. Senate. Committee on the Judiciary. Communist Treatment of Prisoners of War: A Historical Survey. Committee Print. 92nd Congress, 2nd Session. August, 1972. Washington, D. C.: U.S. Government Printing Office, 1972.

_____. Senate. Committee on Veterans Affairs. Veterans Disability, Compensation and Survivors' Benefits Act of 1978. Senate Report No. 95-1054. 95th Congress, 2nd Session. July 31, 1978. Washington, D. C.: U.S. Government Printing Office, 1978.

U.S. Congress. An Act: to facilitate standardization and uniformity of procedure relating to determination of service-connection of injuries or diseases alleged to have been incurred in or aggravated by active service in a war, campaign or expedition. Pub. L. 361, 77th Congress, 1st Session. Approved December 20, 1941.

_____. Veterans Disability Compensation and Survivors' Benefits Act of 1978. Pub. L. 95-479, 95th Congress, 2nd Session. October 18, 1978.

_____. Veterans Disability Compensation Increase. Pub. L. 91-376, 91st Congress, 2nd Session. August 12, 1970.

_____. Veterans' Health Care Amendments of 1979. Pub. L. 96-22, 96th Congress, 1st Session. June 13, 1979.

_____. War Claims Act of 1948. Pub. L. 80-896, 80th Congress, 2nd Session. July 3, 1948.

U.S. Department of Defense. "Operation Homecoming" Commander's Digest. March 1. 1973. Washington D. C.: U.S. Government Printing Office, 1973.

_____. "Follow-Up Medical Care of Returned Military POWs." Washington, D. C., May 22, 1973.

_____. "Initial Medical Examination Form (IMEF)." Washington, D. C., 1973.

_____. POW: The Fight Continues After the Battle, the Report of the Secretary of Defense's Advisory Committee on Prisoners of War. Washington, D. C., August, 1955.

U.S. Department of Health, Education, and Welfare. Effects of Malnutrition and Other Hardships on the Mortality and Morbidity of Former United States Prisoners of War and Civilian Internees of World War II: An Appraisal of Current Information. Washington, D. C.: U.S. Government Printing Office, 1956.

U.S. Foreign Claims Settlement Commission of the United States. Annual Report to the Congress, 1977. Washington, D. C.: U.S. Government Printing Office, 1978.

U.S. National Archives. Modern Military Records Branch. Inventory of Records of World War II American Ex-POWs in the National Archives and Federal Records Centers. Washington D. C., 1968.

U.S. National Personnel Records Center. "Records Pertaining to World War II American Ex-POWs." NPRC 1865.35, Change 4, October 14, 1970.

U.S. Navy. "Report on Navy and Marine Corps Prisoners of War." Statistics of Navy Medicine 11: 3-5, March, 1955.

U.S. Veterans Administration. Department of Veterans Benefits. "POW/MIA Returnee Program" DVB Circular 20-72-94. Washington, D. C. May 3, 1973.

U.S. War Department. Office of the Adjutant General. "Handling and Disposition of Recovered U.S. Military Personnel Who Formerly Served on Wake, Guam, or in the Philippines." Washington, D. C., February 19, 1945.

_____. "Military Personnel Escaped From Enemy Territory." Washington, D. C., July 11, 1944.

_____. "Procedure for Processing, Return, and Reassignment of Recovered Personnel." Washington, D. C., April 21, 1945. Revised August 17, 1945.

_____. "Publicity in Connection with Escaped, Liberated, or Repatriated POWs, to Include Evaders of Capture." Washington, D. C., March 29, 1945.

_____. "Repatriation, Recovery, and Rehabilitation of American POWs in Europe." Washington, D. C., October 3, 1944.

Vernon, Sidney. "Nocturia in Malnutrition," The Quan 27: 10-11, December, 1972.

_____. "Nutritional Malagia, A Deficiency Vascular Disease." The Quan 26: 9-12, April, 1972.

Veterans of Foreign Wars. "Prisoners of War," Rehabilitation News 15: 1-10, November 20, 1970.

Weinstein, Alfred A. Barbed-Wire Surgeon. New York: Macmillan, 1948.

Wetzler, Harry P. "Status of Air Force Prisoners of War Five Years Post-Repatriation," Medical Service Digest 30: 26-28, November-December, 1979.

Williams, T. "Intestinal Parasites - A Survey of Repatriated Hong Kong POWs," Treatment Services Bulletin 2: 24-25, April, 1947.

Wills, Donald H. "Research of Medical Evidence Relative to the Contention of Irreversible Effects on the Heart and Other Body Organs of Ex-POW's caused by Nutritional Deficiency States (Beriberi) and Starvation," The Quan 29: 4-12, August, 1974.

Wolf, Stewart, and Ripley, Herbert S. "Reactions Among Allied Prisoners of War Subjected to Three Years of Imprisonment and Torture by the Japanese," American Journal of Psychiatry 104: 180-193, September, 1947.

World Veterans Federation. Proceedings of the Fourth International Conference on Legislation Concerning Veterans and War Victims. London, April 2-6, 1979.

_____. Proceedings of the International Conference on the Later Effects of Imprisonment and Deportation. The Hague, November 20-25, 1961.

Wright, Irving; and van Ravenswaay, Arie. "Report of the Health Survey of Repatriated American Prisoners of War From the Far East." Washington, D. C.: U.S. Army. Office of the Surgeon General, November, 1945.

•U.S. GOVERNMENT PRINTING OFFICE : 1980 0-626-869/2243