

Table 1

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
66	1B208	Item 66 - C & D cell batteries	Tue, Sep 10, 2019	H	C & D cell batteries	
	1B233	Battery				
84	1B235		Tue, Sep 10, 2019	K	Battery	FBI Collected
	1B243	Batteries				
135	1B262	Item 135 - Two (2) batteries and wires	Sat, Sep 14, 2019	W	Two (2) Batteries and wires	FBI Collected
165	1B263	Item 165 - Battery	Sat, Sep 14, 2019	KK	Battery	
172	1B270	Item 172 - Battery	Sat, Sep 14, 2019	KK	Battery	
356	1B299	Item 356: Electronic Device	Tue, Sep 24, 2019	QQQ	Electronic Device [Cell Phone]	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
363	1B305	Item 363: Cell Phone Charred	Tue, Sep 24, 2019	TTT	Cellphone charred	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
183	1B325	183 - Lithium ion battery 18650	Tue, Sep 17, 2019	Bunk Area	Lithium Ion battery 18650	Batteries located while ATF sifted debris from quadrant C2
184	1B326	184 - Two (2) Lithium Polymer batteries	Tue, Sep 17, 2019	Bunk Area	Two (2) Lithium Polymer batteries	Batteries located while ATF sifted debris from quadrant C2
187	1B329	187 - 9 Volt Battery	Tue, Sep 17, 2019	Bunk Area	9 Volt Battery	Batteries located while ATF sifted debris from quadrant C1
200	1B333	200 - Four (4) C Cell Batteries	Wed, Sep 18, 2019	Bunk Area	Four (4) C Cell Batteries	Identified while ATF sifted debris from C1 Bunk 5
205	1B338	205 - Lithium Polymer battery	Wed, Sep 18, 2019	Bunk Area	Lithium Polymer battery	Identified while ATF sifted debris from C1 Bunk 4
207	1B340	207 - Battery, various electronics	Tue, Sep 17, 2019	Bunk Area	Battery, various electronics	Identified while ATF sifted debris from C2 Bunk 8
209	1B342	209 - Battery	Tue, Sep 17, 2019	Bunk Area	Battery	Identified while ATF sifted debris from C2 Bunk 11

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
217	1B350	217 - Charred batteries	Tue, Sep 17, 2019	Bunk Area	Charred Batteries	Identified while ATF sifted debris from C2 Bunk 11
328	1B357	328 - Batteries	Sun, Sep 22, 2019	KKK	Batteries	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
341	1B361	341 – Batteries	Sun, Sep 22, 2019	000	Batteries	

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
350	1B364	350 – Batteries	Sun, Sep 22, 2019	LLL	Batteries	
354	1B365	354 - Various batteries	Sun, Sep 22, 2019	SSS	Various batteries	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
357	1B366	357 – Batteries	Tue, Sep 24, 2019	TTT	Batteries	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
364	1B367	364 – Batteries	Tue, Sep 24, 2019	UUU	Batteries	X-rayed by ATF. Laying in Connex Box to dry
367	1B369	367 - Batteries	Tue, Sep 24, 2019	VVV	Batteries	X-rayed by ATF.

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
228	1B419	Item 228: Starboard battery packs	Wed, Sep 18, 2019	B1	Starboard battery packs	Item was located while Quadrant B1 was searched by ERT and ATF. Item is stored near Item 164 per ATF request. Item is not packaged.
267	1B437	Item 267: Batteries	Thu, Sep 19, 2019	FFF	Batteries	Item visually observed by ATF and USCG. Item not packaged due to size/boat reconstruction. One of two batteries originally photographed as # 267 re-labeled as Item 373, Battery Pack for Bridge.
311	1B457		Fri, Sep 20, 2019	Galley	Oven (2 pieces)	Item not packaged but utilized for ATF Reconstruction purposes
322	1B465	Item 322: Battery	Fri, Sep 20, 2019	Engine	Battery	Item not packaged but utilized for ATF Reconstruction purposes
373	1B482	Item 373: Battery Pack for Bridge			Battery pack from bridge.	
	1B486	Possible battery collected in an item labeled Item 55.				
	1B500	Item 15: Possible battery				
	1B501	Item 16: Possible battery				

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
	1B502	Item 17: Possible battery				
	1B503	Item 18: Possible battery				
	1B504	Item 19: Possible battery				
	1B505	Item 20: Possible battery				
	1B506	Item 21: Possible battery				
	1B507	Item 22: Possible battery				
55			Tue, Sep 10, 2019	E	Electrical Disconnect	Repackaged. Not Collected.
111			Wed, Sep 11, 2019	C	Electric wires, 3 electrical boxes, electric motor, light fixture, remains of lithium battery, and rope	

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
113			Wed, Sep 11, 2019	G	Batteries	NPS Collected
A7						
D1						
Bunk 1						
Bunk 11						
Bunk 11						
Bunk 4						
Bunk 4						
Bunk 4						
Bunk 4						
Bunk 4						
Bunk 4						
Bunk 5						

ATF #	FBI #	FBI Description	Date Collected	Bag	ATF Description	ATF Note
Bunk 7						
Bunk 8						
Bunk 8						
C2						
C2						
C2						

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
66	1B208	Item 66 consisted of thermally damaged "C" and "D" size battery cells with intact casings.	Listed as "FBI Item;" sent to ATF Lab			144182_555071. Not CT scanned.
	1B233					
84	1B235	Item #84 consisted of the remnants of a lithium polymer battery cell. There was no outer casing present. The cell was observed to be intact with no differential damage (as confirmed via radiographic imaging).	Unignited LiPo?		BOYLAN_00054481	144182_555072 144182_554298 144182_554302 144182_554310
	1B243					
135	1B262	Item#135 consisted of two batteries and a fragment of stranded copper conductor. The batteries were thermally damaged on the exterior and had dimensions that were approximately 50mm in length and 14mm in diameter. The dimensions and physical characteristics are consistent with a rechargeable AA size cell. One cell was observed to be intact internally and the other was observed to have some differential damage towards the positive end via radiographic imaging. That cell also was observed to have a corresponding physical deformity on that end along the exterior. The observed damage was consistent with mechanical damage and heat and flame impingement. There was no evidence of electrical activity or failure. The conductor was devoid of insulation and had thermal melting at both severed ends, There was no evidence of electrical activity or failure.	Charger? Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054502 BOYLAN_00054503 BOYLAN_00054504	144182_555076. Not scanned.
165	1B263	Item #165 consisted of the remnants of an A A A sized alkaline battery that had damage consistent with heat and flame impingement. The battery casing was intact and there was no differential damage internally as observed (confirmed via radiographic imaging). (EE Abraham)	Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054507	144182_555077. Not scanned.
172	1B270	AAA Alkaline	Listed as "FBI Item;" sent to ATF Lab			144182_555078. Not scanned
356	1B299	Dive recovery artifact bag QQQ contained two (2) cellular phones. The internal components, including battery, were observed to be intact (confirmed via radiographic imaging). There was no evidence of electrical activity or failure. The two (2) phones are identified as Items #355 and #356. (EE Abraham)	Whose? S/N visible?		BOYLAN_00054612	

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
363	1B305	<p>Dive recovery artifact bag TTT contained the following items that were examined:</p> <ul style="list-style-type: none"> • Remnants of two digital camera bodies that were observed to be intact internally by radiographic imaging • A section of copper conductors within a support bracket with damage that may have been arc melting that transitioned to thermal damage due to prolonged exposure to heat and flame impingement • The remnants of a dive camera • Three intact toggle switch mounting yokes. One yoke was stand alone, one was attached to a metallic faceplate, and one was attached to a switch body • One (1) power rail associated with a 15A duplex receptacle with intact screw terminals • One (1) intact electric heating element • Remnantsof a USB connector • One (1) intact power rail associated with a three-outlet current tap • One (1) dome style light fixture with no lamp • The batteries associated with Item #357 are as follows: <ul style="list-style-type: none"> • Two (2) LiPo batteries with intact layers observed via radiographic imaging • One (1) cell with approximate dimension of 27mm by 32mm • One (1) cell with approximate dimension of 18mm by 34mm • One (1) D-cell size alkaline battery • One (1) cell with approximate dimension of 16mm by 52mm • Two (2) connected cells with approximate dimension of 15mmby 33mm (CR123?) • Three (3) 18650 lithium ion cells • One (1) ruptured 18650 lithium ion cell • One (1) mechanically fragmented 18650 lithium ion • One (1) 18650 lithium cell located in a mass • One (1) cell with approximate dimension of 13mm by 49mm • Two (2) cells with approximate dimension of 10mm by 46mm • Debris including a rupturedAA-cell case, AA-cell cap, and D-cellcap <p>The observed damage to the above artifacts was consistent with heat and flame impingement and there was no evidence of electrical activity other than the aforementioned potential arc melting; or failure in the examined components.</p>	Charger pile? Scene report says bag TT.		BOYLAN_00054605 BOYLAN_00054613 BOYLAN_00054614	

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
183	1B325	Item #183 consisted of an 18650-lithium ion cell identified within a re-solidified mass. It was observed to be intact (as confirmed via radiographic imaging). (EE Abraham)	C2 is port side of bunkroom. Location noted on PDF 54888 as aisle next to their "Bunk Area 8," Bunks 20/21, M Quitasol, F Sison, E Quitasol. Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054533	144182_555081 144182_554424 144182_554433 144182_554426 144182_554430
184	1B326	Item #184 consisted of two (2) Lithium Polymer (LiPo) batteries with no external casing. The layers of the battery assembly were observed to be intact (as confirmed via radiographic imaging). (E E Abraham)	C2 is port side of bunkroom. Location noted on PDF 54888 as their "Bunk Area 4" is Bunks 1/2, R Chan, K Chan, T Strom. Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054534	144182_555082. Not scanned
187	1B329	Item #187 consisted of a 9V battery with fire damaged case that was observed to be intact internally (confirmed via radiographic imaging). (EE Abraham)	C1 is starboard side of bunkroom. Smoke detector xery? Location noted on PDF 54888 as aisle next to their "Bunk Area 3," Bunks 13/14/15		BOYLAN_00054535	
200	1B333	Item #200 consisted of four (4) NIMH chemistry C-cell batteries with ruptured housings. There was no differential damage internally as observed (as confirmed via radiographic imaging). This item was recovered in the area of Bunk 5. (EE Abraham)	C1 is starboard side of bunkroom. "Bunk Area 5" is Bunks 3/4, D Garcia, K Krashennaya, S Deopujari, K Nirmal. Listed as "FBI Item;" sent to ATF Lab			144182_555083. Not scanned.
205	1B338	Item #205 consisted of a Lithium Polymer (LiPo) battery with no external casing. In addition to the battery, the PCB and electronics associated with two USB A-Type and one Micro-USB type female connectors was observed. The PCB and battery were both identified in the area of bunk 4 and had characteristics consistent with a portable power bank. The layers of the battery assembly and PCB were observed to be intact (confirmed via radiographic imaging). These items were recovered in the area of Bunk 4. (EE Abraham)	C1 is starboard side of bunkroom. "Bunk Area 4" is Bunks 1/2, R Chan, K Chan, T Strom. Listed as "FBI Item;" sent to ATF Lab			144182_555086 Not scanned.
207	1B340	Item #207 consisted of a Lithium Polymer (LiPo) battery with no external casing and the remnants of an electronic device PCB. The layers of the battery assembly were observed to be intact (as confirmed via radiographic imaging). The electronic device PCB had observed damage consistent with heat and flame impingement and there was no evidence of electrical activity or failure. These items were recovered in the area of Bunk 8. (EE Abraham)	C2 is port side of bunkroom. "Bunk Area 8" is Bunks 20/21, M Quitasol, F Sison, E Quitasol.			
209	1B342	Item #209 consisted of the remnants of an A A A sized alkaline battery that had damage consistent with heat and flame impingement. The battery casing was intact. This item was recovered in the area of Bunk 7. [sic] (EE Abraham)	C2 is port side of bunkroom. "Bunk Area 11" (not 7) is Bunks 30/31/32, N Quitasol, J Ahopelto, C McIlvain			

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
217	1B350	Item #217 consisted of fire damaged remains of speakers, four (4) AA sized alkaline batteries, four (4) AAA sized alkaline batteries, one (1) 18650 lithium ion cell, one (1) lithium polymer (LiPo) battery, remnants of a digital camera, and thermally damaged fragments of copper wiring. Battery cell casings were observed to be intact. The internal contents of the batteries, layers of the LiPo battery, and internal components of the camera were observed to be intact via radiographic imaging. The observed damage was consistent with heat and flame impingement and there was no evidence of electrical activity or failure. These items were recovered in the area of Bunk 11. (EE Abraham)	C2 is port side of bunkroom. "Bunk Area 11" is Bunks 30/31/32, N Quitasol, J Ahopelto, C McIlvain	BOYLAN_00274002		
328	1B357	Item #328 consisted of several batteries identified as follows (EE Abraham): <ul style="list-style-type: none"> • One (1) Lithium Polymer (LiPo) with intact layers • One (1) LiPo with damaged external layers • Two (2) C-cell size • Four (4) AA size alkaline cells • One (1) A A A size alkaline cell • One (1) 18650 lithium ion cell that was observed intact by radiographic image • One (1) cell with dimensions of approximately 26mm by 70mm that was observed intact by radiographic image • Once (1) cell with dimension of approximately 18mm by 50mm that was observed to have a hole in the case • One (1) fragment of a cell with dimensions of approximately 15mm by 20mm 	Listed as "FBI Item;" sent to ATF Lab. Contains damaged cell.	BOYLAN_00273774 BOYLAN_00273714ff (bag and spreadout)	BOYLAN_00054592 BOYLAN_00054593 BOYLAN_00054594	144182_555088 Cell 1: 144182_554434 144182_554435 144182_554437 144182_554438 144182_554443 Cell 2:144182_554446 144182_554450 144182_554454 144182_554459 144182_554461 Cell 3: 144182_554463 144182_554470 144182_554472 144182_554474 144182_554476 144182_554481

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341	1B361	<p>Item #341 consisted of several batteries identified as follows (EE Abraham):</p> <ul style="list-style-type: none"> • Two (2) lithium polymer batteries with intact cell layers • Two (2) C-cell size alkaline batteries • One (1) cell with dimension of approximately 30 mm by 65 mm • Seven (7) 18650- Lithium ion cells • One (1) CR123 size lithium ion cell • Fragments including casings and end caps 	<p>Bag OOO also contained an intact “electronic device” and remnants of a motor Listed as “FBI Item;” sent to ATF Lab. Cell 7 is ruptured.</p>	<p>BOYLAN_00273852 BOYLAN_00273916 BOYLAN_00054570 BOYLAN_00054571 BOYLAN_00054572 BOYLAN_00054573 BOYLAN_00054574 BOYLAN_00054575 BOYLAN_00054576 Bag OOO as opened: BOYLAN_00273850B OYLAN_00273834ff (bag and spreadout)</p>		<p>144182_555090 Cell 1: 144182_554482 144182_554483 144182_554487 144182_554492 144182_554496 144182_554498 Cell 2: 144182_554500 144182_554501 144182_554504 144182_554508 144182_554511 Cell 3: 144182_554513 144182_554514 144182_554516 144182_554517 144182_554521 144182_554522 144182_554527 Cell4: 144182_554529 144182_554530 144182_554532 144182_554535 144182_554536 144182_554538 Cell 5: 144182_554541 144182_554545 144182_554551 Cell 6: 144182_554556 144182_554558 144182_554560 144182_554567 Cell 7: 144182_554571 144182_554572 144182_554573 144182_554574 144182_554584 144182_554591</p>

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350	1B364	<p>Item #350 consisted of several batteries identified as follows (EE Abraham):</p> <ul style="list-style-type: none"> • Two (2) lithium polymer batteries with intact cell layers • One (1) C-cell size alkaline battery • One (1) A A size alkaline battery • One (1) A A A size alkaline battery • One (1) cell with dimension of approximately 20mm by 58mm with no internal contents • The positive half of aCR2032 		<p>BOYLAN_00273952 BOYLAN_00273962 - BOYLAN_00273965 BOYLAN_00273930ff (bag and spreadout)</p>		<p>144182_555091 Cell 1: 144182_554592 144182_554596 144182_554598 144182_554607 Cell 2: 144182_554614 144182_554615 144182_554622 144182_554625 144182_554630</p>
354	1B365	<ul style="list-style-type: none"> • Dive recovery artifact bag SSS contained the following items that were examined (EE Abraham): • Remnants of a cell phone that was observed to have intact internal components via radiographic image • A re-solidified mass that was unremarkable via radiographic image • A re-solidified mass that was observed to contain an electric toothbrush with intact internal components and battery via radiographic image • The batteries associated with Item #354 are as follows: <ul style="list-style-type: none"> • Thirteen(13) LiPo batteries with intact layers • One (1) small LiPo battery with intact layers • One (1) deformed LiPo battery • Five (5) AA size cells • One (1) cell with approximate dimensions of 15mm by 43mm • One (1) intact 18650 lithium ion cell • One (1) mechanically fragmented 18650 lithium ion cell • Three (3) cells with approximate dimensions of 18mm by 40mm • One (1) cell with approximate dimensions of 19mm by 33mm • One (1) C-cell size alkaline battery • Remnants of one (1) electronic board <p>The observed damage to the above artifacts was consistent with heat and flame impingement and there was no evidence of electrical activity or failure in the examined components.</p>	<p>What would require 13 batteries? Listed as "FBI Item;" sent to ATF Lab. Cell 3 possible runaway.</p>		<p>BOYLAN_00054606 BOYLAN_00054608 BOYLAN_00054609 BOYLAN_00054610</p>	<p>144182_55509 Cell 1: 144182_554631 144182_554634 144182_554635 144182_554640 144182_554643 Cell 2: 144182_554645 144182_554646 144182_554653 144182_554664 144182_554670 Cell 3: 144182_554671 144182_554672 144182_554673 144182_554678 144182_554681 144182_554690</p>

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
357	1B366	See Item #363	Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054596 BOYLAN_00054597 BOYLAN_00054596	144182_555095 Cell 1: 144182_554702 144182_554704 144182_554715 144182_554724 Cell 2: 144182_554725 144182_554730 144182_554737 Cell 3: 144182_554749 144182_554751 144182_554759 144182_554769 144182_554789 Cell 4: 144182_554793 144182_554794 144182_554798 144182_554814 144182_554822 Cell 5: 144182_554832 144182_554838 144182_554842 144182_554850

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364	1B367	<p>The batteries associated with Item #364 area as follows:</p> <ul style="list-style-type: none"> • One (1) cell with approximately dimension of 30mm by 67mm • Three (3) C-cell size batteries. One was the internal remnants only of a Ni-MH style cell. • Two (2) LiPo batteries with intact layers • One (1) small LiPo battery with intact layers • Four (4) 18650 lithium ion cells • One (1) 18650 lithium ion ruptured cell • Two (2) AA size cells • One(1) • One (1) cell with approximate dimension of 15mm by 44mm with a hole in the case 	Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054607	144182_555097 Cell 1: 144182_554851 144182_554854 144182_554859 144182_554861 144182_554867 Cell 2: 144182_554874 144182_554878 144182_554885 Cell 3: 144182_554894 144182_554896 144182_554897 144182_554900 144182_554911 144182_554923 Cell 4: 144182_554924 144182_554926 144182_554938 Cell 5: 144182_554940 144182_554942 144182_554946 144182_554957 144182_554970 Cell 6: 144182_554972 144182_554975 144182_554983 144182_554987 144182_554997
367	1B369	<p>Dive recovery artifact bag VVV contained the following items that were examined (EE Abraham):</p> <ul style="list-style-type: none"> • A 15A duplex receptacle mounting or grounding yoke attached to a metallic faceplate with attached fragment of wiring • A toggle switch mounting yoke attached to a metallic single gang workbox • The batteries associated with Item #367 as follows: <ul style="list-style-type: none"> • One (1) cell with approximate dimension of 30mm by 67mm • One (1) cell with approximate dimension of 30mm by 62mm with no contents • Two (2) 18650 lithium ion cells <p>In total, approximately 127 batteries, including alkaline, Ni-MH and Lithium Ion batteries were recovered during the examination of both the loose debris collected by divers aswell as debris located within the remains of the M/V Conception.</p>	Listed as "FBI Item;" sent to ATF Lab			144182_555099 Cell 1: 144182_555001 144182_555003 144182_555006 144182_555010 144182_555014 Cell 2: 144182_555016 144182_555017 144182_555018 144182_555021 144182_555023 Cell 3: 144182_555025 144182_555026 144182_555030 144182_555033 144182_555036

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228	1B419	8D for engine starting; Item 228 consisted of two 8D size batteries with attached fragments of copper wiring. The observed damage was consistent with heat and flame impingement and there was no evidence of electrical activity or failure on the examined components. This item was recovered in grid section B1.	B1 is starboard side of the engine room.	BOYLAN_00273471 BOYLAN_00288281		
267	1B437	Item #267 consisted of the fire damaged remains of four (4) 8D sized batteries and associated wiring and connections. The observed damage was consistent with heat and flame impingement and there was no evidence of electrical activity or failure on the examined components. This bank of four (4) batteries was located along the forward wall of the vessel's engine room on the work bench/holding tank. (EE Abraham)	Note indication that evidence was photographed.	BOYLAN_00288325		
311	1B457	Item 311 consisted of the fire damaged remnants of the two electric ovens from the vessel's galley. Conductor points of entry, electric elements, and points of connection on both ovens were observed to be intact. Two AAA batteries, an 18650 Lithium ion cell, and the intact grounding yoke of a 15A duplex receptacle connected to a metallic faceplate were observed within the fire debris removed from inside the ovens. The observed damage was consistent with heat and flame impingement and there was no evidence of electrical activity or failure on the examined components.		BOYLAN_00288375		
322	1B465	Item 322 consisted of the fire damaged remnants of two 8D sized batteries and a bundle of wiring devoid of insulation. The assembly was also observed to contain red and green dive tags within the solidified mass. The batteries were identified as the starter batteries for the vessel's generator set and were located on the outboard port side of the engine room, adjacent to the generator set. The observed damage was consistent with heat and flame impingement and there was no evidence of electrical activity or failure on the examined components.	Have Photo, but it doesn't look like a battery Update: it is one	BOYLAN_00288395 BOYLAN_00288396		
373	1B482			BOYLAN_00288431 BOYLAN_00288432		
	1B486					
	1B500		Item number is FBI subnumber and not ATF number used in various reports			
	1B501		Item number is FBI subnumber and not ATF number used in various reports			

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	1B502		Item number is FBI subnumber and not ATF number used in various reports			
	1B503		Item number is FBI subnumber and not ATF number used in various reports			
	1B504		Item number is FBI subnumber and not ATF number used in various reports			
	1B505		Item number is FBI subnumber and not ATF number used in various reports			
	1B506		Item number is FBI subnumber and not ATF number used in various reports			
	1B507		Item number is FBI subnumber and not ATF number used in various reports			
55		Item #55 consisted of the remnants of a motor starter with no attached cover and connected fragments of stranded copper conductors. The starter was heavily fire damaged but the recovered components and attached wiring had no evidence of electrical activity or failure and the damage was consistent with fire and heat impingement. Within the starter enclosure an 18650-lithium ion battery cell was observed. The battery cell was thermally damaged with the cap missing. The battery was observed to have uniform damage to the contents internally based on radiographic imaging. (EEAbraham)	Ignited battery?		BOYLAN_00054493 BOYLAN_00054494 BOYLAN_00054495	
111		Item #111 consisted of the following: A four (4) cell pack of 18650 lithium ion batteries that were observed to be intact (confirmed via radiographic imaging). Two (2) 4" x 4" metallic work boxes without covers or contents that exhibited damage consistent with heat and flame impingement and no evidence of electrical activity. Investigators examined a single gang metallic work box with attached 15A duplex receptacle ground yoke and both power rails. Screw terminals, attached fragments of stranded copper wiring, and the components of the receptacle were observed to be intact. Damage to the receptacle was consistent with heat and flame impingement. An intact circular dome light fixture with a broken incandescent lamp in the lamp holder was examined. Fragments of stranded copper wiring devoid of insulation were observed to have no electrical activity. An intact section of non-metallic sheathed cable was observed with the following text labelling: "NMSC Ancor Marine Grade 3 Cord 16AWG (UL) Vessel Cable 600V 105 Degrees C Dry Oil Resistant BC- U2 E306583." The remnants of a heat and fire damaged motor rotor had no evidence of failure of electrical activity. (EEAbraham)	See also item 151. Listed as "FBI Item;" sent to ATF Lab		BOYLAN_00054484 BOYLAN_00054485 BOYLAN_00054486 BOYLAN_00054487	144182_555075. Not CT scanned.

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
113		Item#113 consisted of two (2) battery packs ,identified by labeling as Mode INo.SPE-002-C Lithium polymer battery packs. The model number indicates they are rechargeable batteries associated with Thermulation brand heated diving under suits. The connector end of the attached cord was thermally severed with the connector portion not present. The battery packs were observed to be intact internally (as confirmed via radiographic imaging). Additionally, five other remnants of lithium polymer battery packs were identified. The outer casings were not present and the observed damage was consistent with heat and flame impingement. (EE Abraham)	NPS = National Park Service? From Lazarette? Ignited? Listed as "FBI Item;" sent to ATF Lab			144182_555074 Cell 1: 144182_554325 144182_554326 144182_554327 144182_554331 144182_554335 Cell 2: 144182_554338 144182_554340 144182_554344 144182_554347 144182_554355 Cell 3: 144182_554367 144182_554372 144182_554381 144182_554385 Cell 4: 144182_554387 144182_554394 144182_554400 144182_554405 Cell 5: 144182_554407 144182_554411 144182_554416 144182_554419
A7		Lazarette	Cylindrical battery. A7 is far port section of Lazarette.		BOYLAN_00054526	
D1			Small cylindrical battery. D1 is starboard side of shower room		BOYLAN_00054543	
Bunk 1			Wire with connectors at each end. Assume "Bunk 1" on X-Ray is FBI "Bunk Area 1." Bunk 25, X. Lin.		BOYLAN_00054532	
Bunk 11			Unidentified irregular shape and cylindrical battery with distorted end. Assume "Bunk 11" on X-Ray is FBI "Bunk Area 11." Bunks 30/31/32, N Quitasol, J Ahopelto, C Mcllvain		BOYLAN_00054530	
Bunk 11			Heavily damaged electronic device—phone? Assume "Bunk 11" on X-Ray is FBI "Bunk Area 11." Bunks 30/31/32, N Quitasol, J Ahopelto, C Mcllvain		BOYLAN_00054531	
Bunk 4			iPhone. Assume "Bunk 4" on X-Ray is FBI "Bunk Area 4." Bunks 1/2, R Chan, K Chan, T Strom.		BOYLAN_00054516 BOYLAN_00054517	
Bunk 4			Unidentified rectangular object. Assume "Bunk 4" on X-Ray is FBI "Bunk Area 4." Bunks 1/2, R Chan, K Chan, T Strom.		BOYLAN_00054518	
Bunk 4			Electronic components. Assume "Bunk 4" on X-Ray is FBI "Bunk Area 4." Bunks 1/2, R Chan, K Chan, T Strom.		BOYLAN_00054519	
Bunk 4			Earphones? Audio device?. Assume "Bunk 4" on X-Ray is FBI "Bunk Area 4." Bunks 1/2, R Chan, K Chan, T Strom.		BOYLAN_00054522	
Bunk 4			Probably item 202. Assume "Bunk 4" on X-Ray is FBI "Bunk Area 4." Bunks 1/2, R Chan, K Chan, T Strom.		BOYLAN_00054538 BOYLAN_00054539	
Bunk 5			Four round objects—button batteries? Assume "Bunk 5" on X-Ray is FBI "Bunk Area 5." Bunks 3/4, D Garcia, K Krashennaya, S Deopujari, K Nirmal.		BOYLAN_00054536	

ATF #	FBI #	ATF Origin and Cause Report Comment	Our Comment	Photo File Name	X-ray JPEG File Name	ATF FRL Report Reference
Bunk 7			Cylindrical battery with damaged/distorted end. Assume "Bunk 7" on X-Ray is FBI "Bunk Area 7." Bunks 22/23, A Dahood-Fritz, A Fritz, J Dingham.		BOYLAN_00054529	
Bunk 8			Bag with misc. personal care articles. Assume "Bunk 8" on X-Ray is FBI "Bunk Area 8." Bunks 20/21, M Quitasol, F Sison, E Quitasol.		BOYLAN_00054523 BOYLAN_00054524	
Bunk 8			Unidentified rectangular object—battery? Assume "Bunk 8" on X-Ray is FBI "Bunk Area 8." Bunks 20/21, M Quitasol, F Sison, E Quitasol.		BOYLAN_00054525	
C2		Bunk open space	Unidentified electronic device. C2 is port side of bunkroom.		BOYLAN_00054521	
C2		Aisle	Unidentified electronic device. C2 is port side of bunkroom.		BOYLAN_00054527	
C2		Aisle	Headphones and associated electronics. C2 is port side of bunkroom.		BOYLAN_00054528	

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
66	1B208	Not Li	
	1B233		
84	1B235	(LiPo) Sectional views of the battery revealed no internal mass loss and re-solidified beads of melted metallic material	/Item 84/Radiographs: 1,443 /Item 84/ScreenShots: 29
	1B243		
135	1B262	Not Li	
165	1B263	Not Li	
172	1B270	Not Li	
356	1B299		

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
363	1B305		

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
183	1B325	(18650) Sectional views of the battery revealed no internal mass loss and re-solidified beads of melted metallic material	/Item 183/Radiographs-Item 183: 1,803 /Item 183/Screenshots: 12
184	1B326	(LiPo) The batteries were observed to have damage consistent with heat and flame impingement.	
187	1B329		
200	1B333	Not Li	
205	1B338	(LiPo) The batteries were observed to have damage consistent with heat and flame impingement.	
207	1B340		
209	1B342		

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
217	1B350		
328	1B357	<p>Cell 1: (LiPo) Sectional views of the battery revealed no internal mass loss. The internal contents were observed to be shifted from the base towards the cap.</p> <p>Cell 2: (18650) Sectional views of the batteries revealed no internal mass loss and re-solidified beads of melted metallic material.</p> <p>Cell 3: (LiPo) Sectional views of the battery revealed no internal mass loss. A physical deformity was observed on a portion of the battery resulting in contact between internal layers and localized density but no corresponding mass loss or thermal damage.</p>	<p>/Item 328-1/Radiographs-Item 328-1: 1,803</p> <p>/Item 328-1/ScreenShots: 12</p> <p>/Item 328-2/Radiographs-Item 328-2: 1,803</p> <p>/Item 328-2/ScreenShots: 19</p> <p>/Item 328-3/Radiographs-Item 328-3: 1,803</p> <p>/Item 328-3/ScreenShots: 20</p>

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
341	1B361	<p>Cell 1: (18650) Sectional views of the battery revealed no internal mass loss.</p> <p>Cell 2: (18650) Sectional views of the battery identified as cell 2 revealed a shift in the internal contents from the base with partial rupture of the contents through the top vent ... There was no evidence of mass loss or differential damage</p> <p>Cell 3: (18650) Sectional views of the battery identified as cell 3 revealed some areas of mass loss near the base of the cell and deformation of the cell casing</p> <p>Cell 4: (18650) Sectional views of the battery identified as cell 4 revealed no internal mass loss</p> <p>Cell 5: (18650) Sectional views of the battery identified as cell 5 revealed no internal mass loss and re-solidified beads of melted metallic material</p> <p>Cell 6: (18650) Sectional views of the battery identified as cell 6 revealed a thermally damaged housing with no cap and expelled internal contents</p> <p>Cell 7: (18650) Sectional views of the battery identified as cell 7 revealed a shift in the internal contents from the base, deformity to the upper portion of the case, and re- solidified beads of melted metallic material</p>	<p>/Item 341-1/Radiographs-Item 341-1: 2,523</p> <p>/Item 341-1/ScreenShots: 18</p> <p>/Item 341-2/Radiographs-step 0-20200325124507: 2,163 /Item 341-2/Radiographs-step 1-20200325132726: 2,163 /Item 341-2/Radiographs-step 2-20200325140304: 2,163 /Item 341-2/Radiographs-step 3-20200325143321: 2,163</p> <p>/Item 341-2/ScreenShots - 0: 14 /Item 341-2/ScreenShots - 1: 17 /Item 341-2/ScreenShots - 2: 14 /Item 341-2/ScreenShots - 3: 16</p> <p>/Item 341-3/Radiographs-step 0-20200325154635: 2,163 /Item 341-3/Radiographs-step 1-20200325161551: 2,163</p> <p>/Item 341-3/ScreenShots - 0: 16 /Item 341-3/ScreenShots - 1: 22</p>

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
350	1B364	<p>Cell 1: (Li-Ion) Sectional views of the battery revealed physical damage and deformity of layers of the cell. Internally the cell had visibly separated layers with re-solidified beads of melted metallic material.</p> <p>Cell 2: (Li-Ion)Sectional views of the battery revealed physical damage and deformity of the layers of the cell. Internally the cell had visibly separated layers with re-solidified beads of melted metallic material.</p>	<p>/Item 350/Radiographs-step 0-20200326103724: 2,523 /Item 350/Radiographs-step 1-20200326111121: 2,523</p> <p>/Item 350/ScreenShots - 0: 23 /Item 350/ScreenShots - 1: 18</p>
354	1B365	<p>Cell 1: NiMH but scanned anyway.</p> <p>Cell 2: (18650) Sectional views of the battery revealed a slight shift in the contents from the base and re-solidified beads of melted metallic material</p> <p>Cell 3: (18650) Sectional views of the battery revealed mass loss to the contents and housing at the lower end of the battery. A shift in the contents from the base and resulting deformity near the top and re-solidified beads of melted metallic material were observed</p>	<p>/Item 354/Radiographs-step 0-20200330144353: 2,163 /Item 354/Radiographs-step 1-20200330150718: 2,163 /Item 354/Radiographs-step 2-20200330153042: 2,163</p> <p>/Item 354/ScreenShots - 0: 15 /Item 354/ScreenShots - 1: 27 /Item 354/ScreenShots - 2: 31</p>

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
357	1B366	<p>No # (18650) The battery case was ruptured and had no contents. [Not scanned]</p> <p>Cell 1: (18650) Sectional views of the battery revealed a shift in the internal contents from the base and deformity to the upper portion of the case and re-solidified beads of melted metallic material</p> <p>Cell 2: (18650) Sectional views of the battery revealed a shift in the internal contents from the base and deformity to the upper portion of the case and re-solidified beads of melted metallic material</p> <p>Cell 3: (18650) Sectional views of the battery revealed no internal mass loss and re-solidified beads of melted metallic material.</p> <p>Cell 4: (LiPo) Sectional views of the battery revealed no internal mass loss.</p> <p>Cell 5: (LiPo) Sectional views of the battery revealed no internal mass loss.</p>	<p>/Item 357-1/Radiographs-step 0-20200330101834: 1,803 /Item 357-1/Radiographs-step 1-20200330104347: 1,803 /Item 357-1/Radiographs-step 2-20200330110905: 1,803</p> <p>/Item 357-1/ScreenShots - 0: 25 /Item 357-1/ScreenShots - 1: 24 /Item 357-1/ScreenShots - 2: 43</p> <p>/Item 357-2/Radiographs-Item 357-2: 2,883</p> <p>/Item 357-2/ScreenShots: 42</p> <p>/Item 357-3/Radiographs-Item 357-3: 2,163</p> <p>/Item 357-3/ScreenShots: 21</p>

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
364	1B367	<p>(18650) Not scanned.</p> <p>Cell 1: (18650) Sectional views of the battery revealed a shift in the internal contents from the base</p> <p>Cell 2: (18650) Sectional views of the battery revealed a shift in the internal contents from the base</p> <p>Cell 3: (18650) Sectional views of the battery revealed mass loss and a shift in the internal contents and re- solidified beads of melted metallic material</p> <p>Cell 4: (18650) Sectional views of the battery revealed the battery was ruptured with no top and had no contents</p> <p>Cell 5: (Li-Ion) Sectional views of the battery revealed a shift in the internal contents from the base</p> <p>Cell 6: NiMH, scanned to verify.</p>	<p>/Item 364-1/Radiographs-step 0-20200327111313: 2,163 /Item 364-1/Radiographs-step 1-20200327112900: 2,163 /Item 364-1/Radiographs-step 2-20200327114436: 2,163 /Item 364-1/Radiographs-step 3-20200327120012: 2,163</p> <p>/Item 364-1/ScreenShots - 0: 24 /Item 364-1/ScreenShots - 1: 21 /Item 364-1/ScreenShots - 2: 31 /Item 364-1/ScreenShots - 3: 17</p> <p>/Item 364-2/Radiographs-step 0-20200327130350: 2,163 /Item 364-2/Radiographs-step 1-20200327133840: 2,163 /Item 364-2/Radiographs-step 2-20200327141523: 2,163</p> <p>/Item 364-2/ScreenShots: 29 /Item 364-2/ScreenShots - 0: 33 /Item 364-2/ScreenShots - 1: 30</p>
367	1B369	<p>No #: One fire damaged cell with approximate dimensions of 62mm in length by 30mm in diameter with no contents.</p> <p>Cell 1: (18650) Sectional views of the battery revealed intact internal contents</p> <p>Cell 2: (18650) Sectional views of the battery revealed intact internal contents</p> <p>Cell 3: (Li-Ion): Sectional views of the battery revealed a shift in the internal contents from the base</p>	<p>/Item 367/Radiographs-step 0-20200326154213: 2,163 /Item 367/Radiographs-step 1-20200326161215: 2,163 /Item 367/Radiographs-step 2-20200326164227: 2,163</p> <p>/Item 367/ScreenShots - 0: 16 /Item 367/ScreenShots - 1: 10 /Item 367/ScreenShots - 2: 14</p>

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
228	1B419		
267	1B437		
311	1B457		
322	1B465		
373	1B482		
	1B486		
	1B500		
	1B501		

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
	1B502		
	1B503		
	1B504		
	1B505		
	1B506		
	1B507		
55			
111			

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
113		(LiPo) Sectional views of the battery revealed no internal mass loss and re-solidified beads of melted metallic material	/Item 113-1/Radiographs-step 0-20200326122111: 2,163 /Item 113-1/Radiographs-step 1-20200326125131: 2,163 /Item 113-1/Radiographs-step 2-20200326132135: 2,163 /Item 113-1/ScreenShots - 0: 15 /Item 113-1/ScreenShots - 1: 25 /Item 113-1/ScreenShots - 2: 24 /Item 113-2/Radiographs-step 0-20200326140500: 2,163 /Item 113-2/Radiographs-step 1-20200326143655: 2,163 /Item 113-2/ScreenShots - 0: 20 /Item 113-2/ScreenShots - 1: 16
A7			
D1			
Bunk 1			
Bunk 11			
Bunk 11			
Bunk 4			
Bunk 4			
Bunk 4			
Bunk 4			
Bunk 4			
Bunk 4			
Bunk 5			

ATF #	FBI #	ATF FRL Report Summary of Li Batteries	Scan Disk Radiograph and Screenshot File Counts
Bunk 7			
Bunk 8			
Bunk 8			
C2			
C2			
C2			