



# **ESTABLISHING A SPACE FORCE CULTURE**

## **Lessons on Artifacts and Organizational Identity**

**Joshua M. Faustman, Major, USAF**

A historical black and white photograph of the Wright Flyer biplane in flight over a rural landscape. The plane is a two-winged aircraft with a propeller and landing gear. In the background, there are several buildings and trees under a clear sky.

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**Establishing a Space Force Culture**  
*Lessons on Artifacts and Organizational Identity*

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Wright Flyer Paper No. 83

Air University Press  
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<https://www.airuniversity.af.edu/AUPress/>

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Accepted by University Press February 2021 and Published September 2021.

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## Foreword

It is my great pleasure to present another issue of The Wright Flyer Papers. Through this series, Air Command and Staff College presents a sampling of exemplary research produced by our resident and distance-learning students. This series has long showcased the kind of visionary thinking that drove the aspirations and activities of the earliest aviation pioneers. This year's selection of essays admirably extends that tradition. As the series title indicates, these papers aim to present cutting-edge, actionable knowledge—research that addresses some of the most complex security and defense challenges facing us today.

Recently, The Wright Flyer Papers transitioned to an exclusively electronic publication format. It is our hope that our migration from print editions to an electronic-only format will foster even greater intellectual debate among Airmen and fellow members of the profession of arms as the series reaches a growing global audience. By publishing these papers via the Air University Press website, ACSC hopes not only to reach more readers, but also to support Air Force-wide efforts to conserve resources. In this spirit, we invite you to peruse past and current issues of The Wright Flyer Papers at <https://www.airuniversity.af.edu/AUPress/Wright-Flyers/>.

Thank you for supporting The Wright Flyer Papers and our efforts to disseminate outstanding ACSC student research for the benefit of our Air Force and war fighters everywhere. We trust that what follows will stimulate thinking, invite debate, and further encourage today's air, space, and cyber war fighters in their continuing search for innovative and improved ways to defend our nation and way of life.



EVAN L. PETTUS  
Brigadier General, USAF  
Commandant

## **Acknowledgements**

Foremost, I would like to thank my advisor, Dr. Michael “Coyote” Smith, for his mentorship and advice throughout this paper’s development. His passion for space and desire for an effective United States Space Force were significant motivating factors to explore cultural aspects of an organization’s success.

This past year’s Schriever Space Scholar curriculum provided ample opportunities to debate, explore, and discuss space-focused topics that shaped this paper’s focus and conclusions. To that end, I owe a debt of gratitude to the entire Schriever Space Scholar faculty and my fellow peers for their inspiration and support. I would also like to thank Dr. Sebastian Lukasik for his historical insights and research recommendations regarding organizational identity of past military organizations. I wish to thank Maj Alina Matson, Maj Julia Faustman, and Maj Phil Wagenbach for their thoughtful comments and suggestions. All errors found herein are my own.

Finally, the impetus to research organizational identity was influenced heavily by personal interactions and past experiences in various units. I would like to thank all colleagues and leaders from those assignments that aided my professional development and contributed (unknowingly to all parties at the time, as it were) to my interest in the topic of culture and identity dynamics.



## **Abstract**

This study provides considerations and recommendations for establishing a spacepower-focused organizational identity in the United States Space Force. Specifically, the author argues Space Force leaders must deliberately manage cultural artifacts to foster a desired identity. The author further leverages organizational identity theory to tie organizational change with identity formation risk, clarifying the need to align physical manifestations of culture with desired organizational themes and outcomes. Some existing examples of Space Force heraldry artifacts pose risk to identity development. As such, the author proposes a methodology to manage Space Force cultural artifacts and establish corporate-level cultural guidance to ensure an enduring spacepower-focused organizational identity into the future.

## **Introduction**

*If you get the culture right, most of the other stuff will just take care of itself.*

Tony Hsieh, CEO, Zappos

“With my signature today, you will witness the birth of the Space Force, and that will be now officially the sixth branch of the United States Armed Forces. . . . The Space Force will help us deter aggression and control the ultimate high ground.”<sup>1</sup> With those words, President Donald Trump signed into law the newest branch of the armed forces and charted a historic course for US spacepower. President Trump’s Space Policy Directive–4 succinctly describes the impetus behind the organizational change; with America’s technological lead diminished and potential adversaries threatening to deny access, a military organization focused exclusively on space ensures freedom of action in the domain and continuity of space-based services across the spectrum of conflict.<sup>2</sup> Such a structural shift among military forces echoes the emergence of the Air Force from the Army in 1947. In similar fashion, removed from Air Force oversight and bureaucratic processes, Space Force members will seek to clarify roles and responsibilities in satisfying their new institutional mandate. Organizational identity informs members’ understanding of an organization’s purpose, bridging the gap between uncertainty and objective.

This study’s premise is that the creation of the Space Force is a formative event presenting leaders with an opportunity to foster an organizational identity aligned with their respective scope of responsibility. University of Virginia Professor of Commerce Mary Jo Hatch and Copenhagen Business School Professor Majken Schultz describe a give-and-take relationship between identity and culture in their analysis, *The Dynamics of Organizational Identity*. Identity, they say, is based in part on members’ perceptions of the organizational environment. In that capacity, members’ subjective interaction with physical manifestations of culture contributes to identity formation.<sup>3</sup>

Members can comprehend identity by referencing cultural artifacts.<sup>4</sup> According to Dr. C. Marlene Fiol, a professor at New York University’s Stern School of Business, such artifacts are tangible facets of an organization’s environment and can thus be managed, unlocking “organizational commitment, productivity, and profitability.”<sup>5</sup> Therefore, Space Force leaders must manage cultural artifacts during this period of change to foster a desired spacepowerfocused organizational identity. Gen John Raymond, the first Space Force Chief of Space Operations (CSO), stated, “It’s going to be really

important that we get this right. A uniform. A patch. A song. It gets to the culture of a service.”<sup>6</sup>

This study offers considerations and recommendations for cultural artifact management but stops short of prescribing specific logos, slogans, or other such physical manifestations of culture. Rather, it asserts the need to align cultural artifacts with a Space Force unit’s functional mission. For the purposes of this study, the word *functional* does not allude to Joint or Air Force doctrinal terminology. Functional instead refers generically to a unit’s spacepower-focused mission as a mechanism to delineate unit activities from airpower culture. Organizational identity is a complex and multi-faceted concept, studied through psychological, sociological, and physical lenses. Ultimately, this study serves three purposes:

1. To describe the relationship between cultural artifacts and organizational identity.
2. To describe risks to organizational identity formation during a period of change.
3. To provide Space Force leaders considerations and recommendations for cultural artifact management to foster a desired spacepower-focused organizational identity.

### **Why is this Important?**

A strong identity forms the foundation of an effective organization. A report on US Army identity highlights that a shared and congruently manifested sense of purpose among an organization’s members is a hallmark of successful institutions. Furthermore, identity facilitates members’ comprehension of organizational behavior which in turn affects their choices, directly impacting organizational outcomes.<sup>7</sup>

In the context of military organizations, identity motivates commitment, clarifies roles and missions, defines areas of responsibility, and articulates required resources.<sup>8</sup> It delineates and differentiates organizational boundaries, directly impacting esprit de corps.<sup>9</sup> The impact of identity on selflessness and teamwork is especially pertinent; members who fail to identify with their unit may pursue self-serving interests to the detriment of organizational goals.<sup>10</sup> A strong Space Force identity defines what it means to serve in the nation’s newest military service.

Space Force leaders cannot assume a strong organizational identity will develop unencumbered during this period of structural upheaval. In their

seminal study *Organizational Identity*, management professors Stuart Albert and David Whetten assert identity is an especially critical consideration during periods of formation, expansion, or change.<sup>11</sup> The creation of a spacepower-focused military branch whose cultural roots are embedded with Air Force heritage reflects just such an event. Neglecting to consider this cultural misalignment threatens formation of a desired organizational identity, and thus poses a risk to institutional effectiveness. Dr. Michael Diamond, Professor Emeritus of Public Affairs and Organization Studies at the University of Missouri, in his work *The Unconscious Life of Organizations* said, “helping members to become aware of the structure of organizational identity and their place in it is a precondition for freeing them up for organizational change that is strategically sound and productive.”<sup>12</sup>

### **Who is the Audience?**

In his analysis of Air Force institutional identity titled *At the Fulcrum of Air Force Identity*, Lt Col Jonathan Riley notes that “everyone with a vested interest in the success of an organization should care about the state of its institutional identity.”<sup>13</sup> Likewise, this study is applicable to all members of the nascent Space Force. The considerations and recommendations herein are primarily aimed at Space Force leaders responsible for fostering a unit’s organizational identity and maintaining the physical environments where cultural artifacts reside.

### **Road Map**

Chapter 2 introduces and defines organizational identity and cultural artifacts, describes applicable theory, and explains the impact of organizational change. The relationship between organizational identity and cultural artifacts is explored using Hatch and Schultz’s Organizational Identity Dynamics Model.<sup>14</sup> Organizational change is explained with an analysis of identity dynamics during a corporate spin-off event, as documented by Professors Kevin G. Corley and Dennis A. Gioia from the University of Illinois and Pennsylvania State University, respectively.<sup>15</sup> Chapter 2 closes with a review of Fiol’s identity transformation process model.

Chapter 3 begins by describing past examples of cultural artifacts in military organizations, illustrating the tie between artifacts and identity, and providing context for proposals in Chapter 4. The last section of the chapter illustrates potential risk to identity formation associated with cultural artifacts inherited from Air Force organizations.

Finally, Chapter 4 draws upon Fiol's identity transformation process model to offer Space Force leaders considerations and recommendations for managing cultural artifacts to foster a desired spacepower-focused organizational identity aligned with a unit's functional mission.

### **Organizational Identity, Cultural Artifacts, and Change**

*The Roman eagle standards were the symbol of Rome's honor. For the soldiers, looking to the standard was an inspiring force on the battlefield, motivating them to march on, fly high, and dominate as eagles do. The eagle of a legion came to represent the legion itself.*

Eric Wang, Student of Roman History

This chapter defines organizational identity and cultural artifacts, describes their relationship, highlights risks to identity formation during organizational change, and summarizes Fiol's identity transformation process model that serves as the foundation for cultural artifact management recommendations and considerations in Chapter 4.

#### **What is Organizational Identity?**

Albert and Whetten define organizational identity by describing what it provides: an understanding of the distinguishing character, claimed distinctiveness, and enduring qualities of the organization.<sup>16</sup> Identity provides context for understanding one's role in an organization.<sup>17</sup> The process by which members comprehend organizational identity is based in psychology. Diamond defines identity as the "unconscious foundation for organizational culture."<sup>18</sup> Members form an understanding of their organization's identity based on unconscious, emotion-based interactions with each other and with physical manifestations of culture.<sup>19</sup> Albert and Whetten's assertion that identity is the result of an individual's interactions with their organization and subsequent reflections on those interactions complements Diamond's definition.<sup>20</sup>

Organizational identity is not static. Its formation is a dynamic and ongoing process; a member's perception of an organization's purpose will shift because of changes in the environment. Therefore, physical aspects of work centers affect organizational identity's development and relevance. In this manner, tangible cultural artifacts bear significance since they are the most readily available physical manifestations of organizational culture.<sup>21</sup>

## What are Cultural Artifacts?

Organizational identity is the product of culture and history<sup>22</sup> Cultural artifacts help members make sense of their organizational roles, contributing to identity's formation and endurance.<sup>23</sup> Edward Schein describes levels of culture as either accessible or inaccessible. At the surface level lay accessible and physically tangible manifestations of culture and history he categorizes as the "visible products of the group."<sup>24</sup> In military organizations, examples such as technology, rituals, and ceremonial objects are prevalent.<sup>25</sup> Patches, flags, static displays, coins, and other items bear unit insignia and represent an organization's mission and history. Air Force leaders in particular emphasized culture tied to hardware, which explains the many static displays located on most Air Force bases.<sup>26</sup> Artifacts are powerful symbols on which members rely to understand cultural meaning and identity claims.<sup>27</sup> Therefore, the dynamic relationship between identity and artifacts must be understood to achieve effective organizational change.

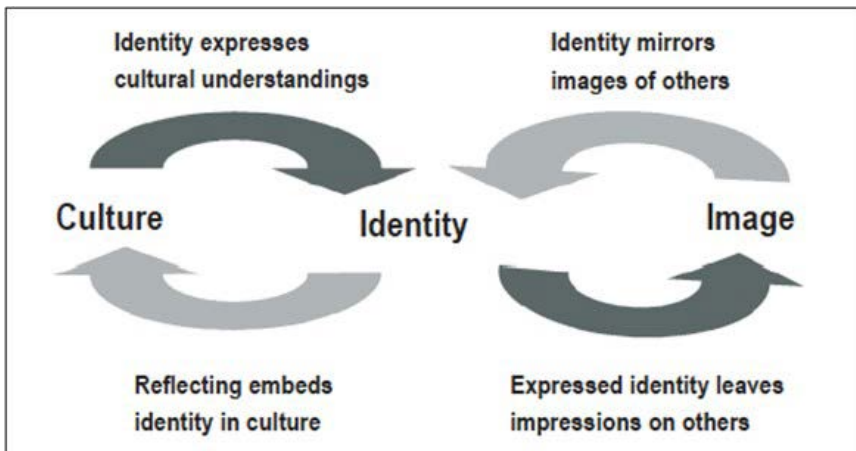
## The Self-Reinforcing Identity Process

The dynamic relationship between organizational identity and cultural artifacts is depicted in a brief anecdote from Graham Allison and Philip Zelikow's *Essence of Decision*, in which a notional person notices artwork in the Pentagon's hallways. The observer sees "scores of paintings and photographs depicting scenes and events of past actions, some mundane and some heroic. Each represents a decision that provides powerful tokens of identity and rules for future action."<sup>28</sup> This anecdote illustrates the assertion that interaction with one's environment affects perceptions that reinforce the relationship between artifacts and organizational identity. In doing so, "operational activity shapes organizational culture."<sup>29</sup> Professor Majken Schultz and Bocconi University Professor of Management Davide Ravasi describe this dynamic as "Reflecting on cultural practices and artifacts."<sup>30</sup> Members' interpretations of artifacts form their understanding of the organization's underlying distinctiveness. Repeated interactions between members and cultural artifacts generates patterns of understanding that contribute to organizational identity formation and change.<sup>31</sup>

Members' interactive and recurring identity reflection processes with cultural artifacts is clarified by the Organizational Identity Dynamics Model in Figure 1. In their study, Hatch and Schultz assert that identity is a function of repeated interactions with expressions of an organization's culture and perceived images of others.<sup>32</sup> Members reference artifacts to reflect on identity, embedding them with cultural meaning as depicted on the left side of the

figure. In cyclical fashion, identity is reinforced when a member develops a perception of organizational identity based on an artifact's previously established significance.<sup>33</sup>

The model indicates an artifact's perceived significance has the capacity to endure. The implication of the self-reinforcement process shown in the model is that cultural meaning will remain embedded in artifacts based on prior iterations of organizational identity formation and reflection.<sup>34</sup> Riley summarizes this concept by saying, "organizational culture finds expression through artifacts that weave their way back into the organizational identity."<sup>35</sup> Ultimately, risk to identity formation emerges when a cultural artifact's embedded meaning clashes with a leader's desired new organizational identity.



**Figure 1: Hatch and Schultz's organizational identity dynamics model**

### **Organizational Identity During Organizational Change**

Organizational change drives members to debate an organization's purpose and goals, to the detriment of identity formation.<sup>36</sup> Corley and Gioia's organizational identity analysis of a corporate spin-off event in which a new company was formed from a subunit of a larger organization supports this assertion.<sup>37</sup> Their premise was that identity can become ambiguous in the minds of members during a period of organizational change when identity's traditional references adjust in relevance.<sup>38</sup> Such a period of ambiguity leads members to form multiple possible interpretations of identity—a problematic notion for leaders seeking organizational coherence and effectiveness.<sup>39</sup> Their

analysis specifically focused on the impact of changing organizational labels (leadership-developed slogans, for example) and the underlying meaning of those labels.<sup>40</sup> Corley and Gioia identified three triggers of identity ambiguity through employee interviews and correspondence reviews, two of which involved members' reactions to external perceptions of the organization. The third trigger occurred as members identified a disconnect between their existing perception of organizational identity and leadership's promotion of a desired identity using new labels. This type of ambiguity is specifically referred to as temporal identity discrepancy.<sup>41</sup>

Temporal identity discrepancy emerged as members recognized the vagueness of the future in contrast to a clear understanding of the cultural past. Labels were changed during the spin-off, but those labels lacked meaning. Members were connected to a previous identity and could not yet connect with leadership's new vision. The new company's mission and strategy statements were promptly forgotten as they held little meaning for employees.<sup>42</sup> One individual said, "I've heard a lot of new ways to describe us, but they don't mean much now."<sup>43</sup> Other people believed that because their day-to-day jobs hadn't changed, that the organization didn't undergo significant change.<sup>44</sup> Members were less motivated and overwhelmed, and tension manifested among the new organization's subgroups, leading one member to state their organization was in a "schizophrenic" state.<sup>45</sup> Corley and Gioia acknowledge identity ambiguity will likely exist in any major organizational change. However, temporal identity discrepancy is a significant risk to an organization's effectiveness. To the extent a new environment is disconnected from the old, it is difficult to foster a cohesive identity.<sup>46</sup>

The self-reinforcing dynamic of Hatch and Schultz's Organizational Identity Dynamics Model is pertinent to the discussion of organizational change and temporal identity discrepancy. The model specifically reveals the inertial tendency of organizational identity. If members are exposed to artifacts with cultural significance that are disconnected from desired identity claims, past identity will be reinforced to the detriment of effective organizational change. The self-reinforcing cycle must be interrupted to align members' perceptions of organizational identity with the new desired identity. Managing artifacts is therefore a necessary practice to align the cultural environment with a vision for the future.

### **Managing Identity Transformation**

Conceptually, changes in the organizational environment can alter identity perceptions.<sup>47</sup> An organization undergoing a period of change that affects cul-



tural beliefs must account for identity's malleability during the change process.<sup>48</sup> It is therefore in an organization's interest to manage cultural artifacts to avoid temporal identity discrepancy.

Mitigating temporal identity discrepancy requires aligning culture with the desired identity. Fiol expounded on this assertion in her work, *Managing Culture as a Competitive Resource*, in which she analyzed two lumber company's approaches to organizational change which were spurred by an increasingly competitive business environment. One company updated its goals but left existing business procedures in place; as Fiol puts it, the company coupled a new strategy map with an outdated set of behaviors.<sup>49</sup> The other company updated its goals and overhauled its business procedures simultaneously, fostering patterns of behavior that contributed to a new organizational identity which aligned with the company's desired future. The latter company was ultimately better positioned to take advantage of the emerging business landscape.<sup>50</sup> Where attaining a competitive advantage is concerned, Fiol hypothesizes that cultural renewal requires first decoupling new behavior patterns from past cultural norms, followed by coupling newly desired meanings to new behaviors.<sup>51</sup> In this manner, the latter company avoided temporal identity discrepancy by aligning culture with a desired identity.

In a later study, *Capitalizing on Paradox: The Role of Language in Transforming Organizational Identities*, Fiol built upon her hypothesis by proposing a model for organizational identity change. The model indicates that change agents can affect identity by adjusting and solidifying members' collective beliefs about an organization's underlying culture.<sup>52</sup> Although her model leverages analysis of leadership language and rhetoric during a period of organizational change, it offers a useful framework for managing cultural artifacts, as will be discussed in Chapter 4. The model's steps are described herein.

Step 1: Deidentification. Fiol argues organizational change first calls for weakening members' ties to a previous organizational identity. Removing references to past identities increases members' receptivity to change and fosters an environment where new identity perceptions can form.<sup>53</sup>

Step 2: Situated Reidentification. In this step, leaders must expose members to representations of a desired identity through deliberate engagement with personnel and the environment.<sup>54</sup> Through Deidentification and Situated Reidentification, an organization effectively interrupts identity's self-reinforcing cycle by providing an opportunity to adjust members' identity perceptions. To establish coherence across an organization, leaders must ensure members can reference a greater cause, leading to the final step.

Step 3: Identification with Core Ideology. The last step asserts new identity perceptions must be solidified in an enduring capacity.<sup>55</sup> Leaders must

foster identity development in a manner that transcends members' differing perceptions, establishing a core ideology available for reference when members reflect on identity in the future.<sup>56</sup> Fiol describes the importance of leadership communication such as vision and mission statements to achieve the desired effect.<sup>57</sup> Establishing and communicating a core ideology institutionalizes a desired organizational identity that can endure through changes in an organization's environment.

## **Conclusion**

The Space Force's emergence from the Air Force is a formative event that mirrors a corporate spin-off, creating risk that members will experience temporal identity discrepancy and posing a risk to organizational effectiveness. Managing cultural artifacts during the transition to an independent service is an effective way to avoid temporal identity discrepancy. Hatch and Schultz's Organizational Identity Dynamics Model provides a mechanism to understand the self-reinforcing cyclical relationship between artifacts and organizational identity. Lest old perceptions be reinforced, leaders must interrupt that cycle by aligning cultural artifacts with a desired new identity.

### **Cultural Artifacts in Military Organizations**

*The removal of distinctive badges and insignia . . . is highly detrimental . . . We must have tremendous pride not only in our nation and in ourselves, but also in the unit to which we belong.*

General George S. Patton, Jr.

Military units rely on cultural artifacts to express and reinforce organizational identity. Visitors to military organizations will likely observe posters, models, images, coins, and statues. Common sights around installations also include uniforms, flags, slogans, patches, and decommissioned equipment and aircraft. Such artifacts tie current missions to those of the past, contributing to an enduring organizational identity.

This chapter reviews several examples of cultural artifacts in past military organizations and examines a current Space Force artifact. Artifact management in the British Army Regimental system illustrates cultural artifacts' utility for fostering a sense of identity. Cultural artifacts in the early British and American air forces reveals artifacts can contribute to identity without leveraging a prior military organization's lineage and heritage.

A current example of Space Force unit heraldry reveals a potential source of temporal identity discrepancy.

### **The British Army Regiment**

Leaders of the British Army Regimental system manufactured an enduring organizational identity in part by managing cultural artifacts. The first permanent British Regiments formed after 1662 when the British Parliament permitted the existence of a standing Army. Soldiers served in regiments with their own distinct customs and traditions, leading to specific rules and enduring patterns of behavior. Members were instilled with a collective source of pride via habits, customs, behaviors, and dress. Ultimately, new recruits were imbued with a sense of belonging to a community aligned with a military identity that was decoupled from civilian life.<sup>58</sup>

Cultural artifacts were deliberately utilized to foster organizational identity. Leaders provided soldiers with tangible objects such as totems, badges, and buttons as a means to generate solidarity within a specific regiment; for example, no two regiments displayed the exact same uniform. Artifacts also captured a regiment's storied history: "The chivalric motifs and heraldic symbols of regimental cap-badges and buttons asserted a social vision of a hierarchical, feudal society in which there was an organic link between past and present, and between every different rank in the regiment."<sup>59</sup> Regimental colors were embroidered with battle honors, exposing new soldiers to the unit's past.<sup>60</sup>

The British Army's deliberate management of cultural artifacts was a means to the establishment of a cohesive force. Regiments were vulnerable to discipline issues because of geographic isolation. Instilling a sense of identity was a mechanism each regiment used to improve esprit de corps sufficient to overcome such vulnerabilities, as well as reduce perceptions of inequality within the regiment itself.<sup>61</sup> The individual thus became interested less in self-serving tasks than with the collective well-being of the organization.

Even after structural changes to the British Army system in the twentieth century, regimental traditions endured. Newly created regiments were still given guidons, colors, and short histories to foster unit-wide esprit de corps. Soldiers were encouraged to take pride in their new units and the cultural heritage that served as their regiment's foundation.<sup>62</sup> Adjusting cultural artifacts not only aided identity formation, but tied past and current identities together in a cohesive manner that allowed members to easily link traditional regimental culture with the desired organizational identity of the future.

## Emerging Identities in Nascent Air Forces

Leaders in the nascent British and American air forces at the beginning of the twentieth century utilized cultural artifacts effectively to establish organizational identities in scenarios where culture and tradition did not exist, and in doing so disassociated organizational purposes, goals, and visions from parent entities.

The British Royal Air Force (RAF) formally came into being in the closing months of World War I. Its founding members immediately prioritized creating a separate identity from that of other British military organizations. Leaders believed clear material differences had to exist to provide airmen with a sense of distinctiveness. Most obvious was the need for a unique service uniform, for which several prototypes emerged. Illustrating the link between organizational identity and esprit de corps, morale dropped after the introduction of RAF uniforms similar in appearance to those of the British Army.<sup>63</sup> The new service introduced other cultural artifacts as well. As would be expected in a military organization, the RAF adopted a distinct service flag.<sup>64</sup> In an attempt to make the RAF's identity immediately visible, rubber stamps depicting the terms "Royal Air Force" instead of the previous "Royal Flying Corps" were promulgated for use on official documents.<sup>65</sup> In this manner, the RAF created identity from the ground up through the use of cultural artifacts, providing a sense of separation from the British Army; a service whose functions and missions were unrelated to the nature of the RAF's new occupation.

The US Air Service also sought to create a unique identity. The experiences of an American Soldier compared to those of an Airman illustrated the need for a distinct culture: "a service with no tradition, composed of young men who will not exactly be soldiers and whose war will often be fought alone, in a place where war had never been fought before, in the great vacancy of the sky."<sup>66</sup>

Like the RAF, the new service leveraged cultural artifacts to foster identity formation. Symbols differentiated pilots from other service members; wings, bars, and even the "dashing cavalryman's mustache" represented membership in the service.<sup>67</sup> Flying squadrons were assigned numerical designations in the sequence of unit activation, rather than attempt to link a unit's lineage to a deactivated military organization from the past.<sup>68</sup> Other artifacts came to exist through operational necessity. General Pershing allowed Air Service squadrons to develop unique insignia to differentiate friend from foe in the air.<sup>69</sup> These heraldic symbols became customary throughout the war, in the process fostering organizational identity in the squadrons. For instance, the 94th Aero Squadron, a pursuit unit, adopted an Uncle Sam hat and hatband

as the unit's insignia. When called to duty, a member commented, "well I guess our hat is in the ring now," cementing the "Hat in the Ring" symbol and slogan as an enduring cultural artifact.<sup>70</sup>

The 94th Fighter Squadron of Langley AFB, Virginia still uses the same emblem, appropriate considering the unit performs a similar functional mission aligned with the underlying cultural significance of its symbols.<sup>71</sup> Like other military units, heraldic symbols are common cultural artifacts in military space organizations as well. The next section will explore a specific example of space heraldry that reveals a potential source of temporal identity discrepancy in Space Force units that have recently transitioned from the Air Force.



Figure 2: Hat in the Ring emblem

### **Air Force Heraldry in the Space Force**

Heraldic symbols are prominent artifacts in all US military organizations. Much of Space Force heraldry, primarily the emblems and logos, were established under the cultural umbrella of Air Force space operations.

Heraldry has its origins in centuries past. Gentry and knights of medieval times used heraldic symbols to distinguish themselves and their families.<sup>72</sup> Armor prevented facial recognition and heraldic symbols served to identify individuals on the battlefield.<sup>73</sup> Over time, the relevant combat practicality of heraldry was overcome by its role as a symbol for organizational uniqueness. Indeed, the colors, shapes, sizes, and content of heraldic symbols all contribute to its underlying cultural significance.<sup>74</sup>

The Air Force manages unit heraldry via Air Force Instruction (AFI) 84-105, *Organizational Lineage, Honors, and Heraldry*. The Air Force defini-

tion of heraldry echoes that of organizational identity: “Organizations need visible, enduring symbols in the form of emblems to promote esprit de corps, morale, and a sense of heritage.”<sup>75</sup> According to the *Guide to Air Force Heraldry*, an accompanying document to AFI 84-105, unit emblems symbolize an organization’s history, mission, or function.<sup>76</sup> Emblems should symbolically portray unique organizational characteristics and qualities that reflect the identity of the unit.<sup>77</sup>

Heraldry is considered continuous, in that emblems are not discarded when a unit deactivates but rather archived until reactivation. A unit’s lineage encompasses its history, honors, and emblems, and remains constant despite changes to the unit’s location, function, and equipment, among other characteristics. A unit may not claim the lineage of another unit despite shared commonalities, nor is lineage terminated should a permanent organization disband.<sup>78</sup> In accordance with Air Force guidance, a new or reactivated unit that takes on a deactivated unit’s designation and inherits its history, honors, and emblems.<sup>79</sup> Artificially imprinting lineage on a unit represents a source of temporal identity discrepancy if the unit’s cultural heritage bears little resemblance to its current functional mission. Such was the experience of Air Force space units in the early 1990s.

An Air Force effort to normalize space operations in the early 1990s resulted in changes to Air Force space units’ cultural environments. In the late 1980s, an Air Force Blue Ribbon Panel finalized a series of decade-long studies regarding the structure of space organizations. The assertion that space systems were operationally capable, and not only research and development assets, helped drive a recommendation to normalize space by shaping space organizations in the image of the traditional Air Force.<sup>80</sup> Air Force wide restructuring efforts took place over the next decade. In 1992, then Air Force Chief of Staff Gen Merrill McPeak directed Air Force organizations to reinstitute traditional unit emblems to reaffirm and rejuvenate historical legacies aligned with airpower.<sup>81</sup> Space units were also organized to fit the traditional Wing, Group, and Squadron structures.<sup>82</sup> As a result, emblems were adjusted to align with the organizational changes. For instance, the 2nd Space Wing (SW) at what is now Schriever AFB, Colorado, experienced a significant redesignation and emblem change.

Before 1992, the 2nd SW operated and controlled a variety of space operations systems. After Air Force-wide restructuring, the 2nd SW inactivated and was redesignated as the 50th SW.<sup>83</sup> In keeping with the spirit of continuous lineage and AFI 84-105, the 50th SW assumed the cultural heritage of the 50th Fighter Group in World War II, the 50th Fighter-Bomber Wing of the Cold War, and the deactivated 50th Fighter Training Wing of the 1980s.<sup>84</sup>

For its heraldry, the 50th SW selected the 50th Fighter Group's original emblem—an Opivicus on a blue background with the phrase “Master of the Sky” at the bottom of the graphic (figure 3).<sup>85</sup> The emblem was adapted in 1992 by replacing “the Sky” with “Space” (figure 4).<sup>86</sup> In doing so, the 50th SW established lineage continuity by assuming its predecessors' cultural heritage. However, its imposed lineage consists entirely of fighter or fighter-bomber aircraft in support of airpower focused missions—missions that bear little resemblance to the wing's spacepower focused activities.<sup>87</sup>



**Figure 3: Master of Sky emblem<sup>88</sup>**



**Figure 4: Master of Space emblem<sup>89</sup>**

In contrast, the original 2nd SW emblem consisted of graphics aligned with the unit's brief history, mission, and function (figure 5). For example, the symbols and colors reflected the wing's space missions (which were later

assumed by the 50th SW) and abstractly represented Air Force priorities and values, grounding it to the core ideology of its parent entity. The deltoid, stars, globe, and satellite icons were easily discernible and relatable to the wing's functional mission, reinforcing an organizational identity tied to space operations. Blue and yellow features represented traditional Air Force colors representing the sky and member excellence.<sup>90</sup> An experienced space operator in 2nd SW needed no explanation of the emblem's significance; the graphics clearly tied the artifact's cultural significance to the organization's functional mission, while still paying homage to enduring Air Force values.



**Figure 5: 2nd Space Wing emblem**

Unlike the 2nd SW emblem, the 50th SW's Opinicus emblem lacks cultural significance for spacepower-focused missions. Rather, it reflects the Wing's historical lineage based solely on unit designation. Illustrating this disconnect, attempts to establish ties between the 50th SW emblem and its applicability as a cultural artifact for a space organization are tenuous and inconsistent. The emblem's blue and yellow features still reflect the Air Force colors. However, it is also claimed that the color blue represents the vastness of space.<sup>91</sup> This seems contradictory to the operating environment, described by the 50th SW as the "deep black of space" in a different historical analysis.<sup>92</sup> The Opinicus "bold flight of an eagle," a characteristic appropriate for an airpower-focused culture, is claimed to represent the current characteristics of the wing and its personnel.<sup>93</sup> In yet a different description however, its flight illustrates the "functions of the wing."<sup>94</sup> The Opinicus emblem's significance to spacepower-focused missions is also not clarified with the replacement of "Sky" with "Space." In brief, the Opinicus emblem does not reflect that which is organizationally distinct to the satellite and network operations activities foundational to the wing's contributions to spacepower.



The cultural disconnect between the Opinicus emblem and the 50th SW's functional mission is a potential source of temporal identity discrepancy that could hinder realization of a spacepower-focused organizational identity. The self-reinforcing relationship between organizational identity and cultural artifacts illustrated by Hatch and Schultz's Organizational Identity Dynamics Model informs that the potential for identity ambiguity will persist until the Opinicus emblem is either replaced or adjusted to reflect operational reality.

## **Conclusion**

The emergence of an independent Space Force presents leaders with the opportunity to deliberately manage cultural artifacts without concern of running afoul of Air Force guidance focused on unit designation and lineage. Indeed, until airpower-focused cultural artifacts are adjusted or removed, they will continue to be available for Space Force members to reflect upon in the context of organizational identity's self-reinforcing nature. Airpower-focused culture imposed on units by Air Force efforts to normalize space is not isolated to the 50th SW. In similar form, the 21st Space Wing and 460th Space Wing celebrate lineage composed of aerial fighter, bomber, and reconnaissance missions, all based on unit designation.<sup>95</sup> The presence of airpower artifacts in the heritage rooms and hallways of Space Force units is thus a potential phenomenon across the entire enterprise.

The examples in this chapter provided considerations for a cultural artifact management process. Leaders of the British Army Regimental system demonstrated the utility of using artifacts to foster a distinct organizational identity that ties current missions with a traditional core ideology centered on unit cohesiveness and esprit de corps. The RAF and US Air Service demonstrated that new organizations could create identities without leveraging designations and lineage of deactivated units. Dissimilarly, the 50th SW's Opinicus emblem illustrates that an artificial process of assigning heritage based on unrelated cultural history yields artifacts with embedded meaning disconnected from operational reality. The organizational identity theories presented in Chapter 2 reveal a desired spacepower-focused identity cannot be fully realized until artifacts' embedded significance coherently ties to a unit's functional mission.

## **Recommendations for Cultural Artifact Management**

*To establish a new invention is like establishing a new religion—it usually demands the conversion or destruction of an entire priesthood.*

J. F. C. Fuller

Space professionals operate systems that are in many cases remote and intangible. Cultural artifacts thus contribute significantly to organizational identity formation. Space Force leaders can foster spacepower-focused organizational identities by managing cultural artifacts in a manner that focuses on a unit's functional mission, avoiding temporal identity discrepancy. Adapting Fiol's three-step identity transformation process (Deidentification, Reidentification, Identification with Core Ideology) provides a framework to this effect.<sup>96</sup> The following content maintains the integrity of Fiol's ordered logic, however, approaching these steps concurrently may also provide an effective method to establish organizational identity.

### **Step 1: Deidentification: Assess the Environment and Remove Risk**

The quote at the beginning of the chapter illustrates this step's intent. Current Space Force organizations experienced a cultural upbringing steeped in airpower, which now demands a clear-eyed assessment of existing cultural artifacts' relevance to desired spacepower-focused organizational identity. Space Force units must remove cultural artifacts that lack relevance to the unit's functional mission and associated history. The following recommendations are offered.

Appoint an action officer. Space Force leaders at all levels must appoint a lead action officer to conduct the cultural artifact management process. This action officer should not be selected at random because of the outsized influence cultural artifacts play in fostering spacepower-focused organizational identities. The action officer must be well-steeped in unit operations and knowledgeable of the unit's functional mission. While this recommendation seems elementary, assigning an action officer from within the organization (sitting at a low hierarchical level relative to the leader) is an effective method to ensure alignment of cultural artifacts with a desired identity. According to Corley, individuals at varying echelons perceive an organization's identity differently.<sup>97</sup> Leaders at higher echelons tend to associate core organizational beliefs with strategy, as opposed to members at lower echelons that associate identity with cultural factors.<sup>98</sup> To fuel an authentic pride in members, assigning this task to a member of the organization mitigates

the risk senior leaders will attempt to downward direct identity in a manner inconsistent with cultural realities.<sup>99</sup>

Conduct an assessment. Before removing irrelevant cultural artifacts in a work environment, the unit must first understand the significance of what is already present. To that end, the action officer must conduct an in-depth review of existing cultural artifacts. Those artifacts must then be evaluated to determine whether removal is warranted. An assessment should consist of the following activities.

First and foremost, conduct an inventory. The scope of the inventory is directly related to the organization's hierarchical level. At the tactical level, action officers should review pictures, statues, displays, artwork, patches, and emblems in work centers, hallways, lobbies, front offices, and operations floors. At a wing level, the focus should turn to static displays, wing heritage rooms, headquarters buildings, and public-facing infrastructure around base. At the service level, the Space Force staff should note logos, slogans, public advertising, unit names, and any other artifacts encountered by Space Force personnel and visitors to Space Force bases.

Second, evaluate each artifact's historical significance to determine whether it was artificially imposed by the Air Force's space normalization campaign in the 1990s.

Third, evaluate the artifact's current cultural significance in the context of its space-focused functional mission. While the artifact may have been tied to airpower-focused identity, it may still hold cultural significance tied to spacepower and therefore may not warrant removal. For example, space capabilities support Air Force operations across the spectrum of conflict. Cultural artifacts depicting space support to flying missions may appear to celebrate airpower when in fact it reinforces awareness of spacepower's significance in the joint fight.

Fourth, evaluate the various symbols that comprise emblems and logos to identify themes or graphics that are culturally irrelevant to spacepower-focused organizational identity. For instance, blue, red, and yellow colors of the 21st SW emblem symbolically represent the three fighter squadrons that comprised the 21st Fighter-Bomber Wing in 1957, unrelated to the 21st SW's current mission (Figure 6).<sup>100</sup>

Remove sources of identity risk. The overarching criteria to determine whether an artifact is culturally relevant for organizational identity is to question—does this artifact functionally align to the organization's mission? Conducting the assessment will answer this question by identifying artifacts that are culturally disconnected from a space unit's spacepower-focused functional mission. Those artifacts must be removed or replaced.



**Figure 6: 21st Space Wing emblem.**

The 50th SW Opinicus emblem is an example of just such an artifact given its direct tie to airpower-focused lineage and its lack of relevance for the unit's current operations. However, such artifacts should by no means be cast aside. Airpower-focused artifacts are as equally significant for Air Force identity as spacepower-focused artifacts are for Space Force identity. Any Air Force artifacts not aligned to a Space Force unit's spacepower-focused functional mission should be provided to an Air Force historian for archiving; cultural heritage is important—it just may not be applicable. Accomplishing this step avoids temporal identity discrepancy by removing artifacts that lack cultural significance for the unit's functional mission.

## **Step 2: Reidentification: Align with Unit's Functional Mission**

A favorable physical environment for identity formation requires replacing and installing culturally relevant artifacts to provide appropriate targets for reflection in the organizational identity self-reinforcement process. Space Force leaders must consider which spacepower-focused artifacts are appropriate for this effort. The following considerations are offered.

Consider heritage of deactivated space units. Space organizations deactivated under General McPeak's efforts to normalize space operations may align culturally with current Space Force units. For example, artifacts such as the aforementioned 2nd SW emblem depicts symbols representing satellite command and control that are functionally relevant to current 50th SW space operations squadrons.<sup>101</sup> In another example, the 1st Space Wing (1st SW) and 3rd Space Support Wing emblems symbolized the space environment, the global nature of space operations, and space surveillance (see Figures 7 and 8).<sup>102</sup> These

artifacts are functionally relevant to the 21st SW, which acquired the spacepower-focused missions of the 1st SW and the 3rd Space Support Wing in 1992.<sup>103</sup>



**Figure 7: 1st Space Wing emblem**



**Figure 8: 3rd Space Support Wing emblem**

Action officers should coordinate with local Air Force historians to identify relevant artifacts from deactivated Air Force space units; those items can be incorporated or reinstalled as deemed appropriate. In doing so, Space Force units can resurrect and reclaim culture associated with its functional mission instead of continuing to rely on airpower artifacts associated with an imposed lineage.

Align new artifacts with the unit's functional mission and not an imposed lineage. Space Force leaders must align new cultural artifacts to the unit's functional mission. A new 50th SW heraldic emblem would depict symbols aligned with space operations, instead of its current airpower-focused form. More generic efforts would consist of adorning hallways, work centers, and heritage

rooms with posters, graphics, and displays depicting spacepower culture associated with a unit's mission. One could also expect to encounter references to environments where space systems impart effects, in addition to the systems themselves. 2 SOPS' installation of cultural artifacts in its common areas reflects such an effort to align identity with a capability and its effects. For example, 2 SOPS hallway displays include graphical depictions of all four Global Positioning System (GPS) satellite vehicle types, senior leader communication emphasizing GPS's support to downrange warfighters, and a recent quote from then vice president Mike Pence declaring GPS as "the world's only global utility."<sup>104</sup> 2 SOPS members also carry a laminated reference card detailing impressive metrics associated with GPS support to US government agencies, first responders, and its significant national economic impact, among other topics.<sup>105</sup> By focusing on functional missions, leaders can reinforce an organizational identity aligned with a unit's contribution to spacepower.

Readjust cultural artifacts among existing space units. Managing cultural artifacts that are already spacepower-focused in nature yet only aligned to the space unit's lineage and not its functional mission presents a different challenge. Under the auspices of Air Force space operations, some current Space Force units have served multiple functional missions without undergoing inactivation or re-designation. For example, the 1st Space Operations Squadron (1 SOPS) served multiple missions over time with inconsistent functions. Briefly, these included missile warning; position, navigation, and timing; weather; and imagery collection, all which ended either with system deactivations or transfers of operation to other units. Since 2009, however, 1 SOPS has operated the Advanced Technology Risk Reduction, Space-Based Space Surveillance, Geosynchronous Space Situational Awareness Program, and Operationally Responsive Space—five systems—all of which align with a space-based space situational awareness function to the extent that the unit has been declared the "premier organization for space-based space domain awareness."<sup>106</sup> In this context, cultural artifacts from 1 SOPS heritage missions are disconnected from its celebrated organizational identity, presenting a risk of temporal identity discrepancy when members reflect on the unit's history.

Cultural artifact adjustment consists of transitioning artifacts to units with organizational identities aligned functionally with the artifacts' cultural significance. For example, 1 SOPS can reduce the risk of temporal identity discrepancy by transitioning GPS artifacts to 2 SOPS, aligning position, navigation, and timing heritage to the space unit charged with that specific functional mission. This adjustment provides 2 SOPS with a holistic cultural heritage previously fractured by misaligned mission assignments. It is likely that historical cultural artifacts appropriately align with the unit's current functional

mission, but in some cases, it may be necessary for Space Force leaders to create new artifacts, like the RAF and US Air Service. For the entire Space Force enterprise to functionally manage cultural artifacts in standardized fashion, there must be an institutionalized cultural ideology put forth by senior Space Force leadership.

### **Step 3: Identification with Core Ideology: Implications for the CSO**

As described by Fiol, identification with a core ideology necessitates leadership communication and action.<sup>107</sup> An organization's original leader has an out-sized effect on organizational identity development.<sup>108</sup> The CSO is therefore the appropriate leader to establish the service's anchoring cultural priority for all other Space Force leaders to reference when managing artifacts in their own organizations. In this manner, organizational identities at all echelons will be imbued with an enduring quality less susceptible to unintended change in a dynamic environment. To this end, the CSO must emphasize a core ideology focused on spacepower-specific cultural history to facilitate members' appreciation for cultural artifacts. The following recommendations are offered.

Clarify cultural history. The CSO must clarify Space Force cultural history to align enterprise-wide efforts in establishing organizational identities. The Space Force is structurally new, however its spacepower missions are in many cases decades old. As previously identified, General McPeak's space normalization campaign effectively severed early spacepower organizational heritage from corporate memory. Air Force Maj William C. Thomas, in his article, *The Cultural Identity of the United States Air Force*, asserts that identity relies heavily on an organization's history, especially its original purpose which fosters norms of behavior.<sup>109</sup> The Space Force's original purpose as described by President Trump, to "control the high ground," is space domain specific, disconnected from imposed airpower lineage.<sup>110</sup> For this reason, the CSO must establish official policy guidance returning airpower lineage associated with General McPeak's space normalization efforts back to the Air Force, and recognizing deactivated space organizations as the cultural foundations for current Space Force units.

Such policy guidance is consistent with ongoing Space Force structural changes functionally aligning cultural values with spacepower-focused missions. For instance, the recently announced Orbital Warfare, Electronic Warfare, Space Battle Management, and Space Access and Sustainment mission areas reflect the desire to functionally organize for a hostile warfighting domain.<sup>111</sup> Accordingly, Space Force personnel will be assigned major warfighting competencies aligned to these new mission area designations. The impetus behind this change is a desire for depth of knowledge and not a

breadth of experience across a variety of functions.<sup>112</sup> The shift to functional mission area organization and personnel management introduces yet more risk for temporal identity discrepancy if cultural focus fails to align, illustrating the need for policy to correct a fractured corporate memory.

Clarifying the service's cultural history provides an enduring foundation on which leaders can rely for artifact management. No longer would space units feel compelled to pay homage to unrelated airpower history with cultural artifacts that present members with confusing references for organizational identity. Rather, clarifying cultural history for all affected Space Force units provides a consistent and enterprise-wide connection to a core ideology focused on spacepower, facilitating members' trust in the identity of the organization.<sup>113</sup>

Establish a Space Force History Office. The CSO must establish a Space Force History Office to manage cultural history and heritage, providing expertise to leaders in support of cultural artifact management. In keeping with the recommended CSO guidance, the Space Force History Office must capture relevant history and heritage aligned to functional spacepower missions instead of unit designations and lineage. The Space Force inherited a history office architecture outlined in AFI 84-101, *Aerospace Historian Responsibilities and Management*. The historian's responsibility to "integrate history and heritage into a seamless and cohesive program that improves organizational effectiveness, esprit de corps, and combat capability," reflects a significant contribution to organizational identity development.<sup>114</sup> Historians are assigned to Air Force Major Commands (MAJCOM), Numbered Air Forces (NAF), and Wings, to capture and analyze data for the purpose of developing heritage and history products.<sup>115</sup> The history office's primary product is the annual unit history and subsequent command history report, an organization's official record of its significant events, accomplishments, and challenges of the previous year.<sup>116</sup>

In the Air Force construct, histories are assembled in the context of stove-piped Wings, NAFs, and MAJCOMs that may organizationally control disparate functional missions. The Space Force History Office should instead implement a program where historians are assigned to functional missions instead of an organizational echelon. Each history office will then be able to capture cultural heritage holistically. To use GPS as an example, a historian that focuses on position, navigation, and timing activities would capture in a single series of products the relevant history of 1 SOPS support to GPS, 2 SOPS support to GPS, and the efforts provided by various staffs and operations centers in support of the GPS mission. Such a Space Force history program provides Space Force leaders seeking to install or replace cultural artifacts with experts steeped in cultural history of the applicable functional mission.



Implement Cultural Heritage Education. Finally, the CSO must mandate the inclusion of cultural heritage education into accession training programs for Space Force recruits. Members must comprehend an artifact's cultural significance for it to effectively contribute to organizational identity formation. This is especially true for new Space Force accessions currently sourced from Air Force military training programs. For example, the description of the 2nd SW emblem's symbolism alone is complex and may be difficult to discern:

Blue and yellow are the Air Force colors. Blue alludes to the sky, the primary theater of operations for the Air Force. Yellow refers to the sun and excellence required of Air Force personnel. The globe represents the Earth as viewed from space and signifies the worldwide coverage provided by Air Force satellites in accomplishing surveillance and communications missions. The ellipse symbolizes the Air Force Satellite Control Network and the two stars depict the satellites. The deltoid and its contrail denote the Air Force Launch Vehicles that place the satellites in orbit. The seven stars represent the vastness of space and the environment of our operations.<sup>117</sup>

Cultural heritage education for new recruits should certainly not rely on space symbology lessons, but the complicated makeup of the 2nd SW emblem illustrates that a new accession may not fully understand its cultural significance without context. A Space Force cultural heritage curriculum should mirror the Air Force Reserve Officer Training Corps (AFROTC) Program's undergraduate General Military Course, which focuses on the structure and mission of Air Force organizations, the history of flight, the development of US airpower, airpower's employment in past conflict, and airpower's contributions to the US as a whole.<sup>118</sup> A curriculum that implements the AFROTC General Military Course with a spacepower focus will clarify the cultural significance of artifacts depicting images of Space Force leaders, the operational environment, and spacepower's contributions to US national power. A culturally savvy recruit is less likely to misinterpret an artifact's underlying meaning, avoiding the risk personnel will perceive different organizational identities within the same unit.

The current absence of a Space Force-specific accession pipeline should not detract from a CSO mandate for cultural heritage education. In the meantime, the Space Force should implement an indoctrination program to accomplish cultural heritage education local to a new accession's first duty station. Decentralized delivery of a centrally controlled cultural education curriculum is not a new concept for space organizations. All new National Reconnaissance Office (NRO) employees attend a multi-day course offered at various NRO locations covering the organization's history and missions.<sup>119</sup> Implementing such an indoctrination system on a temporary basis while

Space Force accession programs are developed ensures accessions gained today can immediately understand the significance of cultural artifacts.

Clarifying cultural history, creating a Space Force History Office, and implementing cultural heritage education is necessary to facilitate members' appreciation for artifacts encountered in Space Force units and work centers. In doing so, the CSO will establish an organizational identity that endures despite frequent personnel turnover and changes in the operational environment.

## **Conclusion**

True organizational change requires cultural transformation.<sup>120</sup> The challenge facing Space Force leaders at all organizational echelons is fostering a spacepower-focused organizational identity. The difficulty emerges when one considers the origins of current Space Force units' cultural heritage and organizational constructs. The misalignment of airpower-focused cultural artifacts with spacepower-focused functional missions must be overcome to foster a unique organizational identity for any Space Force unit. Organizational identity theory not only illustrates the significance tangible cultural artifacts can have on identity formation, but also reveals a self-reinforcing cyclical relationship between the two concepts that, if left uninterrupted, could promote risk in the form of temporal identity discrepancy. Historical examples of cultural artifacts in organizations illustrate that identity is critical to defining an organization yet does not require a historical lineage to be effective. The 50th SW Opinicus emblem reflects a potential phenomenon across current Space Force units where imbuing a unit with culturally irrelevant heritage based purely on unit designation and lineage can be a source of identity ambiguity.

Leaders must therefore deliberately manage cultural artifacts to achieve a desired spacepower-focused organizational identity. The three recommended steps adapted from Fiol's identity transformation process and outlined in this study provide a useful framework. Aligned with Deidentification and Reidentification, each organization will need to remove, adjust, and install cultural artifacts to a varying degree to avoid temporal identity discrepancy and foster a desired identity. Aligned with Identification with Core Ideology, the CSO's responsibility to generate an enduring anchor for cultural artifact management requires establishing mechanisms to appreciate Space Force cultural heritage.

At its core, organizational identity relies on the interaction and involvement of individual members. Considering the intangible nature of most space operations, cultural artifacts play a significant role in spacepower-focused organizational identity development. The establishment of the Space Force is the formative event leaders can leverage to achieve a new spacepower-focused identity.

## Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

1. President, "Remarks by President Trump".
2. President, "Text of Space Policy Directive-4."
3. Hatch and Schultz, "The Dynamics of Organizational Identity," 989–91.
4. Hatch and Schultz, 1000–1.
5. Fiol, "Managing Culture," 195.
6. Insinna, "May the Space Force Be With You."
7. Setear et al., *The Army in a Changing World*, 67; Ravasi and Schultz, "Responding to Organizational Identity Threats," 437; March and Olsen, *Ambiguity and Choice in Organizations*, 12–3.
8. Sine, "Discovering Air Force Identity: Airpower and Innovators," 3.
9. French, *Military Identities*, 78–9.
10. Scott and Lane, "A Stakeholder Approach," 52.
11. Albert and Whetten, "Organizational Identity," 98–9.
12. Diamond, *The Unconscious Life of Organizations*, 77.
13. Riley, *At the Fulcrum of Air Force Identity*, 3.
14. Hatch and Schultz, "The Dynamics of Organizational Identity," 9.
15. Corley and Gioia, "Identity Ambiguity and Change," 173–208.
16. Albert and Whetten, "Organizational Identity," 90–1.
17. Albert and Whetten, 90.
18. Diamond, *The Unconscious Life of Organizations*, 77.
19. Diamond, 60–1.
20. Albert and Whetten, "Organizational Identity," 98.
21. Diamond, *The Unconscious Life of Organizations*, 60–1.
22. Diamond, 79.
23. Ravasi and Schultz, "Responding to Organizational Identity Threats," 437.
24. Schein, *Organizational Culture and Leadership*, 23.
25. Schein, 23.
26. Power, "One Team, One Fight, One Organizational Identity," 42.
27. Ravasi and Schultz, "Responding to Organizational Identity Threats," 453.
28. Allison and Zelikow, *Essence of Decision*, 154.
29. Allison and Zelikow, 154.
30. Ravasi and Schultz, "Responding to Organizational Identity Threats," 447.
31. Ravasi and Schultz, 447–8.
32. Hatch and Schultz, "The Dynamics of Organizational Identity," 1004.
33. Hatch and Schultz, 1000–1.
34. Hatch and Schultz, 1001.
35. Riley, *At the Fulcrum of Air Force Identity*, 7–13. Although this study highlights little direct content from Riley's work, his analysis and conclusions heavily influenced the author's desire to explore identity theory, cultural artifacts, and Space

Force organizational identity development. Similarly, Riley's analysis and associated bibliography introduced the author to much of the research that subsequently informed this study. Notably, this study's treatment of Hatch and Schultz's Organizational Identity Dynamics Model mirrors Riley's analysis of the same, albeit to a lesser degree. Riley's use of the model to describe a feedback loop between culture (including artifacts) and identity, contributes to his in-depth analysis of disconnects between leadership and stakeholder perspectives regarding Air Force institutional identity development efforts.

36. Albert and Whetten, "Organizational Identity," 98–9.
37. Corley and Gioia, "Identity Ambiguity and Change," 173.
38. Corley and Gioia, 173.
39. Corley and Gioia, 173.
40. Corley and Gioia, 202–3.
41. Corley and Gioia, 187–90.
42. Corley and Gioia, 191, 194, 200, 203.
43. Corley and Gioia, 194.
44. Corley and Gioia, 191.
45. Corley and Gioia, 195.
46. Corley and Gioia, 205; Fiol, "Managing Culture," 205.
47. Gioia, Schultz, and Corley, "Organizational Identity, Image, and Adaptive Instability," 63–4.
48. Gioia, Schultz, and Corley, 77.
49. Fiol, "Managing Culture," 207.
50. Fiol, 207.
51. Fiol, 206.
52. Fiol, "Capitalizing on Paradox," 655–8.
53. Fiol, 658–9.
54. Fiol, 660.
55. Fiol, 661.
56. Fiol, 661.
57. Fiol, 662.
58. French, *Military Identities*, 5–6, 77.
59. French, 86.
60. French, 86, 88.
61. French, 78–9.
62. French, 330.
63. Overy, *RAF: The Birth of the World's First Air Force*, 55.
64. Overy, 56.
65. Overy, 47–8.
66. Hynes, *The Unsubstantial Air*, 17.
67. Hynes, 84.
68. Frandsen, *Hat in the Ring*, 10.
69. Frandsen, 79.

70. Frandsen, 78–9.
71. Joint Base Langley-Eustis, “94th Fighter Squadron.”
72. Pine, *The Story of Heraldry*, 11.
73. Pine, 11.
74. Pine, 12.
75. AFI 84-105, *Organizational Lineage, Honors, and Heraldry*, 7.
76. Haulman, “Guide to Air Force Heraldry,” 3.
77. Haulman, 6.
78. AFI 84-105, *Organizational Lineage, Honors, and Heraldry*, 5.
79. Haulman, “Guide to Air Force Heraldry,” 9; AFI 84-105, *Organizational Lineage*, 5.
80. Spires, *Beyond Horizons*, 210–211.
81. Saunders, “What is an Opinicus?”
82. Saunders, “From ‘Master of the Sky’ to Master of Space.”
83. Schriever AFB, “Schriever Air Force Base.”
84. Saunders, “Linking a Proud 50th Heritage.”
85. Saunders, “50th SW Emblem’s History Explained.”
86. Saunders, “50th SW Emblem’s History Explained.”
87. Saunders, “Linking a Proud 50th Heritage.”
88. Saunders, “Linking a Proud 50th Heritage.”
89. Saunders, “Linking a Proud 50th Heritage.”
90. Haulman, “2d Space Wing Lineage and Honors History.”
91. Saunders, “What is an Opinicus?”
92. Saunders, “From ‘Master of the Sky’ to Master of Space.”
93. Saunders, “50th SW Emblem’s History Explained.”
94. Saunders, “What is an Opinicus?”
95. Haulman, “21st Space Wing (AFSPC);” Haulman, “460 Space Wing (AFSPC).”
96. Fiol, “Capitalizing on Paradox,” 657.
97. Corley, “Defined by Our Strategy or Our Culture?” 1149.
98. Corley, 1145.
99. The phrase *authentic pride* was used in a Schriever Space Scholar seminar discussion in February 2020 to describe the ideal result of cultural management practices in space units. It was further discussed that efforts by leaders to impose a culture misaligned with reality results in a lack of *authentic pride*.
100. 21st Space Wing History Office, “21st Space Wing History.”
101. Haulman, “2d Space Wing Lineage and Honors History.”
102. Haulman, “1st Space Wing;” Haulman, “3rd Space Support Wing.”
103. 21st Space Wing History Office, “21st Space Wing: Heritage of Honor,” 38.
104. Schriever, discussion; Rodriguez and Hoffman, “Pence Visits Front Range.”
105. Schriever, discussion.
106. Schriever Air Force Base, “1st Space Operations Squadron.”
107. Fiol, “Capitalizing on Paradox,” 661–2.
108. Thomas, “The Cultural Identity of the United States Air Force,” 2.

109. Thomas, 2.
110. President, "Remarks by President Trump."
111. Secretary of the Air Force, *Report to Congressional Committees*, 8.
112. Air Force Space Command, "Space Cadre Talent Management Update."
113. Fiol, "Capitalizing on Paradox," 662.
114. AFI 84-101, *Aerospace Historian Responsibilities and Management*, 7.
115. AFI 84-101, 7.
116. AFI 84-101, 9.
117. Haulman, "2d Space Wing Lineage and Honors History."
118. US Air Force ROTC, "General Military Course."
119. Account of NRO indoctrination training based on personal experience of the author.
120. Smith, "USAF Culture and Cohesion," 9.

## **Abbreviations**

AFB	Air Force Base
AFROTC	Air Force Reserve Officer Training Corps
CSO	Chief of Space Operations
FTW	Fighter Training Wing
GPS	Global Positioning System
MAJCOM	Major Command
NAF	Numbered Air Forces
NRO	National Reconnaissance Office
RAF	Royal Air Force
SW	Space Wing

## **Bibliography**

- 21st Space Wing History Office. "21st Space Wing History." Peterson AFB, CO, 2003. Accessed 22 March 2020. <http://www.chambleyab.com/>.
- Air Force Space Command. "Space Cadre Talent Management Update." Presentation. Air University, Maxwell AFB, AL, 14 November 2019.
- Albert, Stuart, and David A. Whetten. "Organizational Identity." In *Organizational Identity: A Reader*, edited by Mary Jo Hatch and Majken Schultz, 89–118. Oxford, UK: Oxford University Press, 2004.
- Allison, Graham, and Philip Zelikow. *Essence of Decision: Explaining the Cuban Missile Crisis* 2nd ed. New York: Longman, 1999.
- Air Force Instruction 84-101. *Aerospace Historian Responsibilities and Management*, 13 December 2018. <https://static.e-publishing.af.mil/>.
- Air Force Instruction 84-105. *Organizational Lineage, Honors, and Heraldry*, 19 July 2019.
- Corley, Kevin G. "Defined by Our Strategy or Our Culture? Hierarchical Differences in Perceptions of Organizational Identity and Change." *Human Relations* 57, no. 9 (September 2004): 1145–77. <https://doi.org/>.
- Corley, Kevin G., and Dennis A. Gioia. "Identity Ambiguity and Change in the Wake of a Corporate Spin-Off." *Administrative Science Quarterly* 49, no. 2 (June 2004): 173–208. <https://www.jstor.org/>.
- Diamond, Michael A. "About." Harry S. Truman School of Public Affairs, University of Missouri. Accessed 6 April 2020. <https://truman.missouri.edu/>.
- Diamond, Michael A. *The Unconscious Life of Organizations*. Westport, CT: Quorum Books, 1993.
- Fiol, C. Marlene. "Capitalizing on Paradox: The Role of Language in Transforming Organizational Identities." *Organization Science* 13, no. 6 (November–December 2002): 653–66. <https://doi.org/>.
- Fiol, C. Marlene. "Managing Culture as a Competitive Resource: An Identity-Based View of Sustainable Competitive Advantage." *Journal of Management* 17, no. 1 (1 March 1991): 191–211. <https://doi.org/>.
- Frandsen, Bert. *Hat in the Ring: The Birth of American Air Power in the Great War*. Washington, DC: Smithsonian Institution, 2003.
- French, David. *Military Identities*. New York, NY: Oxford University Press, 2005.
- Hatch, Mary Jo, and Majken Schultz. "The Dynamics of Organizational Identity." *Human Relations* 55, no. 8 (August 2002): 989–1018. <https://doi.org/>.
- Haulman, Daniel, comp. "1st Space Wing." Maxwell AFB, AL: Air Force Historical Research Agency. Accessed 20 March 2020. <https://web.archive.org/>.



- Haulman, Daniel, comp. "2d Space Wing Lineage and Honors History." Maxwell AFB, AL: Air Force Historical Research Agency. Accessed 2 March 2020. <https://web.archive.org/>.
- Haulman, Daniel, comp. "3d Space Support Wing." Maxwell AFB, AL: Air Force Historical Research Agency. Accessed 20 March 2020. <https://web.archive.org/>.
- Haulman, Daniel, L., comp. "21st Space Wing (AFSPC)." Maxwell AFB, AL: Air Force Historical Research Agency, 19 June 2017. <https://www.afhra.af.mil/>.
- Haulman, Daniel, L., comp. "460th Space Wing (AFSPC)." Maxwell AFB, AL: Air Force Historical Research Agency, 23 May 2018. <https://www.afhra.af.mil/>.
- Haulman, Daniel L. "Guide to Air Force Heraldry." Maxwell AFB, AL: Air Force Historical Research Agency, January 2013. <https://www.afhra.af.mil/>.
- Hynes, Samuel. *The Unsubstantial Air: American Fliers in the First World War*. New York, NY: Farrar, Straus, and Giroux, 2014.
- Insinna, Valerie. "May the Space Force Be with You. Here's What We Know About the US Military's Newest Service." *DefenseNews*, 20 December 2019. <https://www.defensenews.com/>.
- Joint Base Langley-Eustis. "94th Fighter Squadron." Joint Base Langley-Eustis Fact Sheets, 29 January 2010. <https://www.jble.af.mil/>.
- March, James G., and Johan P. Olsen. *Ambiguity and Choice in Organizations*. Oslo, Norway: Harald Lyche & Co., 1976.
- Office of the President. "Remarks by President Trump at Signing Ceremony for S.1790, National Defense Authorization Act for Fiscal Year 2020." 20 December 2019. <https://web.archive.org/>.
- Office of the President. "Space Policy Directive-4: Establishment of the United States Space Force." Washington, DC: White House, 19 February 2019. <https://web.archive.org/>.
- Overy, Richard. *RAF: The Birth of the World's First Air Force*. New York, NY: W. W. Norton and Company, Inc., 2018.
- Pine, L.G. *The Story of Heraldry*. London, Great Britain: Country Life Limited, 1952.
- Power, Michael J. "One Team, One Fight, One Organizational Identity . . . Or Not: The United States Air Force at a Turning Point." Master's Thesis. Maxwell AFB, AL: School of Advanced Air and Space Studies, Air University, June 2014.

- Ravasi, Davide, and Majken Schultz, "Responding to Organizational Identity Threats: Exploring the Role of Organizational Culture." *Academy of Management Journal* 49, no. 2 (2006): 433–58.
- Riley, Jonathan. *At the Fulcrum of Air Force Identity: Balancing the Internal and External Pressures of Image and Culture*. The Drew Papers, no. 11. Maxwell AFB, AL: Air University Press, January 2014.
- Rodriguez, Scarlett, and Dennis Hoffman. "Pence Visits Front Range, Receives AFSPC Familiarization." US Air Force, 28 June 2017. <https://www.af.mil/>.
- Saunders, Randy. "50th SW Emblem's History Explained." Schriever Air Force Base, 13 June 2006. <https://www.schriever.spaceforce.mil/>.
- Saunders, Randy. "From 'Master of the Sky' to Master of Space: 50th FTW Gains New Life, New Mission in Ultimate High Ground," *Air Force Print News Today*, 26 June 2007. <https://web.archive.org/>.
- Saunders, Randy. "Linking a Proud 50th Heritage." Schriever Air Force Base, 14 September 2016. <https://www.schriever.spaceforce.mil/>.
- Saunders, Randy. "What is an Opinicus?" Schriever Air Force Base, 13 July 2011. <https://www.schriever.spaceforce.mil/>.
- Schriever, Michael. Discussion with author, 8 April 2020.
- Schriever Air Force Base. "Schriever Air Force Base." Schriever Air Force Base Fact Sheet, 17 July 2012. <https://www.schriever.spaceforce.mil/>.
- Schriever Air Force Base. "1st Space Operations Squadron." Schriever Air Force Base Fact Sheet, December 2019. <https://www.schriever.spaceforce.mil/>.
- Scott, Susanne G., and Vicki R. Lane. "A Stakeholder Approach to Organizational Identity." *Academy of Management Review* 25, no. 1 (2000): 43–62.
- Schein, Edgar H. *Organizational Culture and Leadership*. 4th ed. San Francisco, CA: Josey Bass, 2010.
- Secretary of the Air Force. *Report to Congressional Committees: Comprehensive Plan for the Organizational Structure of the U.S. Space Force*. Pentagon, VA: Department of the Air Force, 2020.
- Setear, John K., Carl H. Builder, M. D. Baccus, and Wayne Madewell. *The Army in a Changing World*. Santa Monica, CA: RAND Corporation, June 1990.
- Sine, Jack L., II. "Discovering Air Force Identity: Airpower and Innovators." Master's thesis. Maxwell AFB, AL: Air War College, February 2012.
- Smith, James M. *USAF Culture and Cohesion: Building an Air and Space Force for the 21st Century*. Colorado Springs, CO: USAF Institute for National Security Studies, June 1998.
- Spires, David N. *Beyond Horizons: A Half Century of Air Force Space Leadership*. Revised Edition. Maxwell AFB, AL: Air University Press, 1998.

- Thomas, William C. "The Cultural Identity of the United States Air Force." *Air and Space Power Journal* 27, no. 2 (March–April 2013). <https://www.airuniversity.af.edu/>.
- US Air Force ROTC. "General Military Course (GMC)." US Air Force ROTC: AFROTC Courses. Accessed 22 March 2020. <https://www.afrotc.com/>.
- Ziarnick, Brent. *Developing National Power in Space*. Jefferson, NC: McFarland and Company, Inc., 2015.