



CJTF-76
Collateral Investigation Board

CASA-212
Blackwater 61 – N960BW
27 November 2004



BOTTOM LINE

The mishap crew flew the mishap aircraft into a box canyon and impacted the terrain at 14,650 feet MSL on the northern face of a 16,580 feet MSL ridgeline.



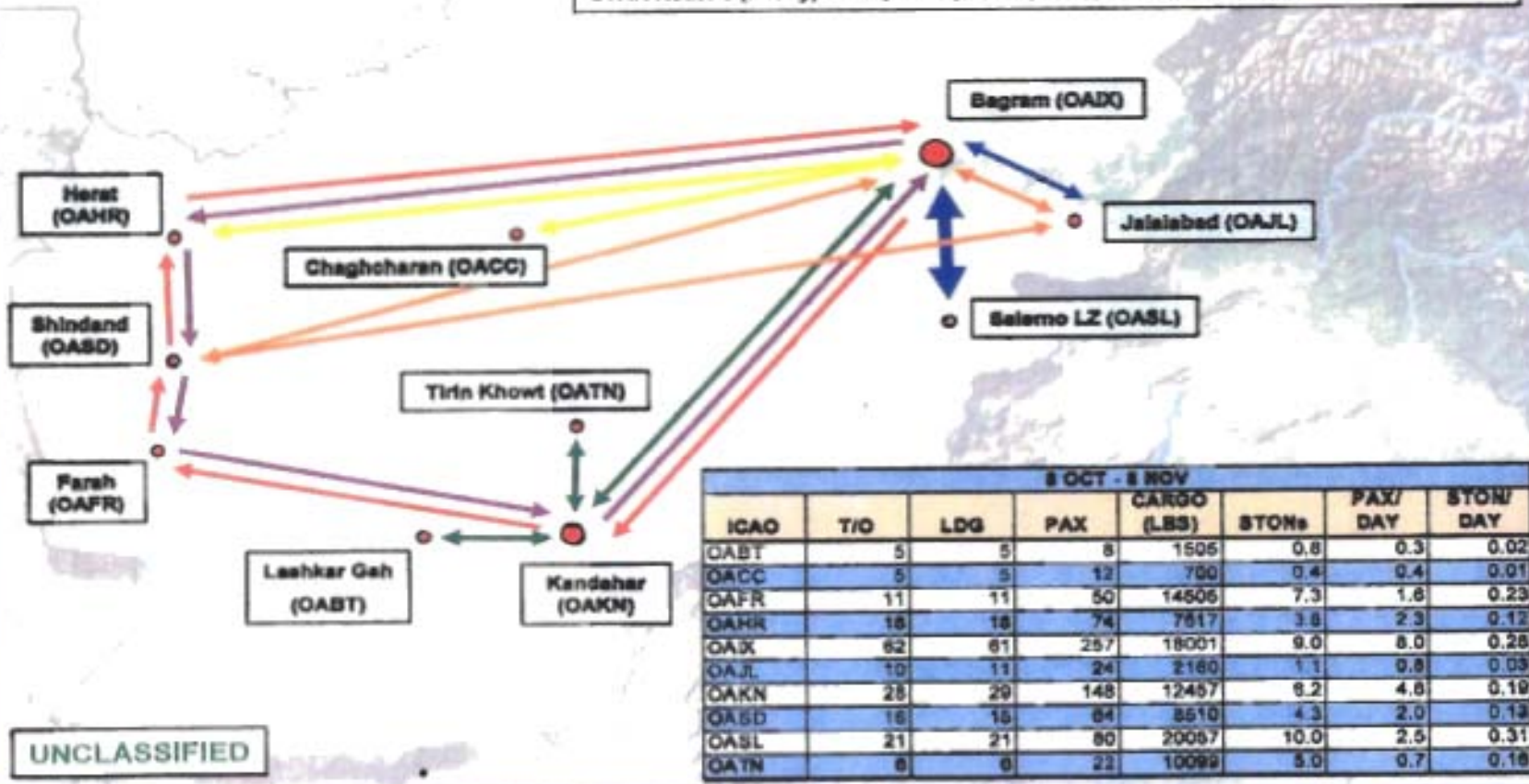


BACKGROUND STAR ROUTES

UNCLASSIFIED

BLACKWATER AVIATION STOL USE IN AFGHANISTAN

- STAR Route 1 (Sunday): OAIK, OADR, OASD, OAFR, OAKN, OAIK
- STAR Route 2 (Monday): OAIK, OASL, OAIK, OAJL, OADK, OASL, OAIK
- STAR Route 3 (Tuesday): OAIK, OAKN, OABT, OAKN, OATN, OAKN, OAIK
- STAR Route 4 (Wednesday): OAIK, OADR, OAIK, OACC, OAIK
- STAR Route 5 (Thursday): OAIK, OAKN, OAFR, OASD, OADR, OAIK
- STAR Route 6 (Friday): OAIK, OAJL, OASD, OAIK, OASD, OAJL, OAIK



UNCLASSIFIED

8 OCT - 8 NOV								
ICAO	T/O	LDG	PAX	CARGO (LBS)	STONS	PAX/DAY	STON/DAY	
OABT	5	5	8	1505	0.8	0.3	0.02	
OACC	5	5	12	700	0.4	0.4	0.01	
OAFR	11	11	50	14505	7.3	1.6	0.23	
OADR	18	18	74	7817	3.8	2.3	0.12	
OAIK	62	61	257	18001	9.0	8.0	0.28	
OAJL	10	11	24	2160	1.1	0.8	0.03	
OAKN	28	29	148	12457	6.2	4.8	0.19	
OASD	18	18	84	8510	4.3	2.0	0.19	
OASL	21	21	80	20067	10.0	2.5	0.31	
OATN	8	8	22	10099	5.0	0.7	0.18	



BACKGROUND AIRCREW DATA

- | | <u>Arrival Date</u> |
|--|---------------------|
| <ul style="list-style-type: none">▪ Noel B. English, Captain<ul style="list-style-type: none">▪ 37 year old Airline Transport Pilot▪ 5753hrs total, 898hrs in CASA 212▪ 33.2 hrs in Afghanistan | 14 Nov 04 |
| <ul style="list-style-type: none">▪ Loren D. Hammer, First Officer<ul style="list-style-type: none">▪ 35 year old Airline Transport Pilot▪ 2262hrs total, 453hrs in CASA 212▪ 33.1 hrs in Afghanistan | 14 Nov 04 |
| <ul style="list-style-type: none">▪ Melvin E. Rowe, Flight Mechanic<ul style="list-style-type: none">▪ 43 year old Airframe & Powerplant Mechanic | 4 Oct 04 |
| <ul style="list-style-type: none">▪ All crewmembers fully qualified▪ No unusual habits, behavior, or stress on the part of the mishap crew | |
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ACCIDENT SUMMARY

- **Blackwater 61 (BW-61) was executing a JMR from Bagram AF to the Western Provinces carrying three passengers and 455 lbs of cargo**
 - **BW-61 departed north to fly through the Bamian Valley**
 - **BW-61 unsuccessfully attempted a 16,580 ft ridgeline crossing, impacting terrain at 14,650 ft**
 - **Overdue aircraft procedures began 3:05 hours after expected arrival at Farah; recovery complete after 74:19 hours**
-



SEQUENCE OF EVENTS

CREW REST

- **No crew rest or duty day problems noted on day of mishap**
 - **Minimum crew rest: 10 hours**
 - Mishap crew went to bed 2000L on 26 Nov 04
 - Crew woke 0430L on 27 Nov 04
 - **Crew pick-up at 0615L; due back to Bagram 1330L**
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SEQUENCE OF EVENTS

PREFLIGHT

- **27 Nov 04**

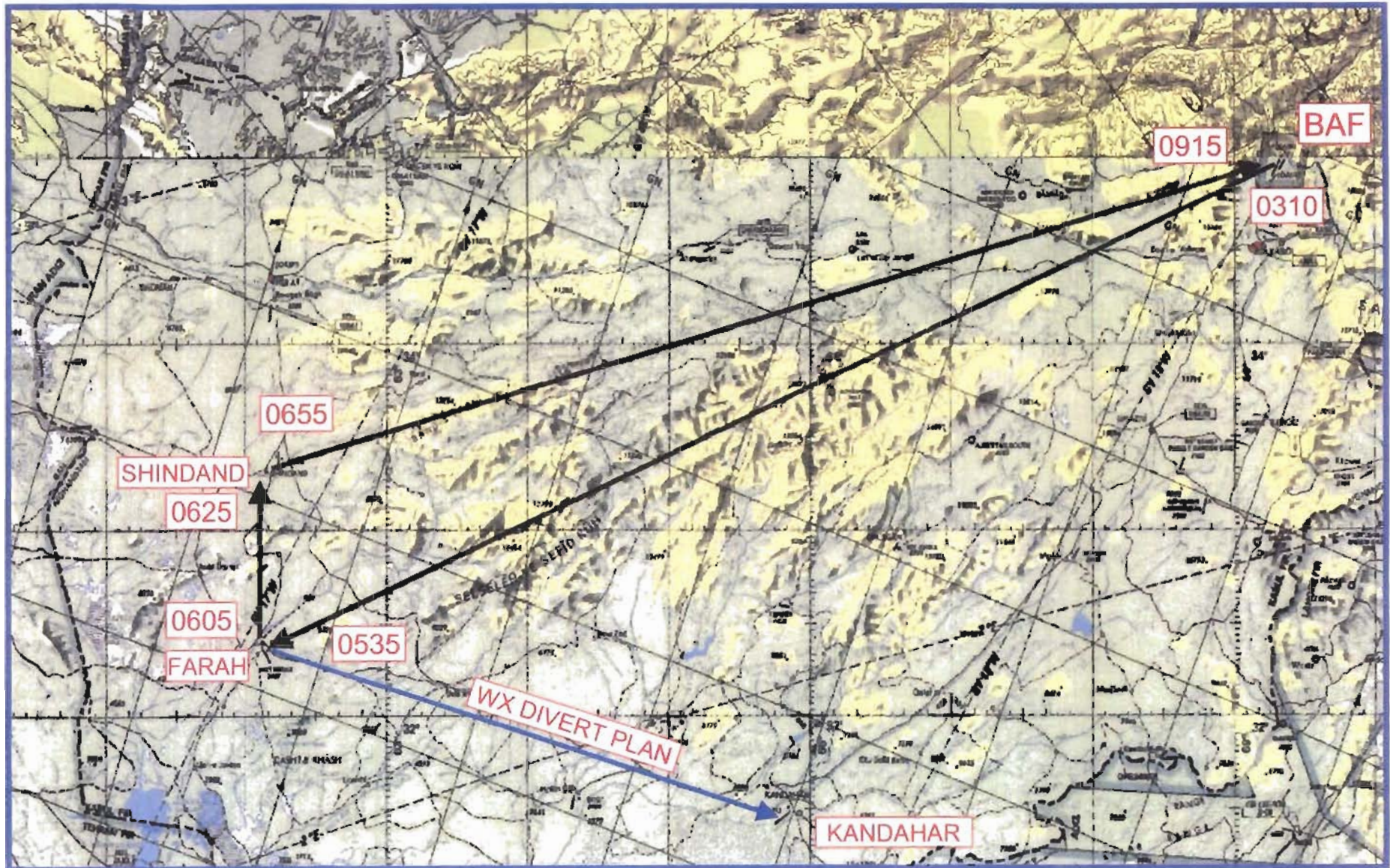
0145Z: Mishap Crew (MC) departed billeting, had breakfast, then stopped briefly for threat briefings enroute company operations

0230Z: MC met with fellow aircrew members and company operations officer to discuss weather divert options



SEQUENCE OF EVENTS

JMR #16695





SEQUENCE OF EVENTS

FLIGHT

- 0245Z: MC boarded passengers, started engines and began taxi roll**
 - 0304Z: MC stopped MA to load additional passenger**
 - 0308Z: MA took off and assumed WNW departure heading**
 - 0313Z: Radar track lost on MA 9.5 NM northwest of Bagram Airfield**
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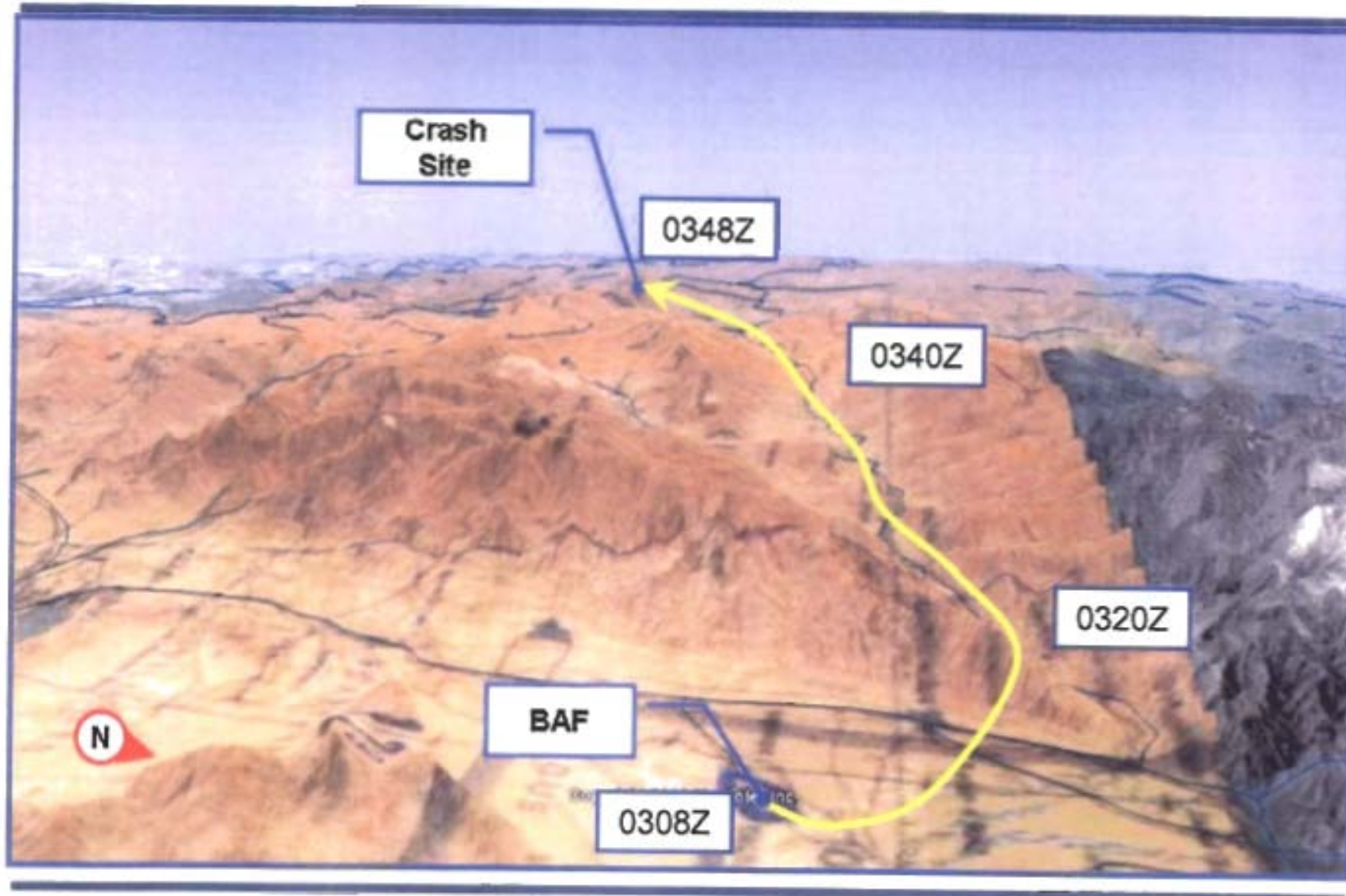


WEATHER

- **Forecast/observed weather**
 - **Bagram clear**
 - **Gusting winds, blowing dust at Western Bases**
 - **Light winds, scattered clouds enroute**
 - **No Hazards**
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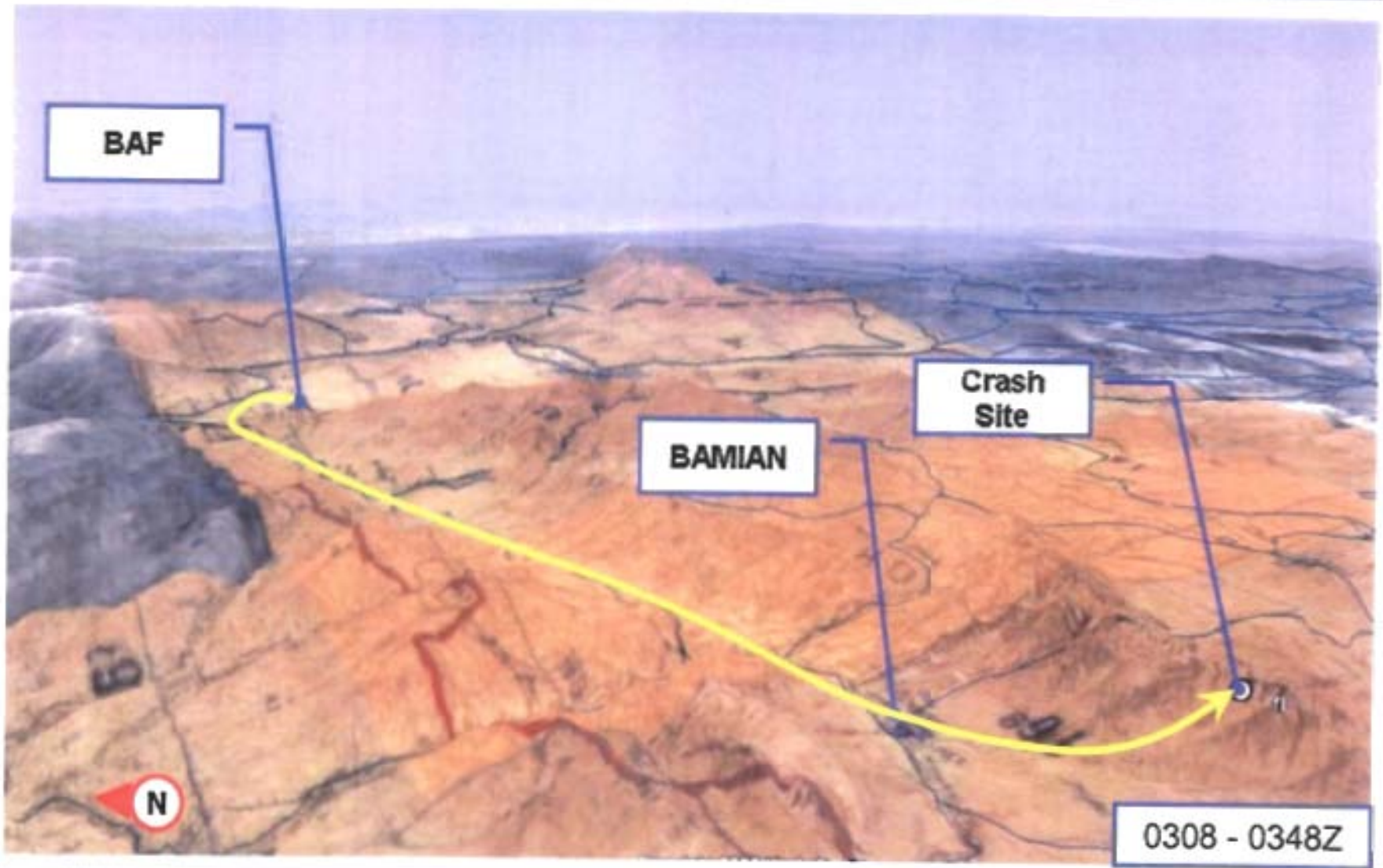


SEQUENCE OF EVENTS FLIGHT



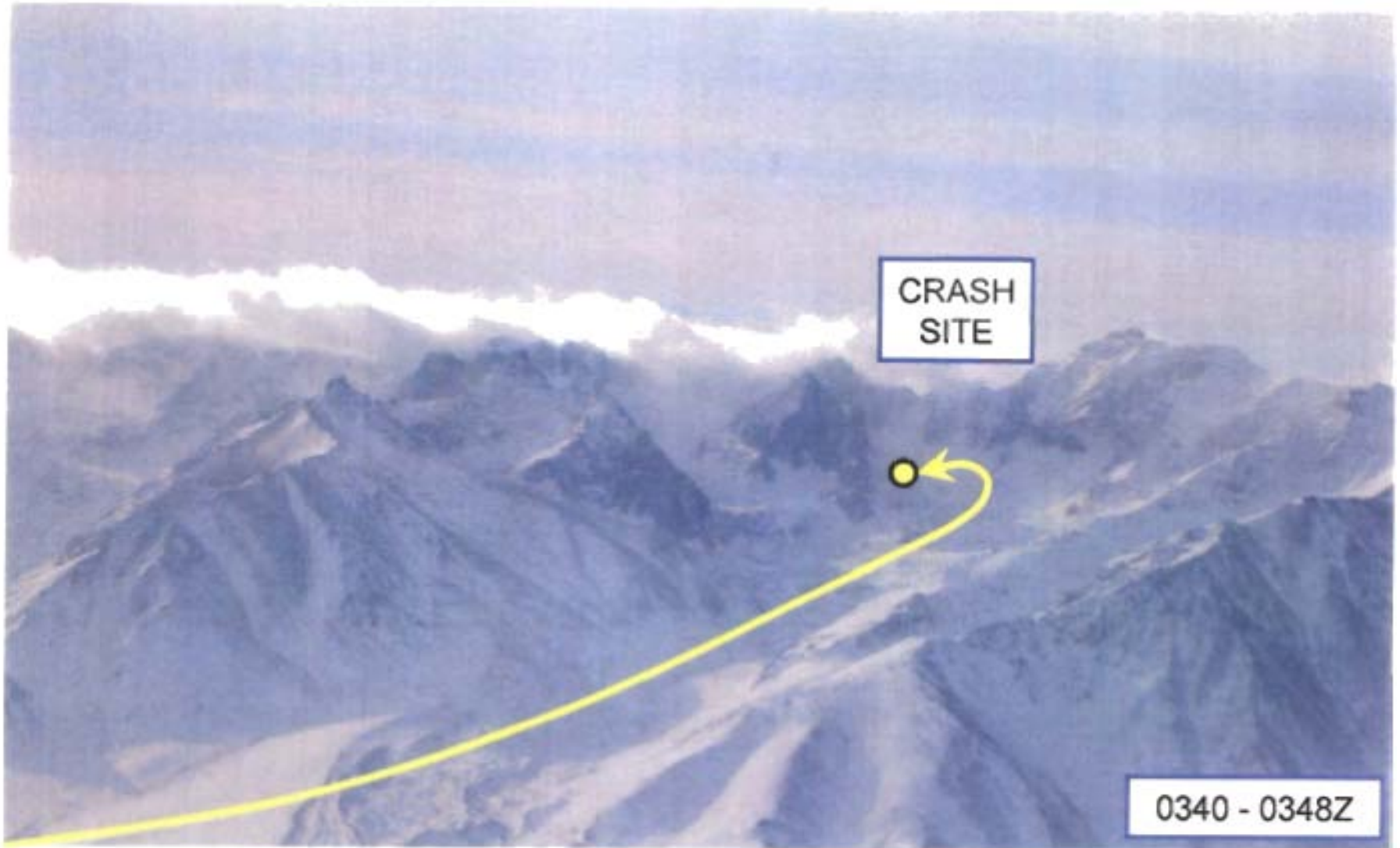


SEQUENCE OF EVENTS FLIGHT



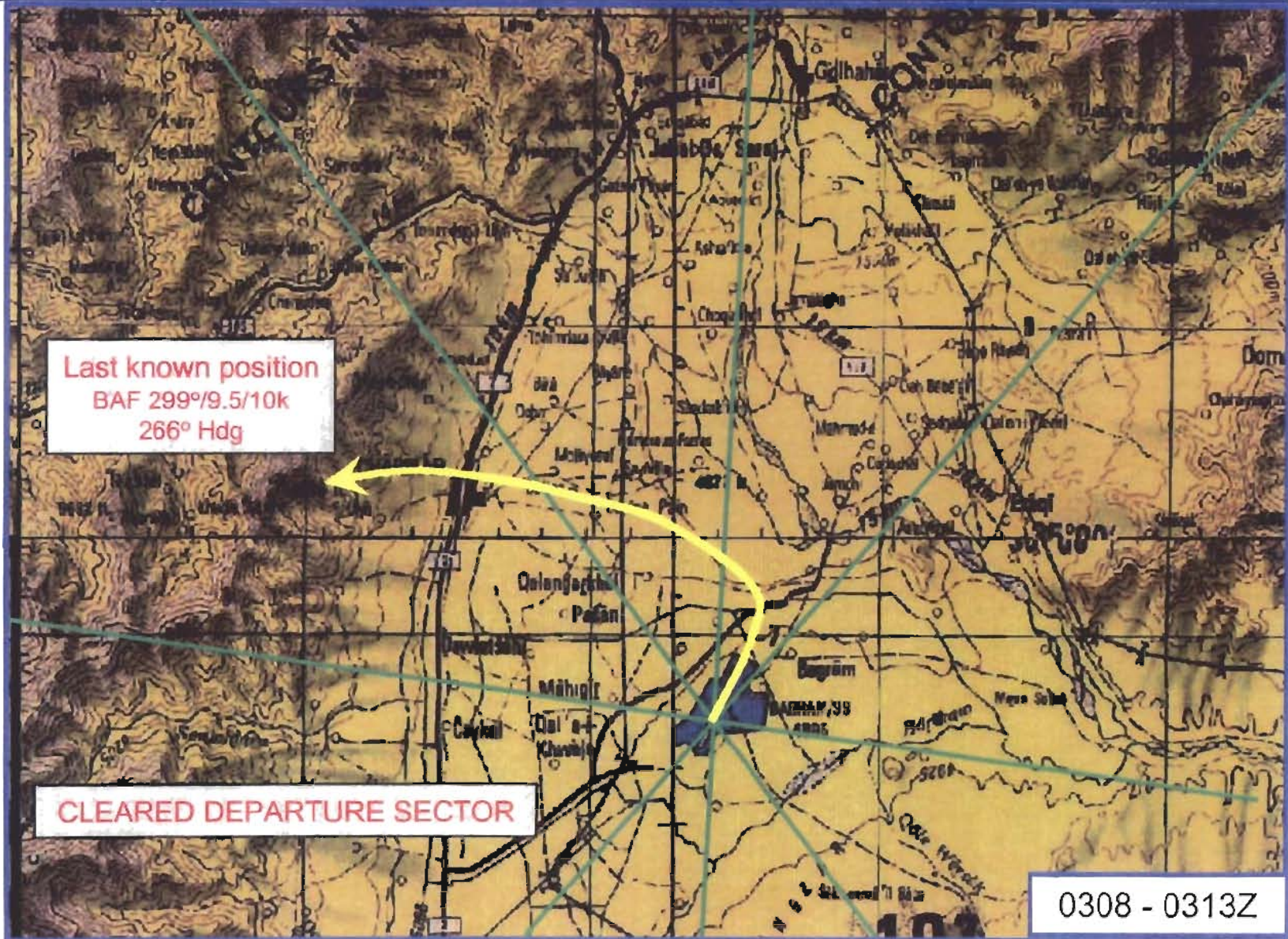


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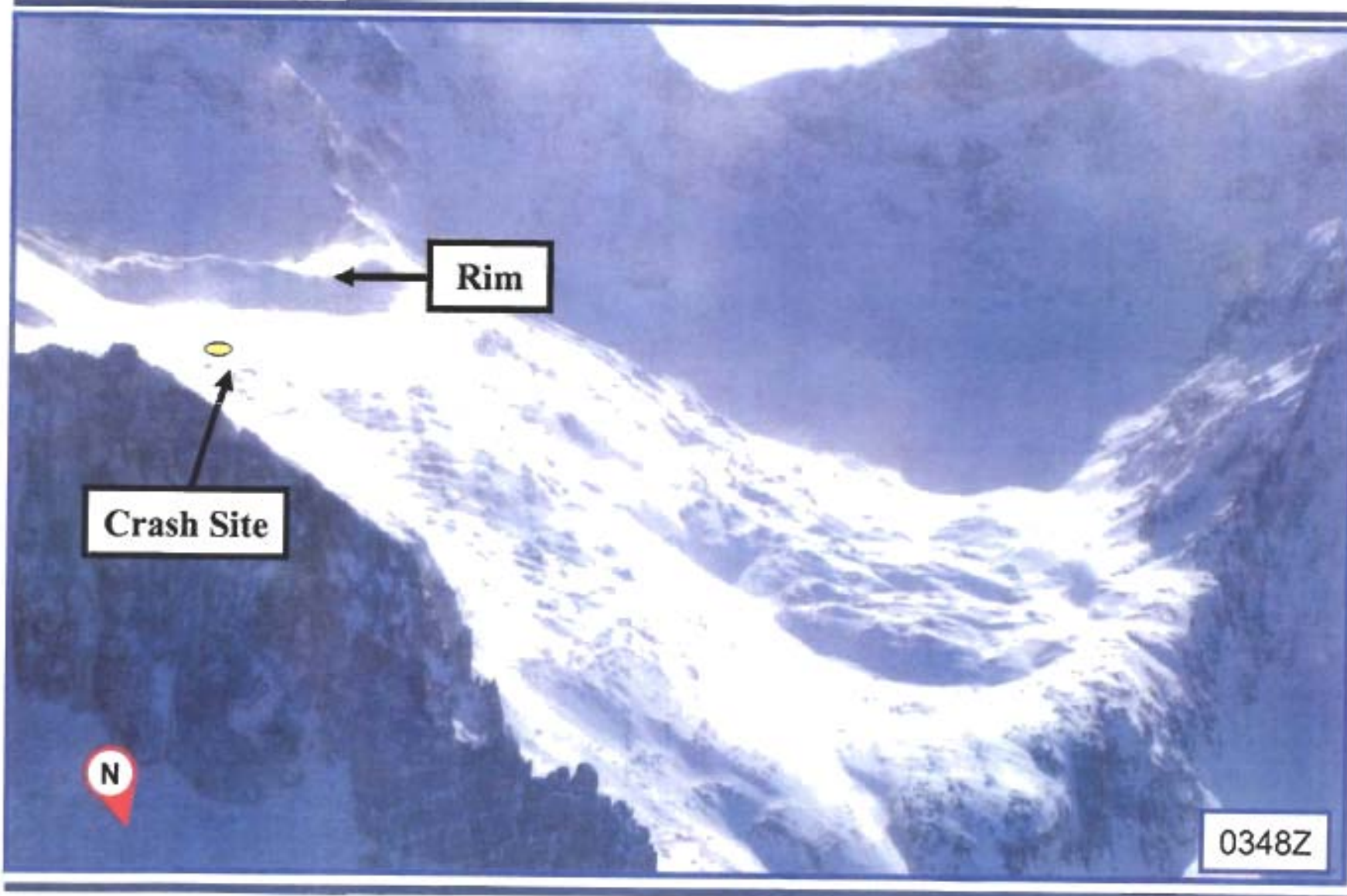


SEQUENCE OF EVENTS FLIGHT





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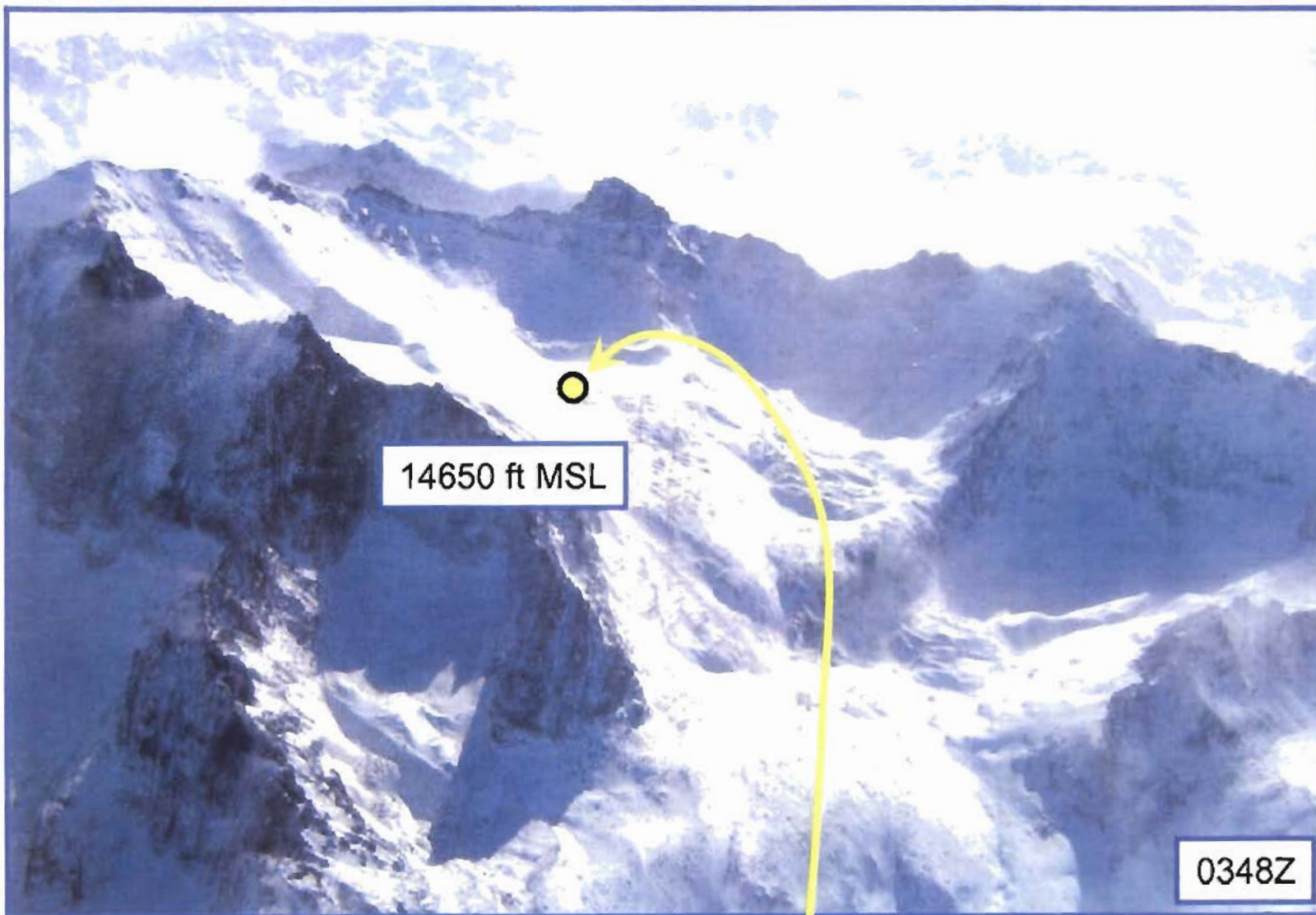


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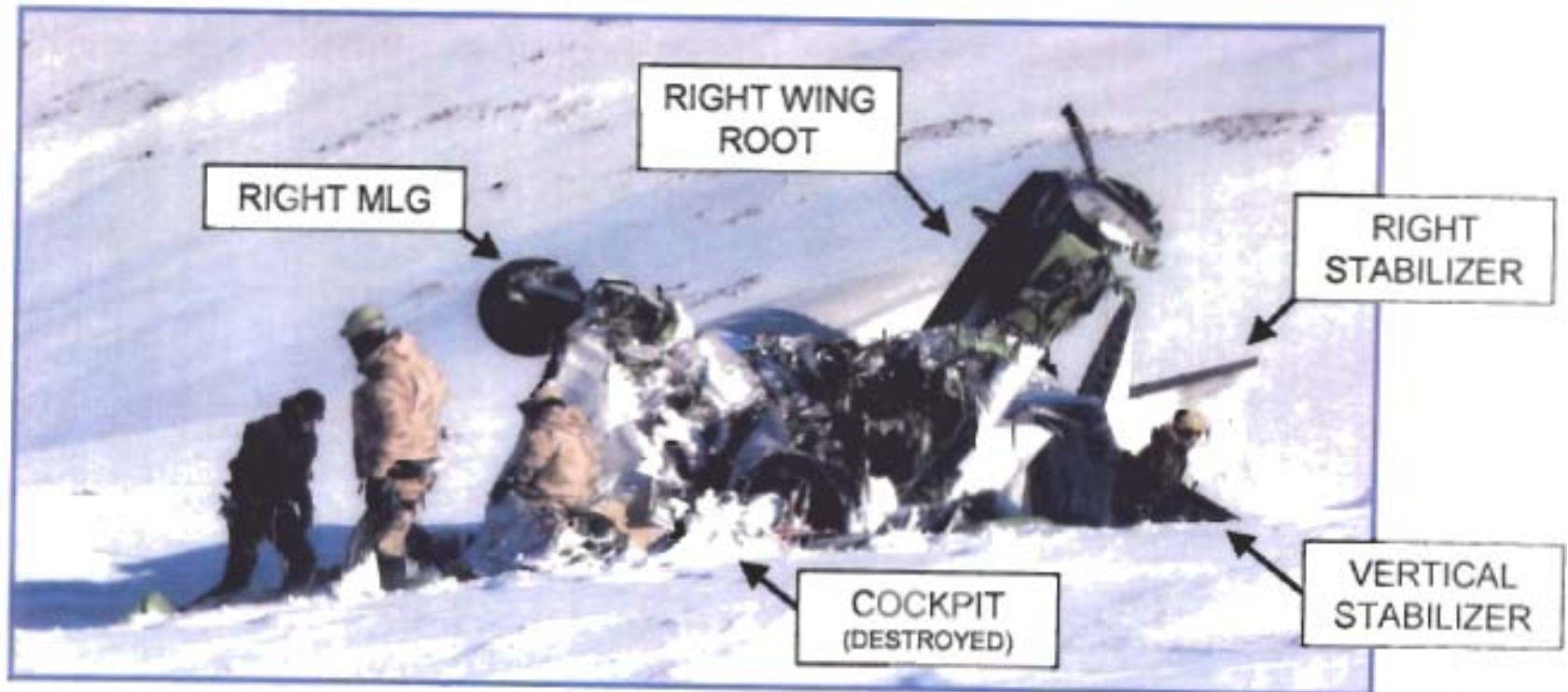


SEQUENCE OF EVENTS

IMPACT

0348Z (approx): The aircraft impacted the terrain, skidding several hundred feet.

Right wing struck terrain and was sheared off; aircraft cartwheeled, destroying cockpit, breaking fuselage, and folding left wing under fuselage.





SEQUENCE OF EVENTS

SEARCH AND RESCUE

0535Z: Blackwater 61 scheduled to arrive at Farah

0900Z: Passenger at Farah notified CJTF-76 CJ4 that MA had not arrived. CJTF-76 CJ4 notified Bagram ATOC

0900Z – 0930Z: ATOC attempted to locate MA at likely divert airfields

0930Z: ATOC informed 455 AEW Command Post (CP) that MA was overdue

0935Z: CP initiated overdue/missing aircraft checklist

xxxxZ: CP contacted RCC to report missing aircraft

1012Z: CJTF-76 Rescue Coordination Center (RCC) issued missing aircraft notification

1012-1018Z: RCC gathered and distributed flight information



SEQUENCE OF EVENTS

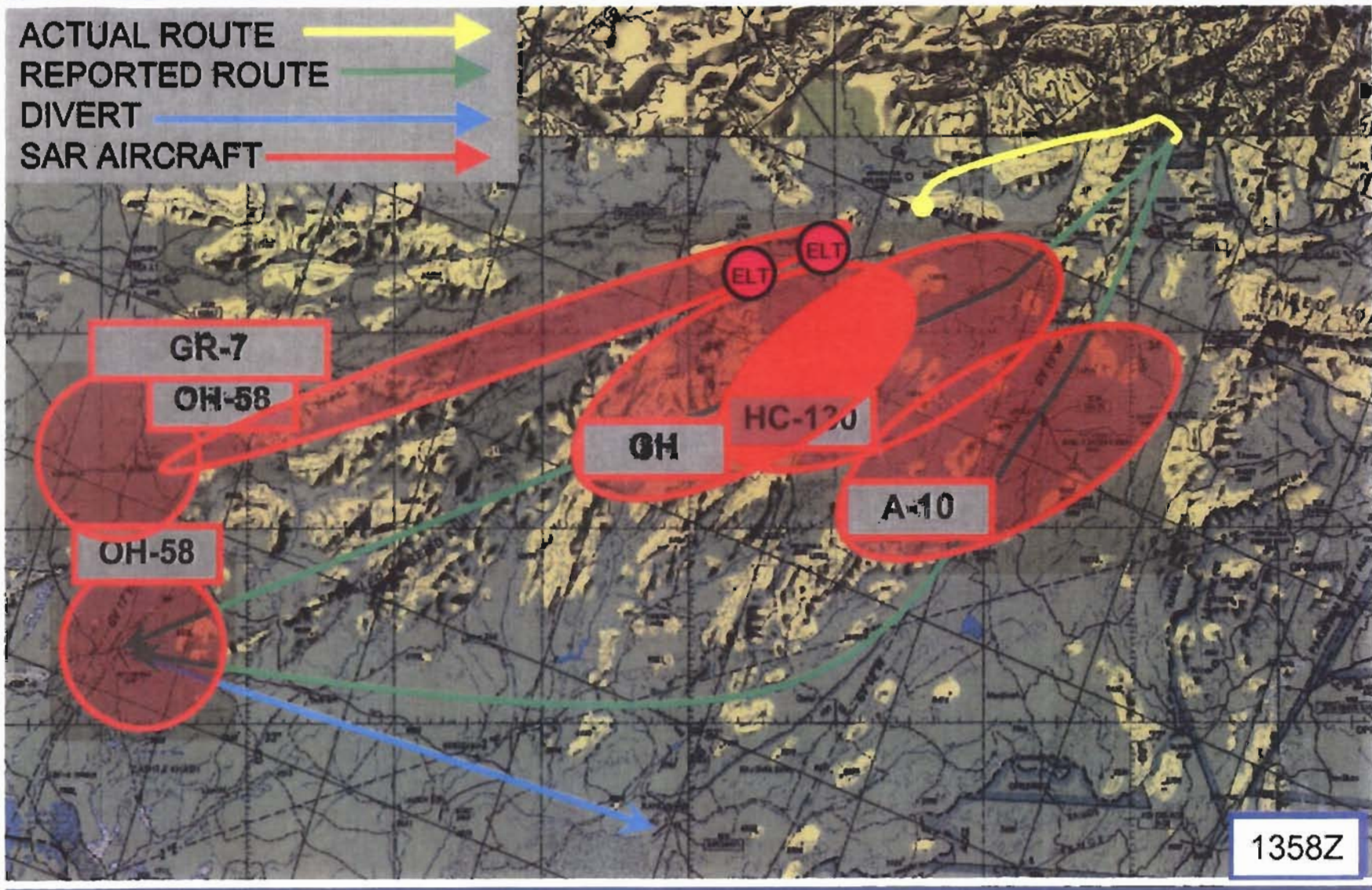
SEARCH AND RESCUE

- 1026Z: Air Support Operations Center directed radio search by airborne aircraft
 - 1030Z: BAF Radar Control had radar contact of unidentified aircraft
 - 1034Z: JSRC Requested Last Known Position Information from RCC
"Left Bagram at 0310Z destination Farah"
 - 1046Z: RCC Reported PA Operations had no flight plan information
 - 1050-1110Z (approx): RCC executed missing aircraft notification process
 - 1119Z: JSRC issued scramble order to search and rescue (SAR) HC-130 from K2
 - 1127Z: CJTF-76 Joint Operations Center made search and rescue request to Joint Search and Rescue Center (JSRC)
 - 1128Z: JSRC accepted SAR mission and assumed coordination authority
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SEQUENCE OF EVENTS

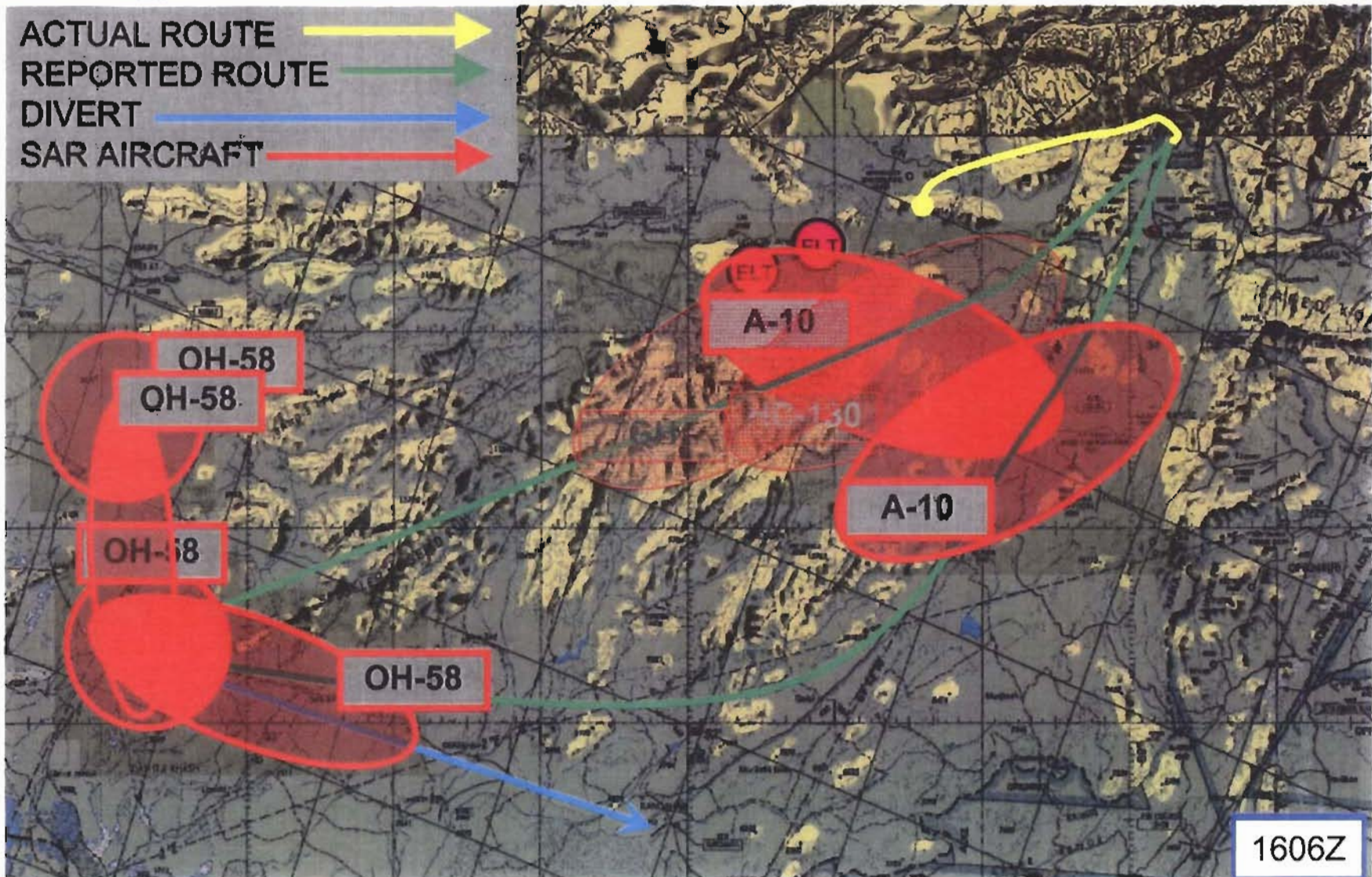
SEARCH AND RESCUE





SEQUENCE OF EVENTS SEARCH AND RESCUE

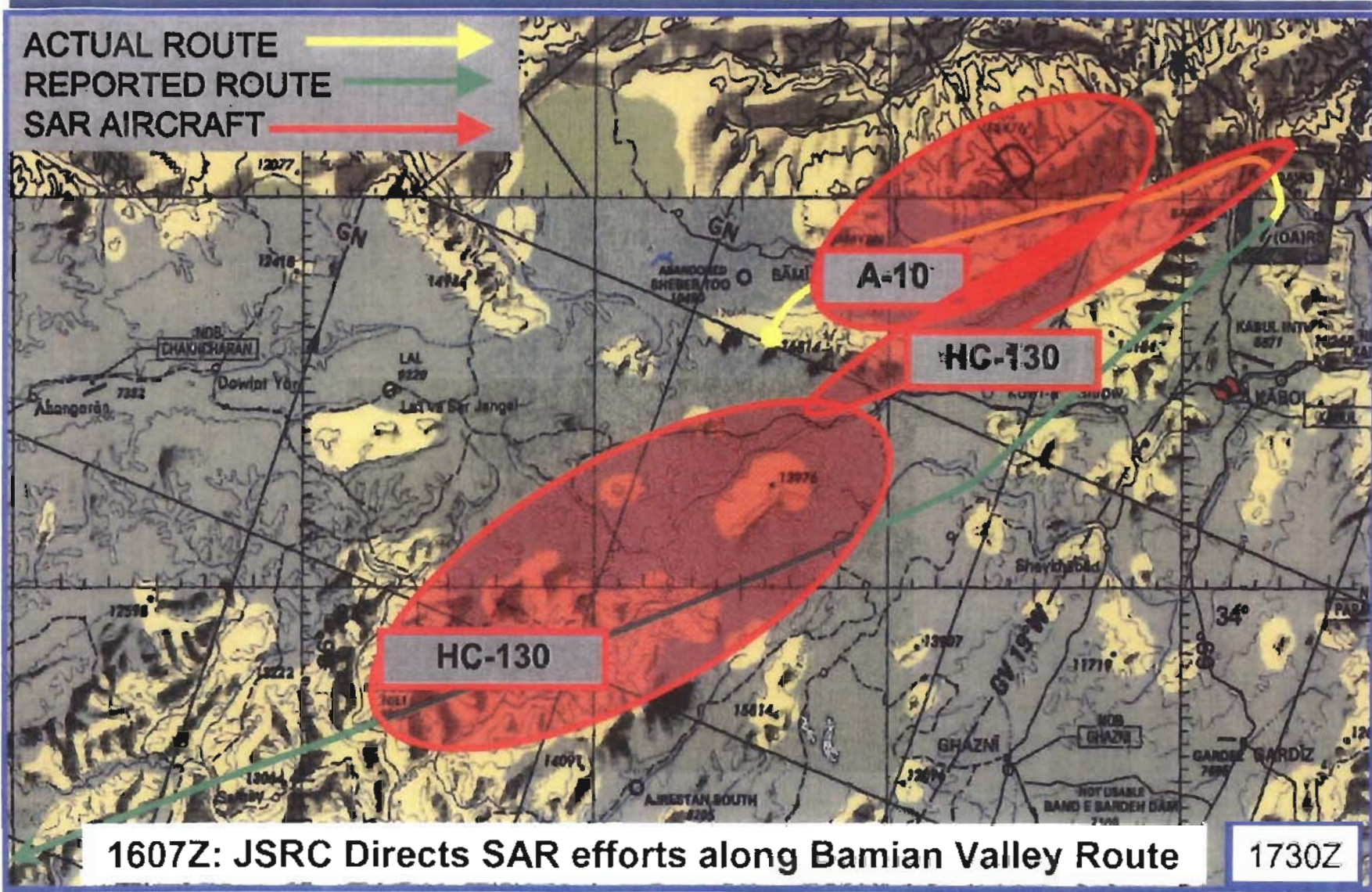
ACTUAL ROUTE →
REPORTED ROUTE →
DIVERT →
SAR AIRCRAFT →





SEQUENCE OF EVENTS

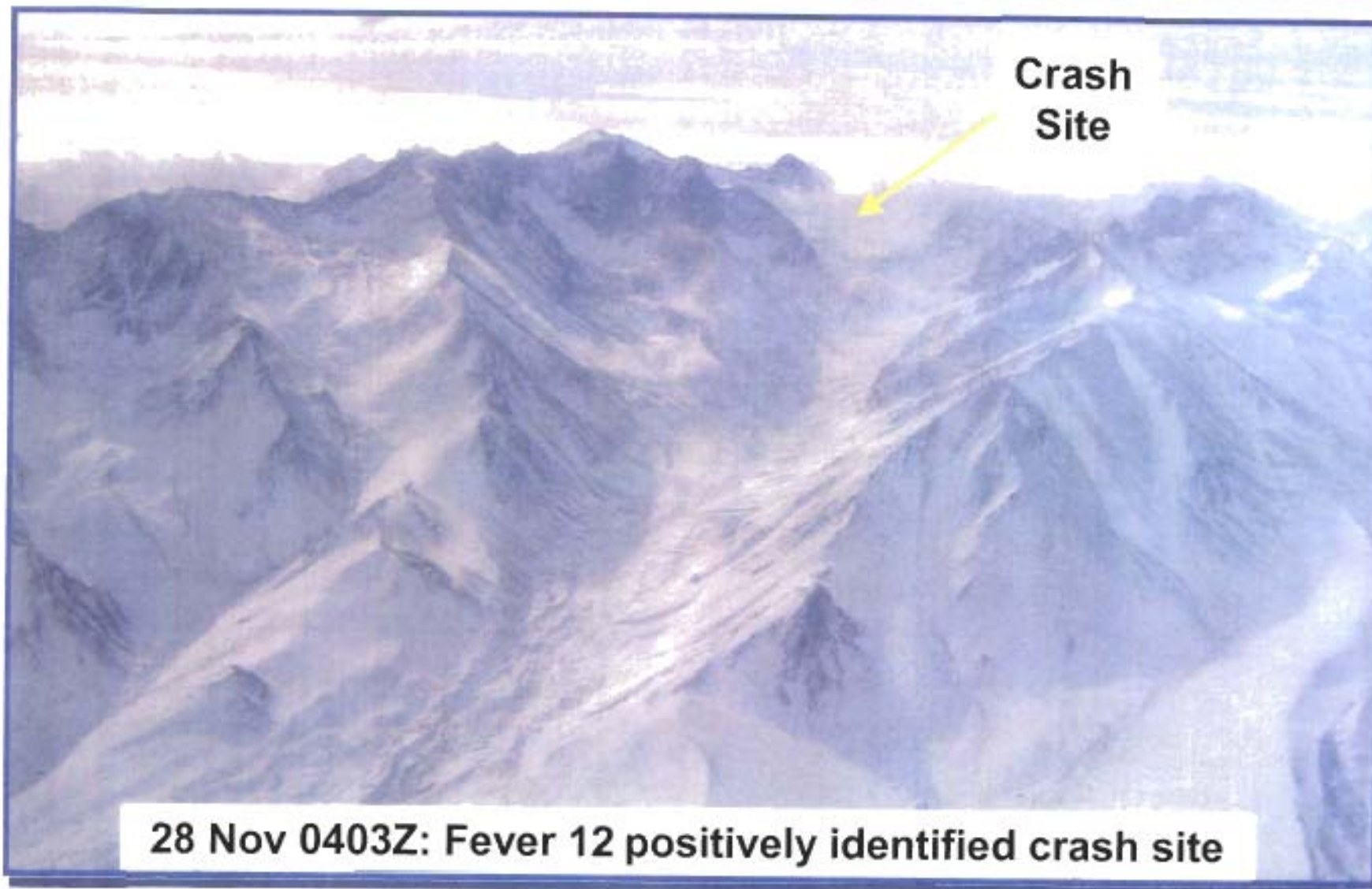
SEARCH AND RESCUE





SEQUENCE OF EVENTS

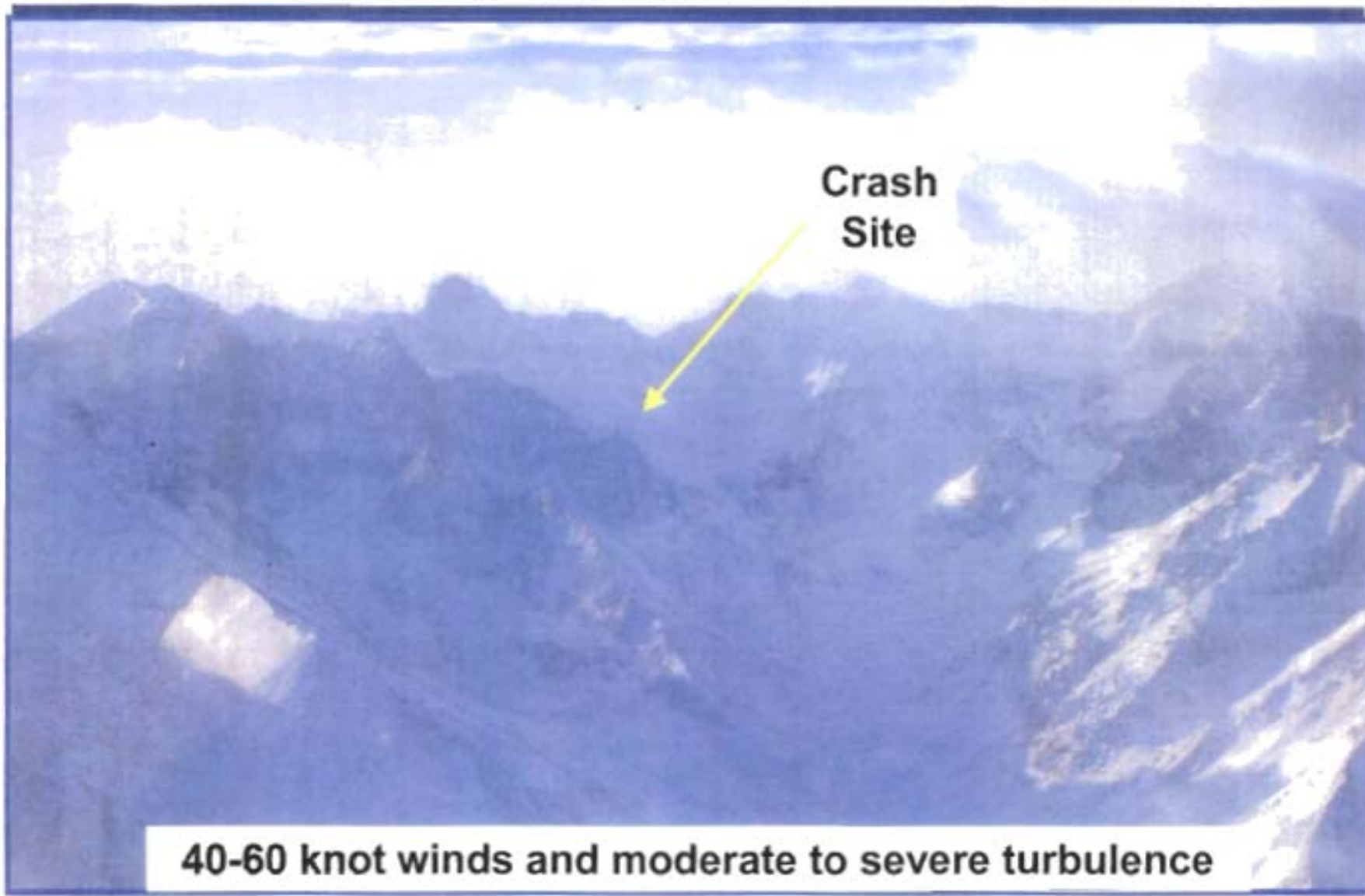
SEARCH AND RESCUE – WRECKAGE DISCOVERY





SEQUENCE OF EVENTS

SEARCH AND RESCUE – RESCUE ATTEMPTS



40-60 knot winds and moderate to severe turbulence



SEQUENCE OF EVENTS

SEARCH AND RESCUE

28 Nov – Special Forces Team moved to Bagram

29 Nov – Weather at crash site and Bagram prevented rescue operations

Rescue/Recovery teams consolidated equipment at Bagram and planned recovery mission from Bamian Airfield.



SEQUENCE OF EVENTS

SEARCH AND RESCUE



30 Nov

0300Z: CH-47s launched from Bagram for Bamian Airfield

0412Z: CH-47s departed Bamian for crash site



SEQUENCE OF EVENTS

SEARCH AND RESCUE

0439Z: CH-47s arrived at crash site, recover 6 bodies, CVR
0549Z: CH-47s departed crash site for Bagram

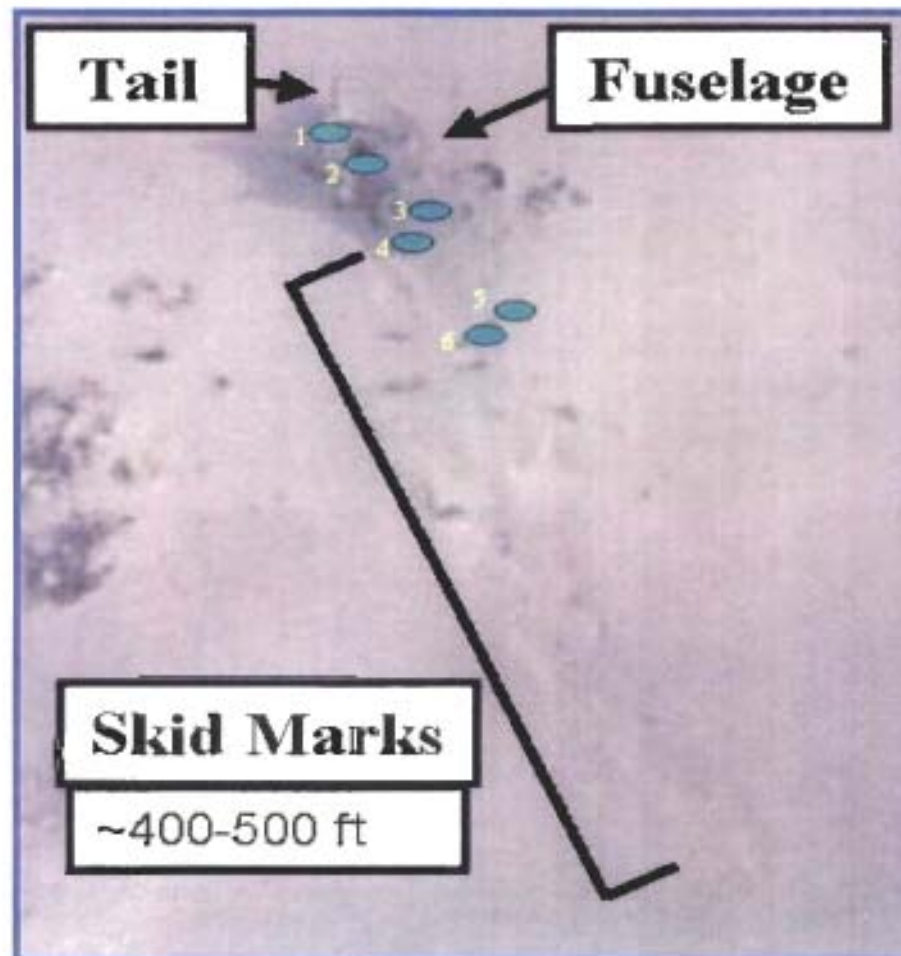




SEQUENCE OF EVENTS

RECOVERY OF REMAINS

1. **Miller - survived initial impact**
 - Smoked cigarette, urinated twice, unrolled sleeping bags
 - Found lying on ramp in aft portion of fuselage wreckage
 - Suffered internal bleeding
 - Presumed to have died within hours of crash
 2. **Grogan - strapped in seat in fuselage**
 3. **McMahon – strapped in seat under wing**
 4. **Rowe (MFM) - buried in snow in front of wreckage**
 5. **Hammer**
 6. **English**
- } buried in snow 150 ft from wreckage





FACTUAL INFORMATION

MEDICAL

- **Pathology**

- Autopsies performed at Port Mortuary, Dover AFB 3 Dec 04
 - All 3 crew members sustained immediately fatal injuries on impact
 - LTC McMahon & CW2 Grogan also sustained immediately fatal injuries on impact
 - SPC Miller had lung and abdominal injuries, a broken rib, significant internal bleeding, and some minor head injuries
-



BOARD CHARTER

- **Establish verifiable time-line for the events related to the crash and search, rescue, and recovery operations, commencing with the estimated time of departure and ending with the recovery and return of the remains at Bagram Airfield, Afghanistan**

 - **Timeline previously discussed**
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WAY AHEAD

- **BRIEF CFACC**
 - **BRIEF AMC COMMANDER**
 - **PROVIDE THIS INFORMATION TO AMC CONTRACTING**
 - **PROVIDE THIS INFORMATION TO USAF AND US ARMY SAFETY CENTERS**
 - **CONDUCT FAMILY BRIEFINGS**
 - **IMPLEMENT BOARD RECOMMENDATIONS**
 - **AMC APPROVES CONTRACTOR TO RESUME FLIGHT OPERATIONS**
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COLLATERAL INVESTIGATION BOARD

