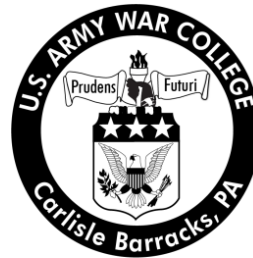# Army Strategic Readiness: We Can Get There From Here

by

Colonel Jack L. Usrey
United States Army

United States Army War College
Class of 2013

REPORT DOCUMENTATION PAGE

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
xx-04-2013	CIVILIAN RESEARCH PROJECT	

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Army Strategic Readiness: We Can Get There From Here	
	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)	5d. PROJECT NUMBER
Colonel Jack L. Usrey	
United States Army	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Dr. Edwin Dorn	
The University of Texas at Austin	

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
Dr. Leonard Wong	
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)
U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013	

12. DISTRIBUTION / AVAILABILITY STATEMENT
Distribution A: Approved for Public Release. Distribution is Unlimited.

13. SUPPLEMENTARY NOTES
Word Count: 14,335

14. ABSTRACT

The Army has existing process, policy and enabling technology to assess and report "as is" Army Force Readiness at the unit level. However, the Army lacks process, policy and enabling technology to assess and report Army Strategic Readiness as it relates to the fulfillment of service Title 10 responsibilities in support of Army strategic objectives. Common to both Army Force Readiness and Army Strategic Readiness is the inability to accurately project future requirements on a timeline that allows leaders time to proactively adjust the strategic levers needed to generate readiness. Simply stated, the Army can report partial current force readiness but can neither report current strategic readiness nor forecast force readiness or strategic readiness. The good news is that the Army can establish an Army Strategic Readiness process and improve its Army Force Readiness process using the FORSCOM and HQDA G3/5/7 initiatives, portions of the Army's current reporting process, and the enabling technology the Army currently possesses.

15. SUBJECT TERMS
Army Strategic Readiness, Army Force Readiness, Army Strategic Readiness Model, DRRS-A

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UU	b. ABSTRACT UU	c. THIS PAGE UU	UU	70	19b. TELEPHONE NUMBER (Include area code)

Army Strategic Readiness: We Can Get There From Here

by

Colonel Jack L. Usrey
United States Army

Dr. Edwin Dorn
The University of Texas at Austin
Project Adviser

Dr. Leonard Wong
U.S. Army War College Faculty Mentor

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

Abstract

Title: Army Strategic Readiness: We Can Get There From Here

Report Date: April 2013

Page Count: 70

Word Count: 14,335

Key Terms: Army Strategic Readiness, Army Force Readiness, Army Strategic Readiness Model, DRRS-A

Classification: Unclassified

 The Army has existing process, policy and enabling technology to assess and report "as is" Army Force Readiness at the unit level. However, the Army lacks process, policy and enabling technology to assess and report Army Strategic Readiness as it relates to the fulfillment of service Title 10 responsibilities in support of Army strategic objectives. Common to both Army Force Readiness and Army Strategic Readiness is the inability to accurately project future requirements on a timeline that allows leaders time to proactively adjust the strategic levers needed to generate readiness.   Simply stated, the Army can report partial current force readiness but can neither report current strategic readiness nor forecast force readiness or strategic readiness. The good news is that the Army can establish an Army Strategic Readiness process and improve its Army Force Readiness process using the FORSCOM and HQDA G3/5/7 initiatives, portions of the Army's current reporting process, and the enabling technology the Army currently possesses.

Army Strategic Readiness: We Can Get There From Here

> As the Army adapts its force generation process, implements the new DoD strategic guidance, and develops the force for the future, it is imperative that we also refine our readiness assessment and reporting processes. This entails timely, precise, and accurate leading indicators for our manning, equipping, training, and sustainment capabilities that inform our decision-making.
>
> GEN Raymond Odierno – Army Chief of Staff (CSA)

Introduction.[1] The Army has existing process, policy and enabling technology to assess and report "as is" Army Force Readiness[2] at the unit level. However, the Army lacks process, policy and enabling technology to assess and report Army Strategic Readiness[3] as it relates to the fulfillment of service Title 10 responsibilities in support of Army strategic objectives. Common to both Army Force Readiness and Army Strategic Readiness is the inability to accurately project future requirements on a timeline that allows leaders the decision space to proactively adjust the strategic levers[4] needed to generate readiness.[5] Simply stated, the Army can report partial current force readiness but can neither report current strategic readiness nor forecast force readiness or strategic readiness.

The Army has been fighting at the brigade level for over a decade, fixated on the tactical - what does the Brigade Combat Team (BCT) need to get out the door. Out of necessity the Army staff (ARSTAF) and senior Army leaders have spent more time ensuring BCTs deployed with the personnel and equipment required than in working strategic initiatives that would define and ensure the Army's strategic readiness to meet the demands of the uncertain and complex global security environment that lie ahead. The Army acknowledged this shortcoming in the draft *Readiness Justification Material*

Narrative that the Services jointly prepared for the Fiscal Year 2014 (FY14) Budget. The document noted that "Since September 2001, the Army has been focused on generating near-term readiness for unit deployments" and "the extraordinary demand for COIN [counter insurgency] forces over the decade has dominated our force generation and resource planning." It goes on to state that "this is the particular task of the Services and SOCOM [U.S. Special Operations Command] right now – on learning how best to prepare forces, in the right quantity, for the future."[6]

This finding is not an indictment against the Army. No one would have believed 15 years ago that the Army could effectively wage two wars for 12 years with an all-volunteer force while transforming its structure. It is against this backdrop that the Army Chief of Staff recognized the Army's need to challenge its current readiness assessment and reporting processes.[7]

Expanding the Problem Set. The Army does not have a defined, articulated, or understood Army Strategic Readiness process. At best it is a dialogue at the senior Army leader level that uses operational art to assess the Army's current force readiness and deduce strategic readiness.

It is important to note that any solution set must begin with a well-defined process. Process drives people (stakeholder) and enabling technology requirements. In its quest to develop a strategic readiness model, the Army must be vigilant to not allow current technology and stake holder capabilities to drive the process. It must develop the process and then identify the stakeholders and enabling technology to support the process. The Army's readiness reporting is focused on a "as is" Army Force Readiness process (P+S+R+T=C)[8] but it needs to broaden the aperture and develop an

Army Strategic Readiness process separate from Army Force Readiness that aggregates measures of the appropriate elements (force readiness + installation capabilities + material + human capital+ other elements = Army Strategic Readiness), while not confusing Army Strategic Readiness with Army Force Readiness. The Army must also broaden the scope of Army Force Readiness process to one that assesses and reports more than P, S, R, T, and C levels. Unit Status Reporting (USR) is fundamentally a lagging indicator of force readiness and reflects resourcing decisions that tactical, operational, and strategic stakeholders made weeks, months, and years prior to the report. It lacks the ability to project future deficiencies and forecast readiness, at either the force or strategic level. Without a clearly defined process, stakeholder division of labor, and enabling technology, the Army will not move beyond its current "looking in the rearview mirror" force readiness reporting.

Lastly, current readiness reporting is not accurate in that it creates two data sets, resulting in senior Army leaders making decisions with one data set – while the personnel, logistic, and medical proponents make distribution decisions with another data set. The data inaccuracy is the disconnect between the authoritative data sources (ADS) and the net-centric unit status report web-based application (NetUSR) commander adjustments, detailed in later analysis.

The Army Strategic Readiness Target.   The first step is defining Army Strategic Readiness – what is the target we are trying to hit – followed by developing a process that hits the target. Then the Army must identify the stakeholders required to execute the process and clearly prescribe their division of labor. Lastly, the Army and

its stakeholders must identify existing and/or procure enabling technology required to

implement the process and to generate the desired outputs.

The Army solution must also be nested within the DOD Strategic Readiness

construct. Unfortunately, the DOD does not define strategic readiness as such. While

Joint Publication (JP) 1-02, Combined Joint Chiefs of Staff (CJCS) Guide 3401D do not

define *strategic readiness*, both define *readiness* as:

> The ability of United States military forces to fight and meet the demands
> of the national military strategy. Readiness is the synthesis of two distinct
> but interrelated levels: a. unit readiness — The ability to provide
> capabilities required by the combatant commanders to execute their
> assigned missions. This is derived from the ability of each unit to deliver
> the outputs for which it was designed. b. joint readiness — The
> combatant commander's ability to integrate and synchronize ready combat
> and support forces to execute his or her assigned missions.[9]
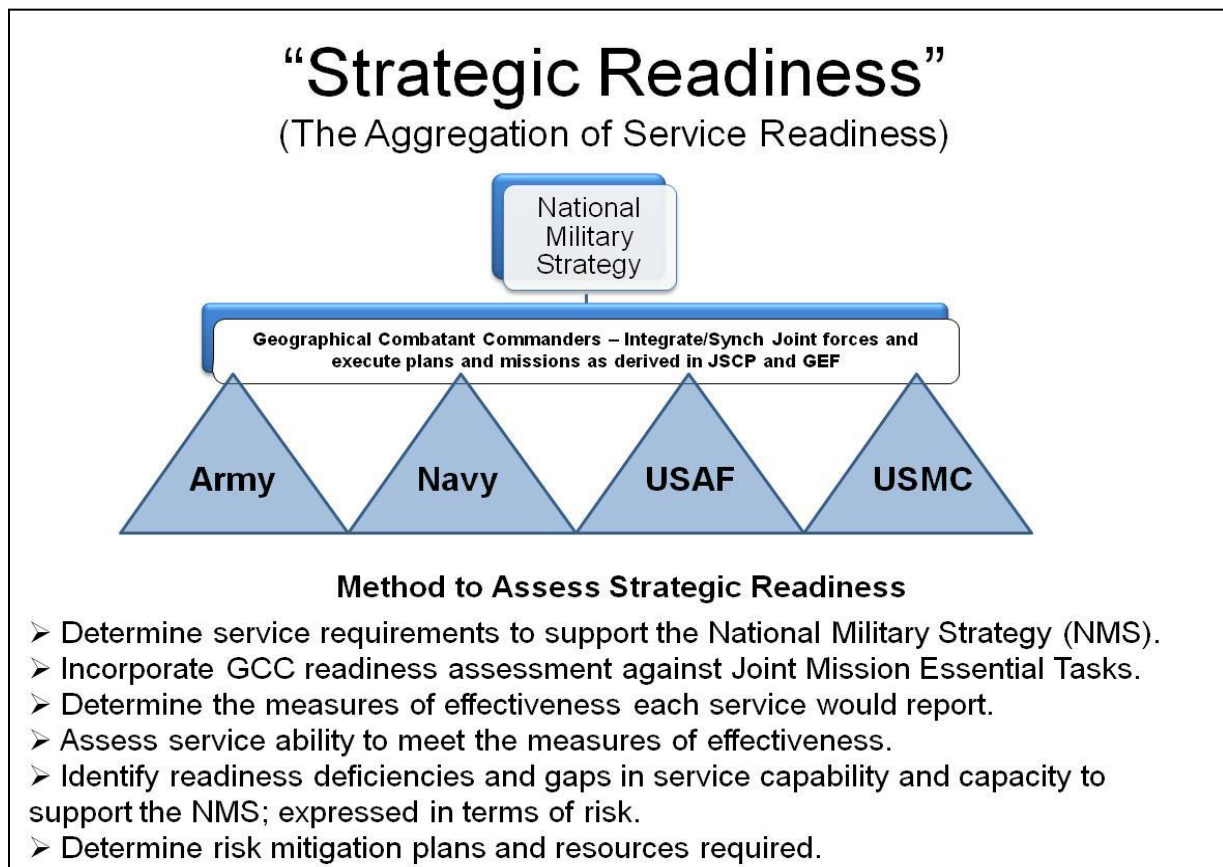
Figure 1. DOD Strategic Readiness Construct[10]

While outside the scope of this paper, any DOD Strategic Readiness definition and process should include an analytical construct similar to Figure 1. The key to this construct is that each Service uses similar methodologies so combatant commanders (COCOM) can easily assimilate Services' strategic readiness assessments into their assessment process. This construct should be the Army's conceptual target.

The Army does not define Army Strategic Readiness but shares the JP 1-02 and CJCS Guide 3401D definition for readiness.[11] And as a conceptual benchmark for this study, the Army Strategic Readiness concept in Figure 2 achieves the Army's contribution to DOD Strategic Readiness and supports the Army's six strategic readiness tenets – manning, capacity and capability, training, installations, equipping, and sustaining.[12]
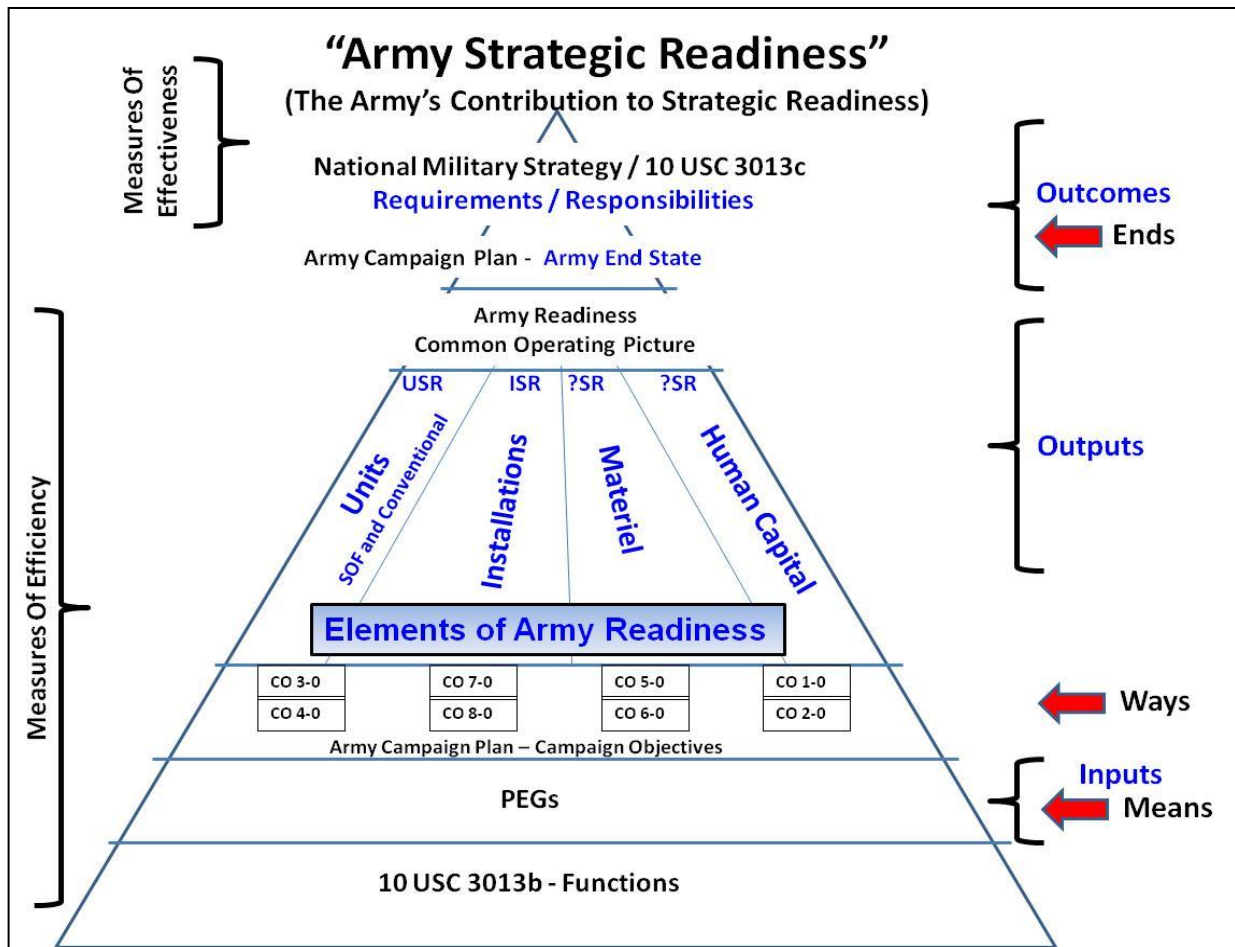
Figure 2. Proposed Army Strategic Readiness Construct[13]

The Army does have two working definitions for strategic readiness. The first

one is "the ability of the Army's operational and generating forces to execute the Army's

Title 10 functions to meet the demands of the national strategic objectives" – HQDA

G3/5/7 used this in readiness discussions with the Under Secretary of the Army.[14] The

second is "the assessment of the Army and its ACOMs [Army Commands], ASCCs

[Army Service Component Commands], and DRUs [Direct Reporting Units] ability to

meet its current and future Title 10 responsibilities in support of the NMS [National

Military Strategy]" – used in a briefing to the Deputy G3/5/7 as part of the Army's

ongoing initiative to develop a regulation that defines Army Strategic Readiness,

codifies roles and responsibilities, and establishes business rules for assessing and reporting current readiness and forecasting future readiness.[15]

This paper studies the Army's requirement to report its readiness and the process, stakeholders, and enabling technology it uses to execute the task – specifically focusing on how it measures up against the need to improve its Army Force Readiness process and to develop an Army Strategic Readiness process. It reviews ongoing readiness initiatives at the Department of the Army Headquarters (HQDA) and U. S. Forces Command (FORSCOM) level. Cognizant of the Army's fiscal constraints, it will determine if the Army can find a feasible solution with current assets.

This paper will generate a historical measures[16] projection tool that can conduct predictive future readiness analysis[17]. Subsequently the Army will be able to assess indicators[18] that drive strategic lever[19] adjustments in order to facilitate allocation of resources[20] in support of the Army's six strategic readiness tenets. It will be able to factor in unit current readiness data, Army Force Generation (ARFORGEN) requirements, Human Resources Command (HRC), Army Materiel Command (AMC), Office of the Surgeon General (OTSG) historical data, and other pertinent measures that enable forecasting Army Force Readiness and Army Strategic Readiness relative to applicable ARFORGEN pools and NMS strategic objectives. The Army Force Readiness outputs feed the Army Strategic Readiness process and establish the means to identify near-term (6-24 months)[21] strategic lever adjustment requirements, and sets the conditions for mid-term (2-6 years) senior Army leader strategic lever decisions.

Figure 3 illustrates the lasting impact this study can have on Army Strategic Readiness. If the Army can develop a process to predict future measures, it can project

readiness deficiencies and leading indicators with enough lead time to adjust strategic
levels, forecast readiness, and facilitate balanced resource allocation.
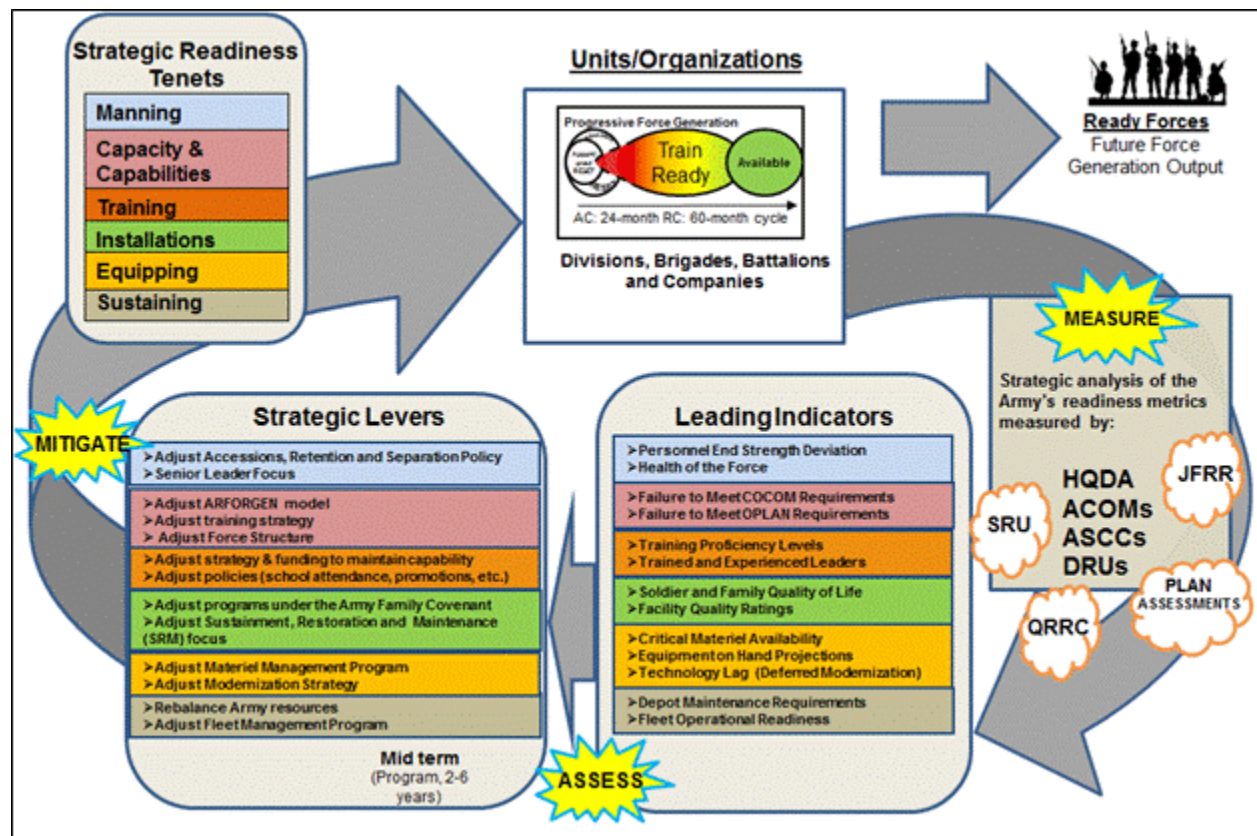
Figure 3. Strategic Readiness Model – Army Emerging Doctrine[22]

Army Requirement to Report Readiness. It is important to understand the
Army's readiness reporting requirements as this study's baseline. Formal readiness
reporting at the Department of Defense (DOD) level is a relatively new paradigm. The
National Defense Authorization Act for FY 1999 directed the Secretary of Defense
(SECDEF) to establish a readiness assessment and reporting system that measures
the U.S. military's ability to execute the National Security Strategy (NSS), Defense
Planning Guidance (DPG), and the National Military Strategy (NMS)."[23] This was
formalized in Unites States (US) Code Title 10, Section 117, which directs the SECDEF
to "establish a comprehensive readiness reporting system for the Department of

Defense" that will "measure in an objective, accurate, and timely manner"[24] the capability of the Armed Forces. Monthly, the DOD must measure "the capability of units (both as elements of their respective armed force and as elements of joint forces)"[25], "critical warfighting deficiencies in unit capability"[26], and "the level of current risk based upon the readiness reporting system relative to the capability of forces to carry out their wartime missions."[27]

The SECDEF executes the Title 10 mandate via DOD Directives 7730.65, Department of Defense Readiness Reporting System (DRRS) and 7730.66, Guidance for the Defense Readiness Reporting System (DRRS). The Directives "establish [es] a capabilities-based, adaptive, near real-time readiness reporting system"[28] and instruct Service Secretaries to "develop and monitor task and resource metrics to measure readiness and accomplish core and assigned missions"[29] on a monthly basis.

The Chairman of the Joint Chiefs of Staff (CJCS) established the Chairman's Readiness System (CRS)[30] to accomplish the SECDEF's mandate to "measure the preparedness of our military to achieve objectives as outlined in the National Military Strategy."[31] The Chairman uses the quarterly Joint Force Readiness Review (JFRR) as the vehicle to apply the Services' readiness assessments from Global Status of Resources and Training System (GSORTS) to an overall Readiness Assessment (RA) relative to the ability of the Services to support the NMS (Table 1).

Table 1. CJCSI Guide 3401D Readiness Assessment (RA) Level Definition[32]

RA Level	Definition
RA-1	Issues and/or shortfalls have negligible impact on readiness and ability to execute assigned mission(s) in support of National Military Strategy (NMS) as directed in the Guidance for Employment of the Force (GEF) and the Joint Strategic Capabilities Plan (JSCP).
RA-2	Issues and/or shortfalls have limited impact on readiness and ability to execute assigned mission(s) in support of NMS as directed in the GEF and JSCP.

RA-3	Issues and/or shortfalls have significant impact on readiness and ability to execute assigned mission(s) in support of the NMS as directed in the GEF and JSCP.
RA-4	Issues and/or shortfalls preclude accomplishment of assigned mission(s) of the NMS as directed in the GEF and JSCP.

The JFRR further requires the Services to assess their capability to accomplish a task specified in their assigned Joint Mission Essential Tasks (JMETL) and Assigned Mission Essential Tasks (AMETL) using a Yes, Qualified Yes, and No rating (Table 2).

Table 2. CJCSI 3401.01E Three Tiered Readiness Metric[33]

Rating	Definition
Y	Unit can accomplish task to established standards and conditions.
Q	Unit can accomplish all or most of the task to standard under most conditions. The specific standards and conditions, as well as the shortfalls or issues impacting the unit's task, must be clearly detailed in the MET assessment.
N	Unit unable to accomplish the task to prescribed standard and conditions at this time.

The "so what" of introducing GSORTS, the JFRR, RA, JMETL, and AMETL assessments is to highlight the complexities involved in assessing and reporting readiness at the strategic level and the importance of the Army to the Army Force Readiness process and to develop an Army Strategic Readiness process.

Army Unit Status Reporting (USR) Process. The Army uses the USR process for assessing and reporting a unit's readiness to conduct their assigned missions. The process centers around the Department of Defense Readiness Reporting System – Army (DRRS-A) enabling technology. USR reporting flows through commander channels from the tactical to the operational and strategic level. The Army measures a unit's readiness at one specific space in time against a P, S, R, T, and C-level.   Its principal output is the Commander's USR, which allows the commander to apply their qualitative assessment to the quantitative reporting. The USR is to "be a 'commanders' report,' reflecting the commander's personal judgments and assessments regarding the

mission readiness of the unit."[34] The Commander uses the USR to indicate "the degree to which a unit has achieved prescribed levels of fill for personnel and equipment, the operational readiness status of the equipment items possessed by the unit, and the training proficiency status of the unit", to "describe the cause/effect relationship between deficiencies and current unit readiness and capability" and to "clarify any significant resourcing issues."[35] Using the USR is problematic because the commander is reporting lagging indicator data without the means to conduct predictive analysis, project areas they need help with, and to forecast future readiness relative to their Modified Table of Organizational Equipment (MTOE) and ARFORGEN aim points.

The USR does little to help the commander correct deficiencies in a timely manner. Using personnel manning as an example, it takes 120 days from the time HRC builds a requisition, validates it, puts a Soldier on assignment orders, and the Soldier arrives to the unit.[36] Unless the higher headquarters (HQ) moves a Soldier already on the installation from another unit to correct the manning deficiency in the unit in question – likely leaving a vacancy in that unit – HRC will get the commander a new Soldier in 120 – 150 days, an unacceptable wait when the Army has technology and stakeholders available to project deficiencies versus record them after they occur. If we extrapolate this example across most personnel and equipment deficiencies, we find that the USR does less to help commanders than it could if it were re-tooled as part of a process overhaul to project deficiencies and forecast readiness several months into the future.

It is evident that a unit's readiness changes by the time the USR reaches the ARSTAF and they create the Strategic Readiness Update (SRU) that senior Army leaders use to determine strategic lever adjustments concerning future resource

allocations. A standard USR/SRU timeline follows: a division's USR operations order requires a first of the month NetUSR data pull, a normal standard for Army units; the brigade commanders brief the division commander on/about the 11th; the division turns its USR in to the Corps "on or about the 17th"[37] and briefs the corps commander on the 26[th][38]; senior Army leaders see the SRU during the last week of the month.[39] Not only are the senior Army leaders seeing tactical/operational readiness information, the information is a month old.

The Department of Defense Readiness Reporting System – Army (DRRS-A). DRRS-A is the enabling technology for the Army's readiness process. The stated purpose of DRRS-A is to "extend" reporting "via mission essential tasks (MET) and overall mission assessments to provide a 'capability based' appraisal of unit and organizational readiness to accomplish specified tasks and missions and to "expand" readiness reporting by "complementing the traditional bands of resource and training data currently resident in GSORTS (overall C-ratings and associated P,S, R, and T levels), with 'authoritative' data obtained by querying, organizing, and displaying the underlying data from various authoritative data sources".[40]

It is helpful to understand the Army's readiness process data flow because it highlights a current process deficiency. Figure 4 represents how data at the user input level (1) flows to the ADS (2) and how commanders adjust it (3) during USR turn-in prior to its deposit into DRRS-A (4). We will discuss the significance of HRC, AMC and OTSG using data (5) from the ADS and senior leaders using DRRS-A commander

adjusted data (6) to report readiness at the strategic level later.
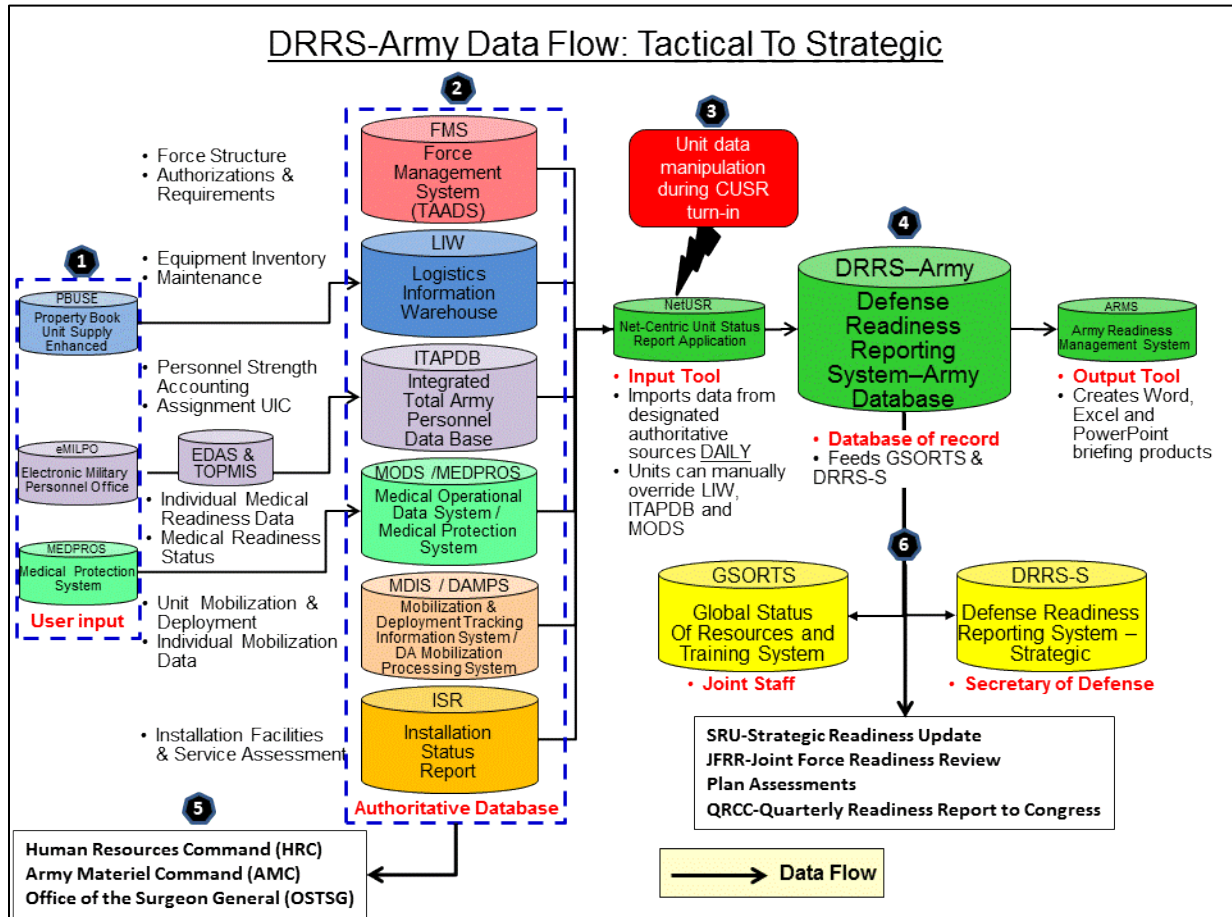
Figure 4. Defense Readiness Reporting System Data Flow: Tactical to Strategic

DRRS-A Database. The DRRS-A database is "the Army's official readiness reporting database and the authoritative database of record."[41] DRRS-A updates the GSORTS and the Defense Readiness Reporting System – Strategic (DRRS-S), providing the SECDEF, the CJCS, and other DOD stakeholders with "the relevant information reported by Army units, to include the unit commander's measurements and assessments regarding the unit's ability to accomplish its core functions".[42] Specifically, the ARSTAF and senior Army leaders use this data to subjectively assess the Army's

strategic readiness that feeds the JFRR, the SRU, and the Quarterly Readiness Report to Congress (QRRC).

NetUSR. NetUSR is the Army's official data input tool that "imports data from proponent ADS for reference to support required commander readiness status assessments." NetUSR imports data daily (Monday – Friday)[43] from the Force Management System Web (FMS-Web), Integrated Total Army Personnel Database (ITAPDB), the Medical Operational Data System (MODS), the Logistics Information Warehouse (LIW), the Installation Status Report Database (ISR), and the Mobilization and Deployment Information System (MDIS).[44] The ITAPDB (administrative), MODS (medical), and LIW (logistics) ADS are updated at the user level via the Electronic Military Personnel Office (eMILPO), Property Book Unit Supply Enhanced (PBUSE), and the Medical Protection System (MEDPROS). HRC uses the data eMILPO feeds into ITAPBD to make personnel assignment decisions; AMC uses the data PBUSE feeds into LIW to make materiel decisions; and the OTSG uses the data MEDPROS feeds into MODS to make resourcing and prioritization decisions that affect a Soldier's medical readiness code (MRC).

A NetUSR business rule allows commanders to adjust data NetUSR imports from ITAPDB, LIW and MODS before it enters the DRRS-A database but only after it leaves the ADS.[45] A few examples of the changes a commander can make are: add or delete a Soldier's record of being in the unit; change a Soldier's available military operational specialty qualified by duty position (DMOSQ) status; move a Soldier from one MTOE slot to another. This affects the P-level by changing the three personnel metrics the Army uses to measure personnel readiness. A commander can: decrease/increase

equipment quantity by national stock number (NSN); delete or add an item by NSN; adjust the equipment readiness posture. This affects both the R-level and the S-level. A commander can: change, delete, or add a Soldier's medical readiness status by adjusting the Soldier's medical readiness code (MRC) category. This affects the P-level, given all three personnel metrics include the available status of the personnel measured within that metric. Ultimately these adjustments affect the unit's C-level since the Army's USR regulation mandates that the C-level must be equal to the lowest of the four measured areas (acknowledging commanders can subjectively upgrade).[46] Note that HRC, OTSG and AMC do not see these data adjustments because they are using the ITAPDB, LIW, and MODS ADS identified in Figure 4.

This business rule prevents accuracy in the Army's readiness assessment and reporting by creating two sets of data and highlights a process defect. The data in DRRS-A and beyond, including what senior Army leaders see, is presumably accurate because Commanders adjust data in NetUSR after its imported into NetUSR – commanders know their units best. This is the data that senior Army leaders see. The inaccuracy resides in the fact that commanders are not updating the Army's ADS to match the changes they made in NetUSR.

The effect is multi-pronged and negative. This process business rule removes the incentive for commanders to hold their staffs accountable for managing eMILPO and PBUSE directly and MEDPROS indirectly (through medical channels) by allowing them to adjust data in NetUSR. Consequently, HRC, AMC and the OTSG use the data set resident in their respective ADS to make resourcing and prioritization decisions, to drive future planning efforts, and to make strategic lever recommendations to the ARSTAF

and senior Army leaders. The ARSTAF and senior Army leaders see another data set –
the one resident in the DRRS-A database after commanders adjust it in NetUSR. The
ARSTAF is analyzing this adjusted data, making recommendations to senior Army
leaders, and reviewing/writing policy. Senior Army leaders are assessing and reporting
the Army's readiness in the Chairman's Readiness System with data that the Army's
personnel, medical, and logistics ADS do not support. The joint staff's GSORTS and
the SECDEF's DRRS-S systems import this adjusted data and generate the JFRR,
plans assessments, Readiness Deficiency Assessment (RDA), and input to the QRCC.
Senior Army leaders are adjusting strategic levers and developing budget submissions
with adjusted data in an effort to positively impact future readiness – all the while HRC,
AMC, and OTSG work with different data. One could argue that accuracy is the wrong
word choice because the commander adjusted data is accurate and that is what senior
Army leaders see. However, if the objective is targeted unit progressive readiness
along the ARFORGEN glide slope and resource providers are making distribution
decisions based on a different data set than the one senior Army leaders see, accuracy
is the problem. HRC, AMC, and OTSG see one readiness assessment (data set) and
senior Army leaders see another readiness assessment (data set). That equates to
data inaccuracy.

Just how bad can it be? One division, in its January 2013 USR turn-in, had over
3,600 data overrides in NetUSR.[47] That would be 64,800 adjustments if the 10 Active
Duty and 8 Army National Guard divisions averaged the same number of adjustments.
Add the myriad non-divisional units and the point is that the Army has a problem.

NetUSR does not have a forcing function that requires commanders to update the user-level input tools that feed ITAPDB, LIW, or MODS to ensure the next data pull is synchronized with the adjusted data. In effect, the NetUSR input tool has become commanders' once-a-month surge method to ensure administrative, logistical and medical data are as accurate as possible. Whether this disconnect stems from commanders' founded or unfounded distrust in the input tools (eMILPO, MEDPROS, PBUSE), input tools that have systematic glitches, or leaders failing to ensure their staffs manage the input tools daily can be argued. The fact remains that the Army is using two disparate data sets (readiness assessments) to make distribution decisions and report readiness.

The history of this business rule is that when the DA G3/5/7 established DRRS-A in 2006, the field was adamant in its assertion that MODS data was inaccurate and that importing that data into the DRRS-A database would result in inaccurate readiness reporting. Commanders wanted to be able to review the data within NetUSR and "correct" it as applicable. Consequently, DA G3/5/7 created functionality for commanders to not only adjust MODS data, but ITAPBD and what is now LIW.[48]

Another vignette for consideration – one battalion with less than 500 personnel authorizations made over 200 personnel adjustments alone in NetUSR during a USR turn-in, only to continue doing it month after month. The reason for monthly changes – the commander did not ensure the NetUSR changes were updated in eMILPO, and NetUSR continued importing uncorrected ITAPBD data into the DRRS-A database.[49]

The Army Readiness Management System Application (ARMS). ARMS is the DRRS-A output tool. It allows the user "to view current, near real-time, and

historical information".[50] It is considered an executive information system and enables

users to see all reporting Army units' current readiness information simultaneously.[51]

Army policy states that any approved Secure Internet Protocol Router Network

(SIPRNet) user can have access to ARMS. However, HQDA, ACOM, ASCC, and DRU

level commands are the primary users. A brigade or battalion typically does not have

access to ARMS because it does not have the ability to limit the user's access –

meaning a battalion-level officer could see the entire Army's CUSR reports. The ARMS

developers are working to create functionality that allows permissions to be set that

define the unit identification codes (UIC) a user can view.[52]

At best, the Army's current process, stakeholders, and enabling technology

report force readiness "as is" (Figure 5). In reality, the Army sees what its readiness

was, because the reports are historical by the time they reach the strategic levels.
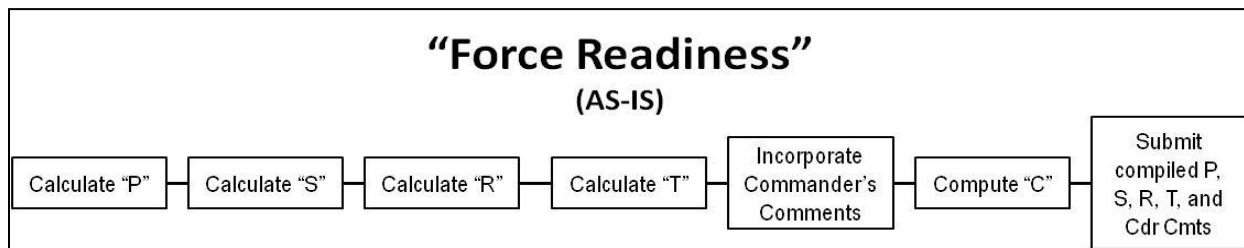
Figure 5. Force Readiness "As-Is"[53]

Not Measuring The Right "Stuff". The Army's "as is" readiness reporting

process does not use enabling technology to report force readiness relative to the

ARFORGEN cycle, the Integrated Requirement Priority list (IRPL), the Active

Component Army Manning Guidance (ACMG), and other aim points[54] pertinent to

readiness reporting, much less forecasting future readiness, whether it be force

readiness or strategic readiness. The Army measures a unit's readiness on a specific

day against a P, S, R, T, and C-level (figure 6). This is important because it measures

against a unit's MTOE – the Army needs to keep this yardstick. That assessment is not associated with a unit's readiness relative to its ARFORGEN aim points.[55] This is a result of the Army changing how it builds combat power – ARFORGEN – and not evolving the process it uses to measure a unit's readiness relative to the new process.
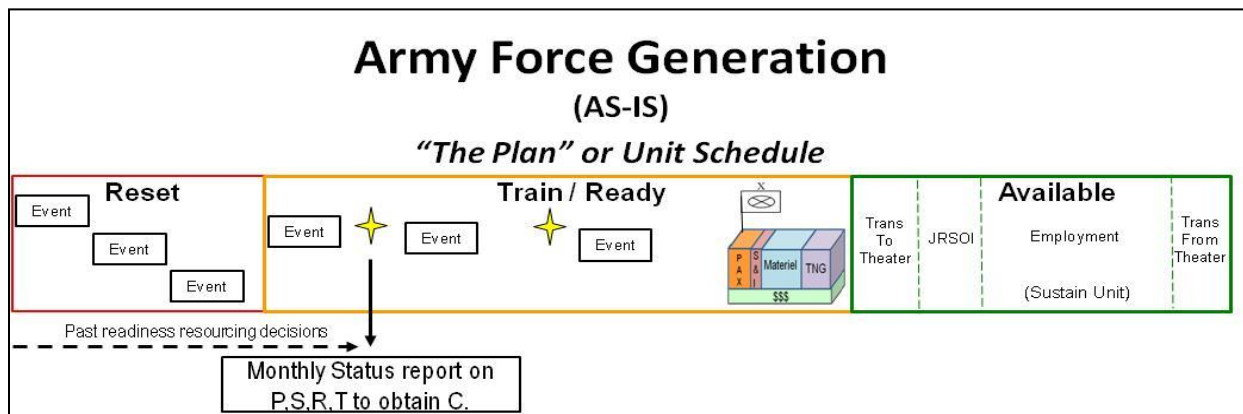
Figure 6. Force Readiness "As-Is"[56]

DRRS-A can play an important role in the future – it is the right enabling technology to support Army Force Readiness and Army Strategic Readiness processes. Its input tool, NetUSR, is very adaptable and the HQDA G3/5/7 proponent for DRRS-A has the skillsets to set functionality in place to support any process requirement.

ARFORGEN. The ARFORGEN process is the vehicle the Army uses to progressively increase a unit's readiness over time in order to prepare it for a scheduled operational deployment in support of a combatant commander (COCOM) or to achieve a designed readiness level for a specific period of time before returning to a lower readiness state. The Army does not have the resources to keep every unit at a high level of readiness indefinitely so it created three force readiness pools – RESET, Train/Ready, and Available – to generate the cyclic capacity required to meet its requirements within its resource constraints. The Army prioritizes and synchronizes

institutional functions and resources to meet operational requirements through a formal process designed to maximize limited resources and provide timely guidance to the sourcing stakeholders. The Army also uses ARFORGEN as a model to forecast its requirements and request resources via the planning, programming, budgeting, and execution (PPBE) process.[57]

At the strategic level, the ARFORGEN cycle begins with the Global Force Management (GFM) process. COCOMs submit requests for forces and capabilities annually, and the SECDEF approves it. FORSCOM and United States Army Special Operations Command (USASOC) provide sourcing solutions that meets the COCOMs' requirements.[58] As the strategic requirements flow through the operational and tactical channels, it creates innumerable measures that stakeholders at the strategic, operational, and tactical level track, assess and report.

Whether the Army is using ARFORGEN as the process to build capacity or as a model to drive PPBE requests, it involves measures that are either tracked to report readiness or forecasted to determine the Army's requested budget. Within each readiness pool, units perform set activities and are manned, trained and equipped to a specific level, or aim point. Aim points "provide the Army a means to track units at a prescribed state of readiness as they move through the ARFORGEN Force Pools and progressively increase readiness."[59] Aim points "synchronize manning and equipping capabilities with training at specific points across the force pools."[60] Aim points are also measures that the Army can measure with enabling technology.

The Army needs to leverage its technology to capture those measures, apply them to the USR and SRU in order to achieve relevant force readiness and strategic

readiness reporting capability, and to establish a forecasting capability at the force readiness and strategic readiness levels. Once the Army harnesses the technology available to apply all readiness related variables quantitatively, it will be better able to qualitatively assess, report, and forecast force readiness and strategic readiness.

An example of an ARFORGEN aim point is manning fill levels. The FY 2013-2015 ACMG fills units to specific levels depending on their designated manning category. If the unit is an ARFORGEN "allocated" unit with a deployment date and in the Train/Ready or Available phase, HRC will fill the unit to P-level 1 (a minimum of 90% and no more than 105%).[61] Every unit in the Army has a designated priority level, and HRC and AMC manages their personnel and equipment distribution accordingly. The ACMG is another measure that the Army can automate and use to help assess current readiness and forecast future readiness. The same goes for equipment on-hand/available and equipment readiness/serviceability aim points. Imagine a USR that shows a unit's P, S, R, T, and C-levels relative to the MTOE (current method), as well as the manning and equipping level aim points associated with their position in the ARFORGEN glide path. Add to that the forecasting capability this paper proposes and the Army now has a readiness process that is useful. For example, if a unit is supposed to have a manning level of P1 five months from now, this paper proposes a process that presents not only the current P-level vis-à-vis the MTOE, but it will forecast the unit's P-level by month for the next 24-months relative to its ARFORGEN aim points. If the forecast indicates the P-level five months from now will not meet P-1, it gives stakeholders time to address the issue. Using the current process, the Army will not know until five months from now if the unit achieves P1 or not.

Those measureable variables are the reason we are evaluating ARFORGEN and its relationship to assessing and reporting force and strategic readiness. Variables that are converted to measures can be incorporated into enabling technology, increasing their accuracy, timeliness, uniformity, and reducing the man-power required to compile the data. It can also be overlaid onto another data set and create synergy. The word "overlaid" is intentional – think of ARFORGEN as an old-school acetate sheet "overlay" with grease pencil circles of air defense artillery (ADA) areas of coverage laid on top of the map in which a unit is fighting. The ADA overlay allowed the commander to quickly determine where forces had ADA coverage and where there were gaps. Enabling technology can automate ARFORGEN aim points, among others, and do the same thing. It would allow staffs and commanders to conduct predictive analysis, project shortages, and identify solutions before it impacts a unit's ability to execute its core functions or assigned mission.

Since its inception, the Army has manually applied the ARFORGEN measures to every unit in order to determine if it is meeting its ARFORGEN man, train, and equip aim points. This intuitively creates challenges when stakeholders at every level manually import data into an adhoc tool created in Excel or Access and then produce PowerPoint slides to present information. Each level may be pulling the same data at different times; they may be pulling slightly different data; or they may be applying differing methodologies in how they analyze it; they may not agree with the aim points and subjectively adjust data to meet their views. Regardless, the unintentional but inevitable end state is contradictory information, resulting in myriad results – the Army not providing COCOMs with the capabilities they need; limited resources going to the

wrong unit; incorrect senior Army leader assessments and reporting to the CJCS, SECDEF or Congress; or HRC needlessly reassigning Soldiers and their Families to another installation.

Automating ARFORGEN and the ACMG – every personnel, logistics, and medical measure for that matter – within a holistic process, supported by clear stakeholder division of labor, and enabling technology, would quickly and accurately provide the unit's current ARFORGEN pool status relative to its man, train, and equip aim points. Add a predictive tool using the last 10 years of data such as non-available rates by military operational specialty (MOS) and grade, equipment readiness and on-hand data, other pertinent variables, and the Army could project readiness issues and forecast future force and strategic readiness, a feat given DRRS-A in its existing state is a lagging indicator snapshot.

Ongoing Initiatives. FORSCOM and HQDA G3/5/7 have ongoing initiatives that if harnessed in accordance to this paper's recommendations, will become the cornerstones of the Army Force Readiness and an Army Strategic Readiness processes.

FORSCOM Demand/Fulfillment Process. FORSCOM created the demand/fulfillment process and AST to meet the Army Campaign Plan directive for FORSCOM to "develop and maintain the ARFORGEN Synchronization Tool (AST) to support ARFORGEN information requirements and integrate Army automation systems (supporting ARFORGEN synchronization)."[62] Whereas DRRS-A provides the "today" view of readiness, AST's intent is to "provide the 'tomorrow' view of readiness (forecasted based on fulfillment of demand)".[63] It does this by projecting "the readiness

by personnel, materiel, training, services and infrastructure, and resourcing ($) by UIC [unit identification code] through application of the demand/fulfillment concept."[64]

The demand/fulfillment concept states that "a producer of a product issues a demand for goods or services affecting his product to affiliated suppliers, who respond with their complete or partial fulfillment of the demand. The product producer must issue the demand with enough lead time to allow the supplier the time required to fulfill the demand."[65] As it relates to ARFORGEN, the demand signal is "what is required to achieve readiness based on aim points and training plans: manning, equipment, training, services and infrastructure, and OPTEMPO [operational tempo] dollars."[66] The fulfillment signal is "what the suppliers can deliver to meet the demand."[67] The product is a unit that is mission-ready and the unit commander is the producer. The commander's suppliers are: "personnel – Commander, Human Resources Command (HRC); materiel – Army Materiel Command (AMC); services and infrastructure – Commander, Installation Management Command (IMCOM); and resourcing – Headquarters, Department of the Army G3 (with the G8 and the Army Budget Office)." The commander identifies the unit's demand signal several months in advance to the supplier – FORSCOM's model is six months – and the supplier projects their ability to provide a complete or partial fulfillment signal to the commander. If the supplier cannot fully fulfill the demand, it gives the commander time to mitigate or resolve any shortfalls.
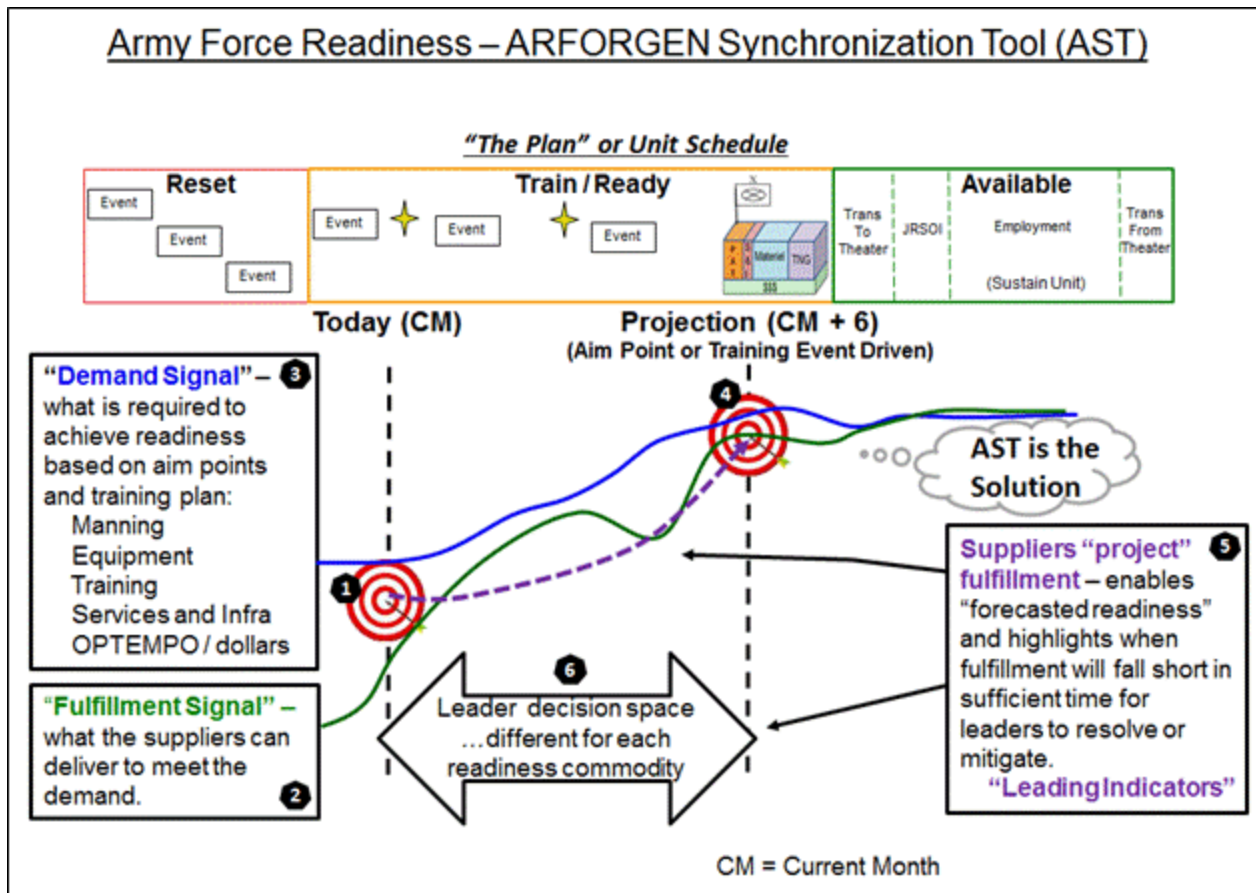
Figure 7. ARFORGEN Synchronization Tool (AST)[68]

Figure 7 depicts FORSCOM's concept. The Army's current USR reports a unit's readiness today (1), providing a lagging indicator that demonstrates whether the fulfillment signal (2) met the demand signal (3). The challenge is that there is little the Army can do to help the unit today to correct its deficiency. AST becomes a game changer by shifting the target (4) into the future. With the commander providing the demand signal to the supplier further out, the supplier can project their ability to fulfill the demand (5). If the supplier projects the inability to fulfill the demand, it gives the Army enough time to make decisions that can resolve the demand/fulfillment gap (6). From an enabling technology perspective, it imports data from DRRS-A and other databases

within FORSCOM. Its outputs include: "one stop consolidation of validated joint and Army institutional force requirements and associated sourcing solutions depicted over time for Army forces worldwide; synchronization of events (training, manning, equipping, resourcing) by unit over time by location; prediction of unit usage through multiple ARFORGEN cycles; production of information products and analytical reports to assess various policies and metrics [measures] in ARFORGEN; and the automated production of the Army Sourcing Laydown, Ribbon Chart, Unit Schedule Matrix (USM), Unit Situational Template, and Sourcing Scorecard."[69]

AST is ideally suited to support an Army recognized Army Force Readiness process and to be FORSCOM's tool to synchronize, assess, and report units' progress along the ARFORGEN progressive readiness timeline, but there are a few things missing. The first is that HQDA needs to formally recognize the FORSCOM initiative as the Army Force Readiness component of Army Strategic Readiness. Secondly, HQDA owes FORSCOM a prescriptive requirement for the AST generated outputs they need to support Army Strategic Readiness requirements. Lastly, the FORSCOM Army Force Readiness process must be able to present a unit's forecasted readiness from current month (CM) to CM + six months (CM+6) on the USR. A USR that reports a unit's current readiness and forecasted readiness (hence deficiencies) by month for the next six months would add great value to the Army's ability to develop solutions before they become a crisis.

Enterprise Management Decision Support (EMDS). EMDS can be the enabling technology to support the Army Strategic Readiness process this paper proposes but it lacks a process to drive its direction – AR and DA PAM 525-XX-B, along

with a HQDA Army Strategic Readiness execution order (EXORD) can be the process corrective measure. HQDA G3/5/7 is developing EMDS, a web-enabled system that imports data from multiple source systems and creates an Army-wide, near real-time readiness common operating picture (COP) designed to enhance understanding and strategic decision making.[70] Its intent is to provide senior Army leaders, commanders, and staffs at every level one-stop access to information required to assess and report both Army aggregate and individual unit readiness. Its Oracle platform "retrieves, integrates, and visually displays data from disparate source systems daily and provides an automated, visual, near-time dashboard that utilizes business logic. Senior Army leaders benefit from access to current information (screens) across the Army enterprise without the need for manual, AO [action officer] driven data calls."[71] Users at every level can "filter views based upon priorities, time frames, and other preferences for faster cognitive consumption."[72] Its current capabilities include providing current and future year ARFORGEN force pool alignment; providing unit aim point progression in support of the Army Synchronization Order (ASO); providing unit and Career Management Field (CMF) historic deployment analysis; automating HQDA G1, G3, G4, G5, G7, and G8 resourcing reporting for manning, equipping, and training; and providing key near real-time readiness data to at the desktop level using a dashboard construct.[73]

It is adaptive – it can import emerging variables, adjust business rules, and create new outputs to meet commander and staff needs. It can identify current resource deficiencies and surpluses across the Army, increasing the Army's efficiency in cross-leveling scarce resources in the fiscally challenged environment that is the Army's foreseeable future. This paper assesses it has the potential to generate an SRU

output that forecasts Army Strategic Readiness 24 months out, supporting the 24-month ARFORGEN cycle. This will allow the ARSTAF and senior Army leaders to adjust strategic levers in the near-term as defined in an Under Secretary of the Army briefing[74] – a capability the Army lacks but urgently needs in light of its fiscal environment.

EMDS continues to evolve and will soon have the ability to conduct predictive analysis, project readiness deficiencies, and report strategic readiness. EMDS can be the strategic enabling technology component of Army Strategic Readiness by adding the functionality to forecast both force and strategic readiness empirically from CM + 6 months to CM + 24 months. That is where EMDS can make its money – the Army's landscape is changing, and it will require the holistic yet precise capability EMDS' potential contains. The CSA stated in the 2013 Army Strategic Planning Guidance that "The Army of the future is characterized as a regionally aligned, mission tailored force organized by leaders into squad-to corps-sized formations"[75] and EMDS is the enabling technology solution to minimize the complexities involved in achieving the CSA's vision. EMDS can absorb a spider-web of data that would take action officers untold man-hours to accumulate, much less analyze, and quickly and accurately through advanced filter searches and data exploration tools, provide data sets to the ARSTAF and senior Army leaders for intellectual consumption and informed decisions.

One concern is that some of the EMDS outputs overlap with FORSCOM's AST outputs, hence the need for a HQDA EXORD that delineates a clear division of labor between Army Force Readiness (FORSCOM) and Army Strategic Readiness (HQDA). Things such as current and future year ARFORGEN force pool alignment, unit aim point progression, unit summary dashboards depicting P, S, R, T levels, manning rollups that

display key shortages, projections, and commander P-level comments are being worked within AST and EMDS. There are more examples, but the fact is both enabling technologies overlap in some areas and HQDA and FORSCOM need to conduct detailed collaboration to identify clear roles and responsibilities. The last thing the Army needs in this turbulent period is two unsynchronized initiatives lacking unity of effort.

Both AST and EMDS have powerful capabilities and potential. EMDS needs to be the strategic enabling technology that supports an Army Strategic Readiness process and HQDA needs to focus on Army Strategic Readiness – strategic DOTMLPF-C problem sets and solutions at the CM+7 to CM+24 months and beyond timeframe. FORSCOM and AST, as a component of Army Strategic Readiness, should focus on the Army Force Readiness process – synchronizing ARFORGEN efforts CM to CM + 6 months. Both processes and enabling technologies have a role in Army Strategic Readiness.

Army Regulation (AR) 525-xx-B and Department of the Army Pamphlet (DA PAM) 525-xx-B. HQDA G3/5/7 is developing a new AR and DA PAM that from a strategic perspective prescribes the Army's policy, "discusses the intellectual underpinnings of the strategic readiness concept, and explains the contributions of the various elements and components".[76] AR 525-XX-B will provide the authoritative policy guidance to the ARSTAF, ACOMs, ASCCs, and DRUs for the preparation for, participation in, and the execution of the JFRR, Joint Combat Capability Assessment Group (JCCAG), Deputy's Management Action Group (DMAG), QRCC, Plan assessments, SRU, and other activities. It will explain the strategic readiness process; key terms and references; resourcing and strategic levers; how the Army Strategic

Readiness Assessment (ASRA) is developed; future readiness and the predictive analysis required to project readiness deficiencies and forecast readiness; and Army assessment linkage to reporting requirements.[77]

DA Pam 525-XX-B will explain the processes and procedures stakeholders will execute to achieve strategic readiness requirements – the keystroke level strategic readiness "how to" manual. If the supporting strategic readiness software application is in existence when the DA Pam is written, it will provide instructions and reference data necessary to carry out the policies established in AR 525-XX-B.[78] The Army should use these new documents to codify this paper's recommendations.

Collectively the EMDS, AST, and AR and DA PAM 525-xx-B initiatives have the potential to resolve the Army's strategic readiness gap and the other readiness reporting deficiencies noted in this paper. The Army – if this study's recommendations are adopted – can achieve its purpose of "formulating a process to forecast and present holistic and qualitative strategic Army readiness"[79], establish near real-time unit readiness visibility, as well as increase accuracy, timeliness, and uniformity. These documents should become the user's manual for the Army Strategic Readiness Model this paper proposes.

Analysis Summary. The Army does not have a strategic readiness process. Its current force readiness process does not measure the myriad aim points associated with ARFORGEN, does not forecast readiness, nor does it provide leaders the decision space required to affect readiness before it becomes a crisis. As defined in this study, the SRU currently focuses on force readiness when it should be focusing more on strategic readiness. The good news is that the Army can establish an Army Strategic

Readiness process and improve its Army Force Readiness process using the FORSCOM and HQDA G3/5/7 initiatives, portions of the Army's current reporting process, and the enabling technology the Army currently possesses.

Recommendations. In short, recommend the Army adopt the Army Strategic Readiness Model (ASRM) proposed below as the Army strategic readiness solution and implement the secondary recommendations required in creating ASRM. The secondary recommendations correct deficiencies in the current readiness reporting process and establish solutions the ASRM requires to achieve strategic readiness and force readiness capabilities.

Recommendation 1. Recommend that the Army establish ASRM as the Army Strategic Readiness solution, with Army Force Readiness as a subcomponent. FORSCOM becomes the proponent for Army Force Readiness and HQDA G3/5/7 becomes the proponent for Army Strategic Readiness. Readiness reporting includes more stakeholders than the ARSTAF and FORSCOM but for the purposes of this study we will focus on them as the "hubs" responsible for coordinating with their respective stakeholder "spokes". Each will need to identify and include its process stakeholders in the dialogue as it fully develops the ASRM process.

Army Strategic Readiness Model (ASRM) Process. The ASRM process follows the current operations (CUOPS), future operations (FUOPS), and future plans (FUPLANS) paradigm. The ASRM expresses CUOPS as force readiness at the monthly USR, FUOPS as current month+1 (CM) through CM+6, and FUPLANS as CM+7 through CM+24. The following is an ASRM process overview, identification of some but not all stakeholders, and the associated enabling technology. In short, tactical

commanders use the existing AR 220-1 process and DRRS-A to report CM force readiness; operational commanders use the demand/fulfillment process and AST to forecast CM+1 to CM+6 readiness; HQDA uses the ASRM process and EMDS to forecast CM+7 to CM+24 quantitative force readiness and to forecast strategic readiness.

ASRM CUOPS (Unit Readiness at the USR). Tactical commanders are at the CUOPS readiness level, and while responsible for unit readiness, have control of only one readiness element – training. The commander cannot man, equip, provide service or infrastructure, and does not fund the unit's ARFORGEN activities. Operational and strategic stakeholders execute those tasks through countless resource provider channels. However, the Army holds the commander responsible for unit readiness – and gives the commander a lagging indicator readiness process without a resource projection or a readiness forecasting capability to achieve it. The Army owes the commander the means to project several months into the future using quantitative measures so the commander can qualitatively forecast readiness and quantitatively project deficiencies the unit needs help with – with enough lead time for the resource stakeholders to resolve issues and increase current unit readiness. FORSCOM's demand/fulfillment concept (process) and its enabling technology, AST, solve that problem for the commander. It allows the commander to see resources available six months out so the commander can shape the unit's activities to increase unit readiness reported at the monthly USR. While the commander and staff do not own the responsibility of managing AST, they provide input to FORSCOM and have access to AST outputs for projecting resources, planning tools, and readiness forecasting. In the

end, projecting personnel and equipment availability will help commanders develop training plans, synchronize resources, increase current readiness, and result in a unit with a higher level of readiness during USR reporting. The commander retains permissions to adjust readiness measures in NetUSR as part of USR turn-in, but ARMS will generate an automated report that becomes the forcing function to ensure unit reconciliation (recommendation below). This process ensures the commander has the last word regarding readiness information.

DRRS-A continues to be the enabling technology that focuses on AR 220-1 "Army Unit Readiness"[80], remaining the Army's single database of record for all data points used to report and/or forecast future readiness. As noted, once commanders adjust personnel, logistical, and medical data in NetUSR, ARMS will generate an "Adjustment Reconciliation Report" that converts to a NIPR extract and feeds eMILPO, PBUSE, and MEDPROS. This report and the additive functionality within eMILPO, PBUSE, and MEDPROS to import the Adjustment Reconciliation Report will force units to reconcile the Army's ADS "feeder" systems, establishing accuracy in the system. The DRRS-A database, as the Army's single authoritative measures database, will support AST and EDMS with the current and historical measures they will use to execute their tasks.

ASRM FUOPS (Forecasted Force Readiness CM+1 through CM+6). At the operational level – FORSCOM – the commander is at the FUOPS readiness level and must have a process and enabling technology to synchronize Army Force Readiness[81] at the unit level to achieve targeted readiness in the future within the ARFORGEN construct. AST is the solution. The FORSCOM demand/fulfillment process that drives

AST allows the tactical commander to provide FORSCOM with the unit's projected resource needs that synchronize personnel and equipment delivery dates, maximizing effectiveness and efficiency, as well as ensuring the commander meets ARFORGEN aim points. This process implies more precision than the aggregated personnel and equipment aim points currently associated with ARFORGEN. The CSA said the Army is adapting ARFORGEN to meet future combatant commander requirements. He said that in order to do that "we envision a progressive readiness model for most active and reserve component early deploying units."[82] The Army cannot simply adjust the operational aspect of ARFORGEN and call it progressive readiness. It must challenge every resource stakeholder aim point definition, methodology to achieve it, philosophy, process, and doctrine in an effort to truly become progressive. Personnel and equipment delivery synchronization are an example – the commander needs the right personnel skillsets in the unit at the right time to receive the equipment on which they will train and deploy. An 80% personnel fill will not help the commander if it is not the right 80% relative to equipment and individual/collective training plan variables – the Army needs to allow the commander to identify precise personnel and equipment needs. AST can support this level of detail. It does not serve the Army well in a fiscally constrained environment to deliver equipment that will sit in a motor pool for months until the correct personnel arrive to the unit. Nor does it benefit the Army if a commander conducts a command post exercise (CPX) before the key staff officers needed to make it beneficial report to the unit. However, AST and FORSCOM's process initiative permits the commander to provide detailed personnel, equipment, and other resource needs far enough out for FORSCOM to coordinate with resource

providers for specific no-later-than delivery dates, with the end state being increased unit readiness and increased efficiency. Over time FORSCOM will collect the historical measures necessary to identify systemic resource deficiencies (leading indicators) in their progressive readiness ARFORGEN model and forward them to HQDA for strategic lever adjustment consideration. Efficiency – some would argue that the Army is more concerned with effectiveness than efficiency. The Army must do both. The CSA was very clear in the 2012 Army Posture statement when he said, "In these challenging economic times, America's Army will join Department of Defense efforts to maximize efficiency".[83] Precision resource delivery is another way to say efficiency within the context of ARFORGEN synchronization. The Army must look for every means possible to be precise in its obligation to provide COCOMs with decisive-action land forces. Precision leads to increased capabilities available because it will better synchronize the elements of combat power generation in time and space. FORSCOM, as the stakeholder synchronizing Army Force Readiness, must have the enabling technology to synchronize those efforts and to report them to HQDA for visibility and assistance as required. AST has the capacity to synchronize that level of precision.

FORSCOM's enabling technology (AST) facilitates Army Force Readiness and will generate its currently FORSCOM designed outputs plus the additional USR output that forecast a unit's CM+1 to CM+6 readiness. That will include the traditional AR 220-1 P, S, R, T, and C-levels, plus ARFORGEN aim points and events, ACMG, and other applicable measures, accompanied by the commander's current and forecasted qualitative assessment by month through CM+6. Tactical and operational units will use current and forecasted force readiness to reallocate resources, make prioritization

decisions, and identify readiness deficiencies that FORSCOM needs to raise to HQDA for assistance. AST will export outputs to EMDS to ensure the ARSTAF and senior Army leaders have situational awareness of unit readiness and the ARSTAF has uniform quantitative and qualitative information with which to conduct predictive analysis and forecast Army Strategic Readiness.

ASRM FUPLANS (Forecasted Force Readiness / Strategic Lever Forecasts) at CM+7 through CM+24). At the strategic level, focusing on Army Strategic Readiness[84] versus Army Force Readiness, the ARSTAF and senior Army leaders are at the FUOPS level and need a process and enabling technology that "sees" strategic resource providers, global accessibility, and the Army's strategic readiness posture 24 months out in terms of "scalable, tailorable forces"[85] that provide a full range of capabilities to COCOMs in a Joint, Interagency, Intergovernmental, and Multi-national environment."[86]

Army Strategic Readiness is about options. The EMDS enabled ASRM possibilities include strategic lever trend analysis, projecting leading indicators, and forecasting strategic readiness DOTMLPF-C resources on all Army-level contributors to readiness. In a scenario involving an emerging threat in a COCOM, EMDS could provide the ARSTAF with immediate access to information such as capabilities available (forces); delivery platforms available given current conditions such as a Hurricane Sandy or the recent East Coast snow storm – usable points of embarkation (POE); Army Prepositioned Stocks (APS) locations, statuses, and time required to reach the COCOM; and friendly points of debarkation (POD) around the world. It could also track things such as generating forces throughput capacity relative to historical

requirement deficiencies in order to identify solutions. EMDS can leverage any strategic variable that feeds into the Army's ability to deliver strategic landpower – it has endless possibilities once the ASRM process is fully developed. ASRM increases the Army's capability to synchronize and adjust strategic DOTMLPF-C resources in time, space, and quantity – Strategic Readiness – so that FORSCOM can better synchronize resources to meet unit readiness needs along the ARFORGEN time continuum – Force Readiness.

Granted, the CSA needs to be able see the current status of specific units if he desires, but FORSCOM will export CM to CM+6 information to EMDS to ensure HQDA sees the same information. The importance of P, S, R, T, levels and ARFORGEN synchronization at the strategic level is that EMDS can use trends FORSCOM captures during force readiness activities to adjust strategic levers as required to "right-size" leading indicators, resulting in FORSCOM being able to provide the commander the right resources at the right time to meet the commander's precise aim points along the progressive readiness ARFORGEN glide path. HQDA has enough rocks in its rucksack to let FORSCOM and its associated stakeholders focus on Army Force Readiness while HQDA focuses on Army Strategic Readiness. ASRM gets HQDA away from fighting the BCTs and back into assessing the holistic Army and adjusting strategic levers to expedite resource allocation and/or address the concern with the applicable resource supplier. To do that, EMDS requires a quantitative analytical capability as well as a qualitative scenario application that the ARSTAF can use to conduct predictive analysis and plans assessments.

As the technology enabler, EMDS has the potential to support Army Strategic Readiness and will generate all strategic readiness statutory reporting outputs plus the SRU outputs that present highlighted units' CM+7 to CM+24 forecasted readiness (220-1, ARFORGEN aim points, ACMG, other applicable metrics); identify the Army's strategic readiness deficiencies and leading indicators; provide a predictive future readiness analysis to support allocation of resources and strategic lever adjustments; generate near real-time dashboard visibility of unit-level through Army aggregated current and forecasted readiness; synthesize the measures the Army uses for reporting requirements; and provide the strategic measures the Army uses to support the PPBE process to "acquire, allocate, and manage resources for military functions."[87]

ASRM's conceptual process harnesses technology via DRRS-A, AST, and EMDS to collect, conduct predictive analysis, and quantitatively assess force readiness; to forecast both force readiness and strategic readiness strategic levers readiness measures in a single input/output flow from the tactical to the operational to the strategic level. It uses the same data, imports commanders' qualitative assessments and generates outputs at all three levels in order to provide accurate, precise, uniform, and near real-time reporting during the readiness reporting cycle and beyond. It will never replace the art of commanders applying their experience and knowledge to tangible metrics and providing a qualitative assessment – but it will provide the best collective set of quantitative current and projected measures the Army has ever had – and the first predictive analysis capability – so that the commander has all the information when conducting an assessment.

An Army draft/pre-decisional narrative description of Army Readiness Reporting to the Under Secretary of the Army indicated that "The Army has endeavored on several occasions to create a readiness reporting methodology at the Strategic level. In each instance, these efforts have instead focused on either technological systems or in some cases pushing strategic readiness assessments to lower echeloned units. In both cases, these efforts waned."[88] That is where ASRM is different. ASRM is process focused, synchronized with linked enabling technology, with clear division of labor requirements for each stakeholder. It will assimilate the myriad tactical, operational, and strategic measures that commanders and staffs at each level can qualitatively assess. It goes beyond force readiness by including the strategic resources required to man, train, equip, alert, marshal, deploy, employ and sustain ground forces. The enabling technology is not the end state. It is only the vehicle that supports the process that allows the applicable stakeholder to intellectually and holistically assess the institutional and operational measures.

Stakeholder Division of Labor. The ASRM establishes an Army Force Readiness process and an Army Strategic Readiness process. Key to its success is clearly identifying the stakeholders required to execute the process and formalizing each stakeholder's tasks. The division of labor must define roles and responsibilities at every level. It must entail ownership for each step in the process, coordination lines, authoritative data sources, etc. Every variable that impacts the ASRM process must be considered and the Army must identify and assign responsibility to specific supported and supporting agencies.

Figure 8 illustrates how the ASRM process shares information from the tactical to the strategic level. At the tactical level, NetUSR imports PBUSE, eMILPO, and MEDPROS daily (1) and PBUSE, eMILPO, and MEDPROS exports to their respective ADS daily as well (2). NetUSR imports the Army's authoritative databases daily (3) and during the monthly USR cycle commanders adjust the NetUSR personnel, logistics, and medical data (4) to ensure the most accurate data available enters the DRRS-A database (5). Commanders continue to use NetUSR to input their commander's assessments and ARMS exports it to AST for inclusion in the AST generated USR slides. Commanders at every level will export AST's automated USR slides (CM to CM+6) – this ensures single-source, accurate, and uniform CUSR slides consistent with measures resident in the Army's ADS. The commander's data adjustments in NetUSR generates an Adjustment Reconciliation Report HQDA G3/5/7 will establish in ARMS and a Non-classified Internet Protocol (IP) Router Network (NIPR) extract is exported to PBUSE, eMILPO, and MEDPROS that becomes the forcing function to ensure staffs update the data commanders adjust during USR turn-in (6). The DRRS-A database exports to ARMS daily (7) and ARMS exports to AST (8), EMDS (9), GSORTS, and DRRS-A (10) daily, ensuring all Army, Joint Staff, and DOD systems see the same near real-time measures. AST also exports to EMDS daily (11) to ensure all HQDA directed AST outputs remain current in EMDS as the ARSTAFF and senior Army leaders conduct analysis and prepare strategic level outputs.
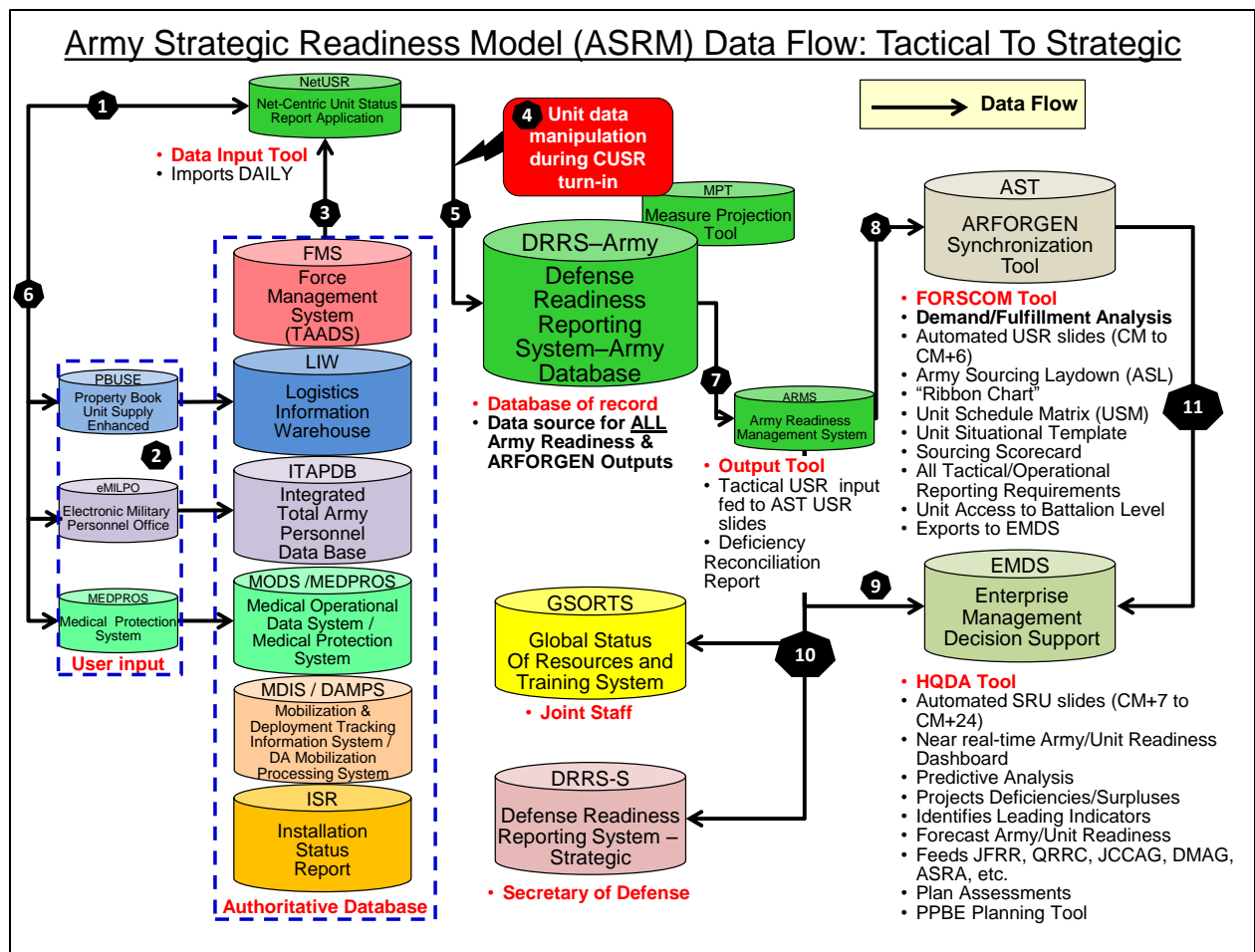
Figure 8. Army Strategic Readiness Model Data Flow: Tactical to Strategic

Stakeholder Paradigm Shift. Precise predictive analysis and resource synchronization is the key to maximizing the Army's diminishing resources. The last 12 years have been resource plentiful but those days are past. The Army must challenge the way it thinks about providing resources in support of the progressive readiness ARFORGEN cycle. It must challenge every process, aim point, policy, and reporting requirement that aggregates any measure that impacts readiness. Achieving or not achieving a precision measure is neither a good nor bad thing. AMC and HRC may not have the piece of equipment or personnel skillset the tactical commander needs. That is okay – the Army needs to track that level of detail. In the long run, the Army will be

better because as it collects historical data on precision measures noted during USRs and SRUs, it can adjust strategic levers and be better prepared to provide resources in the future. In the short run the commander can adjust the unit's training schedule far enough out due to projected unavailable resources and ultimately maximize readiness because the demand/fulfillment process give the commander time to adapt.

Counterargument. One might argue that the Army does not have the fiscal resources to establish ASRM. That's exactly why the Army needs to adopt ASRM. It can be done with existing technology (DRRS-A, AST, EMDS). The Army has smart people in its ranks that can put the meat on the bones that this paper created without outsourcing someone to build it. If and ORSA officer in HRC can create AUTO REQ (see recommendation 2 for details) and an AG warrant officer can develop a personnel accountability solution for Afghanistan, the Army can leverage its smart folks to establish ASRM. ASRM will save money in the long run because it will establish better current and future resource synchronization.

Recommendation 2. Recommend the Army establish a two-tier readiness reporting output model that: establishes AST generated tactical/operational USR slides that depicts CM unit readiness and forecasts CM+1 through CM+6 unit readiness; establishes EMDS generated strategic SRU slides that highlight selected CM to CM+6 unit readiness (imported from AST), but its primary focus is on strategic readiness (CM+7 to CM+24 unit readiness and leading indicator trends and strategic lever adjustment recommendations). Just as they do now, commanders will put their comments into NetUSR, articulating their subjective analysis that "reflects the commander's personal judgments and assessments regarding the mission readiness of

the unit."[89] The change is that the commanders' staffs do not manually generate USR slides. AST generates the slides – units download them. Not only will they depict what the Army currently sees now during USRs, they will forecast the unit's readiness for the next six months using a "Measures Projection Tool" we will discuss in the next recommendation. The new USR will also include additional information, such as the unit's ARFORGEN manning, equipping, and training aim point statuses generated by the ASO, ACMG, and any other requirement that creates a measure the FORSCOM Commander wants to track. FORSCOM and subordinate units use the CM to CM+6 USR for several purposes, including: to report all AR 220-1 requirements; to use as a forecasting tool for ARFORGEN synchronization; to use as a means to identify FORSCOM-level resourcing solutions for unit deficiencies; and to identify areas FORSCOM needs to take to HQDA for assistance.

HQDA uses the CM+7 to CM+24 SRU for several purposes: to review "unit of the month" readiness (CM to CM+6 imported from AST); to review selected units' forecasted readiness (CM+7 to CM+24) in order to determine Army-level solutions for unit deficiencies before they are "passed" to FORSCOM at CM+6; to present the ARSTAF's institutional and operational predictive analysis results based on trends coming out of FORSCOM's CM to CM+6 USRs and other ARSTAF inputs, comprised of strategic readiness deficiencies, leading indicators and recommended strategic lever solutions; to conduct a more informed and timelier analysis to identify solutions for emerging threats; and to provide inputs to the Strategic Readiness Assessment Group (SRAG) General Officer Steering Committee (GOSC) quarterly Army Strategic

Readiness Assessment (ASRA), whose outputs feed the JFRR, QRRC, DMAG, and other statutory Army reporting requirements.

The tactical/operational (CM to CM+6) and the strategic (CM+7 to CM+24) reporting window determination considered several variables: HQDA G3/5/7 defined the strategic lever near-term execution and budget period as 6-24 months so the inference is that the Army can adjust strategic levers to mitigate readiness deficiencies during that period, and anything five months or less becomes an "in-house" fix – in this model that is FORSCOM; the Army ARFORGEN model is a 24-month period so it is advantageous to develop a means to forecast readiness that far out [90]; officer manning cycles occur two times a year and enlisted manning cycles are monthly but require four to five months to get a new Soldier physically to the unit – this is within the six-month window, and FORSCOM can leverage internal assets and engage HRC within the CM+6 window to resolve most personnel issues; FORSCOM's AST model notes six months as an average timeframe for commanders (product producer) and suppliers to "have time to resolve or mitigate shortfalls in fulfillment affecting unit training without impinging on supplier time needed to fulfill actions;"[91] HRC has a system in place to automatically build requisitions (AUTO REQ) in the Enlisted Distribution and Assignment System (EDAS) 18-months out using historical variables to forecast unit needs relative to the Army's resources available and it is working – proof of concept that the Army can conduct predictive analysis, project deficiencies, and forecast readiness levels. The Army can adjust these windows as required but the concept is solid and is "a" way for the Army to report and forecast strategic readiness.

Leveraging DRRS-A, AST, and EMDS enabling technologies also demonstrates that the Army can use internal assets to solve its problems without spending money to outsource solutions – an Operations Research/Systems Analysis (ORSA) functional area officer at HRC developed the AUTO REQ system as part of his daily duties, so nothing prevents the Army from using existing personnel with the requisite skillsets to implement the ASRM. The Army must maximize "in-sourcing" in its endeavor to establish an Army Strategic Readiness process in light of its fiscal challenges.

Counterargument. Some would argue that forecasting readiness 24-months out is impossible to predict manning levels, equipment levels, personnel and equipment availability, generating force capabilities, etc., that far out. That is true – which is why the recommendation is to establish a model and supporting solution sets that allow the Army to forecast, not predict, readiness. Predicting connotes a level of precision forecasting does not claim. It is logical to claim that considering 10 years of precise historical data can result in as accurate a forecast as any other methodology chosen. As the forecasted readiness reports become current readiness reports, the Army can compare forecasted to current and the precision gaps can be lessened by adjusting algorithms and eventually increasing forecasting accuracy. All things considered, the benefits of forecasting at the strategic level outweigh the resources it costs to conduct analysis. The Army needs the ability to forecast readiness across the strategic readiness tenets so that it can best manage its scarce resources and sustain the highest level of readiness possible. These recommendations establish a means to achieve that aim.

Recommendation 3. Recommend HQDA G3/5/7 design a Measures Projection Tool (MPT) that resides in the DRRS-A database. Similar to the AUTOREQ capability HRC designed, MPT will take a current unit's P, S, R, T levels and apply 10 years of readiness data and forecast by month P, S, R, T levels. It will factor down to the skill level, military occupational specialty, and NSN level. ARMs will export MPT data daily to AST and EMDS. The foundation of the MPT is the last 10 years of USR data. The historical data are utilized on a sliding scale, meaning that this month's USR data are added to the MPT and the first months' data 10 years ago drops off. The MPT concept includes a very precise predictive application. An example of MPT's ability to forecast readiness is medical readiness codes (MRC) that make a Soldier non-available. MPT drills down to a Soldier's rank and specialty and determines what percentage of a unit's non-available Soldiers is – for example – an Infantry Specialist. If 4.5% of a unit's historical non-available population for the last 10 years has been an Infantry Specialist, MPT will project that 4.5% of future unit non-available Soldiers will be Infantry Specialists. MPT will apply like unit data to like units to replicate operating environment factors – for example, data may conclude a medic in an airborne unit will likely have a higher non-available rate historically than a medic in a hospital unit. Expand this methodology across every data point that can affect a unit's readiness – and acknowledging previous performance does not guarantee future performance, MPT intuitively is the best means possible to forecast future readiness deficiencies and leading indicators.

Remembering that every month MPT looks back 10 years, adding this month's data and dropping month "1" data, each specific predictive data point variable will adjust

monthly. This applies to all personnel, equipment and supplies on-hand/available, equipment readiness/serviceability, and unit training level proficiency (P, S, R, T levels). It will also include C and A levels, CBRN S&T levels, AMM & AME levels, etc.[92] If the current USR measures it, MPT will use it in its predictive analysis. The second major category of variables the MPT will utilize in its predictive analysis is the data HRC, AMC, and any other resource stakeholder uses to predict requirements such as personnel gains and losses, equipment lifecycles, etc. Clearly forecasts have less precision the farther out they go, but the MPT can be "graded" over time, and the MPT proponent can adjust the algorithms to best support predictive analysis and readiness forecasting.

Recommend HQDA G3/5/7 chair a planning effort with the G1, G4 and other applicable stakeholders to develop the data fields that MPT should include and where the historical data points currently exist. It is possible that the Army has not archived some desired data points – that is okay. Build the data fields within the DRRS-A database and begin collecting them.

Counterargument. Some may argue that the last 10 years of historical data are not the right data set to establish the Measures Projection Tool because it was in a time of war and the foreseeable future includes a mostly garrison environment. That may be true to an extent – frankly one could argue that a perfect solution does not exist. However, one could also argue that the Army has tracked data more precisely over the last 10 years because it needed to get as much personnel and equipment into the fight as possible, resulting in a solid data set foundation. Whether the ARSTAF can determine a better starting point to establish the Measures Projection Tool than this study can is not the point – this study welcomes a better starting point. Establishing the

tool in order to aid in forecasting Army Strategic Readiness is the objective and finding the best methodology to get there is the true goal – no pride of ownership is involved.

Recommendation 4. Recommend the Army create a NetUSR reconciliation functionality that generates an Adjustment Reconciliation Report. This report allows commanders to continue to adjust data in NetUSR to ensure accuracy in readiness reporting, while creating a forcing function to reconcile the adjustments in eMILPO, PBUSE, and MEDPROS. DRRS-A already has the capability to create NIPR extracts so it is feasible to export this data in the form of an extract that can be imported into eMILPO, PBUSE, and MEDPROS. It will require the system proponents to develop the capability to import the report and create the functionality that keeps these adjustments highlighted until the applicable system user executes the transaction to reconcile the adjustment. The secondary recommendation is to address this reconciliation during the monthly USR by placing both the total number and the individual man, equip, and medical NetUSR adjustments each unit made on the USR slide. Higher headquarters need to be aware of the magnitude of the adjustments and help by putting checks and balances in place to minimize the need to manually override the ADS every month. With HRC, AMC, and OTSG making decisions daily from their respective ADS, it is imperative that commanders conduct daily systems management, not monthly surges.

Counterargument. One might question the need for an Adjustment Reconciliation Report, stating that the deviation is acceptable or that the Army just needs to turn the functionality off that allows a commander to change data in NetUSR. It is illogical to accept a deviation in data sets that drive strategic distribution decisions and statutory reporting requirements when a means becomes available to reconcile the

deviation. Equally important is affording the commander the opportunity to ensure readiness data are correct before it reaches strategic leaders. Establishing a forcing function that systematically implements reconciliation is the solution that best serves the Army's needs.

Recommendation 5. Recommend that U.S. Training and Doctrine Command (TRADOC) add readiness training to noncommissioned officer, commissioned officer, and warrant officer program of instructions (POI). The Army does not train personnel on the importance of, complexities involved within, or procedures required daily, weekly, and monthly that result in the monthly USR.   Historically the Army has handed readiness reporting to the unit Chemical, Biological, Radiological, Nuclear and high-yield Explosives (CBRNE) officers and told them to "make it happen". The result is that officers at the battalion and higher level learn USR on-the-job, the good and the bad, and may or may not give it the deserved energy. The Army, now more than ever, must maximize its ability to assess and report readiness.

Counterargument. One might argue that TRADOC cannot afford to create a new POI or that the myriad school houses do not have room on the training calendars to implement readiness training. The strategic importance of getting readiness right cannot be overstated and will continue to increase in its significance as Army resources become more scarce. In the event the Army determines the school house is not the place to train readiness, it should at least task TRADOC to establish a POI that it can export to installations for use.

Recommendation 6. Recommend HQDA G3/5/7 lead a strategic working group with FORSCOM and all applicable stakeholders in order to develop a detailed ASRM

implementation plan. This paper is neither intended nor able to have the best or final answer. It a starting place to challenge old ways, provoke thought, and to highlight the importance of establishing an Army Strategic Readiness process, of which Army Force Readiness is a component. The end state is: a clear understanding of the Army Force Readiness and the Army Strategic Readiness processes; stake holders involved in each process; a detailed division of labor between all stakeholders; stakeholder input/output requirements; enabling technology requirements and the plan to achieve them; AR and DA PAM 525-XX-B published that supports ASRM; and an Army EXORD that prescribes the ASRM implementation plan.

Counterargument. One could argue that the Army does not have the time to take on this large of a project with all the other competing demands. Or they could say it would be too difficult to get all the stakeholders required to participate. The fact is that the Army desperately needs an ASRM-like solution in order to become more effective and efficient with all of the Army's resources, including time. The status quo is unacceptable.

Recommendation 7. Recommend the Army define and codify Army Force Readiness and Army Strategic Readiness definitions and clearly articulate the division of labor between FORSCOM and HQDA. Specifically, recommend definitions capture FORSCOM being responsible for Army Force Readiness and HQDA being responsible for Army Strategic Readiness. This could be considered an implied task within recommendation #1 but it is important enough to highlight it. This study determined that HQDA and FORSCOM initiatives are not formerly linked and have overlapping purposes. Doing this up front is an essential task.

Counterargument. A valid argument is that there are units outside FORSCOM so it cannot be the single Army Force Readiness proponent. This paper argues that as the Army draws down it is even more important to not only establish an Army Force Readiness process but to have a single "hub" owner of the process. Given it already owns most of the Army's formations, FORSCOM is the logical choice.

Conclusion. One has only to read the Army's 2013 Strategic Planning Guidance (SPG) and the CSA's February 12, 2013, statement before the Senate Armed Services Committee (SASC) to consider these recommendations and continue searching for ways to more effectively and efficiently increase the Army's strategic outputs in light of declining strategic resources. The Total Army (Active Duty, Army National Guard, and U.S. Army Reserves) is losing 106,000 Soldier and Civilian positions by fiscal year (FY) 2017.[93] It may lose more due to sequestration. The Army is extending modernization program timelines and reducing training exercise frequencies, moving to "the outer edge of acceptable risk for our future force and our ability to meet our National Security Strategy."[94] The CSA identified adapting the ARFORGEN model "to meet a full range of current and emerging combatant commander requirements"[95] as a near-term objective, defined as being complete within the FY 2013-2015 window[96]. This is the Army's and the Nation's fiscal operational environment for the foreseeable future.

At the end of the day, the Army's strategic objective is to provide combatant commanders with the capabilities they need to achieve their missions. To continue achieving its objective, the Army must "squeeze every bit of juice it can out of the orange". This paper proposes recommendations that can change how the Army sees

itself over the horizon. And while bringing all of these recommendations to fruition is not

an easy task, they are feasible. Army Strategic Readiness – we can get there from

here.

<u>Key Definitions</u>

Army Force Readiness. The ability of the Army, within its established force structure: to station, control, man, equip, replenish, modernize, and train forces in peacetime; concurrently planning to mobilize, deploy, employ, and sustain forces in war to accomplish assigned missions.[97] The equation looks like this: (P+S+R+T=C).

Army Strategic Readiness. The ability of the Army's operational and generating forces to execute the Army's Title 10 functions to meet the demands of the national strategic objectives – or – The assessment of the Army and its ACOMs [Army Commands], ASCCs [Army Service Component Commands], and DRUs [Direct Reporting Units] ability to meet its current and future Title 10 responsibilities in support of the NMS [National Military Strategy].[98] The equation looks like this: (force readiness + installation capabilities + material + human capital+ other elements = Army Strategic Readiness).

C-level. The overall assessment of the unit's core functions and designed capabilities. The Army determines the unit's C-level by measuring its personnel, equipment and supplies on-hand, equipment readiness/serviceability, and unit training (P, S, R, and T) levels and using the lowest measured level to identify its C-level. Specifically, if all the levels are 1 except for one, which is 2, the C-level is C-2.[99]

Personnel level (P-level). Measures personnel readiness using three metrics for personnel fill percentages that are based on the unit's strength requirements.[100]

Equipment and supplies on-hand level (S-level). Measures the on-hand/availability status of designated critical equipment items and other mission essential equipment items that are listed on the units modified table of organizational equipment (MTOE).[101]

Equipment readiness/serviceability level (R-level). Measures the operational

readiness or serviceability of the critical equipment items that are in their possession, under their control or available to them within 72 hours.[102]

Unit training level (T-level). Measures the training status of their units based on the percentage of the unit's mission essential tasks (METs) are trained to standard.[103]

Forecast. To calculate or predict a future condition, usually as a result of study and analysis of available pertinent data.[104]

Predictive. To declare or indicate in advance; foretell on the basis of observation, experience, or scientific reason.[105]

Project. An estimate of future possibilities based on a current trend.[106]

Future Readiness. An anticipated end-state derived from known indicators and potential internal and/or external conditions that are expected to impact readiness over time.[107]

Predictive analysis. The process of leveraging technologies and methodologies to analyze data and produce expected readiness outcomes for any given point in the future.[108]

Aim point. Aim points are targets at specified points in time that enable effective collective training and ensure forces are ready for contingencies and deployments as units cycle through the ARFORGEN model and process; provide the Army a means to track units at a prescribed state of readiness as they move through the ARFORGEN Force Pools and progressively increase readiness.[109]

Levers. Actions by Senior Leaders – the means by which future readiness may be impacted when indicators signal a projected drop in readiness.[110]

Strategic levers. While not inclusive, examples are: adjust accessions, retention and separation policy; senior leader focus; adjust ARFORGEN model; adjust training strategy; adjust force structure; adjust strategy and funding to maintain capacity; adjust policies (school attendance, promotions, etc.); adjust programs under the Army Family Covenant; adjust sustainment, restoration and maintenance (SRM) focus; adjust materiel management program; adjust modernization strategy; rebalance Army resources; adjust Fleet Management Program.[111]

Measures. Processes, reports, or metrics that are measured either periodically or episodically that, when analyzed, indicate a change in forecasted readiness levels.[112]

Indicators. The sum of measures that signal a drop in future readiness.[113]

Demand signal. What is required to achieve readiness based on aim points and training plan: manning, equipping, training, services and Infra OPTEMPO [operational tempo] / dollars.[114]

Fulfillment signal. What the suppliers can deliver to meet the demand.[115]

Projected fulfillment. Enables projected [forecasted] readiness and highlights when fulfillment will fall short in sufficient time for leaders to resolve or mitigate.[116]

Endnotes

[1] I want to thank FORSCOM G3/5/7 and DA G3 ODR for their contribution to this study. My analysis and recommendations are original but there is no way I could have done this project with their assistance. They provided research documents that I would not have otherwise known existed; they spent numerous hours with me in person and through teleconferences and emails; they read my draft product and provided priceless feedback and insights on readiness initiatives they are working.

[2] Defined on the Key Definitions page at the end of the paper.

[3] Ibid.

[4] Ibid.

[5] FORSCOM G3/5/7 provided feedback after reviewing this study's final draft and part of their feedback was a more concise means of articulating the problem statement (thesis). This is not a quote but I am using their more concise concept; want to make sure that FORSCOM gets credit for their willingness to collaborate on this important topic.

[6] HQDAG3/5/7, "Readiness Justification Material Narrative (Draft 7: Outline)", predecisional working paper not suitable for distribution, November 28, 2012, 2-6.

[7] CSA asked me to review this topic for my Civilian Research Paper (CRP) and he made the quote at the beginning of this CRP during the November 2012 Strategic Readiness Update (SRU) and approved the quote for my use.

[8] The *C-level* is the overall assessment of the unit's core functions and designed capabilities. The Army determines the unit's C-level by measuring its P, S, R, and T levels and using the lowest measured level to identify its C-level. Specifically, if all the levels are 1 except for one, which is 2, the C-level is C-2. The *personnel level (P-level)* measures personnel readiness using three metrics for personnel fill percentages that are based on the unit's strength requirements. The *equipment and supplies on-hand level (S-level)* measures the on-hand/availability status of designated critical equipment items and other mission essential equipment items that are listed on the units modified table of organizational equipment (MTOE). The *equipment readiness/serviceability level (R-level)* measures the operational readiness or serviceability of the critical equipment items that are in their possession, under their control or available to them within 72 hours. The *unit training level (T-level)* measures the training status of their units based on the percentage of the unit's mission essential tasks (METs) are trained to standard; Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 12-13.

[9] Department of Defense, *Department of Defense Dictionary of Military and Associated Terms*, Department of Defense Joint Publication 1-02 (Washington, DC: Department of Defense, November 8, 2010, as amended through November 15, 2012), 256-257; U.S. Joint Chiefs of Staff, *CJCS Guide to the Chairman's Readiness System*, Chairman of the Joint Chiefs of Staff Guide 3401D (Washington, DC: U.S. Joint Chiefs of Staff, November 15, 2010), A-3.

[10] FORSCOM G3/5/7 staff offered this as a means to describe the DOD construct from which the Army should derive its strategic readiness definition and process. The FORSCOM staff originally used this slide in a brief they presented to the CG FORSCOM in preparation for HQDA G3/5/7 briefing the CG FORSCOM on EMDS. Once the FORSCOM G3/5/7 reviewed my paper they recommended I use this slide. FORSCOM G3/5/7, "CG FORSCOM Proposed Concept for Measuring Readiness", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, August 10, 2012, 2.

[11] Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 100.

[12] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 15.

[13] FORSCOM G3/5/7 staff offered this as a means to describe the Army strategic readiness construct. The FORSCOM staff also used this slide in a brief they presented to the CG FORSCOM in preparation for HQDA G3/5/7 briefing the CG FORSCOM on EMDS. FORSCOM

G3/5/7 recommended I consider using this construct in my research after they reviewed my paper. FORSCOM G3/5/7, "CG FORSCOM Proposed Concept for Measuring Readiness", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, August 10, 2012, 3.

[14] HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 4.

[15] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 5.

[16] Defined on the Key Definitions page at the end of the paper.

[17] Ibid.

[18] Ibid.

[19] Ibid.

[20] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 8.

[21] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 15.

[22] HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 5.

[23] Department of Defense, *Defense Readiness Reporting System Concept of Operations*, Department of Defense (Washington, DC: Department of Defense, January 22, 2009), 3.

[24] United States Code, title 10, subtitle A, part I, chapter 2, sec 117, (a).

[25] Ibid., subtitle A, part I, chapter 2, sec 117, (c), (1).

[26] Ibid, subtitle A, part I, chapter 2, sec 117, (c), (4).

[27] Ibid. subtitle A, part I, chapter 2, sec 117, (c), (6).

[28] Department of Defense, *Department of Defense Readiness Reporting System (DRRS)*, Department of Defense Directive 7730.65 (Washington, DC: Department of Defense, June 3, 2002, certified current as of April 23, 2007), 1.

[29] Department of Defense, *Guidance for the Department of Defense Readiness Reporting System (DRRS)*, Department of Defense Directive 7730.66 (Washington, DC: Department of Defense, July 8, 2011), 7.

[30] U.S. Joint Chiefs of Staff, *CJCS Guide to the Chairman's Readiness System*, Chairman of the Joint Chiefs of Staff Guide 3401D (Washington, DC: U.S. Joint Chiefs of Staff, November 15, 2010).

[31] Ibid, I-1.

[32] Ibid, 17.

[33] U.S. Joint Chiefs of Staff, *Joint Combat Capability Assessment*, Chairman of the Joint Chiefs of Staff Instruction 3401.01E (Washington, DC: U.S. Joint Chiefs of Staff, April 13, 2010), C-2.

[34] Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 7.

[35] Ibid, 37.

[36] Author has conversation with Mr. David Tighe, HRC Enlisted Management Directorate, regarding length of time it takes for a Soldier to report to a unit. The explanation is practical. The Army owes a Soldier and his/her family time to prepare for a move. Notifying a Soldier that they are moving in 120-days is not unreasonable but at the cost of the billet remaining empty until they arrive.

[37] MG Ierardi, Commander, "1st Cavalry Division Operation Order 12-XXX (Unit Status Report (USR) Turn-in for 2nd Quarter 13, Fort Hood, TX, 1st Cavalry Division, December xx 2012.

[38] LTG Campbell, "Operation Order PW 12-09-833 (USR turn in schedule and requirements), Fort Hood, TX, III Corps, September 25, 2012.

[39] Author attended the December 29, 2012, SRU with the CSA during his TDY to research this CRP. The DA G/3/5/7 ODR told the author that the VCSA normally sees the brief monthly during the last week and that the CSA sees the SRU once a quarter.

[40] Department of Defense, *Defense Readiness Reporting System Concept of Operations*, Department of Defense (Washington, DC: Department of Defense, January 22, 2009), 4.

[41] Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 4.

[42] Defense Readiness Reporting System – Army Procedures, Department of the Army Pamphlet 220-1, (Washington, DC: U.S. Department of the Army, November 16, 2011), 2.

[43] LTC Tom B. Burke, "NetUSR Data Extractor: Preview Data Extract Feature NetUSR V 2.4," briefing slides without scripted commentary, HQDA G-3/5/7 DAMO-ODR, Washington, DC.

[44] Department of Defense, *Defense Readiness Reporting System Concept of Operations*, Department of Defense (Washington, DC: Department of Defense, January 22, 2009), 2-3c.

[45] LTC Tom B. Burke (NetUSR proponent in DA G3/5/7), e-mail message to author, January 18, 2013.

[46] Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 13-14.

[47] Interview with confidential source, February 5, 2013. I do not want to cause any friction between the officer that provided this information and his leadership. The purpose of this information is to demonstrate the seriousness of the data disconnects created by this business rule and to maintain its empirical importance I do not want to cause any problems.

[48] LTC Tom B. Burke (NetUSR proponent in DA G3/5/7), e-mail message to author, January 18, 2013.

[49] The author observed this event while a division G1.

[50] Defense Readiness Reporting System – Army Procedures, Department of the Army Pamphlet 220-1 (Washington, DC: U.S. Department of the Army, November 16, 2011), 6.

[51] Ibid, 6.

[52] LTC Tom B. Burke (NetUSR proponent in DA G3/5/7), e-mail message to author, January 18, 2013.

[53] Mr. Christopher Reddish (FORSCOM), e-mail message to author with draft CRP feedback attachment, February 20, 2013.

[54] Defined on the Key Definitions page at the end of the paper.

[55] Defined on the Key Definitions page at the end of the paper.

[56] Mr. Christopher Reddish (FORSCOM), e-mail message to author with draft CRP feedback attachment, February 20, 2013.

[57] Army Force Generation, Army Regulation 525-29 (Washington, DC: U.S. Department of the Army, March 14, 2011), 1.

[58] Ibid, 16-17.

[59] Ibid, 4.

[60] Ibid, 4.

[61] HQDA G1, "ALARACT 293-2012 HQDA EXORD 10-13 ISO the HQDA FY13-15 Active Component Manning Guidance, Washington, DC, Army G1, October 18, 2012, 3.C.2.B – 3.C.2.B.1.A.

[62] FORSCOM G3/5/7, "Information Briefing: AST…The Means For The Army To 'See & Synchronize Itself' in ARFORGEN", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, January 2013, 3.

[63] Mr. Fred Rawcliffe, (ARFORGEN Enterprise architect), e-mail message to author, February 1, 2013.

[64] Ibid.

[65] Mr. Fred Rawcliffe, "Demand/Fulfillment Paper", FORSCOM G3/5/7, Fort Bragg, NC, no date, 1.

[66] FORSCOM G3/5/7, "CG FORSCOM Proposed Concept for Measuring Readiness", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, August 10, 2012, 4.

[67] Ibid.

[68] This slide is adapted from a FORSCOM G3/5/7 briefing. The concept is the same as FORSCOM's original intent but adjusted to best depict the target shift from today to the future. FORSCOM G3/5/7, "CG FORSCOM Proposed Concept for Measuring Readiness", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, August 10, 2012, 4.

[69] FORSCOM G3/5/7, "Information Briefing: AST…The Means For The Army To 'See & Synchronize Itself' in ARFORGEN", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, January 2013, 8.

[70] LTC Bobby Saxon, Executive Summary, Enterprise Management Decision Support (EMDS), Washington, DC: Army G3/5/7 DAMO-FME, December 2012.

[71] LTC Bobby Saxon, Information Paper, Enterprise Management Decision Support (EMDS), Washington, DC: Army G3/5/7 DAMO-FME, December 2012.

[72] Ibid, 1.

[73] Ibid, 2.

[74] HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 5.

[75] U.S. Department of the Army, *Army Strategic Planning Guidance 2013*, (Washington, DC: U. S. Department of the Army, 2013, 8.

[76] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 8.

[77] Ibid, 8 and 19.

[78] DA PAM 525-XX-B will provide the strategic equivalent of the purpose presented in AR 220-1. Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 1.

[79] "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 18.

[80] The USR is a "commander's report" that is processed thru [through] command channels; the USR is a "snap shot" of unit readiness at a fixed point in time; the documented requirements are the baseline (denominator) for USR measurements; the available resources are those currently possessed/controlled by the reporting unit; available units are those currently under

command authority of the reporting unit (organic, assigned, attached and OPCON); it supports planning and risk assessments. Ibid, 4.

[81] The current definition is "The ability of the Army, within its established force structure: to station, control, man, equip, replenish, modernize, and train forces in peacetime; concurrently planning to mobilize, deploy, employ, and sustain forces in war to accomplish assigned missions." One of this paper's recommendations is to adjust the definition to provide clear delineation between FORSCOM and HQDA with FORSCOM being responsible for Force Readiness and HQDA being responsible for Army Strategic Readiness. That will require the Army to remove words like "modernize" from the Force Readiness definition. HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 4.

[82] Honorable John M. McHugh, Secretary of the Army, General Raymond T. Odierno, Chief of Staff of the Army, *2012 Army Posture: The Nation's Force Of Decisive Action*, submitted to the Committees and Subcommittees of the United States Senate and the House of Representatives, 2nd Session, 112th Congress (Washington, DC: U.S. Department of the Army, February 17, 2012), 11.

[83] Ibid, letter in front of document signed by CSA and SECARMY.

[84] The ability of the Army's operational and generating forces to execute the Army's Title 10 functions to meet the demands of the national strategic objectives. HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 4.

[85] CSA Strategic Coordination Group, "The Army of The Future", briefing slides without commentary that present the CSA's vision of the Army's way ahead, CSA Strategic Coordination Group, Washington, DC, October 19, 2012, 6.

[86] Ibid, 6.

[87] U. S. Army War College and Carlisle Barracks, *How The Army Runs: A Senior Leader Reference Handbook 20011-2012*, (Carlisle, PA: U. S. Army War College and Carlisle Barracks, October 2011), 139.

[88] "Readiness Discussion with the Under Secretary of the Army" version 5, Draft Narrative attached to briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 2.

[89] U.S. Department of the Army, *Defense Readiness Reporting System-Army Procedures*, Department of the Army Pamphlet 220-1 (Washington, DC: U.S. Department of the Army, November 16, 2011, 7.

[90] LTC Phillips/LTC Rexford, "Two-Year Cycle (TGOSC)" briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, November 26, 2011, 1.

[91] Mr. Fred Rawcliffe, "Demand/Fulfillment Paper", FORSCOM G3/5/7, Fort Bragg, NC, no date, 2.

⁹² C-level is the overall assessment of the unit's core functions and designed capabilities. A-level is the overall assessment of the unit's assigned mission level. AMM is the assigned mission manning level and AME is the assigned mission equipping level. CBDRT is the level of chemical and biological (CB) equipment on-hand/available and the commander's assessment of the unit's level of training for a chemical/biological environment. Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 12-13.

⁹³General Raymond T. Odierno, Chief of Staff of the Army, *Statement of General Raymond T. Odierno, Chief of Staff, United States Army, before the U.S. Senate Armed Services Committee*, (Washington, DC: U.S. Department of the Army, February 12, 2013), 2.

⁹⁴ Ibid.

⁹⁵ U.S. Department of the Army, *Army Strategic Planning Guidance 2013*, (Washington, DC: U. S. Department of the Army, 2013, 10.

⁹⁶ Ibid.

⁹⁷ U. S. Army War College and Carlisle Barracks, *How The Army Runs: A Senior Leader Reference Handbook 20011-2012*, (Carlisle, PA: U. S. Army War College and Carlisle Barracks, October 2011), 124; "Readiness Discussion with the Under Secretary of the Army" version 5, Draft Narrative attached to briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 4.

⁹⁸ HQDA G3/5/7, "Readiness Discussion with the Under Secretary of the Army" version 5, briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 4.; HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 5.

⁹⁹ Army Unit Status Reporting and Force Registration – Consolidated Policies, Army Regulation 220-1 (Washington, DC: U.S. Department of the Army, April 15, 2010), 12-13.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Merriam-Webster Dictionary, http://www.merriam-webster.com/, (assessed March 6, 2013).

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ Mr. Christopher Reddish (FORSCOM), e-mail message to author with draft CRP feedback attachment, February 20, 2013.

[108] Mr. Christopher Reddish (FORSCOM), e-mail message to author with draft CRP feedback attachment, February 20, 2013. FORSCOM G3/5/7 staff "murder boarded" this paper and offered this definition.

[109] Army Force Generation, Army Regulation 525-29 (Washington, DC: U.S. Department of the Army, March 14, 2011), 4.

[110] HQDA G3/5/7, "Army Strategic Readiness Development of AR 525-XX-B", briefing slides without commentary, HQDA G3/5/7 DAMO/ODR, Washington, DC, January 4, 2013, 14.

[111] Ibid, 15.

[112] Ibid, 14.

[113] Ibid.

[114] FORSCOM G3/5/7, "CG FORSCOM Proposed Concept for Measuring Readiness", briefing slides without commentary, FORSCOM G3/5/7, Fort Bragg, NC, August 10, 2012, 4.

[115] Ibid.

[116] Ibid.