Friendly Fire : Snook's Analysis

List of Facts & partial WBGs

for

Group, Individual & Organisational Factors

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List of Facts: Group Factors. Version 4

G1-7

1. AWACS CRW could not question F-15 engagement
2. AWACS failed accurately to track helos
3. Weak crew: "pseudo-team" (3, 50)
4. AWACS inability to control mission aircraft
5. Adoption of a priori scripts instead of norms
6. No emphasis placed on crew "mission readiness"
7. AWACS subordinate position in OPC
8. USAF "two layer" culture
9. Overreliance on org-def positions, SOPs, interaction rules
10. Fundamental leadership failure

G8

11. Major budget cut reversals
12. Negative influence on personnel and equipment
13. Gulf War
14. Downsizing (14, 26)
15. High OPTEMPO
16. Shrinking defence budgets (16, 24)
17. Increasing OPNL deployments (17, 23)
18. Cries for "peace dividends"
19. Changing world order
20. Operations other than war
21. Fall of the Soviet Union

G9

22. Poor morale CMD climate in AWACS unit
23. Increased OPNL deployments (17, 23)
24. Shrinking defense budgets (16, 24)
25. Aging airframes
26. Downsizing (14, 26)
27. Deferred maintenance
28. Delayed fielding of new equipment

G10.1

29. Weakened ability in AWACS to perform required tasks
30. "Organisational shell" based structure (30, 32)
31. Weak leadership by MCC and SD
32. Weak "inner shell" (30, 32)
33. Poor "spin-up" training (33, 38)

G10.2

34. Many crew not paying attention
35. Confused authoritiy relations amongst AWACS crew
36. "Diffuse responsibility" amongst AWACS crew (36, 43, 51, 55, 58)
37. Presence of shadow crew on first deployment
38. Gap between "spin-up" training and actual deployment (33, 38)

G11

39. F15s and helos on different radio frequencies
40. No info from AWACS about helos
41. AWACS didn't tell helos to change frequencies
42. Handoff of helos not properly made
43. Diffusion of responsibility (36, 43, 51, 55, 58)
44. Enroute controller and TAOR controller not in physical contact
45. TAOR controller and supervisor not in visual contact
46. Ad hoc seating arrangement in AWACS
47. Console failure

G12-1

48. Critical failure to act (48, 53)
49. Poor launch
50. Weak crew (3, 50)
51. Diffusion of responsibility (36, 43, 51, 55, 58)
52. Helos not integrated into OPC flightops

G12-2

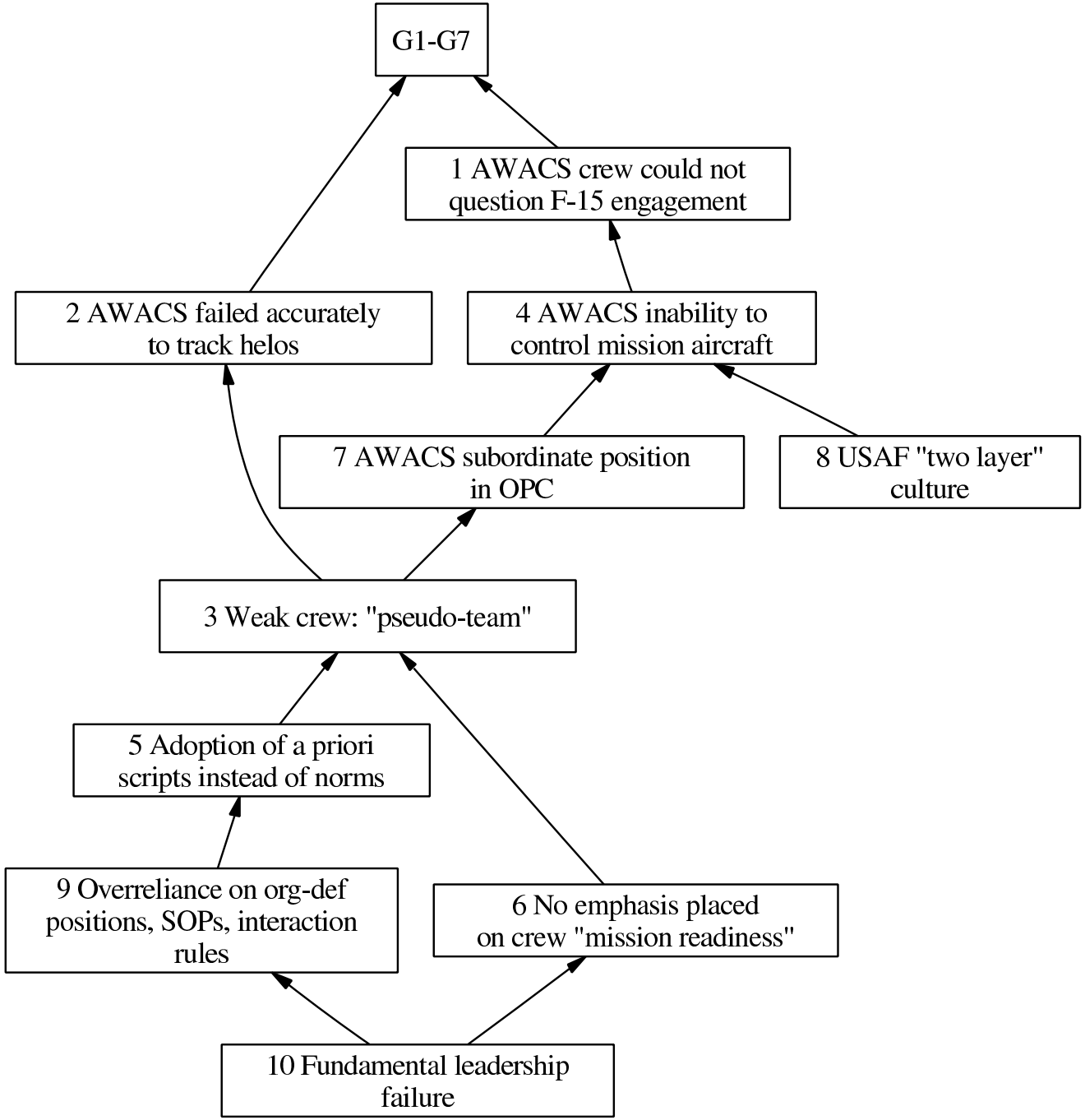
53. Failure to act (48, 53)
54. Premiss "social definition" fulfilled of social impact theory
55. Premiss "diffusion of responsibility" fulfilled of social impact theory (36, 43, 51, 55, 58)
56. Truth of Social Impact Theory
57. SD & MCC believed, against USAF regs, that surveillance not responsible for tracking Eagle Flight (57, 62)

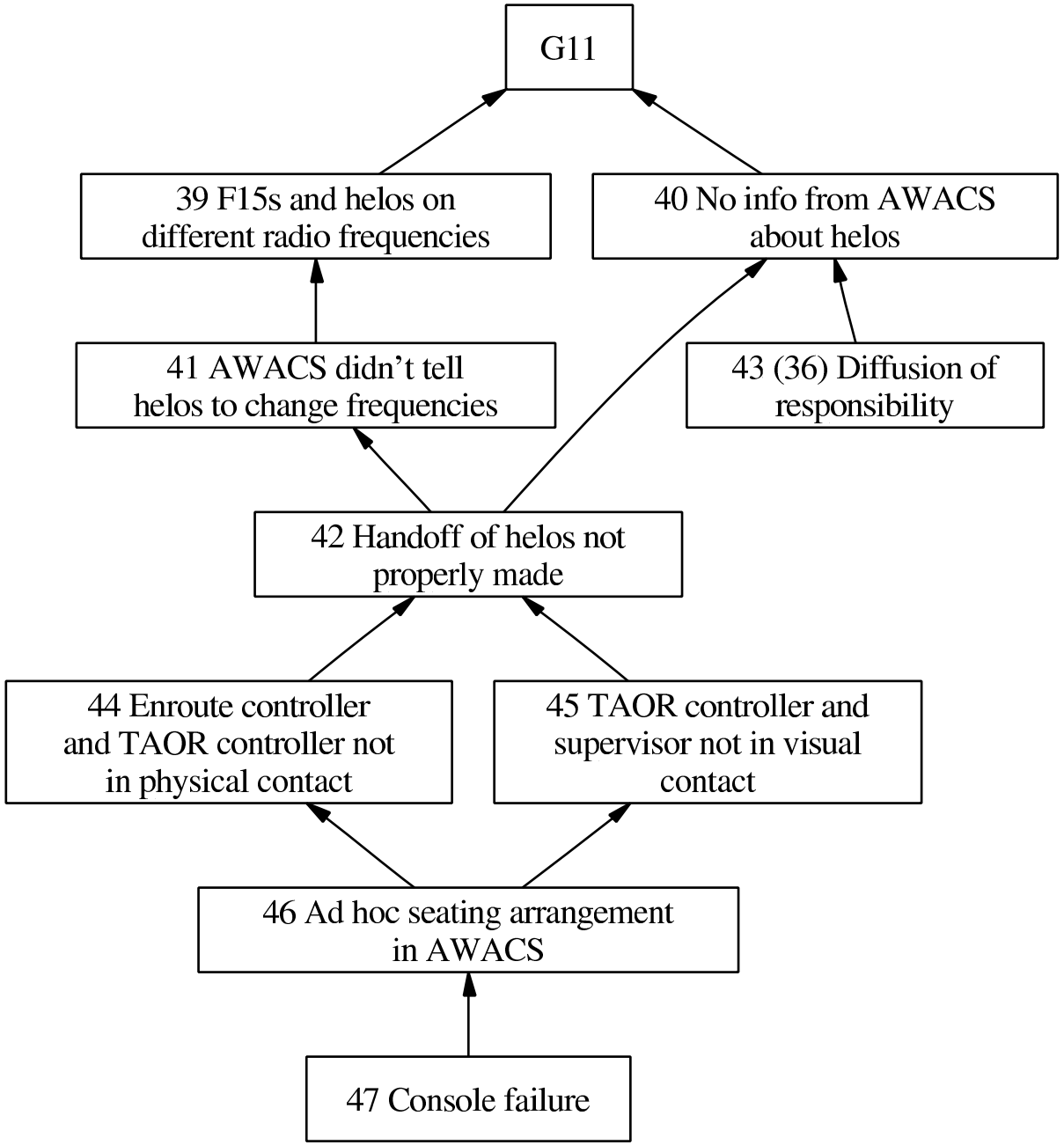
G12-3

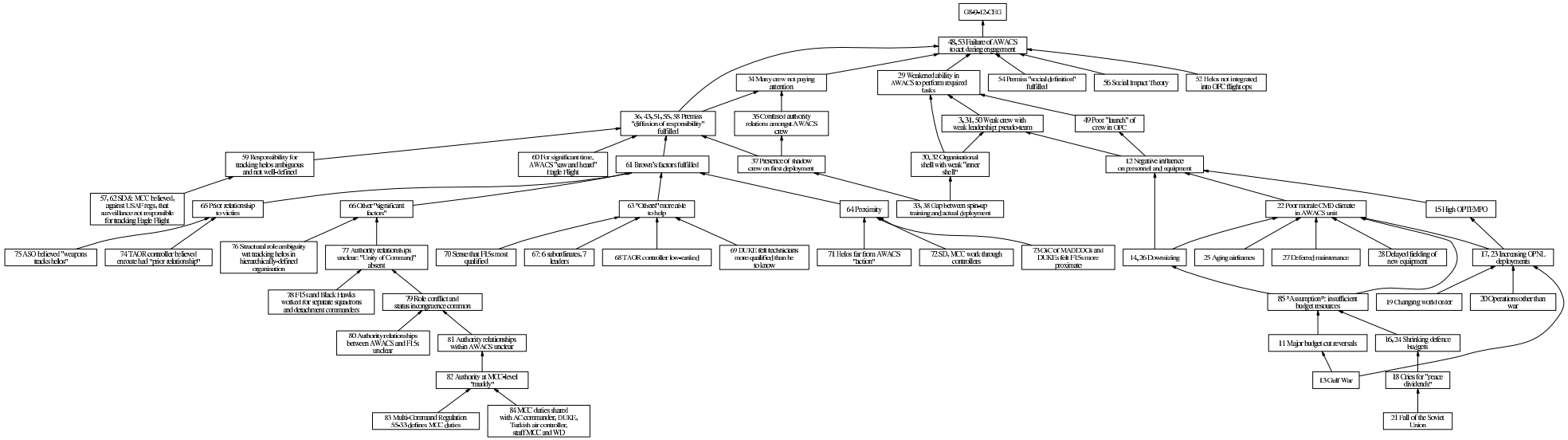
58. Premiss "diffusion of responsibility" fulfilled of social impact theory (36, 43, 51, 55, 58)
59. Responsibility for tracking helos ambiguous and not well-defined
60. For significant time, AWACS "saw and heard" Eagle Flight
61. Brown's factors fulfilled
62. SD & MCC believed, against USAF regs, that surveillance not responsible for tracking Eagle Flight (57, 62)
63. "Others" more able to help
64. Proximity
65. Prior relationship to victim

66. Other "significant factors"
67. 6 subordinates, 7 leaders
68. TAOR controller low-ranked
69. DUKE felt technicians more qualified than he to know
70. Sense that F15s most qualified
71. Helos far from AWACS "action"
72. SD, MCC work through controllers
73. OiC of MADDOGs and DUKEs felt F15s more proximate
74. TAOR controller believed enroute had "priori relationship"
75. ASO believed "weapons tracks helos"
76. Structural role ambiguity wrt tracking helos in hierarchically-defined organisation
77. Authority relationships unclear: "Unity of Command" absent
78. F15s and Black Hawks worked for separate squadrons and detachment commanders
79. Role conflict and status incongruence common
80. Authority relationships between AWACS and F15s unclear
81. Authority relationships within AWACS unclear
82. Authority at MCC-level "muddy"
83. Multi-Command Regulation 55-33 defines MCC duties
84. MCC duties shared with AC commander, DUKE, Turkish air controller, staff MCC and WD

New Nodes
85. **Assumption** Insufficient budget resources


G1-G7
1 AWACS crew could not question F-15 engagement
2 AWACS failed accurately to track helos
4 AWACS inability to control mission aircraft
7 AWACS subordinate position in OPC
8 USAF "two layer" culture
3 Weak crew: "pseudo-team"
5 Adoption of a priori scripts instead of norms
9 Overreliance on org-def positions, SOPs, interaction rules
6 No emphasis placed on crew "mission readiness"
10 Fundamental leadership failure


G11
39 F15s and helos on different radio frequencies
40 No info from AWACS about helos
41 AWACS didn't tell helos to change frequencies
43 (36) Diffusion of responsibility
42 Handoff of helos not properly made
44 Enroute controller and TAOR controller not in physical contact
45 TAOR controller and supervisor not in visual contact
46 Ad hoc seating arrangement in AWACS
47 Console failure


GB49-124-CEG
48, 53 Failure of AWACS to act during engagement
34 Many crew not paying attention
29 Weakened ability in AWACS to perform required tasks
54 Premiss "social definition of" fulfilled
56 Social Impact Theory
52 Helos not integrated into OFC flight ops
36, 43, 51, 55, 58 Premiss "diffusion of responsibility" fulfilled
35 Conflict of authority relations amongst AWACS crew
3, 31, 50 Weak crew with weak leadership, pseudo-team
49 Poor "launch" of crew in OFC
59 Responsibility for tracking helos ambiguous and not well-defined
60 For significant time, AWACS "saw and heard" Eagle Flight
61 Brown's factors fulfilled
37 Presence of shadow crew on first diployment
30, 32 Organisational shell with weak "inner shell"
12 Negative influence on personnel and equipment
57, 62 SD & MCC believed, against USAF regs, their surveillance not responsible for tracking Eagle Flight
65 Prior relationship to victim
66 Other "significant factors"
63 "Others" more able to help
64 Proximity
33, 38 Gap between spin-up training and actual deployment
22 Poor morale CMD climate in AWACS unit
15 High OPTEMPO
75 ASO believed "weapons tracks helos"
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76 Structural role ambiguity wrt tracking helos in hierarchically-defined organisation
77 Authority relationships unclear: "Unity of Command" absent
70 Sense that F15s most qualified
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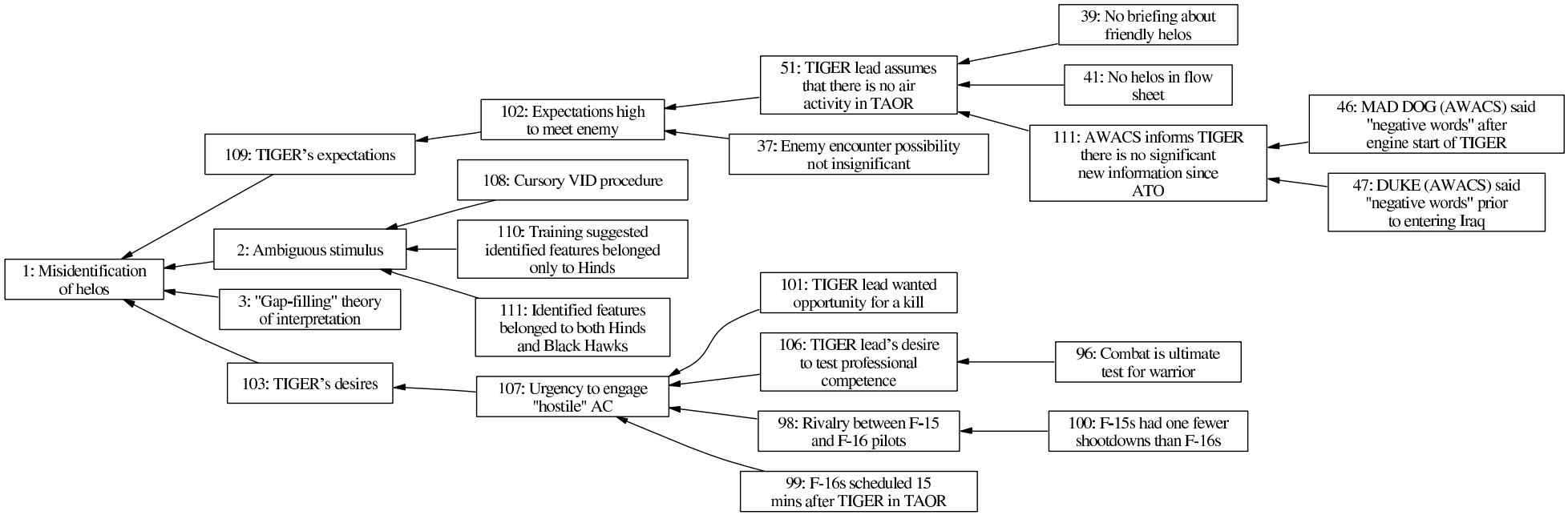
71 Helos far from AWACS "action"
72 SD, MCC work through controllers
73 OIC OF MADLOCs and DUKEs felt F15s more proximate
14, 26 Downsizing
25 Aging airframes
27 Deferred maintenance
28 Delayed fielding of new equipment
17, 23 Increasing OPNL deployments
78 F15s and Black Hawks worked for separate superiors and detachment commanders
79 Role conflict and status incongruence common
85 * Assumption*: insufficient budget resources
19 Changing world order
20 Operations other than war
80 Authority relationships between AWACS and F15s unclear
81 Authority relationships within AWACS unclear
11 Major budget cut reversals
16, 24 Shrinking defence budgets
82 Authority at MCC-level "muddy"
13 Gulf War
18 Cries for "peace dividends"
83 Multi-Command Regulation 55-33 defines MCC duties
84 MCC duties shared with AC commander, DUKE, Turkish air controller, staff MCC and WD
21 Fall of the Soviet Union

List of Facts: Individual Factors Version 3

1. F-15 pilots misidentified Black Hawks
2. stimulus unclear
3. when stimulus is unclear, we fill the gaps (p78)
4. high speed difference between helos and F-15s
5. helos had 130 knots (p76)
6. F-15s flew approx. 450 knots (p76)
7. slant range was 1100 - 1500 feet (p76)
8. camouflage of helos (p76)
9. pilots are taught that: tapered empennage+rear slanting tail+ordnance sponsons = Hind (p78)
10. F15s above Black Hawks (p78)
11. limited visual recognition training previous to accident (p78)
12. disruption of normal vis-recog-training (p78)
13. relocation from Germany to Turkey (p78)
14. only 5% of training slides depicted helicopters (p79)
15. most of helo-slides taken from ground looking up, none from above (p79)
16. army provided helo-slides (p79)
17. ground-up angle most convenient for army (p79)
18. very few slides showed Black Hawks (p79)
19. no Black Hawk slides with wings and aux-tanks (p79)
20. no Intel briefing about Iraqi camouflage scheme (p79)
21. F-15 pilot's helo recognition skills are limited (p79)
22. F-15 pilots consider helo recognition as rel. unimportant (p79)
23. most air superiority fighters spend rel. little time flying low (p79)
24. primary mission for airsuperiority fighters is dogfighting (p79)
25. F-15s greatest moving threat is another fighter (p79)
26. most F-15-pilots attention is focused on most likely contacts (p79)
27. helos are relatively harmless contacts (p79)
28. helos fly low and slow (p79)
29. when lead saw helos, he already believed that they were enemy (p80)
30. TIGER lead's book contained no photos of Black Hawks (p80)
31. both pilots had experience in the region (p81)
32. Lead flew 12 missions on prev. OPC tour (p81)
33. wing flew approx.15 missions in Iraq, a few during Desert Storm (p81)
34. intelligence reported great Iraqi troop movements into northern Iraq (p81)
35. TAOR was designated as combat zone (p81)
36. combat flights are not to be taken lightly (p81)
37. enemy encounter possibility not insignificant (p81)
38. enemy flak had moved to unknown position (p81)
39. no briefing about friendly helos (p83)
40. after tactical brief, pilots had a mental picture of coming mission (p83)
41. no helos in flow sheet (p84)
42. no reconnaisance before TIGER that day (p84)
43. TIGER is first flight that day (p84)
44. according to ACO, aircraft with AI radar would be 1st to enter TAOR each day (p84)

45. always a chance for last-minute exception to ACO policy (p84)
46. MAD DOG said "negative words" after engine start of TIGER (p85)
47. DUKE (AWACS) said "negative words" prior to F-15s entering Iraq (p85)
48. TIGER switched IFF-Mode from 43 to 52 (p85)
49. TIGER lead reports to COUGAR (at 1020) (p86)
50. COUGAR gives no picture call (p86)
51. TIGER lead makes assumption that there is no air activity in AOR (p86)
52. COUGAR crew was aware of Eagle flight, who had already checked in 3 times (p86)
53. TIGER lead picks up radar hits 40 miles out (p86)
54. TIGER lead asks wing „hits there“ (p86)
55. TIGER wing confirms „hits there“ (p86)
56. TIGER lead checks target with IFF Mode 1 and 4 negative (p86)
57. TIGER lead asks COUGAR about hits (p87)
58. COUGAR responds „Clean there“ (p87)
59. TIGER lead asks again (p87)
60. TIGER wing confirms that hits are not road traffic (p87)
61. COUGAR responds with „Hits there“ not „Paint there“ (p87)
62. rules of engagement: still have to prove if hostile (p87)
63. Visual ID needed (p87)
64. TIGER lead not used to flying low (p88)
65. valley gets narrower (p88)
66. TIGER lead pulls up over top of helo (p88)
67. TIGER lead has to take care not to hit the near mountains (p88)
68. TIGER lead had no doubt it was a Hind (p88)
69. TIGER lead asks wing to confirm Hinds (p89)
70. TIGER wing responds „Tally two“ (p89)
71. TIGER wing's response nonstandard (p89)
72. TIGER wing's response ambiguous (p89)
73. pilots use clipped phraseology (p89)
74. clipped phraseology doesn't work (p89)
75. TIGER lead interprets „Tally two“ as positive confirmation (p90)
76. TIGER wing identification interprets helos neither as hostile nor as friendly (p90)
77. TIGER wing is Tiger lead's squadron commander (p99)
78. in two-ship flight, what lead says goes (p91)
79. TIGER wing was famous for the only kill of an Iraqi Hind in Gulf War (p91)
80. TIGER wing had tremendous amount of confidence in TIGER lead (p91)
81. TIGER lead's unit had intercepted more helicopters than any other unit in Bosnia (p92)
82. TIGER made use of limited available information (p92)
83. TIGER socially constructed two enemy Hinds (p92)
84. decision thresholds are governed by expectancy (p92)
85. TIGER lead expected to see a Hind (p93)
86. decision threshold was low (p93)
87. enemy aircraft unexpected (p93)
88. TIGER had high levels of arousal (p93)
89. extended practice produces automatic rather than consciously-controlled processes (p93)
90. overlearning is purchased at the expense of flexibility (p93)
91. F-15 pilots are overtrained to engaged hostile fighters (p94)

92. F-15 pilots are not trained to intercept helicopters (p94)
93. intercepting helos (task) looked too much like intercepting fighters (p94)
94. TIGER miscoded situation (p94)
95. very quick engagement after VID (p94)
96. Combat is ultimate test for professional warrior (p95)
97. TIGER wing felt pretty excited after shootdown (p95)
98. rivalry between F-15 and F-16 pilots (p96)
99. F-16s scheduled 15 mins after TIGER in TAOR (p96)
100. F-15s had one shootdown less than F-16s (p96)
101. TIGER wanted opportunity for a kill (p96)
102. TIGER's expectations high to meet enemy
103. TIGER's desires
104. Behavior conformant with air-to-air combat training
105. TIGER wanted to see enemy (p95)
106. personal desire to test professional competence (p96)
107. urgency to engage hostile aircraft (p96)
108. Cursory visual ID (p145! Organisational Factors)
109. TIGER'S expectations
110. Training suggested visual characteristics belonged only to Hinds
111. Identified features belonged to both Hinds and Black Hawks
112. AWACS informs TIGER there is no significant new information


1: Misidentification of helos
2: Ambiguous stimulus
3: "Gap-filling" theory of interpretation
103: TIGER's desires
109: TIGER's expectations
102: Expectations high to meet enemy
108: Cursory VID procedure
110: Training suggested identified features belonged only to Hinds
111: Identified features belonged to both Hinds and Black Hawks
51: TIGER lead assumes that there is no air activity in TAOR
37: Enemy encounter possibility not insignificant
39: No briefing about friendly helos
41: No helos in flow sheet
111: AWACS informs TIGER there is no significant new information since ATO
46: MAD DOG (AWACS) said "negative words" after engine start of TIGER
47: DUKE (AWACS) said "negative words" prior to entering Iraq
107: Urgency to engage "hostile" AC
101: TIGER lead wanted opportunity for a kill
106: TIGER lead's desire to test professional competence
96: Combat is ultimate test for warrior
98: Rivalry between F-15 and F-16 pilots
100: F-15s had one fewer shootdowns than F-16s
99: F-16s scheduled 15 mins after TIGER in TAOR

1. In peacetime, we (the Army) rarely trained with the Navy (p.140)
2. Combined Task Force failed to integrate helicopter operations with other air operations in the „no fly zone“ (*Perry, 1994,* p.142)
3. F-15 pilots were not made aware of the Black Hawk flight prior to take off (*Perry, 1994,* p.142)
4. Black Hawks were allowed to enter the „no fly zone“ before the F-15s (*Perry, 1994,* p.142)
5. The aircraft were not all communicating on the same radio frequencies (*Perry, 1994,* p.142)

6. Different orientations toward goals between Army aviators and Air Force pilots and planners
7. Different orientations toward time between AWACS and F-15s (p. 145)
8. Interpersonal orientation
   (15-17: three dimensions along which various subunits might differ in how their members think and work, Lawrence and Lorsch, 1969)
9. Eagle Flight flew many missions for the MCC commander (p. 144)
10. Helicopter pilots didn't learn detail of the flight until after they landed at Zakhu (p.144)
11. It was impractical to anticipate the length of meetings (p.144)
12. exact takeoff times and detailed flight plans were impossible to schedule in advance
13. „Flexible“ flight plans from Eagle Flight
14. Air Force aircraft flew as part of larger „package“
15. F-15s were following synchronized flow
16. F-15s were scheduled by „flow sheet“
17. F-15s didn't expect anyone to be in TAOR ahead of them.
18. Air Force fighter pilots and Army aviators known for their bravado
19. AWACS crew members technicians
20. Long history of service separatism
21. AWACS, fighter and helicopter communities physically and socially isolated from one another
22. Primary tasks demanded different orientations toward goals, time and interpersonal relations
23. divergent cognitive and emotional orientations

24. Eagle Flight not well integrated from perspective of the Air Force
25. „Kind of an autonomous operation“
26. „Generally not considered part of the package“
27. „it was a different set of rules for those guys“
28. „I never felt the UH-60s were part of OPC“

29. Flight procedures accepted by CTF for over 3 years as standard procedure (p.148)
30. Members of Task force did not „practice, live, eat, or play together.“
31. F-15 crews did not practice with AWACS
32. AWACS heavily tasked
33. Eagle Flight aviators lived in WWII style huts
34. Air Force officers lived in modern hotel-style Visiting Officers Quarters (VOQ)

Thompson, Levels of interdependence (p.152)
35. pooled interdependence
36. sequential interdependence
37. reciprocal interdependence

pooled interdependence (coordination by standardization) (p.153)
38. Different Mode I IFF codes in and outside TAOR (p.153)
39. Eagle Flight never realized different Mode I IFF codes (p.153)
40. ACO states that „deconfliction ist strictly by altitude“ (p.153)
41. Fighters to use AOR (> 1000ft) (p.153)
42. Helicopters to use AGL (< 400ft) (p.153)
43. ACO, ARF, ROE, OPLANs/OPORDs, SOP use coordination through standardization (p.153)
44. IFF developed to provide integration of services (p.154)
45. ATO is definitive coordination document for flights in OPC (p.155)
46. Flight schedule, radio frequencies and IFF codes included in ATO (p.155)
47. Communication between CFACC FRAG Shop and Eagle Flight operations broke down (p.155)

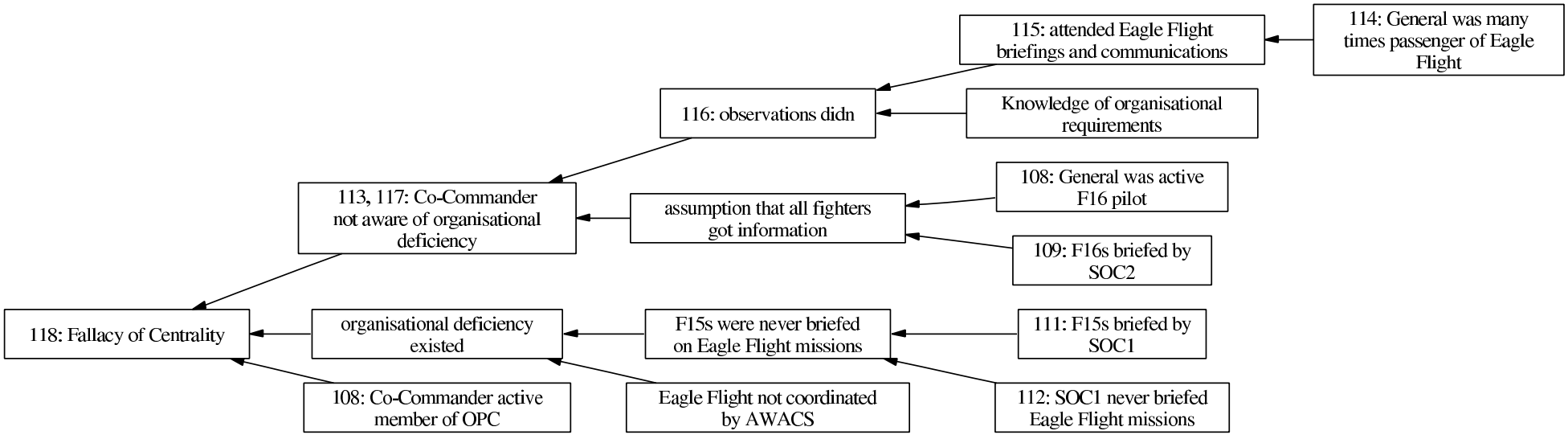
48. 1992 CFAC decided to change instructions pertaining to IFF modes and codes (p.156)
49. change was communicated through daily ATO (p.156)
50. Eagle Flight ATO differed from Air Force ATO (p.156)
51. Eagle Flight ATO received electronically (p.156)
52. Eagle Flight ATO transmitted through Air Force communications center (p.156)
53. Eagle Flight ATO contained no mention of two Mode I codes. (p.156)
54. 14.04.94 Eagle Flight squawked IFF Mode I code 42 instead of code 52 inside TAOR (p.157)
55. AWACS has capability to determine the IFF Mode I code used by plane (p.158)

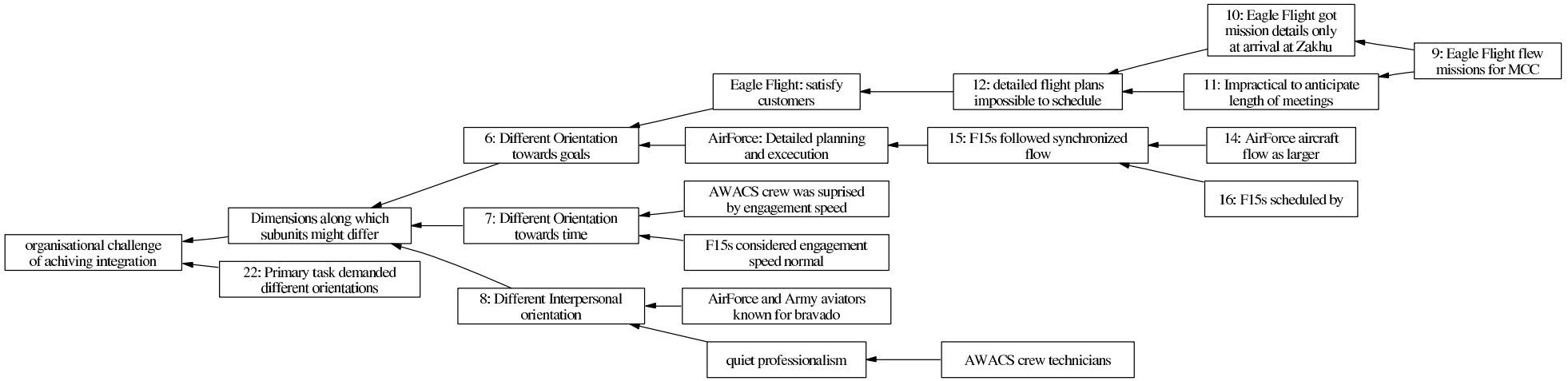
sequential interdependence (coordination by plan) (p.153)
56. F-15 pilots were never informed of Eagle Flight's mission (p.159)
57. Eagle Flight entered TAOR prior to fighter sweep (p.159)
58. Need for effective integration of package (p.159)
59. Detailed schedule required (p.159)
60. F-15 pilots flew with „flow-sheet“ clipped on knee board (p.159)
61. Helicopters were not well integrated in OPC flight operations (p.159)
62. Helicopters were not on F-15s flow-sheet (p.159)
63. Plans failed (p.160)
64. Departure and arrival times of Eagle Flight were listed „as required“ in ATO (p.160)
65. MCC daily mission requirements based on events of the previous day (p.160)
66. MCC exercised flexibility in scheduling helicopter flights (p.160)
67. Weekly flight schedule provided to CTF C3 (p.160)
68. Firm itinerary no available before next day's ATO was published (p.160)
69. Information neither detailed nor firm enough for effective coordination and scheduling (p.160)
70. Helicopter flight plans distributed to F-16s squadron but not F-15s squadron (p.160)
71. each evening MCC sent SITREP to JOIC, listing next day's helicopter flight (p.161)
72. SITREPs received to late to be published in ATO (p.161)
73. Eagle Flight would call JOIC to „activate“ the ATO line (p.161)
74. Activation send to Turkish C3 for approval (p.161)
75. C2 representative in JOIC consolidated weekly schedule and SITREP (p.161)
76. Consolidated work passed by secure channels to operational squadrons (p.161)
77. Activation not passed to CFAC (p.161)
78. CFAC operated off its own internally generated set of plans and schedules (p.161)
79. Information channels were primarily one-way communications (p.161)
80. CFAC was not soliciting input (p.161)
81. F-15s designed primarily for air superiority (p.162)
82. F-16s designed as all-purpose fighters (p.162)
83. It was common for F-16s to fly low (p.162)
84. F-16s did low-level training (p.162)
85. F-16 squadrons had fear of midair collisions with friendly helicopters (p.162)
86. F-16 squadrons regularly briefed details concerning helicopter operations (p.162)
87. Army aviators believed that ACO “fighter sweep” restriction didn't apply to them (p.163)
88. To Army aviators the word “aircraft” didn't include helicopters (p.163)
89. Air Force staff planners didn't consider UH-60s to be aircraft for coordination purposes (p.163)
90. AWACS crew members didn't consider UH-60s to be aircraft for control purposes (p.163)
91. Eagle Flight had official exception to fly in TAOR without AWACS coverage (p.163)

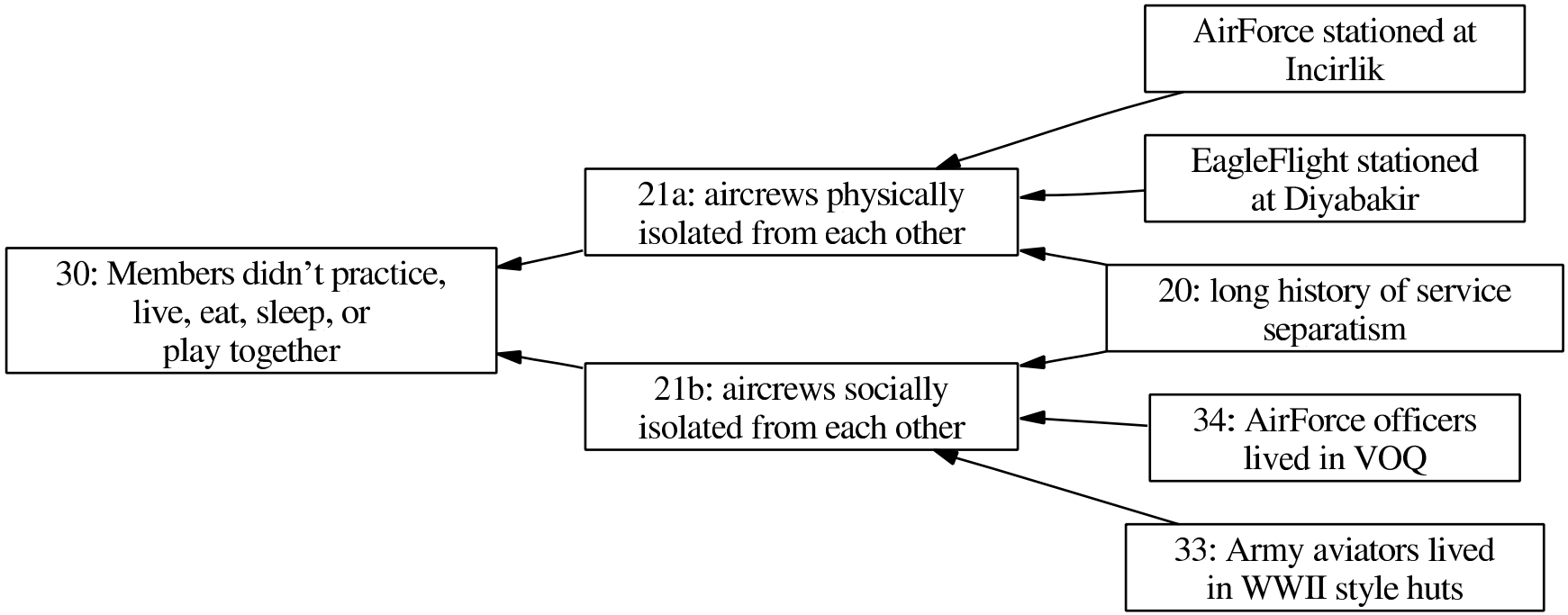
reciprocal interdependence (coordination by mutual adjustment) (p.153)
92. The aircraft were not all communicating on the same frequencies (p.166)
93. strong norms of radio discipline (p.166)
94. service interoperability issues (p.166)
95. “min comm” Task Force policy restricted radio conversations to short bursts (p.166)
96. Separate service procurement systems (p.166)
97. Air Force and Army aircraft with incompatible radios (p.166)
98. physical line of sight restrictions (p.166)
99. steep terrain limits radio contact at low altitudes (p.166)
100. Helicopters in “contour” terrain flight mode inside TAOR (p.167)
101. AWACS and F-15s equipped with HAVE QUICK II radios (frequency hopping, anti jamming) (p.167)
102. Eagle Flight helicopters equipped with incompatible HAVE QUICK I radios (p.167)
103. non-HAVE QUICK II capable aircraft were to use ATO Tactical freqs inside TAOR (p.168)

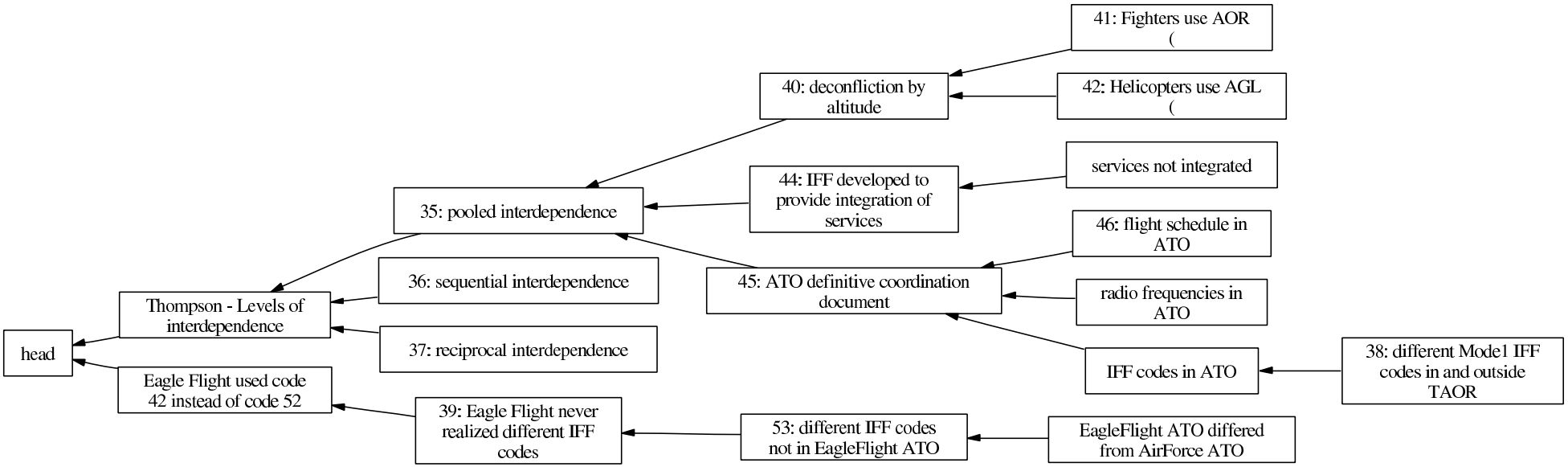
104.Eagle Flight didn't use ATO Tactical frequencies (p.168)
105.AWACS didn't have Eagle Flight change to the mission frequency (p.169)
106.procedural habit because most Eagle Flight mission lead from Diyarbakir to Zakhu and back. (p.170)
107.AWACS reluctant to enforce rules (p.171)

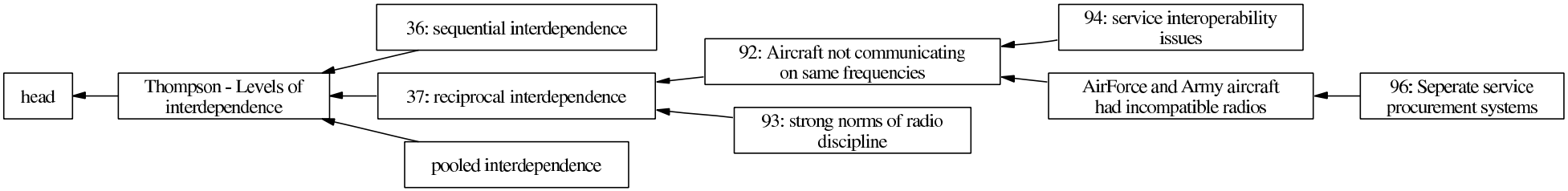
Fallacy of Centrality
108.Co-Commander of OPC General Pilkington was active F-16 pilot (p.174)
109.F-16s briefed by SOC2 (p.175)
110.SOC2 Briefing included Eagle Flight missions (p.175)
111.F-15s briefed by SOC1 (p.175)
112.SOC1 never briefed Eagle Flight activities (p.175)
113.Gen. Pilkington was not aware of organizational deficiency (p.175)
114.Gen. Pilkington was many times passenger of Eagle Flight (p.174)
115.Gen. Pilkington attended Eagle Flight briefeings and communications (p.176)
116.Observations didn't contradict his expectations
117.Assumption that system is working properly
118.Fallacy of centrality (p.177)

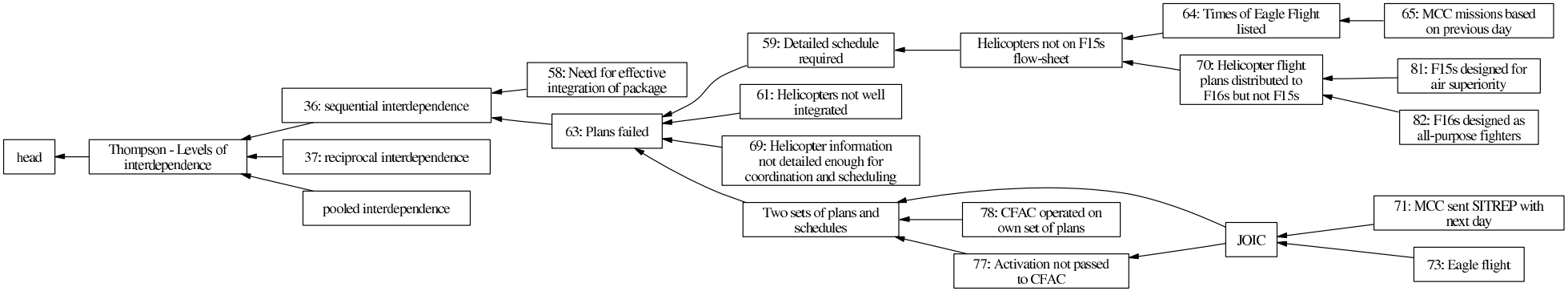

115: attended Eagle Flight briefings and communications
114: General was many times passenger of Eagle Flight
116: observations didn
Knowledge of organisational requirements
113, 117: Co-Commander not aware of organisational deficiency
assumption that all fighters got information
108: General was active F16 pilot
109: F16s briefed by SOC2
118: Fallacy of Centrality
organisational deficiency existed
F15s were never briefed on Eagle Flight missions
111: F15s briefed by SOC1
108: Co-Commander active member of OPC
Eagle Flight not coordinated by AWACS
112: SOC1 never briefed Eagle Flight missions


10: Eagle Flight got mission details only at arrival at Zakhu
9: Eagle Flight flew missions for MCC
Eagle Flight: satisfy customers
12: detailed flight plans impossible to schedule
11: Impractical to anticipate length of meetings
6: Different Orientation towards goals
AirForce: Detailed planning and excecution
15: F15s followed synchronized flow
14: AirForce aircraft flow as larger
16: F15s scheduled by
AWACS crew was suprised by engagement speed
Dimensions along which subunits might differ
7: Different Orientation towards time
organisational challenge of achiving integration
F15s considered engagement speed normal
22: Primary task demanded different orientations
8: Different Interpersonal orientation
AirForce and Army aviators known for bravado
quiet professionalism
AWACS crew technicians


AirForce stationed at Incirlik
EagleFlight stationed at Diyabakir
21a: aircrews physically isolated from each other
30: Members didn't practice, live, eat, sleep, or play together
20: long history of service separatism
21b: aircrews socially isolated from each other
34: AirForce officers lived in VOQ
33: Army aviators lived in WWII style huts


41: Fighters use AOR (
40: deconfliction by altitude
42: Helicopters use AGL (
services not integrated
44: IFF developed to provide integration of services
35: pooled interdependence
46: flight schedule in ATO
36: sequential interdependence
45: ATO definitive coordination document
radio frequencies in ATO
Thompson - Levels of interdependence
37: reciprocal interdependence
IFF codes in ATO
38: different Mode1 IFF codes in and outside TAOR
head
Eagle Flight used code 42 instead of code 52
39: Eagle Flight never realized different IFF codes
53: different IFF codes not in EagleFlight ATO
EagleFlight ATO differed from AirForce ATO


head
Thompson - Levels of interdependence
36: sequential interdependence
37: reciprocal interdependence
pooled interdependence
92: Aircraft not communicating on same frequencies
93: strong norms of radio discipline
94: service interoperability issues
AirForce and Army aircraft had incompatible radios
96: Seperate service procurement systems


head
Thompson - Levels of interdependence
36: sequential interdependence
37: reciprocal interdependence
pooled interdependence
58: Need for effective integration of package
63: Plans failed
59: Detailed schedule required
61: Helicopters not well integrated
69: Helicopter information not detailed enough for coordination and scheduling
Two sets of plans and schedules
Helicopters not on F15s flow-sheet
64: Times of Eagle Flight listed
65: MCC missions based on previous day
70: Helicopter flight plans distributed to F16s but not F15s
81: F15s designed for air superiority
82: F16s designed as all-purpose fighters
78: CFAC operated on own set of plans
77: Activation not passed to CFAC
JOIC
71: MCC sent SITREP with next day
73: Eagle flight