HREAT VECTORS		LIKELIHOC	D		IMPACT	
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component completed by: Joel Rothschild, FVAP Data extracted.	what percei think the th realized ANI effect? Prov maximum v of values as be realized effect in [m the time bu low as [mini	ext of a Federa ntage of the tir reat would be D have an obs ide minimum alues. Interpre "I think this the AND have an obst likely] pero this estimate mum] % and a %." (numbers into 100)	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	assuming th what percei it have a lov	ext of a Feder le threat is re ntage of the t v, medium, a umbers shoul	ealized, time would and high
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High
TACKS						
INSIDER ATTACKS	0				_	_
Attacks Against VRDB Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;	0	0	2	100	0	0
Attacks to Voter's Assistance	0	0	2	100	0	0
Types of threat vectors: Intentional corruption by malicious insiders of information provided to voters (omission, false or incomplete statement, outdated information);						
Attacks to Voting Access	0	0	2	100	0	0
Types of threat vectors: Intentional failure at LEO to mail or misaddress registration form and instructions; Intentional failure at LEO to mail or misaddress registration rejections; Intentional addition of confusing language on registration form and instructions;						
Attacks by Denial of Service	0	0	2	100	0	0
Types of threat vectors: Intentional disruption of registration activities at LEO; Intentional disruption of transmission of registration materials; Intentional disruption of voter's ability to register;						
Attacks Against Registration Forms and Instructions	0	0	2	100	0	0
Types of threat vectors: Intentional modification at LEO of registration forms and instructions; Intentional destruction at LEO of registration forms and instructions; Intentional addition at LEO of fake registration forms and instructions;						
Attacks During Transmission of Registration Forms and Instructions						
Types of threat vectors: Intentional modification of registration forms and instructions during their transmission from LEO to the voters; Intentional destruction of registration forms and instructions during their transmission from LEO to the voters; Intentional addition of fake registration forms and instructions during transmission from LEO to the voters;						

THREAT VECTORS		LIKELIHOO	D		IMPACT		
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	restricted to paper ballots transmitted by postal mail, with no electronic component postal mail, with no electronic component maximum values. Interpret this range					alized, ime would	
Completed by: Joel Rothschild, FVAP Data extracted.	be realized a effect in [m the time bu low as [min	AND have an operations the second of the section of the section of the second of the s	observeable cent (%) of could be as as high as	it have a low, medium, and high impact? (numbers should sum to 100)			
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High	
Attacks During Transmission of Completed Registration Packets							
Types of threat vectors: Intentional modification of completed registration packets during their transmission from the voters to the LEO; Intentional destruction of completed registration packets during their transmission from the voters to the LEO; Intentional addition of fake completed registration packets during transmission from the voters to the LEO;							
Attacks Against Processing of Completed Registration Packets							
Types of threat vectors: Intentional modification of completed registration packets at the LEO; Intentional destruction of completed registration packets at the LEO; Intentional addition of fake completed registration packets at the LEO;							
Attacks During Transmission of Registration Rejections							
Types of threat vectors: Intentional modification of registration rejections during their transmission from LEO to the voters; Intentional destruction of registration rejections during their transmission from LEO to the voters; Intentional addition of fake registration rejections during transmission from LEO to the voters;							
OUTSIDER ATTACKS							
Attacks Against Voter's Assistance							
Types of threat vectors: Intentional corruption by malicious outsiders of information provided to voters (omission, false or incomplete statement, outdated information);							
Attacks Against Marking of Registration Forms							
Types of threat vectors: Coerced registration; Masqueraded registration; Vote buying; Pay voter not to vote; Ineligible registration;							
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	2	100	0	0	

REAT VECTORS		LIKELIHOO	D		IMPACT	
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component ompleted by: Joel Rothschild, FVAP ata extracted.	what perceithink the threalized AN effect? Proving aximum vof values as be realized effect in [mithe time bullow as [min]	ext of a Federa ntage of the tir reat would be D have an obsi ide minimum alues. Interpre "I think this th AND have an cost likely] perc this estimate mum] % and a %." (numbers	me do you most likely ervable and et this range areat would observeable tent (%) of could be as as high as	assuming the what percent it have a love	ext of a Feder ne threat is re ntage of the v, medium, a umbers shou	alized, time would nd high
Voting Step: REGISTRATION	Minimum Most Likely Maximum		Low	Medium	High	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;						
Errors in Voter's Assistance	100	100	100	100	0	0
Types of threat vectors: Erroneous information provided to voters (omission, false or incomplete statement, outdated information);						
Errors in Registration Forms and Instructions	0	0	2	100	0	0
Types of threat vectors: Accidental modification at LEO of registration forms and instructions; Accidental loss at LEO of registration forms and instructions; Accidental destruction at LEO of registration forms and instructions; Accidental addition at LEO of erroneous registration forms and instructions;						
Errors in Processing Completed Registration Packets	0	0	2	100	0	0
Types of threat vectors: Accidental modification of completed registration packets at the LEO; Accidental loss of completed registration packets at the LEO; Accidental destruction of completed registration packets at the LEO;						

THREAT VECTORS		LIKELIHOO	D		IMPACT				
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	restricted to paper ballots transmitted by postal mail, with no electronic component postal mail, with no electronic component postal mail with no electronic co				In the context of a Federal election, assuming the threat is realized, what percentage of the time would				
Completed by: Joel Rothschild, FVAP Data extracted.	be realized a effect in [mo the time but low as [mini	"I think this the AND have an object likely] percent this estimate mum] % and a %." (numbers into 100)	observeable ent (%) of could be as as high as	it have a low, medium, and high impact? (numbers should sum to 100)					
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High			
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS									
Errors in Transmission of Registration Forms and Instructions	1	3	10	100	0	0			
Types of threat vectors: Accidental modification of registration forms and instructions during their transmission from LEO to the voters; Accidental loss of registration forms and instructions during their transmission from LEO to the voters; Accidental destruction of registration forms and instructions during their transmission from LEO to the voters;									
Errors in Transmission of Completed Registration Packets	1	3	10	100	0	0			
Types of threat vectors: Accidental modification of completed registration packets during their transmission from the voters to the LEO; Accidental loss of completed registration packets during their transmission from the voters to the LEO; Accidental destruction of completed registration packets during their transmission from the voters to the LEO;									
Errors in Transmission of Registration Rejections	1	3	10	100	0	0			
Types of threat vectors: Accidental modification of registration rejections during their transmission from LEO to the voters; Accidental loss of registration rejections during their transmission from LEO to the voters; Accidental destruction of registration rejections during their transmission from LEO to the voters;									
ERRORS AT VOTER'S LOCATION									
Errors in Voting Access	1	3	5	100	0	0			
Types of threat vectors: Mail service nonexistent, irregular and/or unreliable; Ease-of-use and clarity of registration form and instructions;									
Errors in Obtaining Voter's Assistance	100	100	100	100	0	0			
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;									
Errors in Registration Application	100	100	100	100	0	0			

THREAT VECTORS		LIKELIHOC	DD		IMPACT		
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range what is the provide minimum and maximum values. Interpret this range what is the provide minimum and maximum values. Interpret this range what is the provide minimum and maximum values. Interpret this range what is the provide minimum and maximum values. Interpret this range what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range.					ral election, ealized, time would	
Completed by: Joel Rothschild, FVAP	be realized	AND have an	observeable	it have a low, medium, and high impact? (numbers should sum to			
Data extracted.	effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)			100)			
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High	
Types of threat vectors: Incorrect contact information provided to LEO; Registration packet incorrectly or illegibly completed/signed; Registration form lost or damaged; Registration packet incorrectly transmitted to LEO;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	1	3	5	99	1	0	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							
Disruptions by Environmental Events	0	1	3	99	1	0	
Types of threat vectors: Fire; Spill; Flooding;					•	•	
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0	
Types of threat vectors: Technical failure; Labor-related; Terrorism;							

HREAT VECTORS		LIKELIHOC	DD	IMPACT				
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	what perce think the th realized AN effect? Prov	ext of a Federa ntage of the ti great would be D have an obs vide minimum	me do you most likely servable and	In the context of a Federal election assuming the threat is realized,				
Completed by: Cyber Security Expert 4 Data extracted.	of values as be realized effect in [m the time bu low as [min	alues. Interpr "I think this t AND have an ost likely] pen t this estimate mum] % and %." (numbers n to 100)	hreat would observeable cent (%) of e could be as as high as	assuming the threat is realized, what percentage of the time wou it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High		
TACKS INSIDER ATTACKS								
Attacks Against VRDB	0	0	2	100	0	0		
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;								
Attacks to Voter's Assistance	0	0	2	100	0	0		
Types of threat vectors: Intentional corruption by malicious insiders of information provided to voters (omission, false or incomplete statement, outdated information);								
Attacks to Voting Access	0	0	2	100	0	0		
Types of threat vectors: Intentional failure at LEO to mail or misaddress absentee ballot request form and instructions; Intentional failure at LEO to mail or misaddress absentee ballot request rejections; Intentional failure at LEO to mail or misaddress absentee ballots; Intentional addition of confusing language on absentee ballot request form and instructions; Intentional addition of confusing language on instructions for marked ballot return;								
Attacks by Denial of Service	0	0	2	100	0	0		
Types of threat vectors: Intentional disruption of absentee ballot request activities at LEO; Intentional disruption of transmission of absentee ballot request materials; Intentional disruption of voter's ability to request an absentee ballot;								
Attacks Against Absentee Ballot Request Forms and Instructions	0	0	2	100	0	0		
Types of threat vectors: Intentional modification at LEO of absentee ballot request forms and instructions; Intentional destruction at LEO of absentee ballot request forms and instructions; Intentional addition at LEO of fake absentee ballot request forms and instructions;								

REAT VECTORS		LIKELIHOO	DD	IMPACT			
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component completed by: Cyber Security Expert 4 ata extracted.	what perce think the the realized AN effect? Pro- maximum of values as be realized effect in [m the time bu low as [min	ext of a Federa ntage of the t treat would be to have an ob- vide minimum "I think this t AND have an post likely] per it this estimat imum] % and %." (number n to 100)	ime do you e most likely servable a and et this range chreat would observeable cent (%) of e could be as as high as	In the context of a Federal election assuming the threat is realized, what percentage of the time woul it have a low, medium, and high impact? (numbers should sum to 100)			
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High	
Attacks During Transmission of Absentee Ballot Request Forms and Instructions	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of absentee ballot request forms and instructions during their transmission from LEO to the voters; Intentional destruction of absentee ballot request forms and instructions during their transmission from LEO to the voters; Intentional addition of fake absentee ballot request forms and instructions during transmission from LEO to the voters;					•		
Attacks During Transmission of Completed Absentee Ballot Request Packets	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of completed absentee ballot request packets during their transmission from the voters to the LEO; Intentional destruction of completed absentee ballot request packets during their transmission from the voters to the LEO; Intentional addition of fake completed absentee ballot request packets during transmission from the voters to the LEO;							
Attacks Against Processing of Completed Absentee Ballot Request Packets	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of completed absentee ballot request packets at the LEO; Intentional destruction of completed absentee ballot request packets at the LEO; Intentional addition of fake completed absentee ballot request packets at the LEO;							
Attacks During Transmission of Rejections of Absentee Ballot Requests	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of rejections of absentee ballot requests during their transmission from LEO to the voters; Intentional destruction of rejections of absentee ballot requests during their transmission from LEO to the voters; Intentional addition of fake rejections of absentee ballot requests during transmission from LEO to the voters;							
Attacks Against Absentee Ballots and Instructions	0	0	2	100	0	0	
Types of threat vectors: Intentional modification at LEO of absentee ballots and instructions; Intentional destruction at LEO of absentee ballots and							

REAT VECTORS			LIKELIHOO	DD	IMPACT			
	Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component oer Security Expert	what perce think the the realized AN effect? Pro maximum y of values as be realized effect in [m the time bu low as [mir	ext of a Federa intage of the t irreat would be ID have an ob- vide minimum values. Interpr is "I think this t AND have an inost likely] per it this estimat imum] % and	ime do you e most likely servable a and et this range chreat would observeable ccent (%) of e could be as as high as	In the context of a Federal el assuming the threat is realiz what percentage of the time it have a low, medium, and I impact? (numbers should su 100)			
		need to sur] %." (number m to 100)	s DO NOT				
Voting Step:	ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High	
JTSIDER ATTACKS								
Attacks Against Voter's Assistance		1	10	30	100	0	0	
Types of threat vectors: Intentional corruption by malicious out- outdated information);	siders of information provided to voters (omission, false or incomplete statement,							
Attacks by Denial of Service		0	0	2	100	0	0	
Types of threat vectors: Intentional disruption of absentee ballor request materials; Intentional disruption of voter's ability to requ	or request activities at LEO; Intentional disruption of transmission of absentee ballot uest an absentee ballot; $\frac{1}{2}$							
Attacks Against Marking of Absentee Ballot Requests		0	0	2	100	0	0	
Types of threat vectors: Coerced absentee ballot request; Mas absentee ballot request;	queraded absentee ballot request; Vote buying; Pay voter not to vote; Ineligible							
ENTIONAL DISRUPTIONS								
RRORS AT LOCAL ELECTION OFFICE								
Errors in VRDB		1	2	5	100	0	0	
Types of threat vectors: Accidental modification of registration records; Accidental addition of erroneous registration records;	records; Accidental loss of registration records; Accidental destruction of registration VRDB accidental crash;	1						
Errors in Voter's Assistance		10	15	25	100	0	0	
Types of threat vectors: Erroneous information provided to vote	ers (omission, false or incomplete statement, outdated information);							
Errors in Absentee Ballot Request Forms and Instructions		0	0	2	100	0	O	
	entee ballot request forms and instructions; Accidental loss at LEO of absentee ballot fabsentee ballot request forms and instructions; Accidental addition at LEO of	ot	•	-		•	•	
Errors in Processing Completed Absentee Ballot Request	Packets	0	0	2	100	0	C	
Types of threat vectors: Accidental modification of completed a ballot request packets at the LEO; Accidental destruction of co	absentee ballot request packets at the LEO; Accidental loss of completed absentee mpleted absentee ballot request packets at the LEO;							
Errors in Absentee Ballots and Instructions		0	0	2	100	0	C	
	entee ballots and instructions; Accidental loss at LEO of absentee ballots and and instructions; Accidental addition at LEO of erroneous absentee ballots and							

THREAT VECTORS		LIKELIHOC	D	IMPACT				
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	what perce think the th realized AN effect? Prov maximum v of values as be realized effect in [m the time bu low as [min	ext of a Federa ntage of the ti reat would be D have an obs vide minimum values. Interpri "I think this ti AND have an ost likely] per it this estimate imum] % and %." (numbers	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	High			
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS								
Errors in Transmission of Absentee Ballot Request Forms and Instructions	5	15	40	100	0	0		
Types of threat vectors: Accidental modification of absentee ballot request forms and instructions during their transmission from LEO to the voters; Accidental loss of absentee ballot request forms and instructions during their transmission from LEO to the voters; Accidental destruction of absentee ballot request forms and instructions during their transmission from LEO to the voters;								
Errors in Transmission of Completed Absentee Ballot Request Packets	5	15	40	100	0	0		
Types of threat vectors: Accidental modification of completed absentee ballot request packets during their transmission from the voters to the LEO; Accidental loss of completed absentee ballot request packets during their transmission from the voters to the LEO; Accidental destruction of completed absentee ballot request packets during their transmission from the voters to the LEO;								
Errors in Transmission of Rejections of Absentee Ballot Requests	5	15	40	100	0	0		
Types of threat vectors: Accidental modification of rejections of absentee ballot requests during their transmission from LEO to the voters; Accidental loss of rejections of absentee ballot requests during their transmission from LEO to the voters; Accidental destruction of rejections of absentee ballot requests during their transmission from LEO to the voters;		ı			•			
ERRORS AT VOTER'S LOCATION								
Errors in Voting Access	2	5	7	100	0	0		
Types of threat vectors: Mail service nonexistent, irregular and/or unreliable; Ease-of-use and clarity of absentee ballot request form and instructions;		•						
Errors in Obtaining Voter's Assistance	100	100	100	100	0	0		
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;								
Errors in Absentee Ballot Requests	100	100	100	100	0	0		
Types of threat vectors: Incorrect contact information provided to LEO; Accidental loss of absentee ballot request form; Absentee ballot request packet incorrectly or illegibly completed/signed; Absentee ballot request form lost or damaged; Absentee ballot request packet incorrectly transmitted to LEO;		ı						
ACCIDENTAL DISRUPTIONS								
Disruptions by Natural Events	1	3	5	99	1	0		
Types of threat vectors: Weather-related; Earthquake; Outbreak;								
Disruptions by Environmental Events	0	1	3	99	1	0		
Types of threat vectors: Fire; Spill; Flooding;								
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0		
Types of threat vectors: Technical failure; Labor-related; Terrorism;								

THREAT VECTORS		LIKELIHOC	D		IMPACT		
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	what percer think the the realized ANI effect? Prov	xt of a Federa ntage of the ti reat would be D have an obs ide minimum alues. Interpre	me do you most likely ervable and	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)			
Completed by: Cyber Security Expert 4 Data extracted.	of values as be realized a effect in [mo the time but low as [mini	"I think this to AND have an object likely] perot t this estimate (mum] % and (%." (numbers	hreat would observeable cent (%) of could be as as high as				
Voting Step: ABSENTEE BALLOT DELIVERY	Minimum	Most Likely	Maximum	Low	Medium	High	
ATTACKS							
INSIDER ATTACKS							
Attacks by Denial of Service	0	0	3	100	0	0	
Types of threat vectors: Intentional disruption of transmission of absentee ballots;							
Attacks During Transmission of Absentee Ballot and Instructions	0	0	3	100	0	0	
Types of threat vectors: Intentional modification of absentee ballots and instructions during their transmission from LEO to the voters; Intentional destruction of absentee ballots and instructions during their transmission from LEO to the voters; Intentional addition of fake absentee ballots and instructions during transmission from LEO to the voters;							
OUTSIDER ATTACKS							
Attacks by Denial of Service	0	0	3	100	0	0	
Types of threat vectors: Intentional disruption of transmission of absentee ballots;							
UNINTENTIONAL DISRUPTIONS							
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS							
Errors in Transmission of Absentee Ballot and Instructions	5	15	40	100	0	0	
Types of threat vectors: Accidental modification of absentee ballots and instructions during their transmission from LEO to the voters; Accidental loss of absentee ballots and instructions during their transmission from LEO to the voters; Accidental destruction of absentee ballots and instructions during their transmission from LEO to the voters;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	1	3	5	99	1	0	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							

THREAT VECTORS		LIKELIHOO	D	IMPACT					
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	what percer think the thine the realized ANI effect? Proving maximum vious as be realized affect in [months of the time but low as [minimum].	ext of a Federa ntage of the tile reat would be 0 have an obsi- ide minimum alues. Interpre "I think this the AND have an obst likely] pero this estimate mum] % and a %." (numbers	assuming th what percer it have a lov	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)					
Voting Step: ABSENTEE BALLOT DELIVERY	Minimum	Most Likely	Maximum	Low	Medium	High			
Disruptions by Environmental Events	0	1	3	99	1	0			
Types of threat vectors: Fire; Spill; Flooding;									
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0			
Types of threat vectors: Technical failure; Labor-related; Terrorism;									

THREAT VECTORS		LIKELIHOC	D	IMPACT				
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	what percei think the th realized AN effect? Prov maximum v of values as be realized effect in [m the time bu low as [min	ext of a Federa ntage of the ti reat would be D have an obs ide minimum "I think this tl AND have an obst likely] pero this estimate mum] % and a %." (numbers	me do you most likely ervable and et this range preat would observeable eent (%) of could be as as high as	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: BALLOT MARKING	Minimum	Most Likely	Maximum	Low	Medium	High		
ATTACKS								
OUTSIDER ATTACKS								
Attacks Against Marking Absentee Ballots and Forms	0	0	2	100	0	0		
Types of threat vectors: Coerced vote; Masqueraded vote; Vote buying; Pay voter not to vote; Ineligible vote;								
UNINTENTIONAL DISRUPTIONS								
ERRORS AT VOTER'S LOCATION								
Errors in Voting Access	1	3	5	100	0	0		
Types of threat vectors: Mail service nonexistent, irregular and/or unreliable; Ease-of-use and clarity of absentee ballot and instructions;								
Errors in Obtaining Voter's Assistance	100	100	100	100	0	0		
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;								
Errors in Absentee Ballot Marking	100	100	100	100	0	0		
Types of threat vectors: Marked ballot packet incorrectly or illegibly completed/signed; Absentee ballot lost or damaged; Marked ballot packet incorrectly transmitted to LEO; Marked ballot packet not transmitted to LEO;								
ACCIDENTAL DISRUPTIONS								
Disruptions by Natural Events	1	3	5	99	1	0		
Types of threat vectors: Weather-related; Earthquake; Outbreak;								
Disruptions by Environmental Events	0	1	3	99	1	0		
Types of threat vectors: Fire; Spill; Flooding;		-						

THREAT VECTORS		LIKELIHOC	DD	IMPACT					
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	what percer think the thing realized ANI effect? Prove maximum voor of values as be realized of effect in [mo	In the context of a Federal election, what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of			hat percentage of the time do you hink the threat would be most likely salized AND have an observable ffect? Provide minimum and haximum values. Interpret this range is values as "I think this threat would be realized AND have an observeable in the context of a Federal electric assuming the threat is realized, what percentage of the time would be realized AND have an observeable in mark? (numbers should sum to				
Data extracted.	low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)								
Voting Step: BALLOT MARKING	Minimum	Most Likely	Maximum	Low	Medium	High			
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0			
Types of threat vectors: Technical failure; Labor-related; Terrorism;									

THREAT VECTORS		LIKELIHOO	OD	IMPACT			
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	what perceithink the threalized AN effect? Proving aximum vof values as be realized effect in [m the time bullow as [min]	D have an obvide minimun values. Interp "I think this vand have an ost likely] pe this estimat imum] % and %." (number	time do you te most likely te most likely te servable in and ret this range threat would to observeable rcent (%) of the could be as I as high as	tition, o you t likely ole In the context of a Federal electio assuming the threat is realized, what percentage of the time woul it have a low, medium, and high impact? (numbers should sum to 100) that			
Voting Step: MARKED BALLOT RETURN		Most Likely	Maximum	Low	Medium	High	
ATTACKS							
INSIDER ATTACKS							
Attacks by Denial of Service	0	0	2	100	0	0	
Types of threat vectors: Intentional disruption of transmission of marked ballots from voter to LEO;							
Attacks During Transmission of Marked Ballots Packets	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of marked ballot packets during their transmission from LEO to the voters; Intentional destruction of marked ballot packets during their transmission from LEO to the voters; Intentional addition of fake marked ballot packets during transmission from LEO to the voters;							
OUTSIDER ATTACKS							
Attacks by Denial of Service	0	0	2	100	0	0	
Types of threat vectors: Intentional disruption of transmission of marked ballots;							
UNINTENTIONAL DISRUPTIONS							
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS							
Errors in Transmission of Marked Ballot Packets	5	15	40	100	0	0	
Types of threat vectors: Accidental modification of marked ballot packets during their transmission from LEO to the voters; Accidental loss of marked ballot packets during their transmission from LEO to the voters; Accidental destruction of marked ballot packets during their transmission from LEO to the voters;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	1	3	5	99	1	0	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							

THREAT VECTORS	L	.IKELIHOC	DD	IMPACT				
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	In the context of a Federal election, what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)			In the context of a Federal election assuming the threat is realized, what percentage of the time woul it have a low, medium, and high impact? (numbers should sum to				
Voting Step: MARKED BALLOT RETURN	Minimum	Most Likely	Maximum	Low	Medium	High		
Disruptions by Environmental Events	0	1	3	99	1	0		
Types of threat vectors: Fire; Spill; Flooding;								
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0		
Types of threat vectors: Technical failure; Labor-related; Terrorism;								

THREAT VECTORS		LIKELIHOO	D	IMPACT			
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	what percenthink the threalized AN effect? Provenaximum v	ext of a Federa ntage of the ti ireat would be D have an obs vide minimum alues. Interpre	me do you most likely ervable and et this range	In the context of a Federal election, assuming the threat is realized,			
Completed by: Cyber Security Expert 4. Data extracted.	of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)				w, medium, a	nd high	
Voting Step: RETURNED BALLOT PROCESSING & TABULATION	Minimum	Most Likely	Maximum	Low	Medium	High	
ATTACKS							
INSIDER ATTACKS							
Attacks Against VRDB	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;							
Attacks by Denial of Service	0	0	2	100	0	0	
Types of threat vectors: Intentional disruption of processing of marked ballots at LEO;							
Attacks Against Processing of Returned Ballots	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of marked ballot packets at the LEO; Intentional destruction of marked ballot packets at the LEO; Intentional addition of fake marked ballot packets at the LEO;							
Attacks Against Tabulation	0	0	2	100	0	0	
Types of threat vectors: Intentional subversion of the counting process; Intentional subversion of the validation process; Intentional destruction of tabulated results; Intentional subversion of the tabulated results;					•		
Attacks Against Adjudication	0	0	2	100	0	0	
Types of threat vectors: Intentional refusal of legitimate ballots; Intentional acceptance of invalid ballots; Intentional misapplication of rules for determining voter's intent;							
OUTSIDER ATTACKS							
Attacks by Denial of Service	0	0	2	100	0	0	
Types of threat vectors: Intentional disruption of marked ballot processing and tabulation activities at LEO;							

THREAT VECTORS		LIKELIHOO	D	IMPACT			
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	what percenthink the threalized AN effect? Prov	ext of a Federa ntage of the ti reat would be D have an obs ride minimum alues. Interpro	me do you e most likely servable and	In the context of a Federal election, assuming the threat is realized,			
Completed by: Cyber Security Expert 4.	of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of			what percentage of the time would it have a low, medium, and high impact? (numbers should sum to			
Data extracted.	the time bu	t this estimate imum] % and %." (numbers	e could be as as high as	100)			
Voting Step: RETURNED BALLOT PROCESSING & TABULATION	Minimum	Most Likely	Maximum	Low	Medium	High	
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	2	100	0	0	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;							
Errors in Processing of Returned Ballots	0	0	2	100	0	0	
Types of threat vectors: Accidental modification of marked ballot packets at the LEO; Accidental destruction of marked ballot packets at the LEO; Accidental loss of marked ballot packets at the LEO;							
Errors in Tabulation	0	0	2	100	0	0	
Types of threat vectors: Errors in counting process; Errors in validation process; Accidental loss of tabulated results; Accidental destruction of tabulated results; Errors in publication of tabulated results;							
Errors in Adjudication	0	0	2	100	0	0	
Types of threat vectors: Accidental refusal of legitimate ballots; Accidental acceptance of invalid ballots; Accidental misapplication of rules for determining voter's intent;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	1	3	5	99	1	0	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							
Disruptions by Environmental Events	0	1	3	99	1	0	
Types of threat vectors: Fire; Spill; Flooding;							
Disruptions by Human-Created Collateral Events	0	1	3	99	1	0	
Types of threat vectors: Technical failure; Labor-related; Terrorism;							

THREAT VECTORS		LIKELIHOC	DD		IMPACT		
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component	In the context of a Federal election, what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range of values as "I think this threat would			In the context of a Federal election, assuming the threat is realized,			
Completed by: Cyber Security Expert 4	be realized	"I think this to AND have an o ost likely] pero	observeable	impact? (nu	v, medium, a umbers shou	_	
Data extracted.	the time bu	this estimate mum] % and a %." (numbers	could be as as high as	100)			
Voting Step: POST-ELECTION AUDIT	Minimum	Most Likely	Maximum	Low	Medium	High	
ATTACKS	I VIIII III III III III III III III III	WOSE LIKELY	Waxiiiaiii	2000	Wicalam	111611	
INSIDER ATTACKS							
Attacks Against VRDB	0	0	2	100	0	0	
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;							
Attacks Against Post-Election Audit	0	0	2	100	0	0	
Types of threat vectors: Intentionally compromise auditors; Intentionally select audit samples non-randomly; Intentional modification of audit results; Intentional destruction of audit results;							
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	2	100	0	0	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;							
Errors in Post-Election Audit	0	0	2	100	0	0	
Types of threat vectors: Accidental non-random selection of audit samples; Accidental modification of audit results; Accidental loss of audit results; Accidental destruction of audit results;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	1	3	5	99	1	0	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							
Disruptions by Environmental Events	0	1	3	99	1	0	

THREAT VECTORS	LIKELIHOOD	IMPACT					
VOTING SCENARIO: Current UOCAVA absentee voting system, restricted to paper ballots transmitted by postal mail, with no electronic component Completed by: Cyber Security Expert 4 Data extracted.	In the context of a Federal election, what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)					
Voting Step: POST-ELECTION AUDIT Types of threat vectors: Fire; Spill; Flooding;	meed to sum to 100) Minimum Most Likely Maximum	Low Medium High					
Disruptions by Human-Created Collateral Events Types of threat vectors: Technical failure; Labor-related; Terrorism;	0 1 3	99 1 0					