



ATEC Project No. 2014-DT-DPG-JSLIO-F9839
WDTC Document No. WDTC-RR-15-013



DEPARTMENT OF THE ARMY
U.S. ARMY DUGWAY PROVING GROUND
DUGWAY, UTAH 84022-5000

TEST RECORD
FOR THE
JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST)
DURABILITY TESTING EVENT

Brief Description of Test: Durability Testing Event to accumulate wear hours on Joint Service Lightweight Integrated Suit Technology (JSLIST) chemical and biological (CB) protective over-garments (OG).

Type Test and Item: JSLIST

Location of Test:
Fort Stewart, Georgia

Dates of Test: 25 August through 23 October 2014

Authority: On 20 March 2014, US Army Test and Evaluation Command (ATEC), Aberdeen Proving Ground (APG), Maryland, issued a test directive through the ATEC Decision Support System (ADSS) authorizing West Desert Test Center (WDTC), US. Army Dugway Proving Ground (DPG), Utah, to conduct the JSLIST Durability Testing Event, ATEC Project Number 2014-DT-DPG-JSLIO-F9839.

1. TEST ITEM(S)

a. The Joint Service Lightweight Integrated Suit Technology (JSLIST) (Figure 2.1) is a two-piece garment design intended to provide the user with limited protection from a Chemical and Biological (CB) and/or radioactive environment. The suit includes a two-piece over-garments (OG), overboots, and gloves. The JSLIST was developed to reduce heat buildup and allow for longer wear in a contaminated environment. The JSLIST was designed to be washable and to work with masks and other protective gear.

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DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY DUGWAY PROVING GROUND
DUGWAY, UT 84022-5000

TEDT-DPW-WD

9 December 2014

MEMORANDUM FOR US Army Test and Evaluation Command (ATEC), US Army Evaluation Center (AEC) Soldier and Support Systems Evaluation Directorate (TEAE-SS/M. Cross), 2202 Aberdeen Blvd, Aberdeen Proving Ground, MD 21005

SUBJECT: Test Record for the Joint Service Lightweight Integrated Suit Technology (JSLIST) Durability Testing Event, ATEC Project Number 2014-DT-DPG-JSLI0-F9839, West Desert Test Center (WDTC) Document Number WDTC-RR-15-013

1. Subject document is forwarded to you for approval.
2. The point of contact is Joseph H. Giese, DSN 789-5362, commercial (435) 831-5362, or email joseph.h.giese.civ@mail.mil.
3. TEAM DUGWAY – Empowering the Nation’s Defenders!

Encl

E-Signed by HARRIS, RYAN, WADE, 1152106692, 11/10/14 10:00:00 AM
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RYAN W. HARRIS
Director, West Desert Test Center

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b. The coat is hip length and has a front, two-way zipper closure with protective flap and an attached hood. A strip of silicone is located on the inside hem of the hood, and an adjustable elastic draw cord is located around the face opening of the hood. The sleeves are a raglan design, and the left sleeve has a bellow-type pocket and flap. Hook-and-loop closure tabs are used to secure the coat at the wrist and forearm, and a strip of silicone is located on the inside hem of the sleeve. The bottom of the coat has an inner skirt with gripper elastic and an elastic draw cord at the bottom of the outer coat. An elastic cord is drawn between the legs at center back and secured in the adjustable coat retention cord holder at center front.

c. The trousers have a high-rise waist design with a zipper front and a single snap-protective flap. Gripper elastic is located on the inside hem of the waist, and elasticized waist adjustment tabs are located on the outside of the trousers. The legs have bellow-type cargo pockets with flaps and hook-and-loop flap fasteners. Hook-and-loop closure tabs are used to secure the leg at the ankle and calf, and a strip of silicone is located on the inside hem of the leg.

2. SUPPORTING MATERIEL, FACILITIES, AND INSTRUMENTATION

a. Facilities. Not applicable.

b. Instrumentation. Not applicable.

3. TEST OBJECTIVE

Determine the effects of degradation and deterioration from storage on the JSLIST CB-protective OGs, with an objective of 240 hours of continuous use through a comparative study using three age configurations.

4. SCOPE

(1) JSLIST age configurations represented three ages from throughout the JSLIST inventory, including zero-year-old (new), 10-year-old, and 15-year-old suits.

(2) There were 45 JSLIST suits, each of which were worn up to 40 hours per week.

(3) Up to 240 hours were accrued per suit.

(4) The test participants (TPs) wore the suits while performing normal daily activities. Daily activities included operationally relevant activities and exercises consistent with the military occupational specialty (MOS) of US Army Soldiers.

(5) The suits were laundered at least once after 120 hours of wear has been completed by the TPs.

5. DETAILS OF TEST

a. Before testing began, test items [JSLIST suits, JSLIST Block 2 Glove Upgrade-non flame resistant (JB2GU-nFR) gloves, and alternative footwear solutions (AFS) or active lightweight overboot (ALO) boots] were in condition code “A” (undamaged and fit for wear). Each ensemble was inspected at the staging area and assigned a test item control number (TICN).

b. All test participants (TPs) were sized and fitted for suits, boots, and gloves in accordance with (IAW) system specifications.

c. JSLIST garments were laundered at least once during the testing event after 120 hours of wear had been achieved. Laundering capability was required on site or within close proximity.

d. TPs wore all OGs while performing operationally relevant activities and exercises, consistent with the MOS of US Army Soldiers. Engaging in strenuous but realistic planned exercises was encouraged to accelerate the wear on the test items.

e. All specific wear activities were defined by the TP unit. The type and amount of wear was the same across the three age configurations (0, 10, and 15 years).

f. TPs donned the JB2GU-nFR gloves and AFS or ALO boots during select periods of the test event.

g. TPs donned protective masks during select periods of the test event. Masks were not required to be worn at all times.

h. JSLIST suits, JB2GU-nFR gloves, and AFS or ALO boots were visually inspected weekly for defects and indications of wear.

i. TPs used daily wear log forms to record the duration the suit was worn, activities performed, and notes (observations). Daily wear log forms were gathered at the company level and delivered to the test data collector one to two times a week.

j. Daily wear log forms were consolidated into a weekly wear summary. The weekly wear summary was transmitted to the test officer (TO)/data manager and uploaded to the Test Mission Support System (TMSS).

k. Six TPs (TPO1, TP02, TP04, TP06, TP11, and TP12) were assigned independent of DPG to support the UIPE durability effort for Product Manager UIPE. The TPs wore the UIPE suites for five weeks. This data was captured by PM UIPE.

6. TEST DATA

Summary data are in Tables 1.1 through 1.4 and Figure 1.1 (Enclosure 1).

7. SUMMARY OF RESULTS

Suit wear and tear summary is in Table 1.1.

8. OBSERVATIONS/REMARKS/VISITORS

None.

SUBMITTED BY:

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Joseph H Giese Date
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RYAN W. HARRIS Date
Director, West Desert Test Center

4 Encls

1. Data
2. References
3. Abbreviations
4. Distribution List

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Joint Program Manager-Protection; Joint Program Manager-Protection (JPM-P), 50 Tech
Pky, Suite 301 Stafford, VA.**

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ENCLOSURE 1. DATA

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FIGURE

1.1 Number of Suit Components Tested by Age of Suit; JSLIST Durability Testing Event.....	1-16
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Table 1.1. Suit Details for Weeks 1 Through 5; JSLIST Durability Testing Event.

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP01	UIPE	UIPE	UIPE		New ^c
TP02	UIPE	UIPE	UIPE		New
TP03	PCPET-JSL00-C010	PCPET-JSL00-T018	JSLIST	LR/LR	0/0
TP04	UIPE	UIPE	UIPE		New
TP05	PCPET-JSL00-C018	PCPET-JSL00-T009	JSLIST	ML/ML	0/0
TP06	UIPE	UIPE	UIPE		New
TP07	PCPET-JSL10-C013	PCPET-JSL10-T010	JSLIST	XLR/XLR	10/10
TP08	PCPET-JSL15-C008	PCPET-JSL15-T020	JSLIST	SS/SS	15/15
TP09	PCPET-JSL10-C008	PCPET-JSL10-T008	JSLIST	LL/LL	10/10
TP10	PCPET-JSL15-C014	PCPET-JSL15-T017	JSLIST	MR/MR	15/15
TP11	UIPE	UIPE	UIPE		New
TP12	UIPE	UIPE	UIPE		New
TP13	PCPET-JSL10-C007	PCPET-JSL15-T014	JSLIST	LR/LR	10/15
TP14	PCPET-JSL10-C009	PCPET-JSL10-T017	JSLIST	ML/ML	10/10
TP15	PCPET-JSL15-C006	PCPET-JSL10-T002	JSLIST	LR/LR	15/10
TP16	PCPET-JSL15-C012	PCPET-JSL15-T018	JSLIST	MR/MR	15/15
TP17	PCPET-JSL00-C003	PCPET-JSL00-T022	JSLIST	LL/LL	0/0
TP18	PCPET-JSL00-C002	PCPET-JSL00-T004	JSLIST	XLL/XLL	0/0
TP19	PCPET-JSL10-C006	PCPET-JSL15-T004	JSLIST	MS/MS	10/15
	PCPET-JSL14-C015	PCPET-JSL15-T004	JSLIST	MS	15/15

Table 1.1. Suit Details for Weeks 1 Through 5; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP20	PCPET-JSL15-C003	PCPET-JSL10-T003	JSLIST	LR/LR	15/10
TP21	PCPET-JSL10-C018	PCPET-JSL15-T016	JSLIST	LR/LR	10/15
TP22	PCPET-JSL00-C015	PCPET-JSL00-T006	JSLIST	MR/MR	0/0
TP23	PCPET-JSL10-C012	PCPET-JSL15-T009	JSLIST	LR/LR	10/15
TP24	PCPET-JSL15-C021	PCPET-JSL15-T021	JSLIST	MR/MR	15/15
TP25	PCPET-JSL10-C012	PCPET-JSL10-T016	JSLIST	XLR/XLR	10/10
TP26	PCPET-JSL00-C020	PCPET-JSL00-T013	JSLIST	XLR/XLR	0/0
TP27	PCPET-JSL10-C017	PCPET-JSL15-T013	JSLIST	LR/LR	10/15
TP28	PCPET-JSL10-C001	PCPET-JSL10-T011	JSLIST	XLL/XLL	10/10
TP29	PCPET-JSL00-C009	PCPET-JSL00-T005	JSLIST	MR/MR	0/0
TP30	PCPET-JSL15-C011	PCPET-JSL10-T014	JSLIST	MR/MR	15/10
TP31	PCPET-JSL10-C015	PCPET-JSL15-T012	JSLIST	LR/LR	10/15
TP32	PCPET-JSL15-C007	PCPET-JSL15-T002	JSLIST	MR/MR	15/15
TP33	PCPET-JSL15-C005	PCPET-JSL15-T006	JSLIST	SS/SS	15/15
TP34	PCPET-JSL00-C007	PCPET-JSL00-T011	JSLIST	SS/SS	0/0
TP35	PCPET-JSL15-C004	PCPET-JSL10-T011	JSLIST	LR/LR	15/10
TP36	PCPET-JSL15-C009	PCPET-JSL15-T001	JSLIST	MR/MR	15/15
TP37	PCPET-JSL00-C011	PCPET-JSL00-T016	JSLIST	LR/LR	0/0
TP38	PCPET-JSL15-C022	PCPET-JSL10-T013	JSLIST	MR/MR	15/10
TP39	PCPET-JSL00-C019	PCPET-JSL00-T012	JSLIST	SS/SS	0/0
TP40	PCPET-JSL00-C017	PCPET-JSL00-T020	JSLIST	LL/LL	0/0

Table 1.1. Suit Details for Weeks 1 Through 5; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP41	PCPET-JSL10-C014	PCPET-JSL15-T015	JSLIST	MR/LR	10/15
TP42	PCPET-JSL00-C016	PCPET-JSL00-T007	JSLIST	MR/MR	0/0
TP43	PCPET-JSL15-C020	PCPET-JSL15-T019	JSLIST	MS/MS	15/15
TP44	PCPET-JSL00-C008	PCPET-JSL00-T017	JSLIST	LR/LR	0/0
TP45	PCPET-JSL15-C019	PCPET-JSL10-T006	JSLIST	LR/LR	15/10
TP46	PCPET-JSL00-C006	PCPET-JSL00-T003	JSLIST	MR/MR	0/0

^aUIPE – uniform integrated protective ensemble; JSLIST – Joint Service Lightweight Integrated Suit Technology.

^bLL – large long; LR – large regular; MR – medium regular; MS – medium short; SS – small short; XLL – extra large long; XLR – extra large regular.

^cThe test participant wore new UIPE suits for the first 5 weeks as part of an excursion for the Joint Project Manager-Protection (JPM-P).

Table 1.2. Suit Details for Weeks 6 Through 8; JSLIST Durability Testing Event.

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP01	PCPET-JSL00-C012	PCPET-JSL00-T004	JSLIST	MR/MS	0/0
TP02	PCPET-JSL00-C022	PCPET-JSL00-T008	JSLIST	MR/MR	0/0
TP03	PCPET-JSL00-C010	PCPET-JSL00-T018	JSLIST	LR/LR	0/0
TP04	PCPET-JSL15-C013	PCPET-JSL15-T022	JSLIST	MR/MR	15/15
TP05	PCPET-JSL00-C018	PCPET-JSL00-T009	JSLIST	ML/ML	0/0
TP06	PCPET-JSL15-C001	PCPET-JSL15-T011	JSLIST	LR/LR	15/15
TP07	PCPET-JSL10-C013	PCPET-JSL10-T010	JSLIST	XLR/XLR	10/10
TP08	PCPET-JSL15-C008	PCPET-JSL15-T020	JSLIST	SS/SS	15/15
TP09	PCPET-JSL10-C008	PCPET-JSL10-T008	JSLIST	LL/LL	10/10
TP10	PCPET-JSL15-C014	PCPET-JSL15-T017	JSLIST	MR/MR	15/15
TP11	PCPET-JSL15-C023	PCPET-JSL15-T008	JSLIST	LR/LR	15/15
TP12	PCPET-JSL15-C024	PCPET-JSL15-T023	JSLIST	MR/MR	15/15
TP13	PCPET-JSL10-C007	PCPET-JSL15-T014	JSLIST	LR/LR	10/15
TP14	PCPET-JSL10-C009	PCPET-JSL10-T017	JSLIST	ML/ML	10/10
TP15	PCPET-JSL15-C006	PCPET-JSL10-T002	JSLIST	LR/LR	15/10
TP16	PCPET-JSL15-C012	PCPET-JSL15-T018	JSLIST	MR/MR	15/15
TP17	PCPET-JSL00-C003	PCPET-JSL00-T022	JSLIST	LL/LL	0/0
TP18	PCPET-JSL00-C002	PCPET-JSL00-T004	JSLIST	XLL/XLL	0/0

Table 1.2. Suit Details for Weeks 6 Through 8; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP19	PCPET-JSL10-C006/ PCPET-JSL14-C015	PCPET-JSL15-T004	JSLIST	MS/MS	10/15
TP20	PCPET-JSL15-C003	PCPET-JSL10-T003	JSLIST	LR/LR	15/10
TP21	PCPET-JSL10-C018	PCPET-JSL15-T016	JSLIST	LR/LR	10/15
TP22	PCPET-JSL00-C015	PCPET-JSL00-T006	JSLIST	MR/MR	0/0
TP23	PCPET-JSL10-C012	PCPET-JSL15-T009	JSLIST	LR/LR	10/15
TP24	PCPET-JSL15-C021	PCPET-JSL15-T021	JSLIST	MR/MR	15/15
TP25	PCPET-JSL10-C012	PCPET-JSL10-T016	JSLIST	XLR/XLR	10/10
TP26	PCPET-JSL00-C020	PCPET-JSL00-T013	JSLIST	XLR/XLR	0/0
TP27	PCPET-JSL10-C017	PCPET-JSL15-T013	JSLIST	LR/LR	10/15
TP28	PCPET-JSL10-C001	PCPET-JSL10-T011	JSLIST	XLL/XLL	10/10
TP29	PCPET-JSL00-C009	PCPET-JSL00-T005	JSLIST	MR/MR	0/0
TP30	PCPET-JSL15-C011	PCPET-JSL10-T014	JSLIST	MR/MR	15/10
TP31	PCPET-JSL10-C015	PCPET-JSL15-T012	JSLIST	LR/LR	10/15
TP32	PCPET-JSL15-C007	PCPET-JSL15-T002	JSLIST	MR/MR	15/15
TP33	PCPET-JSL15-C005	PCPET-JSL15-T006	JSLIST	SS/SS	15/15
TP34	PCPET-JSL00-C007	PCPET-JSL00-T011	JSLIST	SS/SS	0/0
TP35	PCPET-JSL15-C004	PCPET-JSL10-T011	JSLIST	LR/LR	15/10
TP36	PCPET-JSL15-C009	PCPET-JSL15-T001	JSLIST	MR/MR	15/15
TP37	PCPET-JSL00-C011	PCPET-JSL00-T016	JSLIST	LR/LR	0/0
TP38	PCPET-JSL15-C022	PCPET-JSL10-T013	JSLIST	MR/MR	15/10

Table 1.2. Suit Details for Weeks 6 Through 8; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Suit Details		
	Suit Coat	Suit Pants	Type ^a	Coat Size/Pant Size ^b	Coat Age/Pant Age (years)
TP39	PCPET-JSL00-C019	PCPET-JSL00-T012	JSLIST	SS/SS	0/0
TP40	PCPET-JSL00-C017	PCPET-JSL00-T020	JSLIST	LL/LL	0/0
TP41	PCPET-JSL10-C014	PCPET-JSL15-T015	JSLIST	MR/LR	10/15
TP42	PCPET-JSL00-C016	PCPET-JSL00-T007	JSLIST	MR/MR	0/0
TP43	PCPET-JSL15-C020	PCPET-JSL15-T019	JSLIST	MS/MS	15/15
TP44	PCPET-JSL00-C008	PCPET-JSL00-T017	JSLIST	LR/LR	0/0
TP45	PCPET-JSL15-C019	PCPET-JSL10-T006	JSLIST	LR/LR	15/10
TP46	PCPET-JSL00-C006	PCPET-JSL00-T003	JSLIST	MR/MR	0/0

^aJoint Service Lightweight Integrated Suit Technology.

^bLL – large long; LR – large regular; MR – medium regular; MS – medium short; SS – small short; XLL – extra large long; XLR – extra large regular.

Table 1.3. Suit Summary Test Results for All Weeks; JSLIST Durability Testing Event.

Test Participant Identification	Test Item Control Number (TICN)		Hours of Use by Activity						Wear and Tear to Suit (Yes/No)	
	Suit Coat	Suit Pants	Sitting	Normal MOS ^a	PT ^b	Chem ^c	Other ^d	Total	Coat	Pants
TP01 ^e	PCPET-JSL00-C012	PCPET-JSL00-T004	0	118	4	0	0	122	No	No
TP02 ^e	PCPET-JSL00-C022	PCPET-JSL00-T008	0	123	0	0	0	123	No	No
TP03	PCPET-JSL00-C010	PCPET-JSL00-T018	9	111	0	0	0	120	No	No
TP04 ^e	PCPET-JSL15-C013	PCPET-JSL15-T022	0	120	0	0	0	120	No	No
TP05 ^f	PCPET-JSL00-C018	PCPET-JSL00-T009	0	28	0	0	0	28	No	No
TP06 ^e	PCPET-JSL15-C001	PCPET-JSL15-T011	0	117	3	0	0	120	No	No
TP07	PCPET-JSL10-C013	PCPET-JSL10-T010	55	185	3	0	0	243	No	Yes
TP08	PCPET-JSL15-C008	PCPET-JSL15-T020	56	184	0	0	0	240	No	No
TP09	PCPET-JSL10-C008	PCPET-JSL10-T008	43	197	0	0	0	240	No	Yes
TP10	PCPET-JSL15-C014	PCPET-JSL15-T017	55	179	0	0	6	240	No	Yes
TP11 ^e	PCPET-JSL15-C023	PCPET-JSL15-T008	0	119	1	0	0	120	No	No
TP12 ^e	PCPET-JSL15-C024	PCPET-JSL15-T023	0	126	1	0	0	127	No	No
TP13	PCPET-JSL10-C007	PCPET-JSL15-T014	54	186	0	0	0	240	No	No
TP14	PCPET-JSL10-C009	PCPET-JSL10-T017	74	166	0	0	0	240	No	No
TP15	PCPET-JSL15-C006	PCPET-JSL10-T002	73	160	4	0	7	244	No	Yes
TP16	PCPET-JSL15-C012	PCPET-JSL15-T018	66	146	3	0	10	225	No	No
TP17	PCPET-JSL00-C003	PCPET-JSL00-T022	76	164	0	0	0	240	No	Yes
TP18	PCPET-JSL00-C002	PCPET-JSL00-T004	77	163	2	0	0	242	No	No

Table 1.3. Suit Summary Test Results for All Weeks; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Hours of Use by Activity						Wear and Tear to Suit (Yes/No)	
	Suit Coat	Suit Pants	Sitting	Normal MOS ^a	PT ^b	Chem ^c	Other ^d	Total	Coat	Pants
TP19	PCPET-JSL10-C006	Not applicable (NA)	15	16	0	0	16	47	Yes	NA
	PCPET-JSL14-C015	NA	44	75	0	0	2	121	No	NA
	NA	PCPET-JSL15-T004	59	91	0	0	18	168	NA	No
TP20	PCPET-JSL15-C003	PCPET-JSL10-T003	15	222	4	0	0	241	No	No
TP21	PCPET-JSL10-C018	PCPET-JSL15-T016	52	188	0	0	0	240	No	No
TP22	PCPET-JSL00-C015	PCPET-JSL00-T006	56	114	0	11	59	240	No	Yes
TP23	PCPET-JSL10-C012	PCPET-JSL15-T009	55	100	21	0	65	241	No	No
TP24	PCPET-JSL15-C021	PCPET-JSL15-T021	54	111	0	0	75	240	No	No
TP25	PCPET-JSL10-C012	PCPET-JSL10-T016	44	145	0	0	52	241	No	No
TP26	PCPET-JSL00-C020	PCPET-JSL00-T013	37	199	0	0	5	240	No	Yes
TP27	PCPET-JSL10-C017	PCPET-JSL15-T013	36	204	0	0	0	240	No	Yes
TP28	PCPET-JSL10-C001	PCPET-JSL10-T011	72	168	10	0	0	249	Yes	No
TP29	PCPET-JSL00-C009	PCPET-JSL00-T005	36	196	12	0	0	243	No	Yes
TP30	PCPET-JSL15-C011	PCPET-JSL10-T014	124	122	2	0	0	248	No	Yes
TP31	PCPET-JSL10-C015	PCPET-JSL15-T012	21	83	0	0	21	124	No	Yes
TP32	PCPET-JSL15-C007	PCPET-JSL15-T002	37	16	0	0	187	240	No	Yes
TP33	PCPET-JSL15-C005	PCPET-JSL15-T006	94	156	0	0	0	250	No	No
TP34	PCPET-JSL00-C007	PCPET-JSL00-T011	34	25	0	16	165	240	No	No
TP35	PCPET-JSL15-C004	PCPET-JSL10-T011	47	13	2	0	179	240	No	No
TP36	PCPET-JSL15-C009	PCPET-JSL15-T001	50	24	0	0	167	240	No	No

Table 1.3. Suit Summary Test Results for All Weeks; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Hours of Use by Activity						Wear and Tear to Suit (Yes/No)	
	Suit Coat	Suit Pants	Sitting	Normal MOS ^a	PT ^b	Chem ^c	Other ^d	Total	Coat	Pants
TP37	PCPET-JSL00-C011	PCPET-JSL00-T016	129	41	0	0	77	247	No	No
TP38	PCPET-JSL15-C022	PCPET-JSL10-T013	35	122	0	0	89	245	No	No
TP39	PCPET-JSL00-C019	PCPET-JSL00-T012	34	212	0	0	0	246	No	No
TP40	PCPET-JSL00-C017	PCPET-JSL00-T020	86	44	0	9	102	241	No	No
TP41	PCPET-JSL10-C014	PCPET-JSL15-T015	153	55	0	0	33	241	No	No
TP42	PCPET-JSL00-C016	PCPET-JSL00-T007	74	157	0	0	16	247	No	No
TP43	PCPET-JSL15-C020	PCPET-JSL15-T019	122	87	0	0	31	240	No	No
TP44	PCPET-JSL00-C008	PCPET-JSL00-T017	113	88	3	1	41	246	No	No
TP45	PCPET-JSL15-C019	PCPET-JSL10-T006	60	36	0	12	79	187	No	No
TP46	PCPET-JSL00-C006	PCPET-JSL00-T003	43	77	0	0	0	120	No	No

^aMilitary occupational specialty.

^bPhysical training.

^cChemical-specific training.

^dOther nonsedentary.

^eTest participant started wearing the Joint Service Lightweight Integrated Suit Technology (JSLIST) in Week 6.

^fTest participant TP05 was replaced with TP46 because of a medical issue.

Table 1.4. Comments and Observation of Suit Wear by Week; JSLIST Durability Testing Event.

Test Participant Identification	Test Item Control Number (TICN)		Wear Week	Comments/Observations
	Suit Coat	Suit Pants		
TP01	PCPET-JSL00-C012	PCPET-JSL00-T004	6	TP01 wore the uniform integrated protective ensemble (UIPE) in weeks 1 through 5. TP01 wore the Joint Service Lightweight Integrated Suit Technology (JSLIST) in weeks 6 through 8.
TP02	PCPET-JSL00-C022	PCPET-JSL00-T008	6	TP02 wore the UIPE in weeks 1 through 5. TP02 wore the JSLIST in weeks 6 through 8.
TP03	PCPET-JSL00-C010	PCPET-JSL00-T018	3	TP03 did not wear suit.
TP04	PCPET-JSL15-C013	PCPET-JSL15-T022	6	TP04 wore the UIPE in weeks 1 through 5. TP04 wore the JSLIST in weeks 6 through 8.
TP05	PCPET-JSL00-C018	PCPET-JSL00-T009	3	TP05 had skin issues and was unable to proceed. TP05 was replaced with TP46 and replacement gear.
			4	
			5	
			7	
			8	
TP06	PCPET-JSL15-C001	PCPET-JSL15-T011	6	TP06 wore the UIPE in weeks 1 through 5. TP06 wore the JSLIST in weeks 6 through 8.
TP07	PCPET-JSL10-C013	PCPET-JSL10-T010	8	During the turn-in inspection, it was noted that the stitching was coming undone on the right trouser cuff.
TP08	PCPET-JSL15-C008	PCPET-JSL15-T020	1	It was noted that an oil spot was on the right shin of pants.
			2	It was noted that motor oil was on the coat and pants.
TP09	PCPET-JSL10-C008	PCPET-JSL10-T008	2	It was noted that the outer top button on pants was broken.

Table 1.4. Comments and Observation of Suit Wear by Week; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Number (TICN)		Wear Week	Comments/Observations
	Suit Coat	Suit Pants		
TP10	PCPET-JSL15-C014	PCPET-JSL15-T017	8	During the turn-in inspection, it was noted that there was a tear in pants seam at base of zipper.
TP11	PCPET-JSL15-C023	PCPET-JSL15-T008	6	TP11 wore the UIPE in weeks 1 through 5. TP11 wore the JSLIST in weeks 6 through 8.
TP12	PCPET-JSL15-C024	PCPET-JSL15-T023	6	TP12 wore the UIPE in weeks 1 through 5. TP12 wore the JSLIST in weeks 6 through 8.
TP13	PCPET-JSL10-C007	PCPET-JSL15-T014	All	None.
TP14	PCPET-JSL10-C009	PCPET-JSL10-T017	All	None.
TP15	PCPET-JSL15-C006	PCPET-JSL10-T002	4	It was noted that the back strap was damaged, but the suit was still wearable.
			6	TP15 did not wear suit because of a training commitment.
TP16	PCPET-JSL15-C012	PCPET-JSL15-T018	All	None.
TP17	PCPET-JSL00-C003	PCPET-JSL00-T022	4	Elastic waistband on pants was damaged, but the suit was still wearable.
TP18	PCPET-JSL00-C002	PCPET-JSL00-T004	6	TP18 did not wear suit because of a training commitment.
TP19	PCPET-JSL10-C006/ PCPET-JSL14-C015	PCPET-JSL15-T004	1	The zipper on the coat broke. The coat was reissued at close of business (COB) on 5 September 2014. The new coat (PCPET-JSL10-C006) was 10 years old and the pants were 15 years old.
			6	TP19 did not wear suit because of a training commitment.

Table 1.4. Comments and Observation of Suit Wear by Week; JSLIST Durability Testing Event (Cont'd).

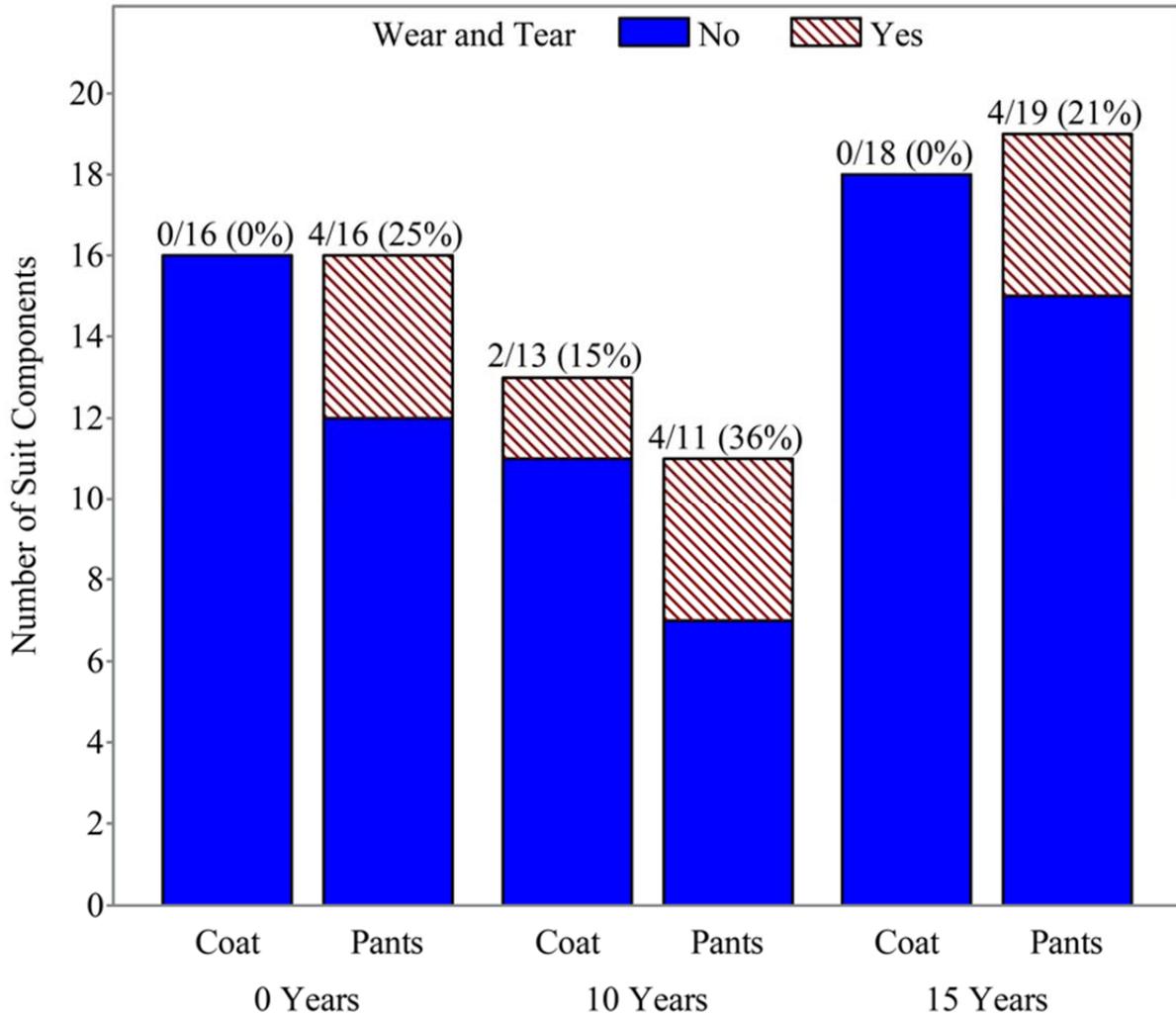
Test Participant Identification	Test Item Control Numbers (TICN)		Wear Week	Comments/Observations
	Suit Coat	Suit Pants		
TP20	PCPET-JSL15-C003	PCPET-JSL10-T003	4	TP20 did not wear the suit because of medical issues.
TP21	PCPET-JSL10-C018	PCPET-JSL15-T016	All	None.
TP22	PCPET-JSL00-C015	PCPET-JSL00-T006	4	It was noted that the elastic waistband of the trouser was damaged.
			6	TP22 did not wear suit because of a training commitment.
TP23	PCPET-JSL10-C012	PCPET-JSL15-T009	6	TP23 did not wear suit because of a training commitment.
TP24	PCPET-JSL15-C021	PCPET-JSL15-T021	6	TP24 did not wear suit because of a training commitment.
TP25	PCPET-JSL10-C012	PCPET-JSL10-T016	6	TP25 did not wear suit because of a training commitment.
TP26	PCPET-JSL00-C020	PCPET-JSL00-T013	3	It was noted that the elastic on the waist band was coming undone.
			4	It was noted that the elastic on the pants waistband was damaged, but the suit was still wearable. Right boot cuff was frayed.
TP27	PCPET-JSL10-C017	PCPET-JSL15-T013	2	It was noted that the suspender was ripped.
			4	It was noted that the button had popped out from the trouser snap.
TP28	PCPET-JSL10-C001	PCPET-JSL10-T011	4	It was noted that the coat zipper fabric handle was coming unstitched.
			7	TP28 did not wear suit because of a training commitment.

Table 1.4. Comments and Observation of Suit Wear by Week; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Numbers (TICN)		Wear Week	Comments/Observations
	Suit Coat	Suit Pants		
TP29	PCPET-JSL00-C009	PCPET-JSL00-T005	4	It was noted that the elastic waistband on pants was damaged, but the suit was still wearable. Right and left boot cuffs were frayed.
TP30	PCPET-JSL15-C011	PCPET-JSL10-T014	3	It was noted that the left bottom ankle strap stitching was coming undone.
			6	None.
			7	TP30 did not wear suit because of a training commitment.
TP31	PCPET-JSL10-C015	PCPET-JSL15-T012	3	TP31 did not wear suit because of medical reasons; waiting on replacement. During week 4, it was noted that the left trouser cuff was frayed.
			4	
			5	
			6	
			7	TP31 did not wear suit because of a training commitment.
TP32	PCPET-JSL15-C007	PCPET-JSL15-T002	7	After the 240-hour wear time, an inspection of the suit revealed that there was a pants seam tear at base of fly.
TP33	PCPET-JSL15-C005	PCPET-JSL15-T006	6	None.
TP34	PCPET-JSL00-C007	PCPET-JSL00-T011	All	None.
TP35	PCPET-JSL15-C004	PCPET-JSL10-T011	6	TP35 did not wear suit because of a training commitment.
TP36	PCPET-JSL15-C009	PCPET-JSL15-T001	All	None.
TP37	PCPET-JSL00-C011	PCPET-JSL00-T016	All	None.

Table 1.4. Comments and Observation of Suit Wear by Week; JSLIST Durability Testing Event (Cont'd).

Test Participant Identification	Test Item Control Numbers (TICN)		Wear Week	Comments/Observations
	Suit Coat	Suit Pants		
TP38	PCPET-JSL15-C022	PCPET-JSL10-T013	7	TP38 did not wear suit because of training a commitment.
TP39	PCPET-JSL00-C019	PCPET-JSL00-T012	All	None.
TP40	PCPET-JSL00-C017	PCPET-JSL00-T020	6	None.
			7	TP40 did not wear suit because of a training commitment.
TP41	PCPET-JSL10-C014	PCPET-JSL15-T015	All	None.
TP42	PCPET-JSL00-C016	PCPET-JSL00-T007	4	TP42 was on leave.
TP43	PCPET-JSL15-C020	PCPET-JSL15-T019	All	None.
TP44	PCPET-JSL00-C008	PCPET-JSL00-T017	All	None.
TP45	PCPET-JSL15-C019	PCPET-JSL10-T006	5	An exploding can of WD40 [®] (Rocket Chemical Company, San Diego, California) sprayed oil on the uniform (non-issue).
TP46	PCPET-JSL00-C006	PCPET-JSL00-T003	3	No data were collected for this suit.
			6	TP46 did not wear suit because of a training commitment.



- NOTES:**
1. The numbers above the bars are the number of suit components showing signs of wear-and-tear/the total number of suit components, and the percent in parentheses is simply that fraction expressed as a percentage.
 2. The 0 years means the suits were new, 10 years means the suits sat on the shelf for 10 years, and 15 years means the suits sat on a shelf for 15 years.

Figure 1.1. Number of Suit Components Tested by Age of Suit; JSLIST Durability Testing Event.

ENCLOSURE 2. ILLUSTRATION



Figure 2.2. Suit Ensemble; JSLIST Durability Testing Event.

ENCLOSURE 3. ABBREVIATIONS

ADSS – ATEC Decision Support System

AFS – alternative footwear solutions

ALO – action lightweight overboot

APG – Aberdeen Proving Ground

ATEC – US Army Test and Evaluation Command

CB – chemical and biological

COB – close of business

DPG – US Army Dugway Proving Ground

IAW – in accordance with

JB2GU-nFR – JSLIST Block 2 Glove Upgrade-non flame resistant

JPM-P – Joint Project Manager-Protection

JSLIST – Joint Service Lightweight Integrated Suit Technology

LL – large long

LR – large regular

MOS – military occupational specialty

MR – medium regular

MS – medium short

NA – not applicable

OG – overgarment

PT – physical training

SS – small short

TICN – test item control number

TMSS – Test Mission Support System.

TO – test officer

TP – test participant

UIPE – uniform integrated protective ensemble

WDTC – West Desert Test Center

XLR – extra large regular

XXL – extra large long

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