

UNITED STATES DEPARTMENT OF THE INTERIOR 9600 (942)
BUREAU OF LAND MANAGEMENT
ARIZONA STATE OFFICE

September 30, 1993

Memorandum

To: Chief, Division of Cadastral Survey (WO 720), MS 407-LS
From: Chief Cadastral Surveyor of Arizona
Subject: Manual Rewrite

A preliminary review of the draft manual rewrite makes it apparent that excessive editing has occurred, changing the meaning of entire sections of the manual. It was our understanding that the manual was being rewritten to update the content and do away with antiquated portions dealing with outdated equipment and practices. What we are finding is that someone has "wordsmithed" almost every sentence, changing past to present tense, totally altering the intent. There is also a glaring absence of reference to any recent legal precedence, which should be the most compelling reason to undertake an update in the first place.

Only those sections needing updates should have been changed; the integrity of the rest should have remained intact. There have been so many changes that to review and comment would be futile; it will be very tedious to edit every word. It is our recommendation at this point to start over. "Wordsmithing" is unnecessary; only those updates that are needed should be included in a new manual.



James P. Kelley

cc: all Cadastral Chiefs

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

OCT 6 1993

In Reply
Refer to:
9600 (720)

Memorandum

To: Chief, Branch of Cadastral Survey (AZ-942)
From: Chief, Division Of Cadastral Survey (W)-720
Subject: Manual Rewrite

This memorandum is in response to your memorandum dated September 30, 1993, with respect to the draft Manual rewrite chapters sent to you for your review. We agree with your assessment that many changes from the 1973 Manual have been made by the rewrite teams in their draft chapters. Our hope is that you will continue to participate in this huge endeavor and mark up on a hard-copy of the draft chapter files, sent to you, those changes you would like to see so as to retain the 1973 Manual meaning. It is impossible for the rewrite editor to make your suggested changes without knowing specifically what you want. Your input is important to the success of this manual rewrite.

Thank you for your past assistance in this important project. We are looking forward to receiving your recommended changes.

*S/ Daniel W. Webb
(acting)*

cc:
All Cadastral Chiefs
D. Wilcox (ES-915)
WO720:WILCOX/WEBB:ats:440-1695:10/06/93:WP5.1:Manual.AZ

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

001 3
In Reply
Refer to:
9600 (720)

OCT 18 1993

Memorandum

To: All Cadastral Chiefs
From: Chief, Division Of Cadastral Survey (WO)-720
Subject: Manual Rewrite

This office has received input from some of the State Offices concerning the condition of the draft Manual that is being rewritten and/or the amount of time allotted for the current review. We realize that teams from offices have spent large amounts of time over the last year and one half working on this rewrite. The Manual editors have reviewed laws and statutes for correctness and edited the draft Manual to make it as professionally correct and readable as possible for all user. In no way has there been any attempt by this office to change the content of the new draft Manual that was submitted by the teams of your offices.

Thank you for your past and ongoing assistance in this important project. We are already receiving chapters back from offices doing the current review. We are looking forward to receiving your recommended changes to the team drafts. We realize that this is a busy time of year with field crews returning and budget items due. At the end of October we will be assessing the received responses of those chapters returned with specific changes, recommendations or comment. If more time is warranted it will be allotted.

Daniel W. Webb
(acting)

provide means to conduct a diligent review. It is very naive to think that all the laws and statutes implicated in the Manual rewrite have been reviewed by the editors or "teams", as their roles were much less than what this office's understanding was. Much of the content of the chapters released for review were drafted by Livermore, and we are uncertain what teams, committees, or peer group review they underwent. As Livermore has retired, he is unavailable to explain or define the rationale he used in developing the first draft. It is also highly unlikely that any individual's work on the draft was intended to be considered as an unquestionable validation of legal implications and backing.

The Manuals of Surveying Instructions over history have been the standard by which land surveying practice has been guided. It would be a great disservice to the American public and the land surveying profession as a whole if a less than worthy document is prepared by the Bureau. It is recommended that all efforts being expended on the rewrite of the Manual be stopped until a full and comprehensive review of the original Livermore plan be produced by WO-720 and concurred by all States Offices before further rewriting efforts continue. Also, all editors, reviewers and or "teams" should be identified so we all know who is responsible for what portions of the rewrite. In no terms should any consideration be given to issuing a new Manual until all impediments to producing a legally sound document are removed.

It is not the purpose of this memorandum to criticize or complain about the erroneous venture in the rewrite of the Manual, or to create the impression that the effort is without complete merit. The matter is mentioned merely for the purpose of refocussing our concerted effort on the original intent to update the Manual. Our office would like to constructively participate in future activities to rewrite the Manual if given the opportunity.

cc: All Cadastral Chiefs



BUREAU OF LAND MANAGEMENT

Wyoming State Office

P.O. Box 1828

Cheyenne, Wyoming 82003-1828

9600 (942)

OCT 07 1993

Memorandum

To: Director (720), Rm. 406, LS
From: **ASSOCIATE**
State Director
Subject: Rewrite of the Manual of Instructions for the Survey of the Public Lands of the United States, 1973

This responds to Instruction Memorandum No. 93-338, and recent correspondence between the Chief, Division of Cadastral Survey and the Chief Cadastral Surveyor for Arizona (attached).

We have completed a section by section, word by word review of chapters one and two. This detailed review confirms Arizona's observations of wholesale editing or "wordsmithing." It was our understanding also that a rewrite of the Manual was to be strictly limited to those areas which have become out-

Due to the egregious changes incorporated in the rewrite, our review to date has consumed two full weeks of one staff professional's time. Based on the complexity and significance of the remaining subjects (Legal Evidence, Resurveys and Restoration of Lost Corners) a detailed review of chapters five, six and seven is expected to take much longer.

In light of the time required for a detailed review we feel that a response date of October 25, 1993, is unreasonable. We hereby request a six month extension of the time allowed. This amount of time is necessary for any meaningful review to be accomplished and a formal response drafted.

William E. Eikenberry

Attachments



BUREAU OF LAND MANAGEMENT

Wyoming State Office

P.O. Box 1828

Cheyenne, Wyoming 82003-1828

9600 (942)

OCT 07 1993

Memorandum

To: Director (720), Rm. 406, LS
ASSOCIATE

From: State Director

Subject: Rewrite of the Manual of Instructions for the Survey of the Public Lands of the United States, 1973

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William Eikenberry

Attachments

Draft JW

October 21, 1993

Memorandum

To: Director

From: State Director, Eastern States

Subject: Review of the Manual of Surveying Instructions, 1973

This memorandum is in response to Instruction Memorandum No. 93-338 requesting final review and comments of the six rewritten chapters pertaining to the Manual of Surveying Instructions, 1973 (Manual).

It is apparent from the onset that the rewrite of the Manual has not been in accordance with the conclusions and recommendations as reported to the Chief, Division of Cadastral Survey (WO-720) in April, 1992 by Marlin Livermore. It is also important to note that that several unforeseen variables have rendered the original project plan as *incomplete and unworkable* as demonstrated by the manifest discrepancies found in this rewrite of the Manual.

It is important to realize that Bureau Technical Bulletin No. 6, the Manual, is relied upon by the thirty States (~~eighteen~~ ^{thirteen} States in the East) that utilize the Public Land Surveying System (PLSS). This document serves as the basis for how surveys of Public Lands are performed. The necessity of a well written, and more importantly a legally defensible document, cannot be overstressed. As the Manual is sometimes recited in the various States' rules and regulations to conduct surveys within their jurisdictions, a credible document is imperative.

The most recent revisions of the Manual have been modest rewrites of previous editions which have incorporated case law and IBLA decisions. This draft appears to evolved to a more encompassing rewrite. This is not necessarily inappropriate, but the change in scope will require increased diligence in it's review, rather than short cutting it.

Based upon a review of the draft, an indepth technical review of the entire document is virtually impossible because there is no base references given from which a reviewer can compare the 1973 Manual to the rewritten version. For instance, if Section 3-135 of the 1973 Manual is being rewritten or changed, the changes should be referenced to a citation from an IBLA decision, a Supreme Court case, statutory requirements, Bureau policy change, technical considerations, etcetera, that demonstrate the necessity for the section to be rewritten. If there was no compelling legal or technical reason for a change, then NO modification should be presented. This would include any unnecessary minor editing or wordsmithing.

The Manual of Surveying Instructions over the past 200 years has been THE standard by which land surveying practice has been guided. It would be a great disservice to the American public if a less than professional document is prepared by the Bureau.

It is recommended that any efforts being expended on the rewrite of the Manual be stopped until a full and comprehensive project plan be developed by WO-720 and reviewed by all States Offices.

Much of the content of the chapters released for review were drafted by Lin, and we are not sure what committees, or peer group review they underwent. Since significant changes were made, and Lin is not even readily available to explain or define the rationale, it would seem that a diligent review be made that will require more time than might have been anticipated.

It is unlikely that any individual's work draft work was intended to be considered as an unquestionable validation of legal implications and backing.

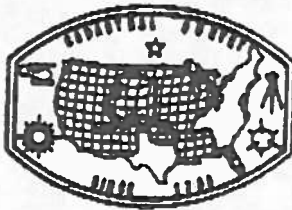
Lin's initial recommendation stated that:

- 1) one person be given the lead in production of the *first draft*,
- 2) the review of this draft will provide the *final means* for all parties to comment and propose changes.
- 3) others would assist in certain areas of specialty such as field notes, plats and riparian
- 4) after the initial drafts, 3 recognized experts on the Manual be assigned to make initial review of the draft to assure the lead writers have not strayed too far.
- 5) This initial review by experts should *precede the final general review* as mentioned in item 2)

These last parts seem to have been overlooked entirely. No consideration should be given to issuing a new Manual within Fiscal Year 1994, but should be deferred until all impediments to producing a legally sound document are removed.

Our office would like to constructively participate in future activities to rewrite the Manual if given the opportunity. Please refer any questions regarding these comments to the Chief Cadastral Surveyor, Eastern States (ES-960).

Fax Form



BUREAU OF LAND MANAGEMENT
COLORADO STATE OFFICE
BRANCH OF CADASTRAL SURVEY
2850 YOUNGFIELD STREET
LAKEWOOD, COLORADO 80215

TO: Fran Eickbush

COMMERCIAL PHONE NUMBER: 703-461-1383

FROM: MARCIN Livermore

OFFICE: CSO CODE: 740

**Branch of Cadastral Survey
fax numbers:**

**303-239-3815
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Branch Secretary

303-239-3850



**THE BUREAU OF LAND MANAGEMENT
EASTERN STATES
7450 Boston Boulevard
Springfield, VA 22153**

FAX Number: (703) 440-1599

Telefax Message

Number of Pages to Follow (incl. cover) 8

To: Kenny Ravnitar Date: 10/19/93
Office Code: AZ-942 Room Number: _____
Telephone Number: (602) ~~264-5331~~ 265-7591

From: Gorky Redline
Office Code: ES-962 Room Number: _____
Telephone Number: (703) 440-1688

Message: Livermore Memo per your request.

TO: Chief, Division of Cadastral Surveys (WO-720)

FROM: Marlin Livermore

SUBJECT: Report on Status of the Manual of Surveying Instructions, 1973, as Related to the Contemporary State-of-Art of Executing Cadastral Surveys

INTRODUCTION

Providing unusable or erroneous information is the unforgivable sin a technical manual can commit. The Manual of Surveying Instructions, 1973, (Manual), commits this sin. Gradually and imperceptibly time has crept by and just as imperceptible large segments of the Manual have crept into obsolescence. A complete rewrite of the Manual is the only means for providing a comprehensive solution to the problem. The credibility of the Manual and the Bureau of Land Management as final authorities for the survey of the federal lands is contingent upon providing state-of-the-art guidelines for these surveys.

In the past, we have discussed solving obsolescence through the publication of supplements. Supplements will not provide a proper solution because they are a temporary solution. Supplements to technical materials are expected to be incorporated in the body upon reprints. Supplements require the user to obtain, know, compare, and reconcile the differences between the original text and new material. The use of supplements for material as extensive and important as the Manual will be cumbersome and lead to conflicting ambiguities between the two sources of information.

This report is based on comments and recommendations from the Cadastral offices relevant to updating the Manual. The report includes an appendix highlighting several chapters where the Manual is grievously outdated.

Input from the cadastral offices was well thought out and relevant. Contributors should be commended on the professionalism demonstrated by their responses. Surveyors Dale Wilson and Louis Gilbert volunteered to assist in any updating undertaken.

WE ARE REQUIRED TO PROVIDE CONTEMPORARY GUIDELINES FOR THE SURVEY OF FEDERAL LANDS

The totality of changes necessary to provide contemporary guidelines for the survey of federal lands will require extensive rewriting of the Manual.

The sphere of cadastral surveying has changed dramatically since the Manual was written and published in the 1960s and early '70s. These changes include:

1. Technical changes in measurement science and data management (e.g., geographic positioning systems, and total stations, Geographic Coordinate Data Base, and the developing Cadastral Measurement Management) have created an entire new technical world in which the survey profession creates, gathers, manipulates, and distributes data.

2. Instruction memorandums have been issued interpreting, modifying and clarifying various procedures described in the Manual; these official interpretations and guidelines should be incorporated in the rewrite. Proper surveys of the federal lands requires this information to be readily available to all users.

3. FLPMA epitomizes major changes in the purpose for cadastral surveys. In 1973, we were surveying for the disposal of public lands; today we survey to facilitate the management of federal lands. Requirements for surveys for disposal of lands are different than for the management of them (e.g., requirements for relotting and tying into previously surveyed lines).

4. Increases in the reimbursable survey program and FLPMA have involved the Bureau in extensive resurveys of federal lands that are not public lands. This change has expanded the scope of the Manual's authority to cover the survey of all federal lands.

As a result of these changes, in all to many sections, our Manual provides technical guidelines reflecting the state of art for surveying the public lands in the 1960s, not the state of art for surveying the federal lands today.

We cannot continue to commit the unforgivable sin of publishing outdated and erroneous technical information and maintain our credibility with the public, Congress, and the courts as the final authority on defining how cadastral surveys of the federal lands are made in conformance to statutory law and its judicial interpretation. Any organization given the authority to publish technical guidelines accepts the responsibility of ensuring the guidelines reflect state-of-the-art practices.

Ma. L. H. Luenmond

THE STATUS
OF
MANUAL OF SURVEYING INSTRUCTIONS, 1973
IN
1992

The status of the Manual of Surveying Instructions, 1973 in 1992 is that it is outdated. This book reflects the state-of-the-art of surveying for the 1910-1973 era not the state-of-the-art for today. If we are to maintain our credibility with the public, Congress, and the courts we will have to update this book. The necessary changes are extensive precluding the consideration of using supplements as a means for solving the problem.

This report discusses the issues pertinent to the three options proposed in considering updating the Manual: I. Do nothing, II. Supplement the present Manual, III. Commit to undertake major revisions.

Recommendations and conclusions offered in the report are that an extensive rewrite is necessary. Another major recommendation is that a first draft be prepared before accepting general comments. Appendix I of the report provides general examples of chapters which need extensive rewriting to detail state of the art procedures.

OPTIONS AND ISSUES DISCUSSED

I. Do nothing.

Issue: Why should we undertake any changes in the Manual, does not the present product serve its purpose.

The Manual is obsolete. (See Appendix). We cannot continue to print antiquated information without it reflecting negatively on Cadastral's professionalism. Obsolescence has crept up on us and it is our duty to recognize the problem or suffer valid criticism for our inability to recognize and accept changes.

There are large segments in the Manual where the guidelines are outdated to the extent that they provide unusable and erroneous information. Unless we update the Manual, this organization abrogates its responsibilities and credibility for establishing policy, rules, and regulations--guidelines and procedures--for the survey of federal lands.

Issue: We will be compelled through political pressure to make changes which will short-cut proper survey methods.

This is a real issue, not easily set aside. Maintaining control on the changes will depend on standing firm on the basic premise that the Manual's usefulness and credibility lies in its sole purpose, to wit, to describe, "how cadastral surveys... are made in conformance to statutory law and its judicial interpretation."

This premise requires that any changes contemplated will have to be properly supported by statutory or ^{Federal} case law. ✓

II. Supplement the present Manual.

ISSUE: Supplements to technical books are designed to update and expand information not replace it. Upon reprinting of technical information supplemental information should be integrated into the base source. Integration provides relief for the inherent problems created by supplements:

Supplements will be a continuous thorn in the side of professional surveyors, attorneys, and other parties. Supplements require users to

acquire each supplement in addition to a Manual with at least one half of the chapters obsolete. Supplements require users to learn, compare, identify, and absolve conflicts between the publications. These inconveniences, inherent in all technical supplements, support the common understanding that supplements for this type of information are temporary solutions. Once the original work is reprinted, the supplements are incorporated into it.

III. A total rewrite.

ISSUE: Is there a point where the extent of modification of material required precludes supplements in lieu of a complete rewrite?

Appendix I details a totality of needed changes requiring major rewrites of at least one-half of the Manual's chapters. Modifications of this magnitude precludes seriously entertaining the thought of updating through supplements.¹

ISSUE: Can we control the final product better with supplements than with a total rewrite?

Either option opens the door for comments from parties within and without the Bureau. These comments will be of the same nature and scope, creating the same number and magnitude of issues whether we supplement or choose a complete rewrite. Therefore, although a valid concern, (see above), this issue has to be addressed under either option.

CONCLUSIONS AND RECOMMENDATIONS

1. A major rewrite of the Manual is necessary.

This recommendation is based on the evidence that large portions of the data and technical methods and procedures presently published are irrelevant and unusable.

This recommendation takes into consideration the various problems that will be encountered in undertaking the task. Given the totality of revisions needed partial revisions through supplements will be inadequate.

The remaining recommendations are made in order to facilitate producing a first draft of the rewrite in an efficient manner. These recommendations are made under an assumption that each change will be scrutinized, discussed and at times fervently argued within and without the organization. If the first draft can be produced before the controversy arises, we will have concrete proposals to debate, in lieu of a hodge-podge of changes radiating from a myriad of sources.

2. One person should be given the lead in the rewrite.

The lead individual will be given responsibility for the general rewriting, the coordination of all task assignments, final compilation, and meeting schedules. For the first draft, the lead will be given authority to approve all changes. Without this authority, the possibility of the process bogging down into a swamp of petty differences will exist. The review of the draft will provide a means for all parties to comment and propose changes.

3. The lead person should be assisted in specialized areas (e.g., field notes, platting, and riparian) by specialists who will rewrite the portions relevant to their area of specialty.

¹ Appendix I identifies the need for major revisions of Chapter I, II, VII, VIII, XI, Appendixes I and II.

Specialists are necessary. No one person has the background or knowledge enabling him or her to provide state-of-the-art guidelines to all aspects of cadastral surveys. However, we do not need a committee of specialists. We need one individual who is a recognized specialist in a particular area of cadastral survey to write the first draft rewrite for that area. A committee of specialists could result in continuous arguments over petty differences making it impossible to produce a final product. Once again, all parties will be given the opportunity to comment on the first draft when it is completed.

4. Three recognized experts on the Manual should be assigned to make initial reviews of the draft product.

The three reviewers will ensure the lead does not stray from the beaten path, by omission or commission of changes. They will provide input from different points of view to ensure we do not veer from acceptable or defensible practices. Review the material from the very start should ensure a quality product while weeding out most inappropriate changes and providing factual and legal support for controversial changes that are deemed necessary. If irreconcilable differences exist, the reviewers will be expected to provide alternative or minority reports.

5. The initial draft should be prepared before requesting comments from outside the Bureau.

As stated above, we need a document to debate before a debate develops. If this approach is not taken, there is a strong possibility that the project will never get off the ground, bogging down into an endless circle of debates over what or what not should be included or omitted.

APPENDIX I.

SAMPLES OF AREAS OF MAJOR OBSOLESCENCE
IN THE
MANUAL OF SURVEYING INSTRUCTIONS, 1973.

INTRODUCTION

The data and facts presented in this Appendix are derived from a combination of responses from cadastral offices in reply to a request for information and my cursory review of the Manual. Many of the areas discussed were commented on by several individuals. No attempt was made to make a comprehensive review of the Manual as a general review provides sufficient information to establish the "Status of the Manual of Surveying Instructions, 1973, as Related to the Contemporary State of Art of Executing Cadastral Surveys." The author considers the general information sufficient, per se, to support the reports recommendation that a complete rewrite of the Manual is necessary.

Chapter I: OBSOLESCENCE IN SURVEY RESPONSIBILITY, AUTHORITY AND JUSTIFICATIONS FOR SURVEYS

This Chapter summarizes the various Acts providing authority for surveys and the general plan of surveying based upon them. Its omission of statutory provisions supporting the authorities for our support of land management and reimbursable survey programs, e.g., 25 USC 176 and 43 USC 1737(c) creates misunderstandings on the scope of our responsibilities.

FLPMA and the reimbursable program through adding and changing the responsibilities of the cadastral program have expanded the scope of authority of the Manual to cover how cadastral surveys of all federal and intermingled lands are made in conformance to statutory law and its judicial interpretation.

We shouldn't underestimate the adverse affect of the Manual not providing a complete summary of our statutory responsibilities. Their inclusion provides easily obtainable documentation supporting: (1) The legal authorities and justifications for official surveys. (2) The right of access onto private lands necessary to execute surveys for non-public-federal lands. (3) Information for justifying cadastral funding and positions.

Chapter II: A STUDY IN OBSOLETE MEASUREMENT PRACTICES.

The methods described in this chapter comprise the specifications for determining the length and directions of lines for cadastral surveys.

The specifications for making measurements described in this chapter were obsolete in 1973. They provide a good historical documentation on how surveys were executed in the 1910-1970 era.

Several people committed on changing the information in this Chapter. I would recommend any direction on the use of equipment or techniques of measurement should be omitted from the Manual. Any procedures we recommend will be outdated by the time we publish. Current methods and procedures for survey measurements are obtainable from any technical book store.

This chapter of all chapters places us in the dark ages. Obsolete instructions of this nature can be easily used to erode our credibility within the surveying profession and used in a court of law to erode the credibility of the Manual.

CHAPTER VII: OBSOLESCENCE IN LAW. OBSOLETE LAW IS BAD LAW.

The Special Surveys---Water Boundaries portion of this chapter should be updated to reflect current law, e.g., the concept of reemerged lands.

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APR 20 1962

OFFICE OF THE ATTORNEY GENERAL

CHAPTER VIII AND IX: OBSOLESCENCE IN DATA MANAGEMENT.

The time has come for us to update the field note processing to a data base format. The development of the format would accompany a rewrite of this chapter.

Plat drafting is automatic. Soon our whole process of cadastral survey data management will be automated, field to finish. This chapter needs to be rewritten describing the use of automation. We need to acknowledge and explain the relationship between the official record and the GCDB.

APPENDIXES I AND II: HISTORICAL TREATISES

Appendix I should be omitted. Appendix II should be revised to reflect a data base format for the field notes.

NEW SUBJECTS

Among the new subjects suggested to be included in a rewrite were methods and procedures pertinent to executing resurveys of resurveys and resurveys of mineral surveys.

GENERAL SUBJECTS

Obsolescence exists throughout the Manual. A comprehensive review of the obsolescence would be lengthy and is inappropriate for this report. The above information provides sufficient information to establish that a large percent of the information published in the present Manual is antiquated, of no use to us or our clients, and could serve as an embarrassment to us and the Bureau if we do not update it.

**Bureau of Land Management
Wyoming State Office
Division of Operations
Telefax Message**



To: Cadastral Chiefs, AZ, AK, UT

Office Code: _____ Room Number: _____

Phone No: _____

Number of Pages to Follow: 1

From: John Lee, Cadastral Chief, WY

Office Code: WY-942 Date: 10/13/93

**Telefax No: 307-775-6173
Confirmation No: 307-775-6210**

Special Instructions:

- Engineering & Support Services**
- Field Operations
 - Fire & Aesthetic Management
 - Topographics

- Cadastral Survey**
- Geographic Coordinate Data Base
 - Office Operations & Review
 - Field Section
 - Grants Project Office

Approval

CHAPTER I

This chapter would require very little editing if a rewrite is accomplished. What changes were made are bureaucratic egotism; change for the sake of change.

The 1973 Manual was well organized. It first explained the "Purpose and Scope," second a history of the "Development of the Manual," third definitions, fourth laws relating to surveys and revised statutes and U.S. Code, fifth subsequent legislation, sixth the general rules, seventh organization of cadastral survey, and eighth the Public Land States.

This draft is poorly organized.

1. Purpose and scope
2. Laws relating to surveys.
3. General rules.
4. Development of Manual.
5. Definitions.
6. Revised statutes and U.S. Code.
7. Subsequent legislation.
8. Legislative rules.
9. Organization.
10. Public Land States.

Since this chapter was brutally altered, review will be by major topic.

Purpose and Scope - 1971 1-1 through 1-4
- Rewrite 1-1 through 1-4

1-1 and 1-2 would require no changes other than the inclusion of the 1973 Manual as a previous edition. However, WHEY obviously felt obliged to make arbitrary and capricious changes to the text and punctuation denigrating the quality.

- 1-3 If it is the goal of this so called rewrite to eliminate Chapter 2 and a discussion of technical procedures then this section would require editing, although still very little.

Washington Office's approach to this is to leave in the first sentence from 1973, "Details of the plan and its methods go beyond the scope of the textbooks on surveying," and to include as a final sentence: "The technical processes for determining true meridian are readily available in surveying textbooks; therefore they are omitted in this Manual."

Washington Office also chose to change "The application to large-scale areas requires an understanding of the stellar and solar methods for making observations to determine the true meridian, . . ." to "The application to large scale areas requires an understanding of astronomical relationships (which is an incomplete sentence). It also includes the surveying procedures used to determine the true meridian, . . ." what "astronomical relationships" are we talking about? According to the rewrite they are different than those used for determining the true meridian because the next sentence starts with "It also includes. . ."

Obviously whoever broke the 1973 sentence into two parts has little or no reading comprehension skills and/or little or no survey experience.

- 1-4 This section also would require editing. However, in keeping with their poor job so far, WHEY chose to change a few words.

Development of the Manual 1973 1-5 through 108
Rewrite 108 through 1-9

1-5 (73)/1-8 (rewrite)

It is unnecessary to edit this section. In their attempt at fame and glory WHEY has altered the wording and punctuation and has made the discussion much more cumbersome and in places confusing.

1-6 ('73)/rewrite not numbered (Para 2 1-8)

It is unnecessary to edit this section. Again the rewrite shows that WHEY has greatly inferior writing skills than did Tom Tillman.

Paragraph 4 1-8 (rewrite)new, does not appear in 1973

For reasons unknown the WHEY decided to include a discussion of the Act of March 3, 1909, under the heading development of the Manual. This act has nothing whatsoever to do with the history of the Manual.

1-8 (73)/1-9 (rewrite)

This section deletes supplements to the Manual which are no longer in print (standard field tables and the Ephemeris). However, it returns the reference to restoration or lost and obliterated corners. Has anyone thought that a rewrite of Chapter 3 and the separation of Chapters 5 and 6 into 5, 6, and 7 would render the manual references in this pamphlet obsolete?

The Public Lands

1-9 (73)/1-10 (rewrite)

Again WHEY felt they had to change something so they altered punctuation and wording with overall effect of degrading the quality.

1-11 (73)/rewrite not numbered (para 2 1-10)

This section in the 1973 Manual was correctly placed under the subheading "Administration." For some unknown reason WHEY chose to include it under definition.

1-10 (73)/1-11 (rewrite)

The rewrite is a new section entitled "Federal Interest Lands" which has incorporated section 1-10 from 1973 which is under the subheading Administration.

Part of the WHEY definition of Federal interest Lands is ". . . all classes of land owned or whose titles are held in trust by the Federal Government" (emphasis added). Which is as opposed to the Manual rewrite definition of Indian Lands (section 1-12) as "lands that are held in trust by the United States Government" (emphasis added).

That portion which is section 1-10 of the 1973 Manual has been edited by the WHEY with once again the only effect being a loss of quality.

1-12 (73)/(1-13 (rewrite) Did not need editing.

This is the subheading navigable waters. Needed no editing. The WHEY just degraded the language.

1-13 (73)/1-14 (rewrite) Did not need editing.

The WHEY degraded the language. Washington Office left out reference to Special Survey section of Manual.

1-14 (73)/rewrite not numbered (paragraph 2, 1-14)

Needed no editing. Washington Office degradation.

1-15 (73)/rewrite not numbered (paragraph 3, 1-14).

The WHEY particularly butchered the language in this section. Specifically, and in all probability without checking the language of the Act changed "... would be unfit for agriculture." to "... would be unfit for cultivation." The Random House Dictionary defines agriculture as "the production of crops, livestock, or poultry" and cultivation as "act or art of cultivating."

Laws relating to survey 1973 1-16 through 1017
Basic laws for rectangular system rewrite 1-5 through 1-6

1-17 (73)/1 6 (rewrite) Needed no editing.

This section was brutally butchered by WHEY. One example of the poor writing abilities of the author is: "... the Northwest Territory, a portion of which later became the State of Ohio.. In this area of present day Ohio, ..." This clumsy statement, in which he felt obligated to mention Ohio twice, is intended to replace the simple "... that part of the Northwest Territory which became a part of Ohio. ..." in the 1973 Manual.

The rewrite also drops the second paragraph from this section, which discusses adoption of the rectangular system adding it to a moved section below called Rectangular Surveys.

1-21 (73)/1-7 (rewrite)

The WHEY, for whatever reason decided to move section 1-21 from the 1973 Manual to a new section with the heading "Rectangular Surveys" and the subheadings "General Plan" and "Square Mile Surveys."

In the 1973 Manual this section was a summation of the discussions of the laws of survey outlined in sections 1-16 through 1-20. Placing this summary here is premature.

In addition the WHEY version of this section was liberally edited losing much of the discussion and severely degrading the content.

Heading: laws Relating to Surveys
Subheading: Revised Statutes and United States Code 1973 1-18

New Heading: Revised Statutes and United States Code (rewrite) 1-15

The WHEY rewrite of the first paragraph is incorrect. They state that "The rectangular surveying system, ... was given increased responsibilities by the following revised statutes and United States Code." This is not true. The revised statutes and U.S. Code cannot add to existing legislation, they merely attempt to define and interpret the provisions of the acts passed.

1-18 (73)/1-15 (rewrite)

Third rule of survey: left out footnote.

Sixth rule of survey: left out footnote.

In general the several R.S and U.S.C.S listed here are given their own heading. This is editorial form but with the appearance of a heading with no corresponding section number the rewrite is clumsy and confusing.

Heading: Subsequent legislation and Establishment of the Bureau of Land Management (1973) 1-19

Heading: Additional Survey Legislation (rewrite) 1-16

The WHEY changed the lead paragraph to read ". . . additional Federal legislation with laws pertinent . . ." (emphasis added). The Random House dictionary definition of legislation is "a law or body of laws enacted." So what are we saying, Federal laws with laws or Federal legislation with legislation or Federal laws with legislation?

The WHEY changed "Purchase of metal monuments" to "Purchase of Iron Posts" and misquotes the Act of May 27, 1908. The Random House dictionary defines metal as "an alloy or mixture" and iron as ". . . crude or impure carbon forms."

In quoting the Act of March 3, 1903, Resurvey of Public Lands, WHEY closes its quote with a period. This is incorrect as the sentence continues in the Act and must be shown as such.

In quoting the Interior Department appropriation Act of 1911 WHEY misquotes the Act by including words not in the original language and by closing the quote with a period. The sentence continues in the Act and must be shown as such.

Under further authority for resurveys WHEY alters the language and creates confusion. The 1973 synopsis is: "resurvey, . . . of townships in which the disposals exceed 50 percent of the total area." The rewrite synopsis is: "resurvey, . . . of townships in which the privately owned lands in the area exceed 50 percent of the total area." (emphasis added) This rewording does not quite say the same thing; "privately owned lands," (does this exclude State owned lands?), "lands in the area exceed 50 percent" (what is "in the area;" in the county, region, district?).

Under the National Environmental Act of 1969 WHEY blatantly misquotes the Act. They change the punctuation, add wording not included in the original language and again finish both indicated quotes with a period, when in the Act the sentence continues and must be shown as such.

Under acceptance of contributions for surveys WHEY cites the Federal Land Policy and Management Act of 1976, omitting the correct Act of July 14, 1960. They recite the synopsis given for the Act of July 14, 1960, from the 1973 Manual as a provision of FLPMA, but add quotation marks indicating that this is a direct quote which it is not.

In effect FLPMA has not been added to the Manual, it was only cited erroneously as providing for contributions for surveys which is the Act of July 14, 1960.

The WHEY included a new section entitled "Survey of Indian Lands" which is derived from the Act of April 8, 1864. This Act was not noted in previous editions of the Manual since its only provision relating to surveys is that Indian lands will be surveyed " . . . in conformity to the rules and regulations under which other public lands are surveyed." The argument has been made that it should be included because it specifies that Indian lands "shall be surveyed under the direction and control of the Bureau of Land Management, . . .", precluding the Indians from contracting. However this section deals with surveys not resurveys and cannot be interpreted as BLM having exclusive rights to resurvey Indian lands.

Heading: General Rules (1973) 1-20 through 1-21
 Heading: Legislative Rules (rewrite) 1-17

The WHEY chose to edit the language of the lead paragraph again denigrating the quality: ". . . summary of congressional legislation, the following legislative rules are apparent." How about simply "the

following rules are apparent."

In first rule, WHEY ungrammatically changed the text from the 1973 " . . . the boundaries and subdivisions . . . are unchangeable . . ." to their version "The boundaries and subdivisions . . . is unchangeable . . ." (emphasis added)

1-21 (1973)

This originally was a summation of the basic surveying procedures derived from the aforementioned rules and regulations cited. The rewrite chose to move this to the new section headed "Rectangular Survey" and subheaded "General Plan" and square Mile Surveys" previously discussed.

The Public Land States

1-23 (73)/1-19 (rewrite)

- Alabama: The WHEY changed this from "Included in the territory of the original 13 states" to "ceded by the State of Georgia."
- Colorado: The WHEY changed "largely acquired under the Louisiana Purchase" to "partially acquired; dropped" land. . . . quieted through treaty with Spain, in 1819, with other lands annexed with Texas in 1845, . . . ; and introduced the statement "lands purchased from Texas in 1850;"
- Idaho: The WHEY changed "acquired with the Oregon Territory" to "acquired with the Oregon Compromise with Great Britain;"
- Kansas: The WHEY changed "(additional lands annexed with Texas in 1845)" to "lands purchased from Texas in 1850;"
- Minnesota: The WHEY introduced lands acquired under "the treaty with Great Britain of 1818;"
- Mississippi: The WHEY cites cessions from Georgia and Florida and includes "adjustment of the Louisiana Purchase boundary in the Treaty with Spain of 1819;"
- Montana: The WHEY changed "Oregon Territory" to "Oregon Compromise with Great Britain,"
- New Mexico: The WHEY dropped "lands annexed with Texas in 1845" and introduced "lands purchased from Texas in 1850;"
- North Dakota: The WHEY dropped "territory of the original 13 States" and introduced "lands acquired in the Treaty with Great Britain of 1818;"
- Oklahoma: The WHEY dropped "lands annexed with Texas in 1845" and introduced "lands purchased from Texas in 1850;"
- Oregon: The WHEY changed "Oregon Territory" to "Oregon Compromise with Great Britain of 1846;"
- South Dakota: The WHEY dropped "territory of the Original 13 States" and introduced "lands acquired by the Treaty with Great Britain of 1818;"
- Washington: The WHEY changed "Oregon Territory" to "Oregon Compromise with Great Britain,"
- Wyoming: The WHEY dropped "lands annexed with Texas in 1845," changed

"Oregon Territory to "Oregon Compromise with Great Britain," and introduced "lands purchased from Texas in 1850;"

A discussion of the formation of the Public Land States first appeared in the 1930 Manual. Other than Alaskan Statehood in 1959 (previously the Territory of Alaska) they have remained unchanged in the 1947 and 1973 Manuals. Suddenly this section required editing? Some bureaucratic egomaniac has decided we need to nitpick "lands annex with Texas in 1845" against "lands purchased from Texas in 1850;" perhaps because of some subsequent agreement or compensation?

After all the capricious changes in acquisition it is notable that there were no change in the present location of the original records. Has anyone bothered to call the closed States to verify if the records remain with the agencies cited in the 1973 Manual. I would be very surprised if over the last 20 plus years, not one of the States has gone through a reorganization or transferred the records to another agency or department.

CHAPTER III

This chapter also would require little or no editing if a rewrite is accomplished. A quick glance through the chapter reveals the same egotistical and bureaucratic editing and reorganizing evident in Chapter 1. Why are we wasting our time and energy, and the tax payer's dollars, rewriting a perfectly acceptable dissertation on the System of Rectangular Surveys?

GENERAL SCHEME

3-1 (73)/3-1 (rewrite) Needed no editing.
Grammar and punctuation degraded

3-2 (73)/3-2 (rewrite)

Washington Office reformatted the provisions of law, 1 through 4, into list rather than paragraph form losing all punctuation in the process. We now have a list of four incomplete sentences.

3-3 (73)/3-3 (rewrite) Needed no editing.

3-4 (73)/3-4 (rewrite) Needed no editing

Washington Office reformatted the provisions of law into list rather than paragraph form losing all punctuation in the process. We now have a list of two incomplete sentences. Ironically they also added a provision at the end of the section and added it in paragraph format.

They also separate what was one paragraph dealing with one subject matter into three paragraphs. This was totally unnecessary.

The rewrite is almost word for word from the 1973 Manual, almost. One key word was changed:

The 19873 Manual states ". . . the distances between identified corner positions given in the field notes constitute proper data from which to determine the position of a lost corner; . . ." (emphasis added) The rewrite states ". . . given in the field notes institute proper data. . ." (emphasis added)

These words are not interchangeable. The Random House Dictionary defines constitute as: "serving to compose or make up a thing" and institute as: "to inaugurate, initiate; get under way."

3-5 (73)/3-5 (rewrite) Needed no editing
New wording is clumsy

INITIAL POINTS

306 (73)/3-6 (rewrite) Needed no editing.

This paragraph was butchered by the WO. They drop mention of the large wall map of the United States and choose to mention only the large and small editions of the special map entitled Principal Meridians and Base Lines. . .

They state that the larger and small special maps are published by BLM and "several State mapping agencies." Is this true?

They also make the statement that ". . . all the topographic maps published by the USGS include rectangular survey boundary line data" (emphasis added). This definitely not true. The USGS does not show protraction survey data nor survey line where they cannot resolve distortion in the surveys

3-7 (73)/3-7 (rewrite) needed no editing

Washington Office states rectangular system started "From an initial point" and in the accompanying table lists this survey as having no initial point.

PRINCIPAL MERIDIAN

3-8 (73)/3-9 (rewrite)

Grammar of the rewrite is atrocious. They state "A principal meridian. . . and extend only to the north, to the south, or in both directions. . ." (emphasis added) The word "only" is incorrect.

The entire meaning of the paragraph is changed. The 1973 Manual states ". . . from the initial point as conditions require" (emphasis added). The rewrite changes this statement to, ". . . From the initial point as field conditions allows" (emphasis added). These two statements are wholly different. The Random House Dictionary defines require as, "to have need of; need" and defines allow as, "to give permission to or for; permit." These words are not interchangeable.

They also change the statement ". . . established alternately at intervals of 40 chains, . . ." from the 1973 Manual to ". . . established at alternate intervals of 40 chains. . ." Alternately at intervals is definitely not the same as alternate intervals. The WO has changed an adverb to an adjective, congratulations.

3-9 (73)/3-8 (rewrite)

Washington Office severely abbreviated this section and in the process changed the content and meaning. Rather than attempt an explanation both sections are repeated below in their entirety.

3-10 (73)/3-10 (rewrite)

As in 3-8/3-9 above alternately at intervals has been replaced with alternate intervals.

3-12 through 16 (73)/3-11 through 3-15 (rewrite) Needed little or no editing.

Washington Office edits of these sections are of a much lesser quality than what is presently in the 1973 Manual.

TOWNSHIP EXTERIORS

Regular Order

3-17 (73)/3-16 (rewrite) Needed no editing.

Washington Office degraded the grammar and the quality of the language.

Meridional Boundaries

3-18 (73)/3-17 (rewrite)

Washington Office degraded the language and again as herein before mentioned alternately at intervals has been replaced with alternate intervals.

3-19 (73)/3-18 (rewrite)

The WO changed the last sentence. The 1973 Manual states: "The parallel is retraced between the nearest standard corners to east and

west to find the exact alignment, and the distance to the nearest corner is measured and recorded." The rewrite states: "The directions and distances to the nearest standard corners are measured and recorded." (emphasis added)

This is not quite the same statement. The rewrite could be interpreted by "directions" that the bearings could be different and thus the corner not on line.

3-20/(73)/3-19 (rewrite) Needed no editing.
The WO degraded the language.

LATITUDINAL BOUNDARIES

3-21 and 22 (73)/3-20 (rewrite) Needed no editing.

The WO absolutely destroyed this section of the Manual. The rewrite explanation of latitudinal boundaries is completely obtuse! Rather than attempt an evaluation both sections are repeated here in their entirety.

FIELD NOTES OF TOWNSHIP EXTERIORS

3-23 (73)/Deleted from rewrite

IRREGULAR ORDER AND PARTIAL SURVEYS

3-24 (73)/3-21 (rewrite) Needed no editing

The WO degraded the language. One special note the WO changed ". . . outlined in the special instructions." (emphasis added) to ". . . outlined in your special instructions." (emphasis added) This is a manual not a letter, the use of the possessive case "your" is improper.

3-22 (rewrite)/does not appear in 1973

This section is unnecessary. The WO was attempting to explain Alaska skeleton surveys, and in keeping with the rest of the manual rewrite butchers the king's english.

The last sentence states: "Therefore, when determining the positions of the original unmonumented corners of skeleton surveys, the proportionate measurement method is used for the restoration of lost corners."

What exactly are we talking about here? "Original unmonumented corners" is an oxymoron. Basically it seems to say when establishing unmonumented corner positions, the proportionate method is used to establish lost corners.

3-25 (73)/3-23 (rewrite)

The WO deleted a portion of the last sentence, i.e., ". . . and even may be established when subdividing, as existing conditions require." and in effect removed a provision.

Allowable deviation in bearing 1973 333-26 through 3-28
Rectangular Limits rewrite 2-24 through 3-32

As in chapter 1 the WO rewrite has moved a discussion forward in the order of the manual and is not only premature but is in error.

They have eliminated sections 3-26 through 28 from the 1973 Manual and replaced it with 3-33 through 3-35 from the 1973 Manual. Once again they show their lack of survey knowledge and failure to comprehend the context of the discussion. Seeing with their limited abilities, what

17
13

they perceive as two discussions of allowable deviation.

At this point in the Manual we are still discussing exterior boundaries. The 1973 Manual is explaining the allowable deviation in bearing of a longitudinally boundary and declares that is ". . . shall not depart more than 14' from the true cardinal course." The WO has substituted those sections of the manual which deal with the rectangular limited of alinement, measurement and position for the subdivision of townships. The allowable deviation for sections is 21' from cardinal and by moving these sections forward in the Manual (and eliminating those sections dealing with exterior boundary limits we have loosened the allowable deviation from 14' of arc to 21' of arc.

The foregoing discussion addresses only the technical error in the rewrite and does not address the bastardization of the language.

NOTE. Removed "maximum discrepancies" from 3-9/3-8 so as not to limit future abilities, loosened limits here.

COMPLETION OF PARTIALLY SURVEYED EXTERIORS

3-29 and 30 (73)/3-33 and 34 (rewrite)

The WO butchered the language and made a complicated explanation far worse than the 1973 Manual.

Specifically, WO changed ". . . any subdivisional line governed by the exterior comes within 14' . . ." which is the present requirement to ". . . all the subdivisional lines governed by the exterior are within 21' . . ."

RETRACEMENTS AND RESURVEYS BEFORE SUBDIVIDING

In general WO degraded this section with its amateurish writing abilities and lack of survey knowledge.

Specifically, WO has added a new paragraph stating that ". . . original surveys should be based on official protraction diagrams." This is outrageous! Protraction diagrams are based on survey record. The methods and procedures followed to perform original surveys are laid out by law, not in protraction diagrams. If the original surveys performed within the law, agrees with the protraction diagram more the better, if not new protraction diagrams are built based on the new survey information.

DEFECTIVE EXTERIORS

3-36 through 3-45 (73)/3-38 through 3-47 (rewrite)

3/36 (73)/3-38 (rewrite)

The WO changed ". . . is obliterated. . ." to ". . . are considered obliterated. . ." The 1973 Manual is talking about the physical and deliberate act of destroying monumentation of a superseded survey not their legal standing.

3-37 (73)/3 39 (rewrite)

The WO left out the last sentence which is important. The 1973 Manual states "Where new corners are placed on an oblique exterior, whose bearing departs more than 1° from cardinal, they are so located for measurement that the cardinal equivalents are 40 and 80 chains." This statement must remain as it is an important differentiation of cardinal as opposed to linear measurement.

18/4

- 3-39 (73)/3-41 (rewrite) WO butchered the language.
- 3-40 (73)/3-42 (rewrite) WO butchered the language. See below.
- 3-41 (73)/3-43 (rewrite) WO also butchered this section.

However, these two paragraphs 3-40 and 3-41 were identified in the 1973 Manual with the exception of south and east, latitudinal and meridional, north and west, and sectional correction line and sectional guide meridian.

The WO edited both these paragraphs very poorly. I may add, changes in one are not reflected in the other. Nice continuity guys.

- 3-42(73)/3-44 (rewrite) WO particularly butchered this paragraph. New language is clumsy and amateurish.

One specific note. The 1973 Manual begins: "New east and south boundaries. . .", the rewrite begins: "The new eastern and souther boundaries. . ." (emphasis added) We are speaking hypothetically here, use of the word THE is improper. I also object to eastern and southern as amateurish.

- 3-43 (73)/3 45 (rewrite) WO butchered the language.

One special note: WO changed "connected regularly" to "terminated at" which is not as descriptive or as eloquent.

- 3-45 (73)/3-47 (rewrite)

The WO added protraction diagram to this discussion. Once again in the extension of the rectangular system or completion of surveys I am bound by the law and not some diagram made from a combination of record, assumption, and scaled positions from USGS topo maps.

TABLES OF LATITUDE AND DEPARTURE AND CLOSING ERRORS

- 3-46 (73)/Deleted from rewrite.

This section was deleted, yet previously limitations are left in for alinement, measurement, and position.

SUBDIVISION OF TOWNSHIPS

Regular Boundaries

- 3-47 (73)/3-48 (rewrite)

The WO dropped that portion of this paragraph which defines 14' in bearing and 33 links per mile. Yet previously they not only leave in these limits, but loosen the bearing limit from 14' to 21'. The preceding section on closing errors was deleted. Make up your mind.

Meridional Section Lines

- 3-48 through 51 (73)/3-49 through 51 (rewrite)

- 3-48 (73)/3-49 (rewrite)

The WO butchered this paragraph. I again object to southern as opposed to south as amateurish. This time they have changed "alternately at intervals" to "at alternating intervals," previously the rewrite used "at alternate intervals." Again, nice continuity guys.

3 49 (73)/Deleted from rewrite

This section dealt with the fact that a meridional section line may not be continued until the latitudinal section line is surveyed; in the case of the Fifth Meridional Line the latitudinal lines east and west. This forms the basis for the order of survey and for the order of our resurvey field notes. It is incomprehensible that it was left out.

3-50 (73)/3 50 (rewrite)

The WO destroyed this paragraph. They included a 21' limit of bearing prematurely (and to some degree erroneously). At this point we are discussing subdivision of townships (the heading) with regular boundaries (+ subheading). Later on in the chapter subdivision of townships with irregular boundaries, sectional guide meridians and correction lines, and closing section lines are dealt with.

3-51 (73)/3-51 (rewrite)

The WO butchered this paragraph. I again object to "northern or eastern" boundaries as amateurish.

LATITUDINAL SECTION LINES

3 52 (73)/3-52 (rewrite)

The WO butchered this section. See comments on 3-50/3 50.

3-53(73)/3-53 (rewrite) WO butchered this paragraph.

Accumulated Error 1973 Rectangular Limits For Distance (rewrite)

3 54 (73)/3-54 (rewrite)

Washington Office severely abbreviated this section. They retained one of six interdependent conditions which are designed to avoid cumulative error and provide continuous checks on accuracy. Once again due to their survey abilities, or more aptly their inabilities, they fail to see the forest for the tree.

MODIFICATIONS

3-55 (73)/Deleted from rewrite

There is no reason to drop this section.

IRREGULAR BOUNDARIES

3 56 (73)/3-55 (rewrite)

Washington Office changed ". . . or alternations are made before subdividing as previously explained. . . ." to ". . . or alterations are made before developing a plan. . ." Unless we are going to "join the Bureau" and become do nothings I do not need a plan. I need to determine existing conditions and subdivide the township according to law.

3 57 (73)/3-56 (rewrite)

Once again WO has changed the five basic requirements from a paragraph format to a listing format, in the process losing all punctuation. We now have a list of five incomplete sentences.

SECTIONAL GUIDE MERIDIAN

3-58 (73)/3-57 (rewrite)

Just can't leave well enough alone, WO had to butcher this paragraph. They ran into the word alternately again and still could not remember what they had changed so this time they changed it from, "... alternately at regular intervals..." to "... at regular alternate intervals..."

3-59 (73)/3-58 (rewrite)

The WO particularly butchered this section. Rather than attempt an explanation both sections are repeated here in their entirety.

3-60 (73)/3-59 (rewrite)

SECTIONAL CORRECTION LINE

3-61 (73)/3-60 (rewrite)

The WO completely changed the content of this discussion. They changed "...so that the west boundary is defective in position..." to "...causing the west boundary to be defective in position..." This is only one condition and temporary points are established for now.

3-62 (73)/3-61 (rewrite)

Washington Office completely destroys the content of this section. This section is the next condition from the one above where the west boundary, due to compensating errors on the south boundary, is not defective in position the first latitudinal section line is projected 5 miles and the last mile is random and true. The rewrite says "...the first latitudinal section line is... between the corners on the eastern and western boundaries. THIS IS NOT CORRECT!!!

3-63 (73)/3-62 (rewrite)

The WO dropped one sentence from this paragraph. The 1973 Manual said: "If the sectional correction line has not been terminated at a closing section corner on the west boundary, the line between sections 30 and 31 is run random and true in the normal manner."

This section is a summation, or more precisely the last step based on whether you find condition 1 (3-61/3-60) or condition 2 (3-62/3-61). These three sections work together. You cannot edit one or the other, or things are taken out of context.

PARTIAL IRREGULARITY

3-64 (73)/3-63 (rewrite)

WO begins to recite the 1973 Manual, however, I do not believe they were capable of understanding the discussion. The 1973 Manual is discussing a situation where only a part of the south or east boundary is defective, and its effect on running sectional guide meridians and sectional correction lines. WO abruptly stops reciting the discussion and adds the sentence "The establishment of these partial lines follows the same rectangular limits and rules that have been provided above for sectional correction lines and guide meridians." I don't know what that means, and neither, I expect, do they.

3-65 (73)/Deleted from rewrite

This section was the second part of the section above and cannot be deleted.

SUMMARY

3-66 (73)/3-64 (rewrite) WO butchered this section.

SURVEY RECORD
(No subheading in rewrite)

3-67 (73)/3-65 (rewrite) WO butchered this section.

Closing Section Lines

3-68 (73)/3-66 (rewrite)

WO changed wording for no apparent reason, and dropped all references to previous sections.

3-69 (73)/3-67 (rewrite) WO butchered this paragraph.

3-70 (73)/3-68 (rewrite)

WO removed that part of this section which deals with the lack of authority to survey or resurvey State boundaries. Specifically that we cannot set corners of minimum control. This restriction is not included in the 1930 or 1947 Manuals, appearing for the first time in the 1973 Manual.

My question is, has anyone bothered to research why it was included in the 1973 Manual? Was there some statute or case law which addressed this issue? It seems to me that if we are going to remove something this significant and definitive there should be supporting documentation to support it.

3-71 (73)/3-69 (rewrite)

In general WO butchered the language of this section.

Specifically they left out that an intersection with a mineral claim or the like may be established to ". . . provide an interval of monumentation of one-half mile or less."

In the case of a claim located entirely within a section, they specify that ". . . a direct connection is made. . ." rather than ". . . a connection made. . ." and they delete the sentence "If the connection is made by traverse, it is reduced to the equivalent direct course and distance. . ."

They change "Since the accuracy of letting in the section depends on a correct location of the claim it may be desirable to retrace one or all of the claim lines." to "A retracement of one or more of the claim lines is necessary if the accuracy of its survey record is insufficient to provide needed acreage." This statement is extremely confusing. We are attempting to accurately locate the claim lines, irrespective of its contents, so that we may lot the lot accordingly.

3-72 (73)/3-70 (rewrite) WO butchered this paragraph.

Specifically, they changed, "On the other hand, if the survey is continued across the reservation or grant for the purpose of establishing a full complement of corners for the control of the subdivision of a section so invaded, a closing corner may not be required." to "on the other hand, if the rectangular system survey is

extended across the reservation or grant, a closing corner may not be required." They completely lost the purpose of the extension of the survey. These statements are not the same.

3-73 (73)/3-71 (rewrite) WO butchered this paragraph.

SUBDIVISION OF SECTIONS

3-74 (73)/3-71 (rewrite) WO butchered this paragraph.

3-75 (73)/3-73 (rewrite) Poorly rewritten.

3-76 (73)/3-74 (rewrite) WO butchered this section.

SUBDIVISION BY PROTRACTION

3-77 (73)/3-75 (rewrite) WO butchered this paragraph.

I particularly object to northern and western as opposed to north or west.

3-74 (73)/3-77 (rewrite)

WO changed ". . .fractional parts as may be necessary. . ." to ". . .fractional parts. This may be necessary. . ." These are not the same statement. Sections are always subdivided by protraction. By the statement "This may be necessary. . ." WO is indicating that protracted subdivision may not be necessary.

3-83 (73)/3-81 (rewrite) WO butchered this section

Specifically they changed tense, i.e., ". . .exceeds 480 chains. . ." as to require. . ." to ". . .exceeded 480 chains. . . that it required. . .", ". . .the usual past practice has been. . ." to ". . .the past practice was. . ."

This section explains the past and present practice of letting elongated sections. WO deleted the explanation ". . . in order to avoid possible confusion of descriptions. . ." I can see no reason for leaving out this sentence.

SUBDIVISION BY SURVEY

3-85 (73)/3-83 (rewrite) WO butchered this section.

Order of Procedure in Survey

3-86 (73)/3-84 (rewrite) WO severely abbreviated this section.

In the process they eliminated the requirement to retrace the section boundaries. They also deleted the entire second paragraph which outlines the order of procedure, which is the subheading for this section for no apparent reason.

SUBDIVISION OF SECTIONS INTO QUARTER SECTIONS

3-87 (73)/3-85 (rewrite)

WO has eliminated the requirement to physically run the centerlines of the section when subdividing. Stating merely ". . .determine the point of intersection. . ." This is incorrect and should not be eliminated because in all cases the physical running of the line will yield different, and more legally correct results, than a mathematical calculation.

WO completely butchered the last paragraph with changes like "record distances" to "old distances" and deleting ". . . to suit the calculations of the areas. . ."

SUBDIVISION OF FRACTIONAL SECTIONS

3-88 (73)/3-86 (rewrite) WO particularly butchered this section.

They combined two paragraphs into one improperly. The first paragraph deals with the provisions of the law. The second paragraph interprets the spirit of the law and explains the practical application to the subdivision of functional sections.

They also declare that the mean course is a "weighted mean bearing. . . of all the controlling lines." This must be eliminated. A weighted mean bearing is merely one tool available to the surveyor and may, under certain conditions, introduce distortion into the subdivision of a functional section. The surveyor may adopt a simple mean bearing or may run the centerline parallel to only one boundary as existing conditions dictate. The method of determining the mean course must be left up to the professional judgment of the surveyor, subject to review by the Office Section.

SUBDIVISION OF QUARTER SECTIONS

3-89 (73)/3-87 (rewrite) WO butchered this section.

They liberally edited this section as they did 3-87/3-85 above. However, consistent with their inconsistency they did not edit them to read alike. They also again eliminated the language requiring the running of the lines.

SUBDIVISION OF FRACTIONAL QUARTER SECTIONS

3-90 (73)/3-88 (rewrite) WO butchered the first paragraph.

SUMMARY

3-92 (73)/3-90 (rewrite) WO butchered this section completely losing punctuation and flow of discussion.

SURVEY OF PARTS OF SECTIONS

3-93 (73)/3-91 (rewrite)

WO completely changed the content of this section. The 1973 Manual states: "A random subdivision of section line is run closing the area to be surveyed. . .", WO changed this to read: "The closing error of the area to be surveyed is determined. . ."

3-93 through 96 (73)/3-91 through 94 (rewrite)

In general the language, wording, and punctuation of these sections has been severely degraded by the WO rewrite.

FRACTIONAL TOWNSHIPS

3-97 through 99 (73)/3-95 through 97 (rewrite)

In general WO butchered the language and punctuation of these sections. Again I object to southern as opposed to south as amateurish.

EXTENSION AND COMPLETION SURVEYS

3-100 through 102 (73)/3-98 through 100 (rewrite) In general WO denigrated the language and punctuation of this section.

COMPLETION OF PARTIALLY SURVEYED SECTIONS

3-103 (73)/3-101 (rewrite) WO generally butchered this section.

3-104 (73)/3-102 (rewrite)

WO felt obliged to reformat this paragraph to a listing format of two conditions. In the process they have eliminated all punctuation and we now have a list of two incomplete sentences.

3-105 (73)/3-103 (rewrite) WO butchered this section.

3-107 (73)/3-105 (rewrite) WO butchered this section.

Specifically the first sentence was changed from: "Modification . . . is necessary where completing each of two sections in the above manner would cause an overlap or hiatus. (No emphasis added) to "Modification . . . is necessary where completing two sections causes an overlap or hiatus." (emphasis added)

PIOTTING GUIDELINES

3-111 (73)/3-109 (rewrite)

- (1) WO butchered this section.
- (2) WO butchered this section.

COMPLETION OF TOWNSHIP SUBDIVISION

3-113 (73)/3-111 (rewrite) WO butchered the middle portion of this section.

MEANDERING

3-115 (73)/3-113 (rewrite)

WO combined the last two paragraphs into one. Unfortunately they cover two different subjects.

The fourth paragraph asserts that meander lines are not boundaries. The fifth paragraph declares that meander lines are between upland and swamp or overflowed lands but not the ordinary high water mark. These paragraphs cannot be combined.

3-116 (73)/3-114 (rewrite)

WO split the first paragraph into two paragraphs improperly since they deal with the same subject. In all other areas they change "mean high water" to "ordinary high water."

3-119 (73)/3-117 (rewrite)

WO combined the first and second paragraphs improperly. And, again, reformat the paragraph to a listing of the six items losing all punctuation. We now have a list of six incomplete sentences.

WO butchers the language in the last paragraph.

LAKES

In general WO butchers the language in this section. They combine the

first two and last two paragraphs improperly.

Under "Meandering" 3-116/3-114, it was noted that WO changed mean high water to ordinary high water. Under the subheading "Rivers" they did not change mean high water. Now under the subheading "Lakes" they again change mean high water to ordinary high water.

ISLANDS

3-122 (73)/3-120 (rewrite)

WO butchered the language. WO again changed mean high water to ordinary high water.

In the third paragraph WO changed ". . . some may rightfully belong to the State, some to a riparian proprietor, . . ." to ". . . some to a riparian agricultural upland. . ." This is not correct, we are talking about ownership not classification. They also add to the same sentence, ". . . and some may be within the limits of swamp and overflowed lands." By the 1973 Manual areas of upland within swamp and overflowed lands are not classified as islands.

WO deletes five paragraphs from the 1973 Manual which discuss, similarly to lakes, islands, which are crossed by township or section lines, and is lands which fall entirely within one section. In the discussion we learn the difference between special and auxiliary meander corners, as they pertain to islands.

The last paragraph, which WO has erroneously mixed in with the discussion of islands in their rewrite was deleted. It is repeated here in its entirety

"Agricultural upland within the limits of swap and overflowed lands should be so classified and shown upon the plat accordingly, but such land is not meandered as an island."

LIMITS OF CLOSURE 1973 Accuracies of Public Land Survey Measurements

3-124 (73)/3-122 (rewrite)

The WO has deleted this entire section, although they leave similar subjects in previous discussions and even loosen bearing from 14' to 21', and replace it with one small paragraph. In this paragraph they state: "The accuracy of measurements for public land surveys are independently verified." Anyone reading this would assume that two people have measured each line.

MARKING LINES BETWEEN CORNERS

3-125 (73)/3-123 (rewrite)

(2) WO changed this statement. The 1973 Manual states "The relation to natural topographic features is recorded in detail in the field notes. (Chapter VIII); the rewrite states "The relation to natural topographic features is recorded in the field notes or derived from other sources, as described in Chapter VIII." What exactly does this mean?

Summary of Objects to be Noted, and Sketches 1973 Plats, Field Notes and Summary of Objects rewritten

3-129 (rewritten) New, not included in 73

I do not see how the requirements for a complete record can be met with

only a plat. It would be impossible to describe the survey accurately. Particularly original surveys, how could topography be handled?

3-126 (73)/3-130 (rewrite) The WO butchered this section.

Technical and Topographic Features (rewrite)

3-131 (rewrite)/Not numbered, paragraph 2, 3-126 (73)

(5) WO deleted the last paragraph, which allowed that ascent and descent is only required in rough country. Now we must always specify ascent and descent in the field notes.

(18) WO deleted this paragraph which required curiosities, archaeological remains, etc. to be tied to the survey.

(19) WO deleted this paragraph which is the magnetic declination.

WO discontinued the list at this point and created a new heading "General Description" and continuing with the 1973 list.

The above sections 3-125/3-123 to this point were rewritten just to be rewritten. The result is poor grammar and a general degrading of the quality of the Manual.

