

FROM KNUCKLEBUSTER TO WARRIOR:
THE CHANGING IDEAL SOLDIER IN
A U.S. ARMY INSTRUCTIONAL
COMIC BOOK

by

Rachel Berryhill, B.S, M.A.

A thesis submitted to the Graduate Council of
Texas State University in partial fulfillment
of the requirements for the degree of
Master of Arts
with a Major in Technical Communication
May 2017

Committee Members:

Miriam F. Williams, Chair

Libby Allison

Deborah Balzhiser

COPYRIGHT

by

Rachel Berryhill

2017

FAIR USE AND AUTHOR'S PERMISSION STATEMENT

Fair Use

This work is protected by the Copyright Laws of the United States (Public Law 94-553, section 107). Consistent with fair use as defined in the Copyright Laws, brief quotations from this material are allowed with proper acknowledgment. Use of this material for financial gain without the author's express written permission is not allowed.

Duplication Permission

As the copyright holder of this work I, Rachel Berryhill, authorize duplication of this work, in whole or in part, for educational or scholarly purposes only.

ACKNOWLEDGEMENTS

I would like to thank my thesis committee members Miriam Williams, Deborah Balzhiser, and Libby Allison, for not only their feedback, support, and guidance in this project, but how they have helped develop my critical thinking skills and technical writing competency through their teaching. I am grateful to the Texas State University English Department and the Texas State University Graduate College for providing guidance and learning opportunities, as well as the helpful tutors and staff of the Texas State University Writing Center. I would also like to thank Robert Watkins, English professor at Utah State University, for sharing his knowledge and insight on *PS* characters and comics in technical communication. Also, I thank my family for their support, encouragement, and helpful advice. Special thanks to Michael Berryhill and Tim Berryhill and for their Army and Army Aviation knowledge, and Souma Mondal and Kathryn Berryhill for their support and suggestions. Finally, I acknowledge the U.S. Army for its role in my professional development.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
CHAPTER	
I. INTRODUCTION	1
II. LITERATURE REVIEW	10
III. METHODOLOGY	21
IV. RESULTS	33
V. CONCLUSION	61
WORKS CITED	67

LIST OF TABLES

Table	Page
1. Analytical Concepts to Apply to <i>PS</i> Selections	22
2. Individual Possession of Aircraft	43
3. Discourses of Three <i>PS</i> Aviation Selections	57

LIST OF FIGURES

Figure	Page
1. September 1970 <i>PS</i> Cover and Table of Contents	25
2. September 1990 <i>PS</i> Cover and Table of Contents	27
3. September 2010 <i>PS</i> Cover and Table of Contents	29
4. Image Designating Air Mobility Section in September 1970 <i>PS</i> Issue	39
5. Cobra Metaphor, September 1970 <i>PS</i>	40
6. Female and Bird Metaphor in Exterior Care of Aircraft, September 1970 <i>PS</i>	41
7. Female and Bird Metaphor in Adding Wheel Assemblies to an Aircraft, September 1970 <i>PS</i>	41
8. Response to Soldier Letter that Requests Removal of Cold Weather Equipment, September 1970 <i>PS</i>	47
9. Anthropomorphized Aircraft Giving a Command, September 1990	49
10. Anthropomorphized Equipment and Agentless Statements, September 1990	50
11. Proper Tool Use in Top Half of Pages 50 and 51, September 1970 <i>PS</i>	54
12. Simple Language in Helmet Instruction, September 2010 <i>PS</i>	60

LIST OF ABBREVIATIONS

Abbreviation	Description
CDA	Critical Discourse Analysis
LOGSA	Logistics Support Activity
PM	Preventive Maintenance
Pubs	Publications

I. INTRODUCTION

While serving in the U.S. Army Reserves in the mid-2000s, I came across a copy of the Army instructional comic book, *PS: The Preventive Maintenance Monthly (PS)* in a vehicle maintenance building. I quickly forgot about the pocket-sized comic book. The comic was never introduced to me by a superior, nor did I read it for information. I do not remember seeing a copy of the comic while deployed to Iraq or Afghanistan, and I never encountered *PS* again as a soldier. Years later, as a graduate student studying technical communication, I remembered *PS* while reading Yu's *Comics in Technical Communication: The Other Kind of Funnies*, and I accessed *PS* issues online. While reading *PS* issues, I realized that *PS* would have been a valuable resource to me as a soldier. I learned that *PS* contains short sections with topics on various maintenance and logistics procedures and explains these procedures in clear explanation and character dialog; furthermore, it also includes Army acronyms and technical terms familiar to soldiers. I became interested in how *PS* combines non-technical and technical text and imagery in this publication, but I also began to consider more broadly how the Army and soldiers are represented in this publication after reading Richard Graham's book about U.S government-produced comics. Graham, a librarian and scholar of U.S. government-produced comic books, summarizes the history of *PS*, focusing on *PS*' early years. He also recounts his personal experience with *PS*. His experience with *PS* was somewhat similar to mine in that he was briefly introduced to the comic and studied the comic years later. His father, a soldier, introduced him to *PS* as a child, and Graham re-discovered the publication doing research later in life. Graham describes government comics as "a looking glass into our government's idealized or assumed 'American experience'" (*Government Issue* 13). Though Graham's discussion of *PS* is limited, his metaphor for

government comics assisted me in forming research questions to guide my study of *PS*. Through direct address, instruction, character dialogue, and technical description, how does *PS* shape or inform the Army's perception of an ideal soldier? How has the *PS* representation of the idealized soldier changed over decades?

Examining *PS* requires considering the historical context in which it was created. *PS*'s inception occurred during the Korean War, in 1951, but an Army comics-style instructional publication began with soldier Will Eisner's *Army Motors* in World War II (Graham 17-18). Following his military service, Eisner founded a graphics company, American Visuals, and was tasked with creating *PS* (Eisner 12-13). He illustrated *PS* issues until 1971 but became much more well known for his graphic novels for the general public (Fitzgerald 9). Eisner established a foundation for later comics work, especially instructional comics (Watkins and Lindsley fig. 10) and has an annual award in the comics industry named for him (Miodrag 61).

The 65th anniversary issue of *PS* in June 2016 recaps the history of *PS*, and states the reason for the publication's existence. "The problem: changes to maintenance procedures were **slow** to get to soldiers who did the moving, shooting, and communicating. The solution: *PS* would be a **post script** to other Army publications that seemingly took forever to change. *PS* would get the official word out **quickly** while **saving equipment and lives**" (emphasis in original) (*PS* June 2016 27). *PS*' purpose, to instruct soldiers on the repair, storage, use, maintenance, and ordering of various equipment, has never changed. This equipment ranges in size from personal communications equipment to tactical vehicles. The letters "PS" refer to the "post script" function of the comic book, because *PS* contains updated information found in traditional Army technical manuals, as mentioned in the explanation of *PS*' existence in the June

2016 issue. *PS* also contains information absent in technical manuals—additional approved ways to efficiently repair equipment, and the rationale behind recommended or required procedures—but is not meant to be a replacement for technical manuals. *PS* has a mostly lighthearted tone, using noncontroversial humor such as puns or anthropomorphism of equipment. However, *PS* also provides messages of caution, alerting readers to what can go wrong if procedures are not followed. Occasionally, real incidents in which soldiers were hurt and/or equipment was damaged are briefly mentioned, with advice on how to minimize risk when performing maintenance procedures to prevent these incidents from reoccurring. Each 62 page color issue provides easily accessible, short articles organized into topics, such as Small Arms or Aviation.

As might be expected with a military branch, an institution emphasizing tradition, certain elements of the *PS* comic book have largely remained unchanged over time, such as anthropomorphism of equipment, content influenced by soldier input, and a balance between humor and warnings. *PS*' instructional language is also an established feature: a mix between jargon and acronyms that traditionally characterize military discourse, and common, conversational language. Another constant element of *PS* are characters that demonstrate or instruct correct and safe maintenance procedures.

However, the portrayal of certain characters throughout *PS*' 65 year history has been controversial. *PS* has discontinued some characters, such as the “hopelessly incompetent” Joe Dope (Yu 104), and changed the appearance of others to reflect professionalism (Steward 86). Two central characters whose appearance has dramatically changed over years are Connie and Bonnie, two female civilian maintenance experts. Twenty-five years ago, Bernhardt's article “The Design of Sexism: The Case of an Army

Maintenance Manual”, was published. Bernhardt acknowledged improvements in the professional depiction of these two female characters in the previous two decades, but doubted that a visual approach exists that eliminates sexism. The technical expert characters Connie and Bonnie continue to appear in *PS*, but now have a conservative appearance, so no overt sexism is apparent. Yu believes that sexism within *PS* is a thing of the past, noting that Connie’s appearance is now professional, and that contemporary *PS* issues “have rectified their gender stereotypes” (90). This notion is not a unanimous belief among those who study *PS*, however. The appearance of these female characters may have changed over the years, but what they say and how they say it compared to other characters is also an important consideration, notes Simmons. “When they [*PS* staff] want to communicate an authoritative message that may imply the risk of danger, [Master Sergeant] Half-Mast delivers the message. But when they want to communicate either a highly technical or gentler message, they may use female characters—who today are represented as professionals, instead of sexy or suggestive figures” (28). Steward similarly states that the character Connie instructs in a “nurturing and caring manner” (88). She notes that Connie and Bonnie are attractive (88), which suggests that the comments on the physical appearance of these characters as they appeared in *PS*’ early years have not disappeared.

One point regarding gender, surprisingly absent in the literature on *PS*, is that no established, recurring female soldier characters exist. Female soldiers do appear in *PS*, but mostly as lower enlisted soldiers (inexperienced and not holding a leadership position). Even in recent *PS* issues, depiction of female leaders seldom occurs. Though Connie, Bonnie, and the latest character Cloe (an acronym for Common Logistics Operating Environment) who was introduced in 2012, are technical experts who provide

a wealth of information on a variety of maintenance and logistics topics, they are civilians. The other current characters are male non-commissioned officers (enlisted soldiers who have leadership ranks). The most prominent character throughout the years is Master Sergeant Half-Mast, wide-shouldered with a square jaw and prominent chin, frequently described as “gruff” by those who write about *PS*, and always wearing the appropriate protective equipment for the scenario in which he appears. Connie and Half-Mast were characters from *Army Motors* (Graham 17) who have transformed over the years to appear more professional. Scholarship that addresses how stereotyping or even just appearance of main characters in technical comics influence effectiveness is lacking, and because *PS* has been instructing a soldier audience with both soldier and non-soldier characters for several decades, it seems to be an appropriate publication for study.

One other *PS* modification to convey professionalism besides character appearance is the small but noticeable (because of its position on the front cover) *PS* logo. The original logo of 1951 had rounded serif letters *PS* within a circle and remained for almost 65 years. A redesigned logo that appeared in the January 2016 issue featured shortened, widened, and angular letters overlapping a circle. The logo change after many years suggests in a small way that the Army wants to appear modern and relevant to its soldiers. The comic book’s technical content itself is often modified to adapt to the needs of a 21st century Army, including descriptions of how to maintain increasingly complex technological equipment.

According to Bruce Cotton, current *PS* managing editor, the Army’s Logistics Support Activity (LOGSA) distributes 32,000 uniform pocket-sized copies monthly (“*PS Magazine Distribution*”). While this is a dramatic drop from a peak of almost 190,000 copies printed monthly in 1989 (Fitzgerald 35), *PS* now has greater availability because

the information contained in *PS* is now on a website, blog, the social media websites Twitter and Facebook, and a mobile phone application for iPhone and Android users. The website and mobile phone application include digital *PS* issues.

Accessing *PS* until recent years had mostly been restricted to U.S. military personnel (Fitzgerald 9), but since *PS* is now accessible to the public in an online environment, interest in *PS* among a civilian audience has grown. In recent years, books intended for a general audience as well as a few scholarly publications (Bernhardt; Eisner; Fitzgerald; Graham; Simmons; Steward; Yu) have addressed topics such as the history of *PS*, its characters, its discourse, and its visual elements. Yet, published work on *PS* remains limited, has tended to be descriptive rather than critical, and lack a soldier or former soldier's perspective. Additionally, there has not been sufficient recognition of *PS* as a unique collection of genres with a function beyond providing technical instruction. The genres—illustrated letters to the editor, procedures, questions and answers, as well as an eight-page non-technical graphic narrative usually featuring one or more of *PS*'s recurring characters (called a “continuity” among *PS* staff) —are combined into one publication.

Though other branches of U.S. military service have produced comics, government comics librarian Richard Graham, (“P.S. Magazine/Government Issue Book”) believes *PS* to be the only U.S. military *instructional* comic book. Additionally, *PS* may be the longest running instructional comic book in the United States. *PS* is a valuable publication for technical communicators to study because of the decades of available content, and the publication's goal being user-centered: “to assist soldiers in adapting to ever-changing environments and conditions, and to help them be

knowledgeable of all aspects of their tasks and the tools and equipment around them” (Eisner 6).

PS’ stated purpose is to instruct soldiers, and instruction is a positive attribute of government comics, according to Graham. “Government comics stand a better chance of success in delivering their messages when they demonstrate procedures or explain facts, rather than illustrate overly dramatic morality tales intended to persuade, which much of the target audience only laughs at” (Graham 13). Articles and books on *PS*, both scholarly and intended for the general public, tend to praise the 5 by 7 inch publication for its illustrated common-language instructions. However, it also does contain the so-called “morality tales”, intended to encourage certain attitudes and behaviors (which constitute *PS*’ idealized soldier) from its main audience—inexperienced soldiers (lower enlisted, which are soldiers not in a leadership position). Steward emphasizes the appeal to *pathos* in *PS*, including “patriotism and sense of responsibility” (49), especially through the use of characters (86). In her book on comics in the technical communication field, Yu acknowledges the dual functions of *PS*. “It not only teaches soldiers specific maintenance procedures but seeks to educate them about the importance of maintenance so that they bring a positive attitude to the task” (Yu 105). Paul Fitzgerald, a former managing editor of *PS* from 1953 to 1963, also points out the dual general and specific instructional functions of *PS* by referring to *PS* as “motivational-educational” (9). *PS*’ concept of the ideal soldier has always meant a soldier who is knowledgeable about equipment and dutifully follows instruction, but as my research revealed, increasingly also involves being a professional and committed soldier.

To conduct a study of *PS*’ promotion of a certain ideal soldier, I use the theoretical framework of *genres of organization communication* by Yates and

Orlikowski. According to Yates and Orlikowski, genres evolve through an interaction between institutionalized practices and individual human actions (318). *PS* has evolved from a sporadically printed publication with heavy emphasis on text descriptions, to a genre produced in multimedia with interactive content, reflecting both the changing institutional practices of the Army and soldier needs. Yates and Orlikowski acknowledge, though, that power can be realized through the use, disuse, and manipulation of genre rules—that genre rules can be instruments of power. Genre rules prescribe certain elements of form and structure. For *PS*, soldier readers (the individual actors) can participate in the shaping of the comic book through feedback and questions, but the U.S. Army as an institution, through directing the work of a civilian staff and contracted graphics company, ultimately has the power to shape the genre rules. The U.S. Army retains control over form and substance, deciding what is excluded or included in this comic book. The method of providing feedback is now more efficient, facilitated by digital opportunities to engage with the *PS* staff, but soldiers still have limited input into each *PS* issue. In a 2008 interview, *PS* production manager Stuart Henderson alludes to current pressure on *PS* staff, both internal and external to the U.S. Army regarding the content of *PS*, noting that while the goal of *PS* has remained the same since 1951, “what’s changed are the strictures placed upon the process throughout the years by Congress, the upper echelons of the Army, and the Army’s lawyers” (Fitzgerald 219).

The institutional power of the U.S. Army makes Critical Discourse Analysis (CDA) an appropriate method of analysis for this publication. CDA involves the analysis of written and oral discourse that is politically or culturally influential, with attention to the broader context in which the discourse occurs (Huckin 79). Applying CDA to the character dialogue and instructional discourse contained in *PS* reveals a level of

communication beyond simply instruction about particular maintenance and repair situations, one which promotes a certain ideal soldier. I use CDA within the model of *genres organizational communication* to study the character dialogue and instructional discourse of three selected *PS* issues during U.S. military war involvement spaced 20 years apart: 1970—Vietnam War, 1990—Operation Desert Shield, 2010—Operation New Dawn, to determine how *PS* promotes a certain ideal soldier. *PS* started during a wartime era—the Korean War. I chose *PS* issues from periods of combat because during combat, soldiers’ skills (many of which are emphasized in *PS*) are put to the test in extremely stressful situations. The following literature review and methodology provide a background on comics, comics in technical communication, and a rationale for the selection of CDA features or tools to apply to *PS*.

II. LITERATURE REVIEW

Comics Composition and Visual Communication

Articles and books on comics often cite the comic theorist/artist Scott McCloud's definition of comics, whether the author agrees with the definition or not (Jacobs 505; Porter 7; Sealey-Morris 34; Webb et al. 106; Yu 213). McCloud's definition, well known to comics fans and researchers alike is "juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer" (9). There is no agreed upon defined boundary of what is or what is not a comic. Technical communicator and comic writer Alan Porter establishes his own definition: "a graphic medium in which images are used in order to convey a sequential narrative. In other words, the combination of words and pictures in sequence" (7). While a simpler definition than McCloud's, Porter's definition would seemingly include children's books. Gabriel Sealey-Morris rejects the notion that comics combine word and image in a linear fashion, stating that comics are complex, containing a "cacophony of images, words, sounds, and states" which makes comics ideal for the literacy classroom (38). Comics take a variety of forms (Jacobs 503) but tend to have several recognizable features such as panels, speech bubbles, a narrative, and gutters. Gutters (space between panels—separate scenes or images) connect the panels to form the narrative and convey the passage of time (Jacobs 504).

Although comics scholarship and comics as a pedagogical tool have developed and expanded in recent years, Carol Tilley points out that comics remain limited to specialty journals and conferences, and the role of comics is largely ignored in children's literature and book and print culture (405-06). In the early 1950s, around the time *PS* began to be published, psychiatrist Frederic Wertham wrote *Seduction of the Innocent*, a

book aimed to persuade the public that the increasingly mature themes of comics at the time were damaging to children (Tilley 390). Tilley, who gained access to Wertham's notes, found *Seduction of the Innocent* to contain exaggerated and sometimes falsified evidence (390). Wertham provided anecdotal accounts of troubled youth that were often not his own patients, selectively presenting only children's mentions of sex or violence themes in comics (Tilley). *Seduction of the Innocent* "cast a long shadow over the place of comics in society" (Tilley 405), influencing the creation of the Comics Magazine Association's self-regulating Comics Code (Nyberg 27; Tilley 385). According to Nyberg, sales of comics after the implementation of the Code, which governed certain subjects and provided standards relating to marriage and sex, never again reached pre-Code levels (31). The Code diminished over time and ceased to have influence in the comics industry in 2011.

Although *PS* is obviously for an adult audience and not children the Comics Code was created to protect, it is remarkable that *PS*' formative years were during a time of widespread comics denigration in America. *PS* provided a convenient, novel way for soldiers to learn maintenance procedures, and the publication has remained relevant, able to adapt to changing Army technology, attitudes, and training needs. *PS* was truly innovative for the mid-twentieth century, and having an instructional format, is an excellent example of a technical communication comic.

Comics in Technical Communication

Technical comics such as *PS* have been largely understudied within the technical communication field. However, the publication of Han Yu's book *The Other Kind of Funnies: Comics in Technical Communication* in 2015, may signal the beginning of a

shift toward technical communicators regarding comics such as *PS* as professional publications worthy of study and replication. Yu discusses *PS*' characters, storytelling, and anthropomorphized equipment extensively in her chapter on instructional comics. While she supports the use of comics to communicate instructions (Yu 131), she contends that the technical communication field has not yet embraced comics as a medium for communication because of its reputation as being unprofessional or juvenile and the field is still developing its professional identity (Webber). Michael Opsteegh, a technical communication practitioner, seems to share the notion that technical communicators are hesitant about comics. He introduces the topic of comics by stating "First, let's dispel any misconception that comics are kids' stuff" (19). In a separate article on technical comics, Alan Porter, another technical communication practitioner, discusses the misconception that comics have a limited range (7).

Even when comics' reputation is not mentioned, some technical communication professionals imply a negative reputation of comics by placing limitations on comics. Michael Opsteegh twice states his views that keep comics limited: "I see no reason to use the comics format as a primary means to convey information" and "comics should not become the primary method of our communication" (21). Yu asserts that not all forms of technical communication would be appropriate for the comics format (90 and 251). Watkins and Lindsley, who advocate for using comics in the college technical writing classroom and designed a scholarly article entirely in a comic format, state that comics should be taken seriously in education, however, comics should not be the "ultimate solution" (Figure 82). These statements are somewhat obvious because comics, like any other medium, will not be appropriate for every communication situation. Explicitly limiting comics is a way for technical communication professionals to support the still-

new notion of comics as technical communication but also announce to others in the profession that they are not abandoning traditional forms of technical communication.

Yu and Nyberg seem to share the same perception on comics' reputation in American society. In the last chapter of her book, Yu claims that comics are still characterized by American society as dispensable, unprofessional, and a guilty pleasure (249-50). This reputation is why there rarely are proposals to produce technical communication comics (Yu 5). Nyberg attributes the poor reputation of comics to the lasting effects of the Comics Code: "The biggest challenge facing comics creators, publishers, and retailers today is the persistent public perception of comics as a 'juvenile' literary form. There is nothing inherent in the comic form that limits it to telling stories suitable only for children" (Nyberg 32). However, the publication of Yu's recent book, which was praised by accomplished technical communication scholars Sam Dragga, Thomas Barker, and Stephen Bernhardt, along with the successful creation and use of technical comics in a variety of situations (contracting—Haapio et al., technical documentation—Webb et al., cyber security—Zhang-Kennedy et al., and medical instruction—Babaian et al.) indicates that scholars and practitioners are beginning to explore and even embrace this creative form of technical communication. Zhang-Kennedy et al. and Webb et al. developed instructional comics and do not raise concerns that comics are perceived as unprofessional. In fact, Webb, et al., user experience professionals who tested two types of instructional comics with an audience of technical writers, believe that comics are now mainstream, popular, and highly regarded in technical communication (106-07).

Both Webb et al. and Zhang-Kennedy et al. received positive feedback on their digital comics from users in their studies. Zhang-Kennedy et al. tracked eye movement of

participants viewing their cybersecurity comics, and interviewed the participants one week later. The interactive features of the comics held users' attention, users retained concepts presented in the comics, and users described the comics as "funny", "relatable", "enjoyable", and "fun" (Zhang-Kennedy et al. 239). Webb et al. tested two types of comics—one task oriented and one concept oriented—against PowerPoint presentations concerning the topics of the comics. Study participants found the comics to be friendlier, more appealing, and more useful than the PowerPoint presentations (Webb et al. 114).

Literature such as Webb et al. and Zhang-Kennedy et al.'s articles include discussion of several features that make a technical comic successful, but there are no formalized or universally agreed upon guidelines or structural requirements for technical comics. Anthropomorphized characters are a rhetorical use of *pathos* and they humanize the material (Zhang-Kennedy et al. 220; Yu 115). A central character that appears throughout the work is essential for advancing the narrative (Porter 8; Zhang-Kennedy et al. 220), who may or may not be a surrogate user (characters who perform the task being instructed) (Yu 106). To communicate procedures effectively, a technical comic needs a narrative to hold the reader's interest (Porter 7; Yu 128-30; Zhang-Kennedy et al. 239), with a balance of text and visual art (Porter 8). Also, metaphors within the instruction aid in comprehension of the material (Webb et al. 114; Yu 196-201; Zhang-Kennedy et al. 221). Yu specifically mentions how the image of a locked jail cell and the word "SLAM" in a comic about the internet browser Google Chrome helps communicate the concept of Google Chrome blocking malware (120). *PS* contains many of these features; unsurprisingly, Yu notes many examples from *PS* to highlight technical comic successes.

Perhaps because *PS* is not a traditional comic book and combines mini-narratives, text instruction, and letters to the editor, some scholars and comics authors do not refer to

PS as a comic or comic book. Paul Fitzgerald, a former editor of *PS*, has called it a program (9), a book on the best of *PS*'s early issues refers to it as a magazine or booklet (Eisner 11 and 14), and technical communication scholar Bernhardt referred to *PS* as a manual (217). Scholarship on comics as technical communication is still trying to gain a foothold in the field of technical communication, and a body of literature that includes established concepts and best practices for technical communication comics does not yet exist.

Genres of Organizational Communication

Porter and Yu contend that comics are a medium, not a genre (Porter 7; Yu 20). Comics are a visual method of displaying information from a variety of subjects. Genres, on the other hand, have clearly identifiable characteristics of purpose and/or form and are recognizable within the community in which they occur (Bhatia 23; Orlikowski and Yates, "Genre Repertoire" 544; Yoshioka et al. 438). *PS* is unique as a hybridized genre. Combining instruction, comic narrative, and letters to the editor in technical as well as colloquial discourse, *PS* is unlike other Department of the Army publications. The totality of these Army publications including but not limited to forms, technical manuals, technical bulletins, regulations, and *PS* make up the Army's genre repertoire. A genre repertoire is the totality of genres that a community routinely uses (Orlikowski and Yates, "Genre Repertoire" 546). Established genres can be appropriated into new media, Orlikowski and Yates state, like a memo heading transformed into an electronic mail template ("Genre Repertoire" 572; Yates et al. 66). *PS*' older issues have been scanned and made available as Portable Document Files (PDFs). Orlikowski and Yates and Yates et al. studied genres in business communication practices, not the military, which

involved communication efforts by many employees. In contrast, *PS* is mostly one-way communication, an approved military instructional publication for soldiers. *PS* staff answer letters from soldiers and publish selected letters, but most of the publication is wholly written and designed by *PS* staff and a contracted graphics company.

Yates and Orlikowski (“Genres of Organizational Communication” 321) and Bhatia (25 and 189) discuss the role of power in regards to genres. Bhatia characterizes the actors who develop or change a genre as expert members of a particular community (25 and 189), whereas Yates and Orlikowski simply name those who shape or influence a genre as individuals (“Genres of Organizational Communication” 321). Bhatia points out that genres reflect the culture of the organization or discipline they exist in (23), and expert members of these disciplines or organizations have the power to create entirely new genre forms (189). Those who can alter genres also have the power to halt communication practices when technology affords the opportunity for a new medium that provides less control. Yates et al. studied the use of an electronic bulletin board at a petroleum company, which was intended for employees to use as technical support, but the bulletin board became an opportunity for employees to post grievances disapproving of management, and management shut down the bulletin board after 20 months (69).

Suchan argues, however, that genre studies such as Yates and Orlikowski’s do not account for the effect of attitude-based factors on genre enactment and modification (452). He studied how an organization’s “root”, or broad, metaphors guide attitude toward organizational change, whether consciously or not (457). To determine why two geographically separated workplaces of the same organization produced such disparate reports, he interviewed workers at each site extensively, and concluded that opposing metaphors had become entrenched at each workplace, which guided worker action,

producing different reports. One worksite was very open to change, while the other held firmly to established practices and traditions.

Suchan's article on organizational metaphors contained a root metaphor of the Marine Corps, which may provide some insight into possible metaphoric representations in *PS*. In the late 1990s, the Marine Corps developed the metaphor of the "three-block war", which indicates that this military branch is open to change (456). The "three-block war" means that a Marine must be prepared to conduct a variety of operations—military action, peacekeeping, and humanitarian aid, in the space of three city blocks (456). The "three-block war" suggest that Marines must be adaptable and possess a variety of skills (457). Does *PS* contain similar metaphors, especially in a recent issue, that suggests Army openness to change? While Suchan, and Yates and Orlikowski studied genre use and modification within an organization, *PS* is produced by non-organization members (non-soldiers) for soldiers. The genre rules or norms of *PS* are controlled by the limited staff members of *PS*.

PS as a genre reflects the balance between formal/legitimate and casual that is inherent in Army culture: on one hand, the publication contains humorous comic illustration and uses plain language to instruct soldiers, but on the other hand, *PS* also contains technical descriptions, warnings, and procedures and the Army classifies it as a technical bulletin. On the front cover of each issue and each table of contents contains "TB" (technical bulletin) followed by a code. The Army also describes *PS* as an official publication on the table of contents page. Army genres, which Anson and Nealy refer to as "textual tools", are adapted to fit the needs of each Army unit (5). "The original tool mutates and often merges with other similar tools to form a more effective hybrid", and since multiple authors typically produce and modify a textual tool, author recognition is

not a usual practice (Anson and Nealy 5). This is true for *PS*. *PS* is a collection of modifying genres, and no longer contains even signatures of comic artists like Will Eisner on its covers. This is a general, introductory explanation of *PS*, or genre orientation. Genre Orientation is understanding the genre of the text to be analyzed and how the text fits the genre, which Huckin states should be the first step in conducting Critical Discourse Analysis (CDA) (82).

Critical Discourse Analysis

Critical Discourse Analysis is an analytical approach or orientation to be applied to discourse, not a step-by-step process (Huckin, “Critical Discourse Analysis” 78; Huckin, “Discourse of Condensation” 163; Locke 2). Huckin applies a militaristic metaphor to CDA when he states that it “offers a powerful arsenal of analytic tools that can be deployed” to public texts (“Discourse of Condensation” 157). Like genre studies, CDA involves consideration for the social context in which the discourse occurs (Huckin, “Critical Discourse Analysis” 79; Koller 27). I mentioned in the Introduction that the institutional power of the U.S. Army is what makes CDA an appropriate strategy for analysis of this publication, but there are several other reasons that support the use of CDA to analyze *PS*.

First, as discussed previously, CDA involves exposing power issues such as social inequalities, dominance, and privilege (Fairclough 8; Huckin et al. 123; Huckin, “Critical Discourse Analysis” 79; Huckin, “Discourse of Condensation” 158; Locke 25). *PS* is produced by a military branch, which makes Critical Discourse Analysis appropriate because institutions such as government, law, and education are commonly sites of power inequalities (Huckin et al. 123). Military identity is comprised of emphasis on specific

history and tradition, uniformity, hierarchy, and values. To understand a group such as a military branch's collective identity, we can examine their texts. Social action is textually mediated (Fairclough 169; Koller 22) and collective identities are formed and transformed through within-group discourse and between-group discourse (Koller 20). *PS* is now a part of public discourse, with searchable issues available online. Availability of digitized documents provides an opportunity for analysis (Huckin et al. 120) of Army communication including illustrated instructions.

Additionally, *PS* is a form of multimodal communication, with text, illustration, diagram, and in recent years, supplemental information including videos online. Comics are multimodal texts, which are “complex rhetorical environments in which persuasion occurs through a variety of means” (Jacobs 512). Huckin et al. recommend the application of Critical Discourse Analysis to multimodal forms of communication to understand the “multifaceted rhetorical message” (Huckin et al. 122). Finally, a comic book may be an untapped genre for critical discourse analysis and discourse analysis generally. Examples in discourse analysis and critical discourse analysis texts include newspaper articles (Huckin, “Critical Discourse Analysis” 84-91; Zdenek 154), newspaper editorials (Locke 54), scientific articles (Makwanya 133), advertisements, university teaching job postings, a government green paper on social welfare (Fairclough), a personal care product catalog (Koller), letters to the editor (Magnet and Carnet), a legislator response to constituent letter (Huckin, “Discourse of Condescension” 166-72) and even graffiti and calendars (Wood and Kroger 68). When analyzed images instead of texts are discussed, they have included “paintings, textbook illustrations, children's drawings, billboards, and maps” (Huckin, “Discourse of Condescension” 157)—comics are absent.

Zdenek applied CDA to 136 news articles on cochlear implants for people who are Deaf and hard-of-hearing. He argues that the Deaf community lacks rhetorical agency in these articles, which are dismissive of Deaf culture and simplify the discussion through assumption of Deaf/hearing binary. Though he does not specifically mention metaphor use throughout these articles, a selection he excerpts presents a pattern of dramatic, war-like metaphors describing parents seeking out cochlear implants for their children who feel threatened by people against the surgical procedure (including people who are Deaf), through words such as “barrage”, “besieged”, “D-Day”, and “genocide” (164). Zdenek comments on the use of these words by stating “the tables have turned as oppressor and oppressed swap places” (164), meaning that those who have been excluded or minimized in discussion—Deaf people—are presented as aggressors.

Metaphor use was also present in the analysis of a personal care products catalog, revealing gender differences (Koller 31). More variation existed in metaphors aimed at males than females, assuming a stereotypical role for females (Koller 31). In a study of scientific discourse on climate change in Zimbabwe, Makwanya applied CDA to uncover heavy use of jargon and metaphors that separated scientists from the lay public, solidifying the scientists’ role as gate-keepers of knowledge and disempowering the public (143). The prevalence of metaphor examination across CDA, comics, and organizational communication literature, along with CDA emphasis on human action or agency (inclusion or exclusion of social groups in a text) and discursive differences will guide this study. In the following Methodology section, I provide a rationale for studying *PS* through the CDA tools of metaphor, agent-patient relations, and discursive differences.

III. METHODOLOGY

CDA connects a dominant, institutional voice and a text because it is a “marriage of text and context” (Huckin et al. 111), where unequal power distribution is uncovered through the analysis of social context or social practice, discourse practice such as production and distribution, and the actual text (Koller 24; Huckin “Critical Discourse Analysis” 80; Fairclough). CDA provides numerous possible analytical tools. It is not prescriptive or exhaustive; rather, CDA as a critical perspective is selective, highlighting the most relevant features of a text that suggest an imbalance of power (Huckin “Critical Discourse Analysis” 79-80; Huckin “Discourse of Condescension” 163). Therefore, for this study I limited the number of analytical concepts to three analytical concepts used by CDA researchers that will help to answer the research questions stated in the Introduction: how does *PS* shape or inform the Army’s perception of an ideal soldier? How has the *PS* representation of the idealized soldier changed over decades?

I followed Huckin’s two stage process for performing CDA: gaining insight when reading a public text, with a typical reader of the text in mind, and then applying CDA concepts in a critical reading of the text (“Critical Discourse Analysis” 81; “Discourse of Condescension” 163). Although there is no standard way to perform CDA, Huckin believes his personal approach to be “fairly typical” among CDA researchers (“Critical Discourse Analysis” 81). He considers a text at three levels: the text as a whole, sentences, and words and phrases.

Keeping these three levels of text in mind, I selected three CDA concepts noted by Huckin to correspond to these levels of text (“Critical Discourse Analysis” 81-4). Table 3.1 notes each concept and the rationale for studying *PS* through each one.

Table 1 Analytical Concepts to Apply to *PS* Selections

Text Level	CDA Tool	Rationale
Words and Phrases	Metaphor (Huckin “Critical Discourse Analysis” 84; Koller 25; Makwanya 132; Simmons 58; Sucham 456-457; Webb et al., 114; Yu 201; Zhang-Kennedy et al. 221)	Metaphors structure social action (Koller 25) and indicate an organization’s openness to change (Sucham 456-57). They are also a common feature of technical comics (Webb et al., 114; Yu 201; Zhang-Kennedy et al. 221), so I expect to find metaphors in the selected <i>PS</i> issues.
Sentence Level	Agent-Patient Relations (initiators of action and receivers of action) (Huckin “Critical Discourse Analysis” 83; Simmons 57; Steward 98; Zdenek 150)	Determining who is excluded or included in a text and if they are passive or active uncovers who has power (Koller 23; Zdenek 150).
Text as a Whole	Discursive Differences (Huckin “Critical Discourse Analysis” 83; Makwanya 129; Simmons 19; Yu 58-60)	Discursive differences in a comic can assist with making meaning (Yu 58-60) and suggests an attempt at inclusion of multiple voices. However, different discourses could signal a manipulative rhetorical effect (Huckin “Critical Discourse Analysis” 83).

After reading the CDA literature, I formulated questions to aid in analysis, to ultimately accomplish the goal of answering my research questions. Questions pertaining to metaphor include what metaphors are evident in *PS*, and what does the choice of metaphor say about the *PS* staff’s impression of their target audience and how *PS* intends to influence the target audience, especially lower-enlisted soldiers who tend to be inexperienced and young? Additionally, how do metaphors structure relations between

social actors (soldiers in *PS*) (Koller 25)? If there is an absence of metaphor, what does this say about *PS*?

For agent-patient relations, who exerts power in *PS*? According to Huckin, an “agent” is one who initiates action and a “patient” is a passive recipient. If a certain person or persons in the text are consistently doing something (agents) to others (patients), this may be an indication of imbalance of status or power (Huckin “Critical Discourse Analysis” 83; Huckin “Discourse of Condescension” 160). Are soldiers depicted in *PS* able to initiate action, or are they passive recipients of Army directives, or even disempowered by autonomous technology? Do soldiers actively shape Army regulations and Army culture in *PS*? To what extent is the communication in *PS* top-down, where *PS* is “the one who tells” and the soldier reader “the one who is told” (Fairclough 184). The teacher to student relationship (technical communicator to product or technology user) is typical for technical manuals—is this also the case for *PS*?

Within agent-patient relations, I focused specifically on sentences that empower or inspire action from soldiers and sentences that limit action or power of soldiers.

Sentences or page illustrations that show empowerment of soldiers will include

- recognition of soldiers’ effort or ingenuity,
- reference to individual soldier ownership of large Army equipment or aircraft, and
- emphasis on collective responsibility/consideration for fellow soldier.

I also searched the *PS* aviation selections for sentences and page illustrations that limit the action of soldiers by showing soldiers as passive recipients of Army instruction.

These limiting sentences or page illustrations would include

- absence of rationale or stated consequences for a procedure the soldier is instructed to accomplish (such instruction would suggest that soldiers should simply follow orders), and
- reminders of subordinate status of enlisted soldiers.

Finally, examining discursive difference will reveal to what extent *PS* weaves together colloquial and formal (jargon-filled) discourses. What discourse is evident in soldier and character dialogue? When discursual differences occur, are they confined to certain areas, or located throughout the text? I selected these questions to explore how *PS* represents an ideal soldier through the genres contained in the publication (comic narrative, instruction, and letters) and how the concept of the ideal soldier may have changed over a forty-year period.

I selected a sample of three September issues of *PS* that occurred during combat operations, twenty years apart. The September 1970 issue, during the Vietnam War, contained 81 pages. The September 1990 (Operation Desert Shield) and September 2010 (Operation Enduring Freedom and Operation New Dawn) issues both contain 63 pages. Since 270 total pages presents a body of text too large for the scope of this study, I selected a section that each issue contained—Air Mobility, later changed to Aviation in January 1996—for comparison of the same subject. Despite the different names for these sections of *PS*, air mobility and aviation are the same activity within the U.S. Army, which is the maintenance, repair, and operation of aircraft and aircraft-related equipment. The September 1970 issue contains thirteen pages on the topic of air mobility, the September 1990 issue contains seven pages, and the September 2010 issue's aviation section is also seven pages, for a total of 27 pages of text and illustration to be analyzed. The issue covers and tables of contents are located in figures 1, 2, and 3.

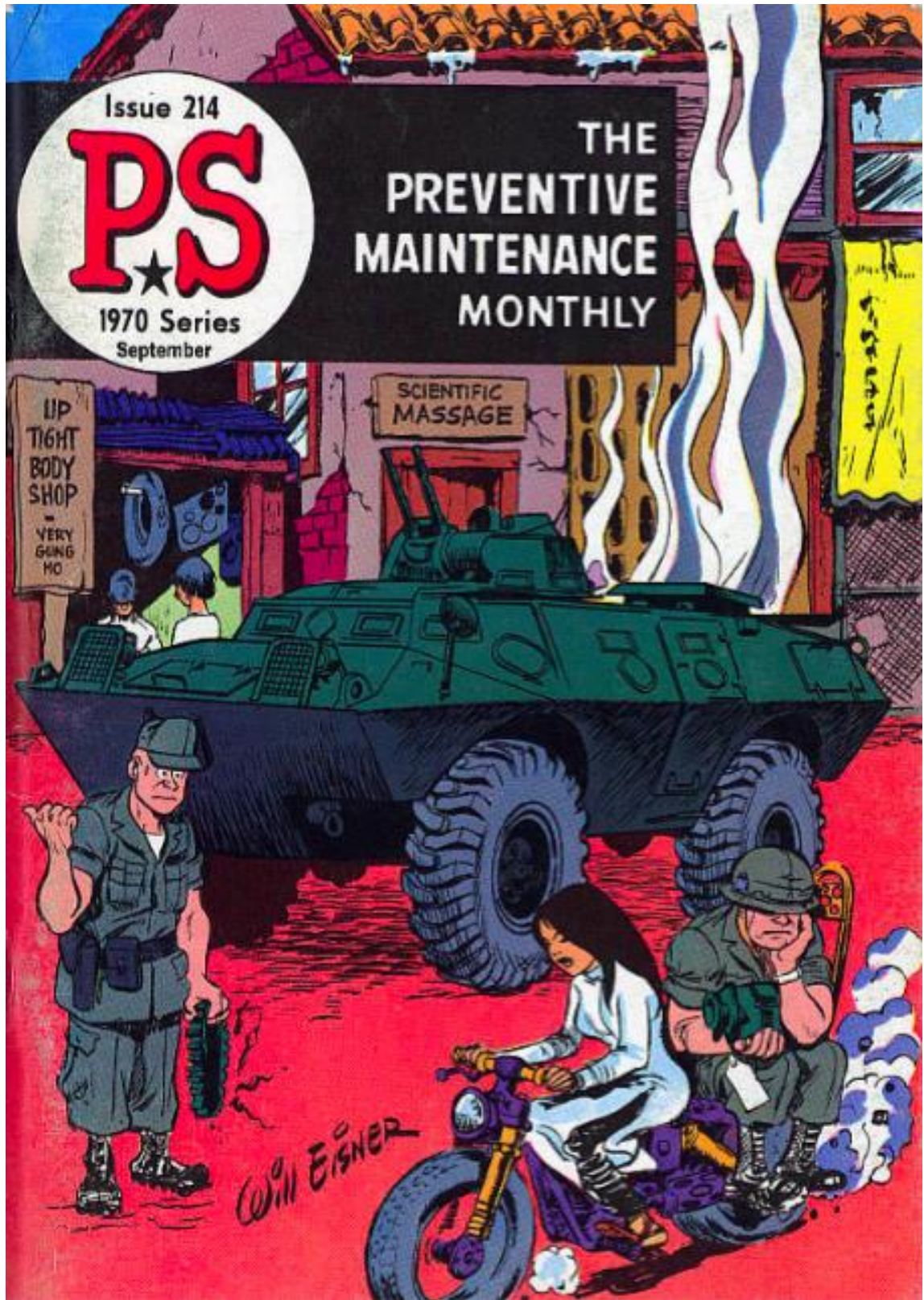


Fig. 1 September 1970 *PS* Cover and Table of Contents



Fig. 1 (Continued) September 1970 PS Cover and Table of Contents

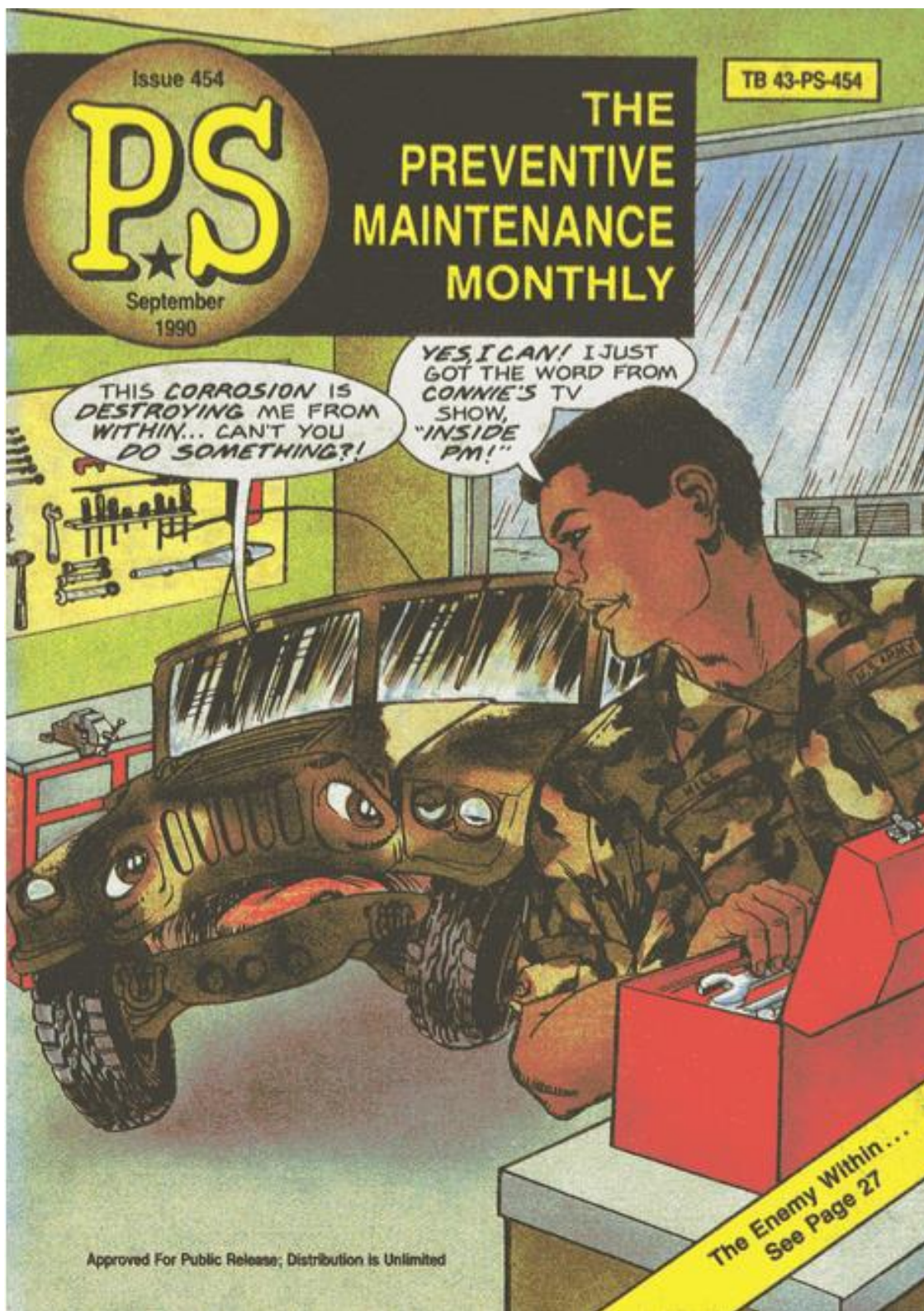


Fig. 2 September 1990 *PS* Cover and Table of Contents



THE PREVENTIVE MAINTENANCE MONTHLY

TS 43-PS-454, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user.

ISSUE 454 SEPTEMBER 1990

FIREPOWER

M103A1, M167A1	MLRS	8, 9
Vulcan	M1 Tanks	8
Dragon	M2/M3 Bradley	10
G/VLLD	M113 FOV	11
Chaparral		

GROUND MOBILITY

CUCV	HEMTT	20
M1010 Ambulance	M931/A1, M932/A1	
HMMWV	Truck Tractors	21
M809-, M93-Series	M933-Series	22, 23
M915 Truck Tractors	M915-Series	24-25
Parking Brake Kit	M796 Bolster Trailer	25
Door Seal NSN		

AIR MOBILITY

AH-64 Apache	CH-47D Chinook	39
UH-60A Black Hawk	Fuel Resistant	
Hawk	Gloves	39
EH-60A Black Hawk	Aviation Messages	39
CH-53 Kowas	Hydraulic Fluid	
Helipad Decoy NSN	Dispenser	40-41

COMMUNICATIONS

AN/TRC-170(V)3	Night Vision Devices	45
SHCOARS	AN/PVS-5	45
AN/VVS-2	AN/APR-39(V)1	45

TROOP SUPPORT

New Pubs, SOU's	5-, 10-KW DED	
Corrosion	Generators	53
1300 Graders	Sanator Decon	54, 55
Ribbon Bridge	M12A1 Decon	55
Transporter	Strapping and Sealing	
MW24, -B, -C Scoop	Kit	56
Loaders	Food Containers	57
Cat D7-Series Tractors	SOUs	58
Twin-Jet Bridge Boat	AMDF	59
	MWO Microfiche	59

You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems, questions or comments on material published in PS. Just write to:

RCG Mail-Box
The Preventive Maintenance Monthly
Lexington, KY 40511-5101

FAX: DSN 745-3855
or Comtel 606-293-3855

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

WILLIAM J. MEEHAN II
Brigadier General, United States Army
The Adjutant General

PS, The Preventive Maintenance Monthly (ISSN 0475-2953) is published monthly by the Department of the Army, Lexington, KY 40511-5101. Second Class Postage is paid at the Lexington, KY post office and at additional mailing offices.

Postmaster: Send address changes to PS, The Preventive Maintenance Monthly, US Army Pubs Ctr, 2800 Eastern Blvd, Baltimore, MD 21225-2896.

Fig. 2 (Continued) September 1990 PS Cover and Table of Contents

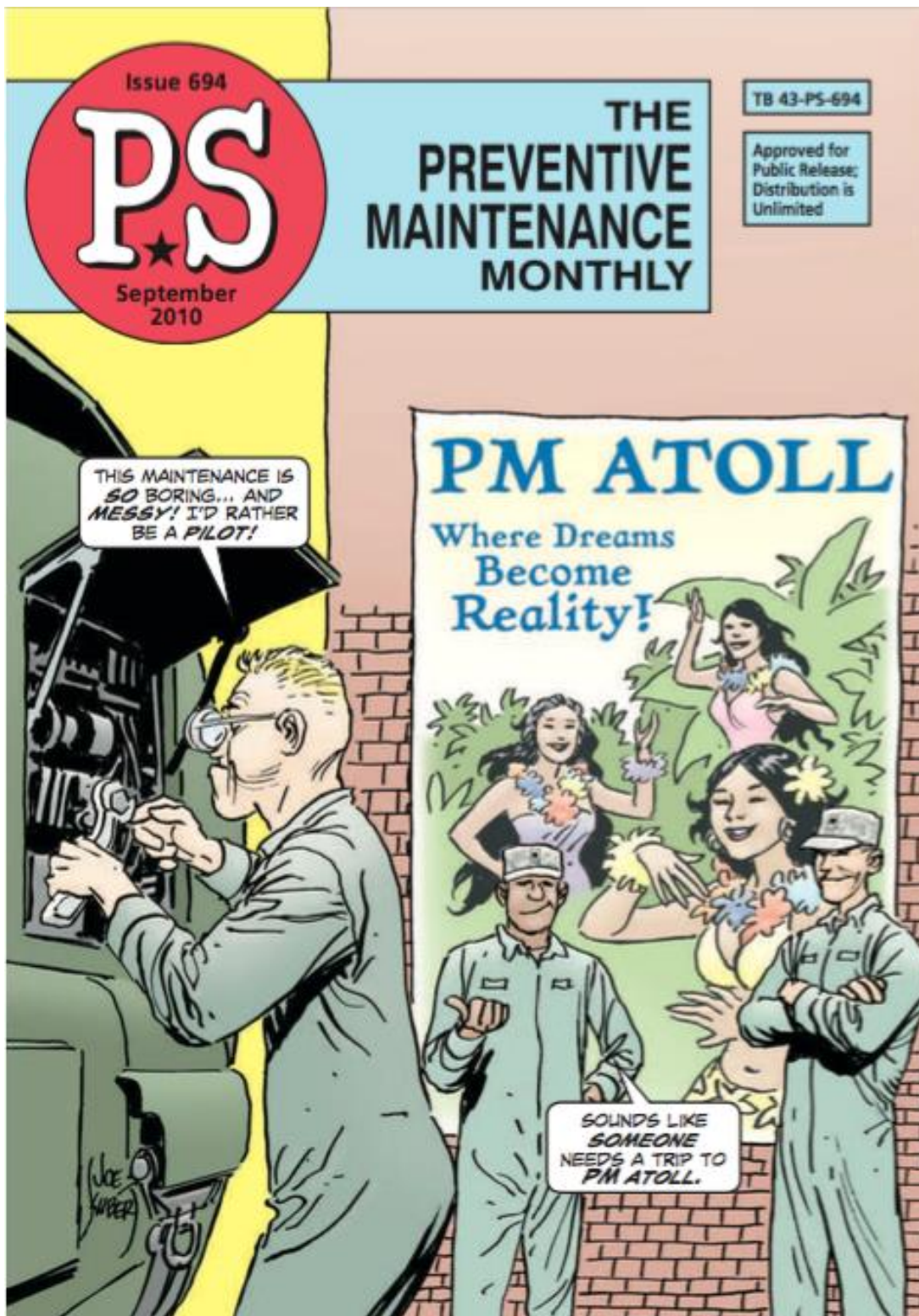









Fig. 3 September 2010 *PS* Cover and Table of Contents

PS THE PREVENTIVE MAINTENANCE MONTHLY

TS 43-PS-694, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

ISSUE 694 SEPTEMBER 2010

	COMBAT VEHICLES	2		AVIATION	35
Armored Knight, BFIST, Stryker Software Updates	2	HGU-56P A/HS Helmet Care	35-37		
M1A2 SEP Tank DAGR Power Cable	3	IHADSS Care	38-39		
M2/M3-Series Bradley Ramp Light Switch	4	UH-60 Seat Adjustment	39		
M88A1 Recovery Vehicle Splash Guard Fenders	5	Primary Survival Gear Carrier	40		
AVLB Track Tension Check	6-7	Aircraft Modular Survival System Kits	41		
M577A2 Command Post Carrier Battery Tip	7				
M109A6 Paladin, M992A2 Ammo Carrier Powerpack	8				
M119A2 Towed Howitzer Brake Hose Check	9				
	WHEELED VEHICLES	10		COMMUNICATIONS	42
HMMWV Ball Joint Inspection	10-11	Lithium Non-Rechargeable Battery Safety	42-43		
HMMWV Brush Guard Locking Pins	12	SINCGARS RT Antenna Connection	44		
HMMWV Seat Covers	13	AN/PYQ-10(C) Simple Key Loader Advice	45		
FMTV Oil Overfilling	14-15	New Edition of SB 11-6 Arrives	45		
FMTV Driveshaft Inspection	16	AN/TAS-8(V)1, (V)2, (V)3 LRAS3 Installation	46		
Leftover Diesel Fuel Disposal	17	5-kW DED Generator Parts Manual Change	47		
PLS DDEC III/IV Engine NSN	17				
	SMALL ARMS	18		CBRN	48
M2 Machine Gun Cocking Lever Tool	18-19	M40/M42-Series Mask Maintenance	48-49		
Small Arms Demilling Policy	20	M41 PATS Calibration Reminder	50		
M16 Rifle, M4/M4A1 Carbine Bolt Tips	21	AN/PDR-75 Radiometer Cleaning	51		
M1200 Shotgun Replacement	22	M12A1 Decon Diesel Changeover	52-53		
Shotgun Safety Caution	22	M12A1 Decon Mounting	52-53		
M249 Machine Gun Feed Tray Pawls	23				
M9 Pistol Rack Guides	23				
Small Arms Field Support Clues	24-26				
			LOGISTICS MANAGEMENT	54	
		PQDR URL Changes	54-55		
		EPIC Policy Search Tool Online	56-57		
		Field Manual Now Available as Audio Book	56-57		
		Supply Request Paperwork Tips	58-59		
		ISO Containers Get New FSC	60		

You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

Just write to:

MSG Half-Mast
PS, the Preventive Maintenance Monthly
USAMC LOGSA (AMXLS-AM)
5307 Sparkman Circle
Redstone Arsenal, AL 35898

Or email to:

logsa.psmag@conus.army.mil or
half_mast@us.army.mil

Internet address:

<http://www.logsa.army.mil/psmag/pshome.cfm>

By order of the Secretary of the Army:

GEORGE W. CASEY, JR.

General, United States Army Chief of Staff

Official:


JOYCE E. MORROW

Administrative Assistant to the Secretary of the Army

1016805

PS, The Preventive Maintenance Monthly (ISSN 0475-2953) is published monthly by the Department of the Army, Redstone Arsenal, AL 35898-5000. Periodical postage is paid at the Huntsville, AL post office and at additional mailing offices.
Postmaster: Send address changes to PS, The Preventive Maintenance Monthly, USAMC LOGSA (AMXLS-AM), 5307 Sparkman Circle, Redstone Arsenal, AL 35898-5000.

Fig. 3 (Continued) September 2010 PS Cover and Table of Contents

Considering that *PS* is a comic book, I will include both direct address to soldier *PS* readers in the form of instructional explanation and character address to soldier readers, dialogue between characters, as well as any published soldier letters to *PS* and the replies of *PS* staff. Character speech includes speech from human characters, both established and one-issue-only characters, but also speech from anthropomorphized equipment. Though the text of *PS* will be my main focus, character and equipment depiction and other illustrations will serve as a supplement to textual analysis, either reinforcing or contradicting metaphor, agent-patient relations, and discursive differences located in the text.

I purchased paper copies of the *PS* issues from an online comics retailer to experience how a soldier would have read these texts, especially the 1970 and 1990 issues that were only available in paper format when originally published. Electronic versions of *PS* issues are content within the public domain, and can be accessed through an archive at psmag.radionerds.com. Virginia Commonwealth University's website makes the first twenty years of issues available to the public as electronic scanned copies, and the U.S. Army LOGSA's *PS* website provides access to issues since 2000. These three resources are free to the public. The longitudinal practice of selecting *PS* samples that span forty years will assist with analysis of the broader context (CDA at the macro-level)—a shifting culture of the Army, evident in how soldiers are discussed and depicted in *PS*, and directly addressed. Once I obtained the paper versions of the *PS* issues, I read the aviation sections uncritically, made copies of the aviation pages, and then proceeded with analysis by reading the sections three separate times. I scanned the text for examples of one CDA concept at a time, making notes next to illustrations and text and circling examples of the CDA concepts.

The analysis of the three *PS* issues in the following chapter follows the succession of analytical concepts from smallest text (word or phrase level) to largest (the text as a whole) located in Table 1—metaphor, followed by agent-patient relations, and ending with discursive differences. Rather than organize the analysis chronologically from 1970 to 2010, I place emphasis on the three discrete analytical tools, with each of them containing discussion of the 1970 issue, the 1990 issue, and the 2010 issue. This process enables temporal shifts in each analytical concept to be very apparent.

IV. RESULTS

Historical and Within-Issue Context of the Three PS Aviation Sections

To apply Critical Discourse Analysis to these aviation sections within the three selected *PS* issues first requires a situational understanding of not only the within-issue context of these sections, but also the historical context of each issue. Prior to presenting the results of analysis, I provide a description of my initial reading of these *PS* aviation selections, and the historical context and context of aviation sections within their particular *PS* issues. The September 1970 air mobility section spans pages 45 to 57. Air mobility is accompanied by sections on ground mobility, electronics, firepower, and combat support. Recurring *PS* sections that are multi-topic are not mentioned in the “In This Issue” listing on page one. One of these sections is the continuity, an eight-page comic narrative I introduced earlier.

The continuity in the September 1970 issue complements the air mobility section because the narrative involves soldier behaviors in and around helicopters. In this continuity, a patrol unit in Vietnam requests an air lift after finishing a mission. When the soldiers do not secure their equipment, the helicopter suffers from FOD, or foreign object damage, and a communications antenna is severed by the rotating blades. The moral of this narrative is summed up on the last page of the continuity, when one of the negligent soldiers says to a member of the helicopter crew “Whaddya mean our equipment! It was your aircraft!!” [emphasis in original] (*PS* Sep. 1970 44). The helicopter crewman replies “True...but troops around aircraft of any kind should realize that loose items can get sucked up into vital parts.” In the next panel, someone states “Always secure your gear” (*PS* Sep. 1970 44). This continuity included a two-page poster known as a “Dope Sheet”, where the pinup-style civilian character Connie Rodd states this rhyme

What more can anyone say?

So, cross y'r fingers 'n' pray

That troops around birds

Will heed these wise words

Watch the blades—Keep out of the way! (emphasis in original) (*PS* Sep. 1970 40-41).

In the background is an anthropomorphized helicopter, with eyes focused ahead, appearing shocked. Its blades are cartoonishly twisted. To the right of the helicopter is a soldier, holding a rifle with damaged barrel and looking embarrassingly up at one of the twisted helicopter blade. To the left of the helicopter is a Jeep, also anthropomorphized, containing a soldier driver. The Jeep has an antenna bent in several places, and the Jeep's eyes are looking upward, tongue extended. The soldier driver is looking upward at the damaged helicopter blade incredulously with his mouth open. The message of this continuity is aimed at any soldier who is near to or a passenger of an Army helicopter. In the last panel, one of the flight crew members says to the soldiers who caused the damage "hey...which one of you guys left them ammo links laying all over my bird?" (*PS* Sep. 1970 44). This statement shows ownership of equipment by helicopter crew members, but also that the soldiers who had caused the foreign object damage to the helicopter had still not learned their lessons about leaving objects unsecured inside the helicopter.

Following this continuity is the 13 page air mobility section. Each instructional section in this issue is designated by a symbol of the subject matter and name of subject matter within a rectangle at the top left of the first page of the section. In this issue, the symbol for air mobility is a pterodactyl-like bird flying above the words AIR MOBILITY. The first page of this section is split between the topic of log book entries,

and fixing loose screws on aviator sunglasses, relatively minor topics. The next three pages concern proper Huey and Huey Cobra (types of helicopter) wheel attachment, which are followed by a page with a letter with a technical question from a Specialist (a rank of lower enlisted soldier). This letter is addressed to Windy, also known as Windy Windsock, a *PS* character who was an aircraft expert. Windy appeared twice in *PS* in early issues, and then returned in the February 1962 issue, remaining until September 2002 (Fitzgerald 87). In the two pages following this Specialist letter, Windy appears in instruction on correct hardware and tool use for the Huey Cobra helicopter. The next page is split between another soldier letter to Windy and a note about Chinook (type of helicopter) air filters. Another soldier letter appears on the next page, as well as a short description of parts ordering for replacement batteries for survival kit distress marker light. The next two pages contain short maintenance notes with subheadings and another soldier letter about posting signs when aircraft are lifted onto jacks. Seven letters to the editor or to specific characters appear in this issue, with four appearing in this air mobility section. The final two pages of this section involve instruction on checking the pilot's protective helmet, the SPH-4.

By the time the September 1970 issue was published, the Vietnam War had existed for over five years and would officially end in January 1973. Helicopter operations were critical to combat operations in Vietnam. “Wars often contain **weapons** or a method of fighting that visually define them. In Vietnam, it was the **helicopter**. Helicopters gave troops mobility and firepower support on an unprecedented scale” (emphasis in original) (Zimmerman and Vanzant 25). The U.S. government used the Selective Service System, or “the draft”, from 1969 to 1971 to select young males for compulsory military service in Vietnam. At the height of the Vietnam War, drafted

military members made up more than 60 percent of total military members deployed to Vietnam (Zimmerman and Vanzant 24-25).

Twenty years later, in the September 1990 *PS* issue, the air mobility section spans pages 35 to 41, and the other named sections in the table of contents are firepower, ground mobility, communications, and troop support. The air mobility section again follows the continuity in this issue. This issue's continuity involves the recurring *PS* characters appearing in a television program about equipment corrosion, with a brief appearance by Windy Windsock. The first page of the air mobility section involves the use of covers for night vision sensors on the Apache helicopter. Instructions on cleaning landing gear shock struts on the Black Hawk helicopter appear on the second page. The next three pages each contain two topics per page on minor aircraft issues. This section of the September 1990 issue does not contain any soldier letters, and at five pages is the shortest of the three aviation sections in issues I selected for analysis.

The Persian Gulf War encompassed Operation Desert Shield and Operation Desert Storm, and would not officially begin until the 17th of January, 1991, five days after the U.S. Congress voted to approve the use of U.S. military force in this conflict (Englehardt 48 and 50). At the time of the September 1990 *PS* issue, President George H. W. Bush had condemned Saddam Hussein's aggression against Kuwait, suggesting the use of force could be necessary (Englehardt 14). By mid-February 1991, the number of U.S. military members deployed to the Gulf would be around 523,000 (Englehardt 65).

The 8th Battalion, 158th Aviation Regiment (AVIM) headquarters and one subordinate company, stationed in Germany, deployed to Saudi Arabia in September 1990. In a report on Army aviation logistics in the Persian Gulf War, Lieutenant Colonel John Penman states "the preparation and deployment of the battalion from Germany was

unplanned, confusing, indecisive, and tumultuous—in a word, terrible!” (5). Two deployment false starts and a short, seven-day notice to deploy for the headquarters, a lack of information, and haphazard planning “hindered the rapid development of an effective corps AVIM support operation in the early part of Desert Shield” (Penman 20). Throughout the Persian Gulf War, aircraft were essential, with numerous types of rotary and fixed-wing aircraft used in combat operations (Penman 9).

A decade after the cease-fire ending the Persian Gulf War, the terrorist attacks in the U.S. on September 11, 2001 resulted in U.S. military counterterrorism operations in Iraq (Operation Iraqi Freedom, or OIF) and Afghanistan (Operation Enduring Freedom, or OEF). At the time of the September 2010 *PS* issue, U.S. military forces had been deployed to Afghanistan for about nine years, and to Iraq for over seven years. President Obama announced on August 31, 2010 that OIF, the U.S. combat mission in Iraq, had ended and an Iraq support mission called Operation New Dawn would commence. OEF would not end until December 28, 2014, and would also be followed by a support mission—Operation Freedom’s Sentinel, with gradually decreasing U.S. military involvement (Torreon 6-9).

The aviation section of the September 2010 *PS* issue spans pages 35 to 41, once again following the issue’s continuity. The continuity involves a helicopter mechanic, Joe, who desires to be a pilot. Joe considers the life of a pilot to be glamorous, stating “pilots get the girls...mechanics just get the **grease**. Nobody notices or cares about PM [preventive maintenance]. I might as well be **invisible**” [emphasis in original] (*PS* Sep. 2010 29). Joe’s fantasy comes true, but he soon learns that his new pilot skills do not help when he encounters a mechanical issue. He realizes how important his mechanic job is,

and concludes that “most soldiers seem to need a preventive maintenance **wake-up call** now and then” (emphasis in original) (*PS* Sep. 2010 33).

Following this continuity, the aviation section starts with three pages on helmet care. Sergeant Blade, the aviation character who first appeared in *PS* in September 2002, replacing Windy Windsock, is shown wearing the helmet and instructing helicopter crew members on how to put on the helmet. The topic of personal aircraft equipment continues on the following pages: a wiring harness that connects to the helmet, primary survival gear organization, and the aircraft modular survival system (AMSS) kits. The AMSS topic is presented as a soldier letter to Sergeant Blade. The only topic in this section involving aircraft components is a short explanation of less than a page about adjustment of pilot and co-pilot seats in the Black Hawk helicopter, discouraging the practice of forcefully putting body weight onto the seats.

Metaphor

I proceeded chronologically through the three *PS* aviation sections to find metaphors present. Throughout the word or phrase level of the text and illustrations, I sought representations of soldiers, the Army, equipment, processes, and aircraft as something they are not. Besides one brief mention of the Army Maintenance Management System being a two-way street of information (*PS* Sep. 1970 45), metaphors present in the September 1970 *PS* issue are aircraft as animal and aircraft as female. First, aircraft as animal is evident on the first page of this section, page 45, with the bird as symbol of air mobility (fig. 4).



Fig. 4 Image Designating Air Mobility Section in September 1970 *PS* Issue

Numerous references to aircraft as a bird occur in this section, including “Armybird” or “birdmen” (*PS* Sep. 1970 53), and the intuitive “aircraft as bird” metaphor is still present in *PS* and Army vernacular. However, the addition of another, more threatening animal than a bird in a metaphor may present a deadlier aviation force. In this issue, the cobra in HueyCobra (the colloquial term for the AH-1 helicopter) is the subject of metaphor. Figure 5, part of a two-page spread on HueyCobra wheels refers to the “belly” of the aircraft, and warns that if the wheels are not fixed properly onto the aircraft, “you’ve milked the fangs of your Congkiller” (*PS* Sep. 1970 47). “Your Congkiller” adds emphasis to the deadly Cobra metaphor, names the enemy, and presents the idea of the aircraft itself doing the killing while also noting aircraft crew member’s possession of the aircraft.

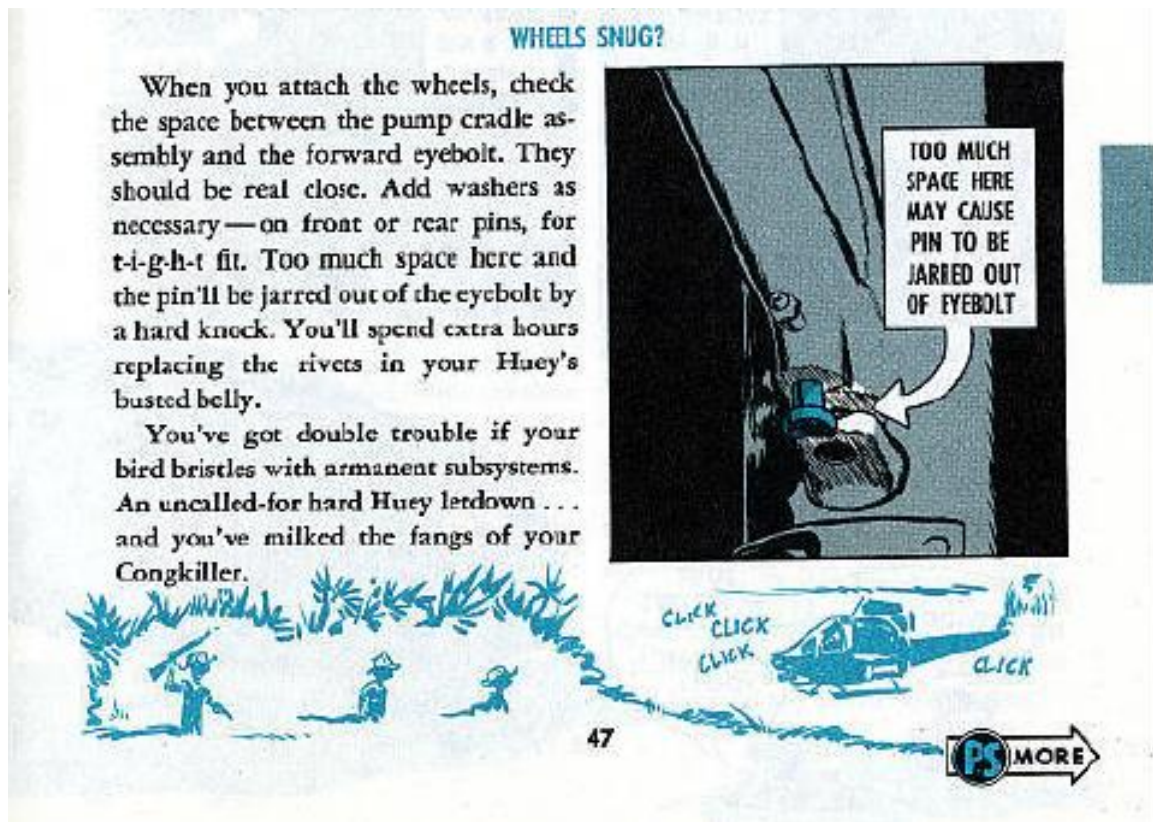


Fig. 5 Cobra Metaphor, September 1970 *PS*

Two years prior to the September 1970 issue, the September 1968 issue discusses the same topic, fixing wheels to the HueyCobra, and similarly warns mechanics to not “sandbag your Cobra Cong killer with lousy bogie wheel latch-on” (*PS* Sep. 1968 13). *PS* was not the only Army publication that applied the Cobra metaphor. The April 1967 issue of *Army Digest*, which was the official magazine of the Department of the Army and written by soldiers for soldiers, contained an article describing the capabilities of the then-new HueyCobra helicopter, which presented several instances of the cobra metaphor. “This slimmed down, trimmed down, fully armed version of the Huey spews firepower from its deadly ‘fangs’. Its HueyCobra—poised to strike” (Jaggers 7).

However, alongside these cobra references are examples of the “aircraft as female” metaphor, presenting aircraft as reliable if cared for properly. The two places in

which the “aircraft as female” metaphor appear are shown in figures 6 and 7, and appear in conjunction with the “aircraft as bird” metaphor (*PS* Sep. 1970 48 and 55).

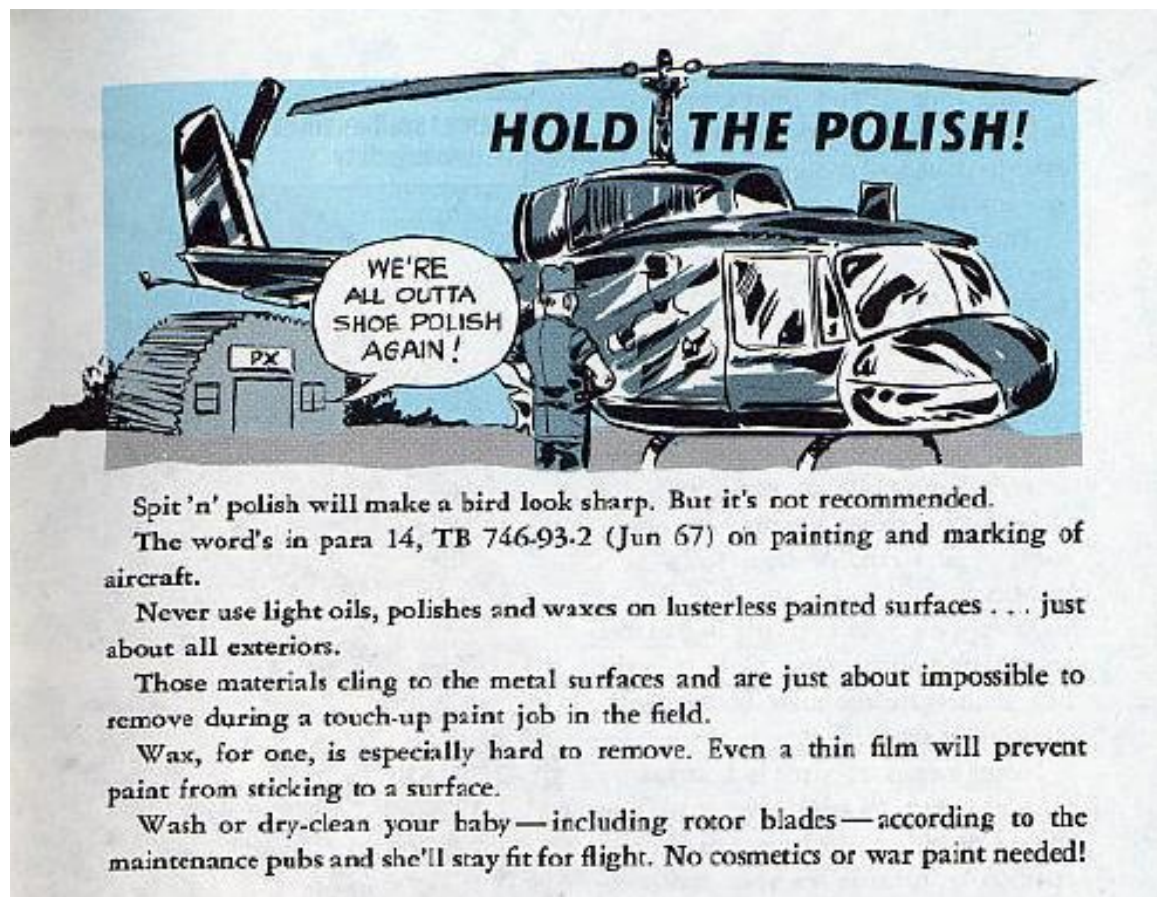


Fig. 6 Female and Bird Metaphor in Exterior Care of Aircraft, September 1970 *PS*

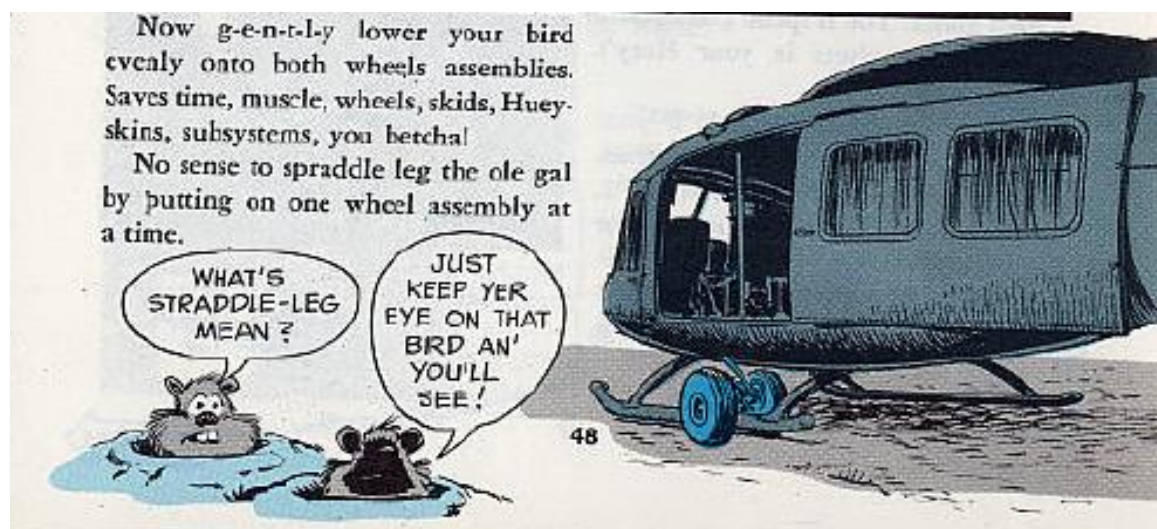


Fig. 7 Female and Bird Metaphor in Adding Wheel Assemblies to an Aircraft, September 1970 *PS*

A helicopter is “your baby”, needing care so that “she’ll stay fit for flight” (*PS* Sep. 1970 55). The image in figure 7 appears on the third page of a topic on adding wheels to Hueys and HueyCobra helicopters, after the page that contains several cobra references.

Spraddle leg, or straddle leg, is a condition known to occur when baby animals cannot walk properly because their legs have splayed, and commonly occurs in birds. The statement “no sense to spraddle leg the ole gal by putting on one wheel assembly at a time” suggests that a mechanic should not make this reliable aircraft’s contact with the ground unstable while adding the wheels. “Huey-skins” in figure 7 is another reference to aircraft as a living being. Both the animal and female metaphors in this air mobility section of *PS* give aircraft the qualities of living beings, but places the control of the aircraft with the aircraft crew member who reads these instructions. Figures 5, 6, and 7 all have close proximity of phrases showing an aircraft mechanic’s possession of aircraft (“your bird”, “your Huey”, “your Congkiller”, “your baby”) and phrases containing an animal or female metaphor. The 1990 September *PS* issue and 2010 September *PS* issue aviation sections do not contain any metaphors other than aircraft as bird. The implication in these metaphors is that not only can females and birds can be controlled, but even a powerful, deadly cobra can be managed through ownership by a mechanic and his knowledge of correct procedures. I continue to explore the subjects of agency and control in the next CDA feature, agent-patient relations.

Agent-patient Relations

A sentence by sentence analysis of agent-patient relations shows how *PS* both empowers soldiers and imposes limitations on them, sometimes occurring together in the same topic. I previously mentioned *PS* assumption of ownership of aircraft by the

reader, and have noted all occurrences of explicitly stated individual ownership of aircraft in table 2, with emphasis added to these possessive pronouns. Some of the factors that may explain the lesser number of occurrences of aircraft ownership in the September 1990 and September 2010 issues may be the result of these issues containing less pages in their aviation section than the September 1970 issue, less text per page in the September 1990 issue compared to the September 1970 issue, and less focus on aircraft maintenance in the September 2010 issue (all but one of the instructional topics in the September 2010 issue concerned personal aviation equipment).

Table 2 Individual Possession of Aircraft

Statement	Context within <i>PS</i> issue
September 1970	
“Poor PM on your wheels can result in bad news--for you--and your bird” (47).	Character Connie Rodd addressing the reader in a three-page instruction on attaching wheels to Huey and HueyCobra helicopters
“Sloppy maintenance of the ground handling wheels and skid eyebolts on your Hueys and HueyCobras can mean big trouble” (46).	Three-page instruction on attaching wheels to Huey and HueyCobra helicopters
“You'll spend extra hours replacing the rivets in your Huey's busted belly” (47).	Three-page instruction on attaching wheels to Huey and HueyCobra helicopters
“You've got double trouble if your bird bristles with armament subsystems” (47).	Three-page instruction on attaching wheels to Huey and HueyCobra helicopters
“An un-called for hard Huey letdown...and you've milked the fangs of your Congkiller” (47).	Three-page instruction on attaching wheels to Huey and HueyCobra helicopters
“Now g-e-n-t-l-y lower your bird evenly onto both wheel assemblies” (48).	Three-page instruction on attaching wheels to Huey and HueyCobra helicopters

Table 2 (Continued) Individual Possession of Aircraft

“Hardware comes in little pieces. It takes a heap of the right type to keep that flying machine of yours in one piece” (50).	Two-page instruction on correct hardware and tools for HueyCobra helicopter maintenance and repair
“SEA [Southeast Asia] weather really knocks the stuffing out of our Seminole wing de-icer boots...” (52).	Published letter from soldier about cold weather equipment on Seminole (U-8) aircraft
“That would be an interim fix until new boots were available to be put on your bird” (52).	Reply to published letter from soldier about cold weather equipment on Seminole (U-8) aircraft
“Maybe you don't have the newest, improved throw-away types on your Chinook's T62 engine APU” (52).	Brief instructional item on CH-47 (Chinook helicopter) filters
“Me'n another knucklebuster are real uptight about the correct forward/rearward towing poop for our Ol Reliable (U-1A)” (53).	Published letter from soldier about the U-1A (Otter) fixed-wing aircraft
“Wash or dry-clean your baby--including rotor blades--according to the maintenance pubs and she'll stay fit for flight” (54).	Brief instructional item on maintaining exterior of helicopters
September 1990	
“ Your Apache's Target Acquisition Sight/Pilot Night Vision Sensor (TADS/PNVS) includes some very high dollar Line Replaceable Units (LRU)” (35).	Instruction on protecting Apache helicopter equipment for shipping
“It doesn't pay to ignore the crud and corrosion that builds up on your Black Hawk's main landing gear shock struts” (36).	Instruction on keeping hydraulic cylinders clean
“To keep your bird's wipers wiping, lube the converter every 500 flight hours--with the right grease” (37).	Instruction on maintenance of windshield wiper motor
“When you do an operational check on your big bird's center cargo hook, make sure the pressure gage reads at least 2,100 PSI...” (39).	Instruction on checking pressure gages in the CH-47D (Chinook) helicopter

Table 2 (Continued) Individual Possession of Aircraft

September 2010	
“Then it will flap, and you know you can't fly your bird holding a flapping mike with one hand and flight controls in the other” (36).	Instruction on helmet inspection and maintenance
“ Your Black Hawk pilot and co-pilot seats are not designed to allow the full force of your body weight to free fall into the seat” (39).	Brief instruction on adjusting UH-60 (Black Hawk) helicopter seats
“If that happens, your bird is NMC [non-mission capable] and the mission never gets off the ground” (39).	Brief instruction on adjusting UH-60 (Black Hawk) helicopter seats

Although ownership of aircraft gives power to the individual soldier, the soldier reader is also often reminded that they are subject to the commands of their immediate leaders, higher headquarters, and published Army instruction. Pages 46 to 48 of the September 1970 issue, instruction on Huey and HueyCobra wheel installation, features an enraged officer at the top left of the first page. The situation illustrated is a Huey landing hard with a CRUNCH, its wheels rolling away, and a soldier, probably the mechanic, running away from the aircraft. The officer says, “Wait till I get my hands on the maintenance crew!!” (*PS Sep. 1970* 46). The first paragraph of instruction states “Ever see a commander blow his cool because of pre-flight mission abort?” (*PS Sep. 1970* 46). On a separate page, a short informational topic on PMI (Preventive Maintenance Intermediate) inspection frequency shows a soldier asking “I did my PM [preventive maintenance] all at once—now can I have a 3-day pass?”. The leader replies, “No deal—y’gotta do it by the book” (*PS Sep. 2010* 54).

Another reminder to the soldier reader of their subordinate status is also in the response to a soldier letter on page 52 of this issue, shown in figure 8. The soldier refers

to an aircraft using the plural possessive pronoun “our”, notes that cold weather boots on the aircraft are not necessary in the climate of southeast Asia, and asks permission to remove them from the aircraft. The response is not only in the form of a letter, but in an illustration as well. The letter response starts with “No sir-e-e-e. The head shed says no deal” (*PS* Sep. 1970 52). The phrase “head shed” is a general term for military headquarters used in the Vietnam War (Dalzell 77). In the illustration to this letter, a soldier and the response he receives sums up the content of the letter and Windy Windsock’s response (“How about me sheddin’ those cold weather boots?” says the soldier; “No sireee!” replies the leader), but this scene suggests an acknowledgement that even though the policy to keep cold weather equipment on this aircraft’s wings is unreasonable, the soldier should do as instructed and keep the cold weather equipment on the wings.

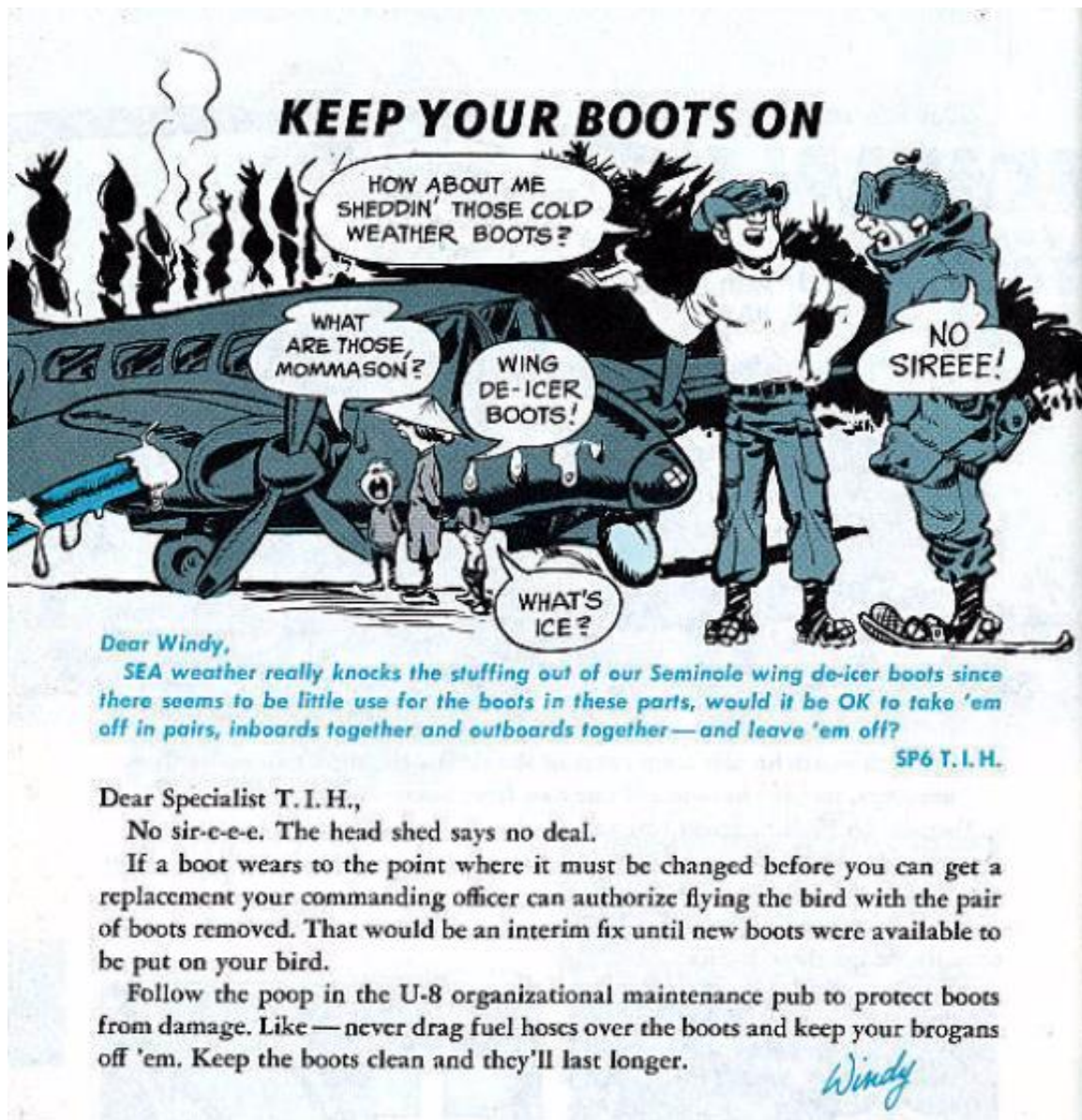


Fig. 8 Response to Soldier Letter that Requests Removal of Cold Weather Equipment, September 1970 PS

This is the only scene in the selections of the three PS issues that contains civilians of the location of combat. The use of the word “mommason” (also spelled mamasan) by the wide-mouthed child would be understood by the soldier reader since this is how the soldiers referred to older Vietnamese women. The term was used in the Korean War and as used by the military, refers to madam in a brothel or an older Asian woman hired to complete cleaning duties. The word is comprised of the English word

“mama” with the Japanese honorific suffix *san* (Dalzell 101, Dickson 248-49). The other child depicted in this scene asks, “what’s ice?” and the aircraft appears overheated, but the commander talking to the soldier is wearing cold weather gear. *PS* is humorously presenting their readers with the message that they acknowledge the absurdity of the policy. However, the reasoning behind the policy is not explained. The response to the soldier’s letter recognizes the soldier’s possession of the aircraft (“that would be an interim fix until new boots were available to be put on your bird”), but the soldier is simply instructed to maintain the cold weather boots as stated in a maintenance publication and keep them on the aircraft wings.

The September 1990 air mobility section contains no letters from soldiers, and no appearance by Windy Windsock, but like the September 1970 air mobility section, it also explicitly reminds soldiers of their subordinate status despite possession of aircraft. The difference between the two sections is that in the September 1990 air mobility section, the limitation of soldier agency occurs not by mentioning commanders or the “head shed”, but by illustrating aircraft as anthropomorphic, sternly instructing soldiers what to do. On the first page of the September 1990 air mobility section, a reference to “your Apache’s Target Acquisition Designation Sight/Pilot Night Vision Sensor (TADS/PNVS)” is next to an Apache helicopter with eyes, who states “Hey! Don’t ship me without my covers!” (35), shown in figure 9. Anthropomorphized Black Hawk helicopters appear on the following two pages, one praising a mechanic by stating “Ahh...what a relief! Thanks for removing crud from my strut!” (36) and another grimacing with an “Ouch!”, next to a crew member incredulously stating “All I did was step on his fairing!” (37), referring to the aircraft. Similarly, the September 2010 aviation section’s informational topic on Black Hawk seats shows an irritated Black Hawk

helicopter, who scolds a co-pilot by stating “Hey buddy, watch how you **handle** my seat!” (emphasis in original)(39).

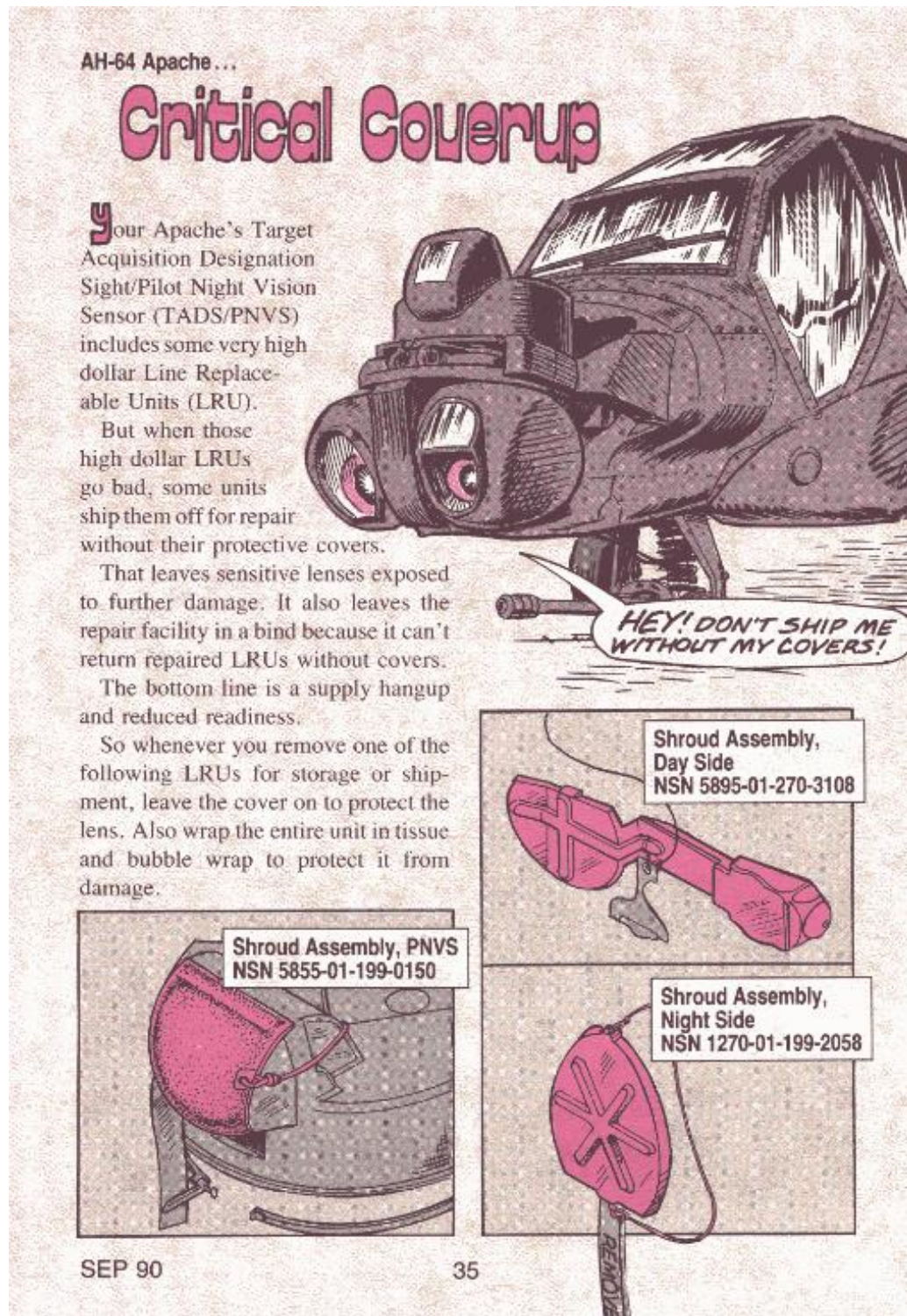


Fig. 9 Anthropomorphized Aircraft Giving a Command, September 1990

Figure 10 shows an excerpt from a page in the 1990 section featuring anthropomorphized aircraft equipment sternly instructing soldiers on proper application of shims has two agentless statements: “shims are precisely machined and bonded to the fuselage to provide the exact amount of cushion under each mount fitting so that all components are perfectly aligned”, and the equipment dialogue “Shims are supposed to be **precisely machined** and **bonded** to the fuselage! (emphasis in original) (PS Sep. 1990 38), placing emphasis not with the humans who manipulate equipment, but with the equipment itself.



Fig. 10 Anthropomorphized Equipment and Agentless Statements, September 1990

The September 2010 aviation section contains the only example across the three selections in which a soldier writes to *PS* to describe how his he and his unit solved a problem innovatively, where the solution did not involve following an Army technical manual or other instructional publication. During an inspection, his unit noticed a problem—water packets in the AMSS (Army Modular Survival System) cases ruptured during storage—and the soldier writes, “we decided that the best way to protect the contents of the kits from water damage is to put the water packets in a plastic bag with tear tabs. So if they break open, the water is contained in the bag and won’t ruin everything in the kit” (*PS* Sep. 2010 41).

On the surface, using a plastic bag to protect gear seems like a minor, common sense solution. However, considering that the simple use of a plastic bag may prevent the ruining of equipment that soldiers would need in an emergency, and that the water packets referred to on this *PS* page contain emergency drinking water, the importance placed on the plastic bag solution by *PS* is warranted. This letter from a soldier and its accompanying illustrations fill a page, with this solution emphasized three times in illustrations. At the top of the page, a female soldier admonishes a soldier who has opened his stored AMSS case to find ruptured water packets and a bad smell. She states, “maybe next time you’ll put those packets in a plastic bag” (*PS* Sep. 2010 41). The response to the soldier from the fictitious character Sergeant Blade, whom the letter was addressed to, is an image of Sergeant Blade stating, “**Good job!** Looks like you have this problem all mopped up” (emphasis in original) (*PS* Sep. 2010 41). He is holding a mop and smiling, with a mop bucket nearby and two AMSS cases behind him. At the bottom of this page is an illustration of an open AMSS case, with the packets encased in bags. A label states “protect water packets before placing into AMSS kit”, and the title of this

page is “PROTECT CONTAINER CONTENTS”. These two statements directing soldiers to protect their equipment shows that the solution presented by the soldier became instruction from *PS* to soldier readers. There is no indication of how frequently this water damage problem has occurred across units who store AMSS cases. *PS*’ omission of this information suggests that frequency of occurrence is not important. Even if the water damage problem is a rare occurrence, the potential for equipment to become ruined and soldiers not having needed equipment in an emergency is significant, so *PS* responds to the soldier’s letter with praise for the soldier letter writer and commands soldier readers to protect water packets.

Empowerment of soldiers through recognition of soldier knowledge or effort also occurs three times in the 1970 section, and one time in the 1990 section. The September 1990 instance is the previously mentioned talking helicopter who praises a mechanic for removing “crud” from his landing gear shock strut (36). The responses to two soldier letters in the 1970 issue recognize the letter writer’s effort or knowledge. First, on page 49, a soldier’s letter to Windy describes a thorough search for information on fore and aft tolerances on the Huey synchronized elevator, but since the soldier could not find the information, he wrote to Windy for help. The first line of the reply to the soldier is “rest your eyeballs over a brew” (*PS* Sep. 1970 49), a recognition of the soldier’s effort. The other letter from a soldier describes a disagreement between the soldier letter writer and a fellow soldier about the correct way to tow a U-1A aircraft, stating each soldier’s position on the matter. The reply is an encouraging “you’re right with the program, Sarge” (*PS* Sep. 1970 53). The third statement recognizing a knowledgeable or hard working soldier is in a two-page spread regarding the use of correct tools on the HueyCobra helicopter, with the statement “any mech worth his salt knows that he should use the right tool on

hardware” (*PS* Sep. 1970 51). This statement contrasts with the illustration above it, in which five mechanics appear in front of a HueyCobra, clearly demonstrating their ignorance of using the correct tools (fig. 11). Windy Windsock appears on the left, instructing mechanics that there is only one way to work on the hardware of the HueyCobra helicopter.



Fig. 11 Proper Tool Use in Top Half of Pages 50 and 51, September 1970 *PS*

As I previously stated in the methodology, besides recognition of soldier effort and reference to individual soldier ownership of large Army equipment or aircraft, I consider emphasis on collective responsibility or consideration for fellow soldiers as a way in which *PS* may empower soldiers—by connecting them to a greater goal, realized through teamwork. I found seven references to collective responsibility in the three *PS* aviation sections. On the first page of the September 1970 section, by stating “keep accurate info flowing from aircraft log book forms to the head shed, and you’ll get accurate info back...when you need it” (45), *PS* is emphasizing teamwork between aircraft maintenance soldiers and U.S. Army Aviation Systems Command.

The September 1990 selection contains two references to collective responsibility. First, soldiers who work on the Apache helicopter are warned that if they do not put the protective covers on the LRUs (Line Replacement Units) when shipping for repair, the repair facility will be left in a bind because this equipment cannot be returned without covers (35). The last line of this September 1990 air mobility section is a common expression in *PS* issues that conveys collective responsibility with the pronoun we. “We have the world’s best equipment...take care of it” (39).

Finally, the September 2010 section has four references to collective responsibility. In a short instructional topic on adjusting Black Hawk helicopter seats, the *PS* reader is reminded that if they do not carefully adjust the seat, a vertical bracket can bend or break, “and the mission never gets off the ground” (39), which would affect other helicopter crew members. On the following page, the instructional text on the primary survival gear carrier (PSGC) warns against rearranging certain first aid items inside of the PSGC, noting not just the effect on the soldier reader who experiences an emergency, but on the soldier who renders first aid. “Some items in the PSGC are specifically arranged to

help in an emergency, like when a buddy needs them to save your life” and a following statement “Moving the tourniquet, first aid platform, signaling platform and extraction strap means your buddy has to go on a hunting trip to find those items in an emergency” encourage a soldier to not only consider themselves, but that of a fellow soldier. The final reference to collective responsibility is in the same instruction on the PSGC. Aviation soldier readers are encouraged to get ALSE (Aviation Life Support Equipment) inspections completed when specified, because “if everyone overlooks the due date, you can be sure of long lines and an angry ALSE tech” (40).

The terms “buddy” and “warrior” in this section promote soldier agency. These terms suggest fighting for a noble cause and being close to fellow soldiers, and are not terms used exclusively by *PS*, but were common U.S. Army terms at the time *PS* published this issue. The concept of soldier as warrior originated in 2003, when the U.S. Army first promoted the “warrior ethos”, encouraging soldiers who may be deployed to war in Afghanistan or Iraq to be competent in skills every soldier should have (Loeb). This “warrior ethos” is four statements included in the Soldier’s Creed. The Soldier’s Creed is a series of statements about being a soldier, all beginning with the first-person pronoun I. The “warrior ethos” includes the lines “I will always place the mission first. I will never accept defeat. I will never quit. I will never leave a fallen comrade” (“Warrior Ethos”).

Discourse Differences

Expanding my analysis to consider each aviation section as a whole, I considered discourse differences in these three *PS* sections. Table 3 shows the discourses of soldier

letters to *PS*, character dialogue, and instructions to soldier readers of *PS* in the three aviation selections.

Table 3 Discourses of Three *PS* Aviation Selections

	September 1970	September 1990	September 2010
Discourse of published soldier letters to <i>PS</i>	<p>Highly colloquial, with abbreviations and slang</p> <p>Example: “What’s the deal about posting signs for aircraft on jacks? Huey and other rotary wing pubs recommend roping off the bird...” (54).</p>	<p>Does not apply</p>	<p>Colloquial and plain language</p> <p>Example: “So if they break open, the water is contained in the bag and won’t ruin everything in the kit” (41).</p>
Discourse of soldier, anthropomorphized equipment, or character dialogue	<p>Highly colloquial, with abbreviations and slang</p> <p>Example: “Man! With a screwdriver, a pair o’ pliers ‘n’ a hammer I can fix anything” (51).</p>	<p>Colloquial and plain language</p> <p>Example: “Hey! Don’t ship me without my covers!” (35).</p>	<p>Colloquial dialogue between soldiers and between soldier and anthropomorphized aircraft, plain language, colloquial discourse, and military terminology used by character Sergeant Blade</p> <p>Example: “The TACOM-RI headshed has a new branched wiring harness, NSN 6150-01-534-0552...” (38), but also “Good job! Looks like you have this problem all mopped up.” (emphasis in original)(41).</p>

Table 3 (Continued) Discourses of Three PS Aviation Sections

Discourse of instruction to soldier reader of <i>PS</i>	Colloquial, with abbreviations and slang Example: “Sometimes, tho, it’s hard to tell one tool from another” (51).	Mostly plain language, but also colloquial and containing jargon. Example: “It’s not on the AMDF, so order it on a DD form 1348-6 from RIC S9G” (38).	Mostly plain language, but also colloquial and containing jargon. Example: “Check the inspection date on DD Form 1574—that’s the yellow tag—and head for the ALSE office when your time comes” (40).
Where discourse differences occur	Reply to soldier letter asking “what’s the deal” with a certain policy is the bureaucratic statement “Aircraft on jacks shall be so labeled and access restricted” (54). Also, labels to technical diagrams are in plain language only.	Aviation messages and short informational items at the end of this section mostly contain Army jargon such as parts numbers and acronyms. Except for one instance, dialogue does not contain jargon.	Soldier letter and soldier dialogue does not contain Army jargon.

The September 1990 and 2010 aviation sections’ styles of discourse are clearly different from the 1970 section, which is distinguished by popular and military sayings and slang, and heavy use of contractions and abbreviations. Though each war has its own lexicon, the compulsory participation in the Vietnam War for many males may have produced “linguistic resistance” against the authoritative institution of the Army (Dalzell ix), which resulted in “a totally new slang—brutal, direct, and geared to high-tech jungle warfare with a rock ‘n’ roll beat backed up by the throb of chopper engines” (Dickson 260). The September 1970 section contains terms repurposed from earlier conflicts:

“poop” to refer to an informational document, in use in World War II (Dalzell 120; Dickson 200), the previously mentioned “mommason”, and “knucklebuster”, a World War II term referring to a crescent wrench (Dickson 183). From one period of occupation or war to the next, military members use established colloquial phrases and terms, discard some terms, and create new terms applicable to the current war (Dickson 259).

While the September 2010 section contains a few colloquial terms such as “stink up” and “gunk”, these are not unique military terms, and most of the instruction is in plain language. This style, devoid of slang and military-specific colloquial terminology except for one reference to “headshed”, puts procedures in terms easy to understand across a diverse group of soldiers spread worldwide, especially the inexperienced soldiers who are likely to read *PS*. On page 37, Sergeant Blade directs the reader to the six-step common language process of putting on the aviator’s helmet (fig. 12).

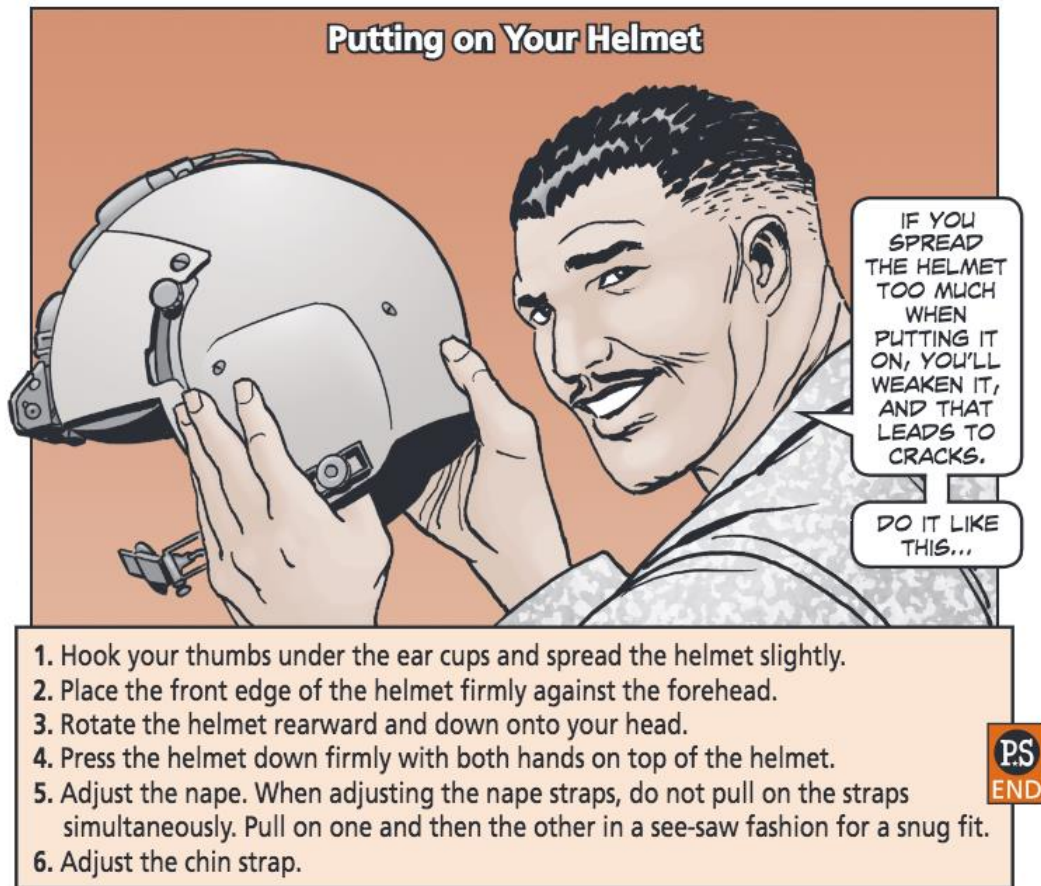


Fig. 12 Simple Language in Helmet Instruction, September 2010 *PS*

V. CONCLUSION

PS's idealized soldier, evident in instructions and characters, has always included the characteristics of being highly attentive to equipment and following instruction. The practice of directly addressing the soldier encourages the development of these characteristics. On *PS*, Yu states that "feeling personally acknowledged and directly involved, readers are more likely to pay attention and participate in the ongoing communication" (48). However, reading the three *PS* aviation sections, and applying the CDA concepts of metaphor, agent-patient relations, and discourse differences shows a shift from hardworking but uneducated soldier (perhaps a "Johnny-come-lately" mentioned on page 50 of the 1970 air mobility section), a common man with limited responsibility, to a professional soldier who is committed to a cause other than him or herself. In other words, the ideal soldier that *PS* presents changed from knucklebuster (*PS* Sep. 1970 53) to warrior (*PS* Sep. 2010 39-40).

Though there were a few instances of metaphor in the September 1970 air mobility section, the only metaphor that persisted throughout the 1990 and 2010 sections was that of aircraft as bird. One reason for this may be that because the Vietnam War draft created new soldiers, unaccustomed to Army equipment, metaphors were used in *PS* to help them relate to the equipment, whereas the aviation soldiers of 1990 and 2010 would have had greater experience in the Army and with the equipment and aircraft. The only new equipment presented in the 1990 or 2010 aviation sections is the branched wiring harness on page 38 and 39 of the 2010 section, and even that is an improved version, not new technology. The other pages in the 1990 and 2010 sections instruct soldiers on existing and established equipment or aircraft, so there may be no need to introduce a metaphor to help explain the function of this equipment or aircraft. Another

reason for lack of metaphor in the 1990 and 2010 sections is that metaphor in comics may be appropriate for introducing educational concepts, information new to the reader (Yu 196). Metaphors in Webb et al. and Zhang-Kennedy et al.'s comics were used to help readers understand concepts related to the technical writing model Darwin Information Typing Architecture (DITA) and cybersecurity, respectively. While *PS* does inform, it mainly instructs. The female and animal metaphors present in the 1970 section—living being metaphors—encourage connection with the aircraft or equipment, but their proximity to references of individual soldier possession/ownership of the aircraft suggests that the soldier maintains control. The living being metaphors are also a precursor to later *PS* anthropomorphism of aircraft and equipment, which steadily increased over the decade of the late 20th century and into the 21st (Simmons 47).

At the sentence level, I found limitations of soldier agency imposed by anthropomorphic equipment, responses to soldier letters, illustrations of leaders denying soldier requests, mentions of commanders or higher headquarters, and instructions to perform tasks according to published instructions. The 1970 section is unique in the inclusion of references to the people of Vietnam, suggesting power of the U.S. Army in Vietnam in two ways. First, the sentence “milked the fangs of your Congkiller” in figure 2 prominently mentions the action of killing the enemy, and is the only reference to the purpose of Army aircraft use in Vietnam in this section—references to equipment or personnel transport are not mentioned. Additionally, the child in Figure 5 referring to his mother/older woman as “mommason” is *PS* appropriating a term created by soldiers that homogenizes Asian women and places these women in a lowly position (Japanese suffix –san, and the word being used by military members in the Korean and Vietnam wars to describe Korean and Vietnamese women). By having a child use this term, which erases

ethnic differences and refers to a madam of a brothel or a woman who cleans, to refer to his mother/older woman is especially egregious.

In the 1990 section, human agency is largely erased—this section contains no letters from soldiers, no appearance by Windy Windsock, and anthropomorphic aircraft command soldiers. Each time a helicopter is illustrated, the helicopter talks to a soldier, praising, warning, or criticizing. This lessening of human agency in military language was typical of the Gulf War time period, states Dickson:

Some complained that the combat was made to sound like a bloodless bureaucratic exercise rather than a war, and some of the new official jargon tended to validate that judgment. The person sent out to tell a family of the death of a son or daughter was called a “casualty assistance coordinator,” a bullet hole in a human being became a “ballistically induced aperture in the subcutaneous environment,” the destruction of Iraqi antiaircraft weaponry was referred to as “suppressing assets,” and then there was the politically correct “cultural bonding officer” who was nothing more than a person whose job it was to prevent G.I.’s [general infantrymen—a general term for soldiers] from offending their Saudi hosts (289-90).

Soldier agency in the September 2010 aviation section is provided by the model of the aviation professional Sergeant Blade. He is prominent, appearing in five of the seven pages of the September 2010 aviation section. He is commanding without being harsh, encouraging with a smile. The 1970 section’s depiction of soldiers as similar looking and small in relation to page size, and the 1990 section’s minimal illustration of soldiers and absence of an instructing aviation character contrasts with the use of Sergeant Blade and soldiers shown in pages of the September 2010 section. Sergeant

Blade provides feedback to the soldier's letter. He stands next to an aviator on page 38, both wearing aviation helmets and clothing as if ready to fly or returning from a flight. Of course, the aviation soldier of 2010 is still limited by Army regulations and published procedures, directed by anthropomorphized aircraft and Sergeant Blade in this section.

When I analyzed discourse differences within each section, I found a highly casual style in the 1970 September section. The soldiers of 1970 likely grew up reading comic books and would have been accustomed to the colloquial dialogue within them. Exceptions to the colloquial style occur in tool or part descriptions, and in the response to a soldier letter challenging policy. When a soldier writes to *PS* asking a generic question, “what’s the deal” with posting signs when aircraft are on jacks, the response is the bureaucratic statement “aircraft on jacks shall be so labeled and access restricted” (*PS* Sep. 1970 54). This letter and its response imply that *PS* uses soldier language (colloquial phrases and jargon) to relate to soldiers, but once Army authority is questioned, *PS* uses the formal style of published policies and instruction. The 1990 and 2010 sections, for the most part, abandon the practice of using colloquial terms and soldier jargon, relying more on plain instructions. The 2010 section’s inclusion of the Army established terms “buddy” and “warrior” show an Army-directed but not bureaucratic discourse, one that encourages soldier as professional.

Throughout these wartime periods, *PS* retained control of the genres within *PS*—informational items, comic illustrations, question and answer letters, and technical diagrams, and did so in a manner that suggested how the ideal soldier should be and act—from hardworking but cognizant of low status, to focused on equipment, to a professional serving others—but always following Army regulations and procedures.

Limitations and Implications for Further Research

In this study, I selected a small sample of one section from three *PS* issues. For a more comprehensive study, a variety of sections in many *PS* issues could be analyzed. I also did not explore the actual use of *PS* by soldiers. Further research could include surveys of soldiers and former soldiers who read *PS* in the past and read *PS* currently, and usability studies employing the use of eye-tracking equipment could show which elements of *PS* soldiers focus on or ignore. My experience as a soldier allowed me to understand Army cultural references within *PS* like the soldier rank hierarchy and much of the jargon. However, I understand that because I am a former soldier, I may not be completely impartial in my analysis of *PS*, though my reading of *PS* began years after I left the Army.

The September 2010 aviation section emphasized soldier professionalism. A visual study on soldier professionalism could extend Huckin's concept of agent-patient relations to examine soldier diversity, specifically the inclusion of females and people of color within *PS*, and to what extent current *PS* representations of these groups form the *PS* concept of the ideal soldier within the aviation section or within the entire *PS* publication. In recent years, a woman became a four-star U.S. Army general, women can now serve in combat units, and in 2015 two women graduated from the physically and mentally demanding Army Ranger School. Yet, *PS* still lacks a recurring female soldier character.

Finally, as *PS* is becoming an online publication, with soldier participation encouraged by feedback through the social media platforms Twitter and Facebook, a study analyzing the frequency and content of soldier input and *PS* response would also

show the degree of control over the content published in *PS*, and how *PS* may extend its influence of the ideal soldier in modern online media.

WORKS CITED

- Akinci Oktay, Suhan. "Discursive Features of Operation Manuals in Terms of Technical Communication." *Journal of Faculty of Letters / Edebiyat Fakultesi Dergisi*, vol. 28, no. 2, Dec. 2011, pp. 25-40. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=hus&AN=73785640&site=eds-live&scope=site.
- Anson, Chris and Shawn Neely. "The Army as Textual Community: Exploring Mismatches in the Concepts of Attribution, Appropriation, and Shared Goals." *Kairos: A Journal of Rhetoric, Technology, and Pedagogy*, vol. 14, no. 3, 01 June 2010. EBSCOhost, http://kairos.technorhetoric.net/14.3/topoi/anson-neely/Anson_Neely.pdf.
- Babaian, Caryn Sona, and Ara A. Chalian. "'The Thyroidectomy Story': Comic Books, Graphic Novels, and the Novel Approach to Teaching Head and Neck Surgery through the Genre of the Comic Book." *Journal of Surgical Education*, vol. 71, no. 3, 01 Jan. 2014, p. 413-418. EBSCOhost, doi:10.1016/j.jsurg.2013.11.008.
- Bernhardt, Stephen A. "The Design of Sexism: The Case of an Army Maintenance Manual." *IEEE Transactions on Professional Communication*, vol. 35, no. 4, Dec. 1992, pp. 217-221, Scopus, doi: 10.1109/47.180282.
- Bhatia, Vijay K. *Worlds of Written Discourse: A Genre-Based View*. Continuum, 2004.
- Caldwell, Joshua. "Comic Panel Layout: A Peircean Analysis." *Studies in Comics*, vol. 2, no. 2, June 2011, pp. 317-338. EBSCOhost, doi:10.1386/stic.2.2.317_1.
- Cotton, David. "PS Magazine Distribution." Received by Rachel Berryhill, 16 Aug. 2016.

- Dalzell, Tom. *Vietnam War Slang: A Dictionary on Historical Principles*. Routledge, 2014.
- Dickson, Paul. *War Slang: Fighting Words and Phrases of Americans from the Civil War to the Gulf War*. Pocket Books, 1994.
- Eisner, Will. *PS Magazine: The Best of the Preventive Maintenance Monthly*. Abrams ComicArts, 2011.
- Englehardt, Joseph P. *Desert Shield and Desert Storm, A Chronology and Troop List for the 1990-1991 Persian Gulf Crisis (SSI Special Report)*. Strategic Studies Institute, U.S. Army War College, 25 Mar. 1991, <http://www.dtic.mil/dtic/tr/fulltext/u2/a234743.pdf>.
- Fairclough, Norman. *Critical Discourse Analysis: The Critical Study of Language*. Longman, 1995.
- Figueiredo, Sergio. "Building Worlds for an Interactive Experience: Selecting, Organizing, and Showing Worlds of Information through Comics." *Journal of Visual Literacy*, vol. 30, no. 1, Spring 2011, pp. 86-100. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=hus&AN=61341517&site=eds-live&scope=site.
- Fitzgerald, Paul E. *Will Eisner and PS Magazine: An Ongoing Legacy of Nitty-Gritty Laughs and Deadly Serious How-to Comics for Generations of America's Warriors: An Illustrated History and Commentary*. FitzWorld.US, 2009.
- Graham, Richard. *Government Issue: Comics for the People, 1940s-2000s*. Abrams ComicArts, 2011.
- . "P.S. Magazine/Government Issue Book." Received by Rachel Berryhill, 18 Aug. 2016.

- Haapio, Helena, et al. "Next Generation Deal Design: Comics and Visual Platforms for Contracting." *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS*. n.p., 2016. pp. 373–380, https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=2747821.
- Huckin, Thomas. "Critical Discourse Analysis." *Functional Approaches to Written Text: Classroom Applications*, edited by Tom Miller, United States Information Agency, 1997, pp.78-92, <https://eric-ed-gov.libproxy.txstate.edu/?id=ED417422>.
- . "Critical Discourse Analysis and the Discourse of Condescension." *Discourse Studies in Composition*, Ellen (ed. and introd.) Barton, et al., Hampton, 2002, pp. 155-176. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=mzh&AN=2002702826&site=eds-live&scope=site.
- Huckin, Thomas, et al. "Critical Discourse Analysis and Rhetoric and Composition." *College Composition and Communication*, vol. 64, no. 1, 2012, pp. 107-129. EBSCOhost, <http://www.jstor.org.libproxy.txstate.edu/stable/23264919>.
- Jaggers, Joseph N., Jr. "HueyCobra—Poised to Strike." *Army Digest*, vol. 22, no. 4, pp. 7-9. *The Vietnam Center and Archive, Texas Tech University*, <http://www.vietnam.ttu.edu/virtualarchive/items.php?item=2250111012>.
- Koller, Veronika. "How to Analyse Collective Identity in Discourse - Textual and Contextual Parameters." *Critical Approaches to Discourse Analysis across Disciplines*, vol. 5, no. 2, Jan. 2012, pp. 19-38. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=90537251&site=eds-live&scope=site.

- Locke, Terry. *Critical Discourse Analysis*. Continuum, 2004. Continuum Research Methods Series. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=378046&site=eds-live&scope=site.
- Loeb, Vernon. "Army Plans Steps to Heighten 'Warrior Ethos'". *The Washington Post*, 8 Sep. 2003, https://www.washingtonpost.com/archive/politics/2003/09/08/army-plans-steps-to-heighten-warrior-ethos/aafb2625-a33d-48ca-8fcf-3ef2747f1243/?utm_term=.baa4261c796d.
- Makwanya, Peter. "An Analysis of the Language Used in Communication on Climate Change." *Nawa: Journal of Language and Communication*, no. 2, 2010, pp. 128-145. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsglr&AN=edsgcl.300979664&site=eds-live&scope=site.
- McCloud, Scott. *Understanding Comics*. HarperPerennial, 1994.
- Miodrag, Hannah. *Comics and Language: Reimagining Critical Discourse on the Form*. UP of Mississippi, 2013.
- Nyberg, Amy K. "Chapter 3: The Comics Code." *Routledge Companion to Comics*, edited by Bramlett, Frank, et al., Routledge, 2016, pp. 25-33.
- Opsteegh, Michael. "What Technical Communicators Can Learn from Comics." *Intercom*, vol. 56, no. 2, Feb. 2009, pp. 19-21. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=42843148&site=eds-live&scope=site.
- Orlikowski, Wanda J. and JoAnne Yates. "Genre Repertoire: The Structuring of Communicative Practices in Organizations." *Administrative Science Quarterly*,

no. 4, 1994, p. 541-574. EBSCOhost,

<http://www.jstor.org.libproxy.txstate.edu/stable/2393771>.

Penman, John R. *Army Aviation Logistics in the Gulf War: A Corps-Level Perspective (Or, the Good, the Bad, and the Ugly?)*. The Industrial College of the Armed Forces, 1993, <http://www.dtic.mil/dtic/tr/fulltext/u2/a276859.pdf>.

Porter, Alan J. "Writing Technical Comics." *Intercom*, vol. 57, no. 2, Feb. 2010, pp. 6-8. EBSCOhost,

[libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true
&db=bsu&AN=48617118&site=eds-live&scope=site](http://libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=48617118&site=eds-live&scope=site).

Sealey-Morris, Gabriel. "The Rhetoric of the Paneled Page: Comics and Composition Pedagogy." *Composition Studies*, vol. 43, no. 1, 1 Mar. 2015, pp. 31-50. EBSCOhost, <http://www.uc.edu/journals/composition-studies/issues/archives/spring-2015--43-1.html>.

Simmons, Eugene Bradley. "Humanizing the Humvee Personification Techniques and Visual Rhetoric as Used in a U.S. Army Technical Comic Book." 2010. EBSCOhost,

[libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true
&db=edsndl&AN=edsndl.oai.union.ndltd.org.OCLC.oai.xcat.oclc.org.OCLCNo.
647204585&site=eds-live&scope=site](http://libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsndl&AN=edsndl.oai.union.ndltd.org.OCLC.oai.xcat.oclc.org.OCLCNo.647204585&site=eds-live&scope=site).

Steward, Sherry. *A Rhetoric of Technology: The Discourse in US Army Manuals and Handbooks*. Diss. University of Central Florida, 2004. *Google Scholar*. Web. 23 Aug. 2016.

- Suchan, Jim. "Gauging Openness to Written Communication Change: The Predictive Power of Metaphor." *Journal of Business and Technical Communication*, vol. 28, no. 4, Oct. 2014, pp. 447-476. *Scopus*, doi: 10.1177/1050651914536187.
- Tilley, Carol L. "Seducing the Innocent: Fredric Wertham and the Falsifications That Helped Condemn Comics." *Information & Culture: A Journal of History*, vol. 47, no. 4, 2012, pp. 383-413. *EBSCOhost*, <https://muse-jhu-edu.libproxy.txstate.edu/article/490073>.
- Torreón, Barbara S. "U.S. Periods of War and Recent Conflicts." *Congressional Research Service*. 29 Sep. 2016. <https://fas.org/sgp/crs/natsec/RS21405.pdf>.
- United States, Department of the Army. *PS the Preventive Maintenance Monthly*. Sep. 1968.
- United States, Department of the Army. *PS the Preventive Maintenance Monthly*. Sep. 1970.
- United States, Department of the Army. *PS the Preventive Maintenance Monthly*. Sep. 1990.
- United States. Department of the Army. *PS the Preventive Maintenance Monthly*. United States Army Materiel Command Logistics Support Activity, Jun. 2016.
- United States, Department of the Army. *PS the Preventive Maintenance Monthly*. United States Army Materiel Command Logistics Support Activity, Sep. 2010.
- "Warrior Ethos." *United States Army*, <https://www.army.mil/values/warrior.html>. Accessed 8 Mar. 2017.
- Watkins, Robert D., and Lindsley, Tom. "Sequential Rhetoric: Using Freire and Quintilian to Teach Students to Read and Create Comics." *Digital Humanities*

- Quarterly*, vol. 9, no. 4, 2015, n.p.,
<http://www.digitalhumanities.org/dhq/vol/9/4/000225/000225.html>.
- Webb, Erika Noll, et al. "WHAM! POW! Comics as User Assistance." *Journal of Usability Studies*, vol. 7, no. 3, May 2012, pp. 105-117. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=asn&AN=85740985&site=eds-live&scope=site.
- Webber, Ryan. "Episode 9: Dr. Han Yu on Comics in Technical Communication." *10-Minute Tech Comm*, University of Alabama–Huntsville, 22 Apr. 2015, <https://uahtechcomm.com/10-min-tech-comm-podcast/>.
- Wood, Linda A., and Rolf O. Kroger. *Doing Discourse Analysis: Methods for Studying Action in Talk and Text*. Sage Publications, 2000.
- Yates, JoAnne and Wanda Orlikowski. "Genre Systems: Structuring Interaction through Communicative Norms." *Journal of Business Communication*, vol. 39, no. 1, Jan. 2002, pp. 13-35. EBSCOhost, libproxy.txstate.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=6492884&site=eds-live&scope=site.
- . "Genres of Organizational Communication: A Structural Approach to Studying Communication and Media." *The Academy of Management Review*, no. 2, 1992, p. 299. EBSCOhost, <http://www.jstor.org.libproxy.txstate.edu/stable/258774>.
- Yoshioka, Takeshi, et al. "Genre Taxonomy: A Knowledge Repository of Communicative Actions." *ACM Transactions on Information Systems*, vol. 19, no. 4, Oct. 2001, p. 431-456. EBSCOhost, doi:10.1145/502795.502798.
- Yu, Han. *The Other Kind of Funnies: Comics in Technical Communication*. Baywood Publishing Co., Inc., 2015.

- Zachry, Mark. "Conceptualizing Communicative Practices in Organizations: Genre-Based Research in Professional Communication." *Business Communication Quarterly*, vol. 63, no. 4, Dec. 2000, pp. 95-101. *Scopus*, doi: 10.1177/108056990006300409.
- Zhang-Kennedy, L., et al. "The Role of Instructional Design in Persuasion: A Comics Approach for Improving Cybersecurity." *International Journal of Human-Computer Interaction*, vol. 32, no. 3, 03 Mar. 2016, p. 215-257. *EBSCOhost*, doi:10.1080/10447318.2016.1136177.
- Zimmerman, Dwight J., and Wayne Vanzant. *The Vietnam War: A Graphic History*. Hill and Wang, 2009.
- Zdenek, Sean. "Muted Voices: Cochlear Implants, News Discourse, and the Public Fascination with Curing Deafness." *Rhetoric in Detail: Discourse Analyses of Rhetorical Talk and Text*, edited by Barbara Johnstone and Christopher Eisenhart, John Benjamins Publishing Co., 2008, pp. 147-171.