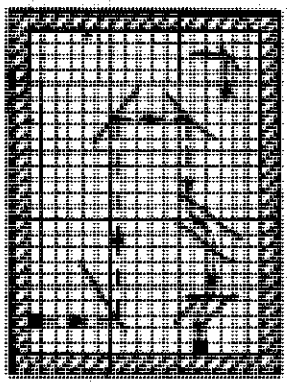
DISTANCE TO CLEAR 50 FOOT OBSTACLE - WATER TAKEOFF

TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
FOD SHIELD ON OR OFF
MAXIMUM POWER
TECHNIQUE: LEVEL ACCELERATION FROM WATER
103% N_r

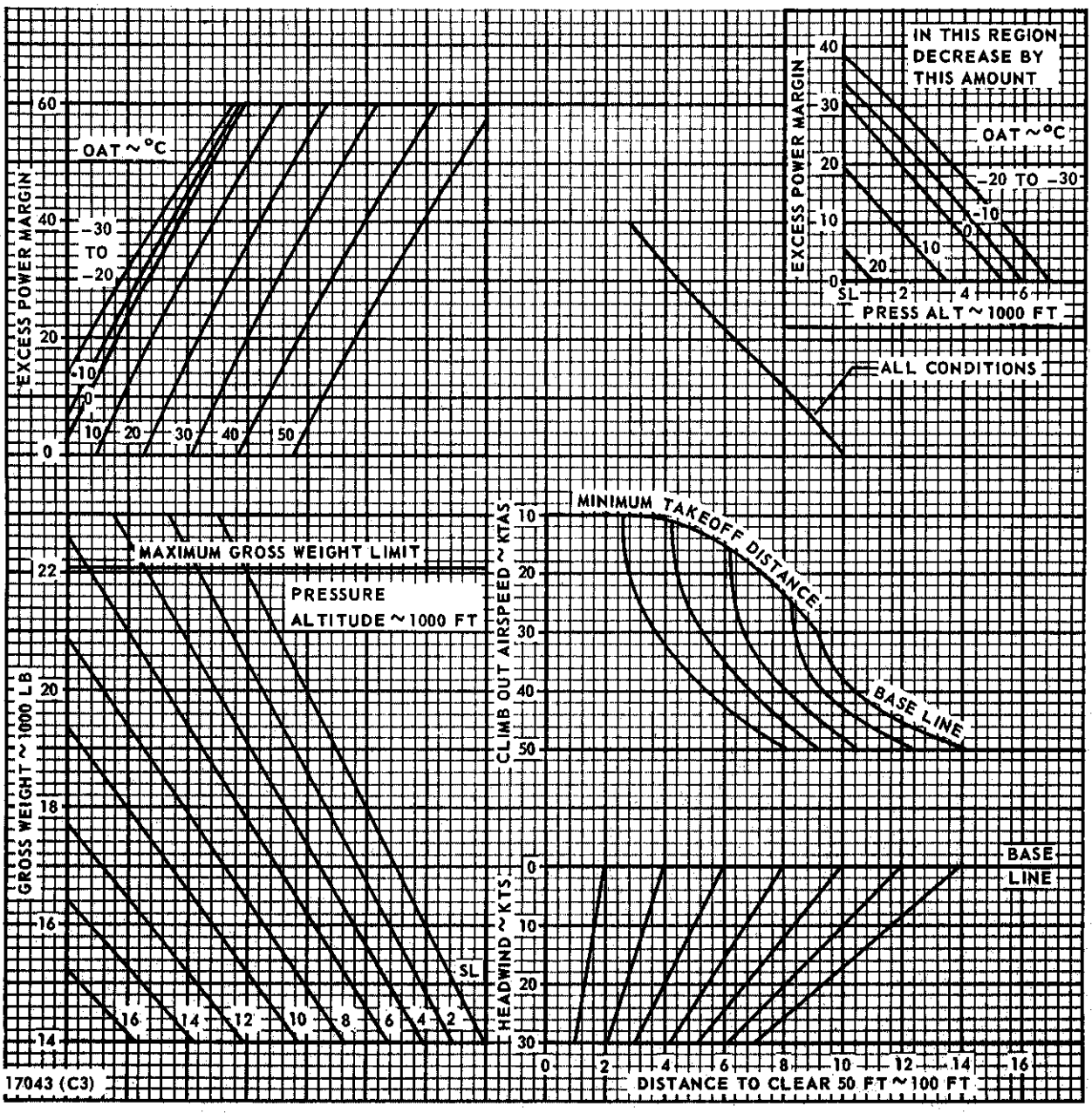
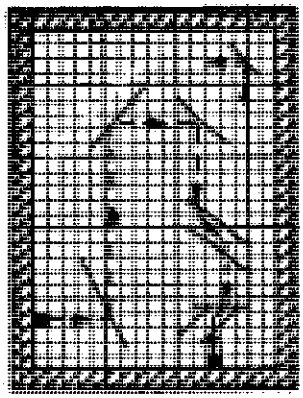


Figure A-17. Distance to Clear 50-Foot Obstacle - Water Takeoff - Two Engines

CONDITIONS:
FOD SHIELD ON OR OFF
MAXIMUM POWER
TECHNIQUE: ROLLING
103% N_1



DISTANCE TO CLEAR 50 FOOT OBSTACLE - ROLLING TAKEOFF

TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

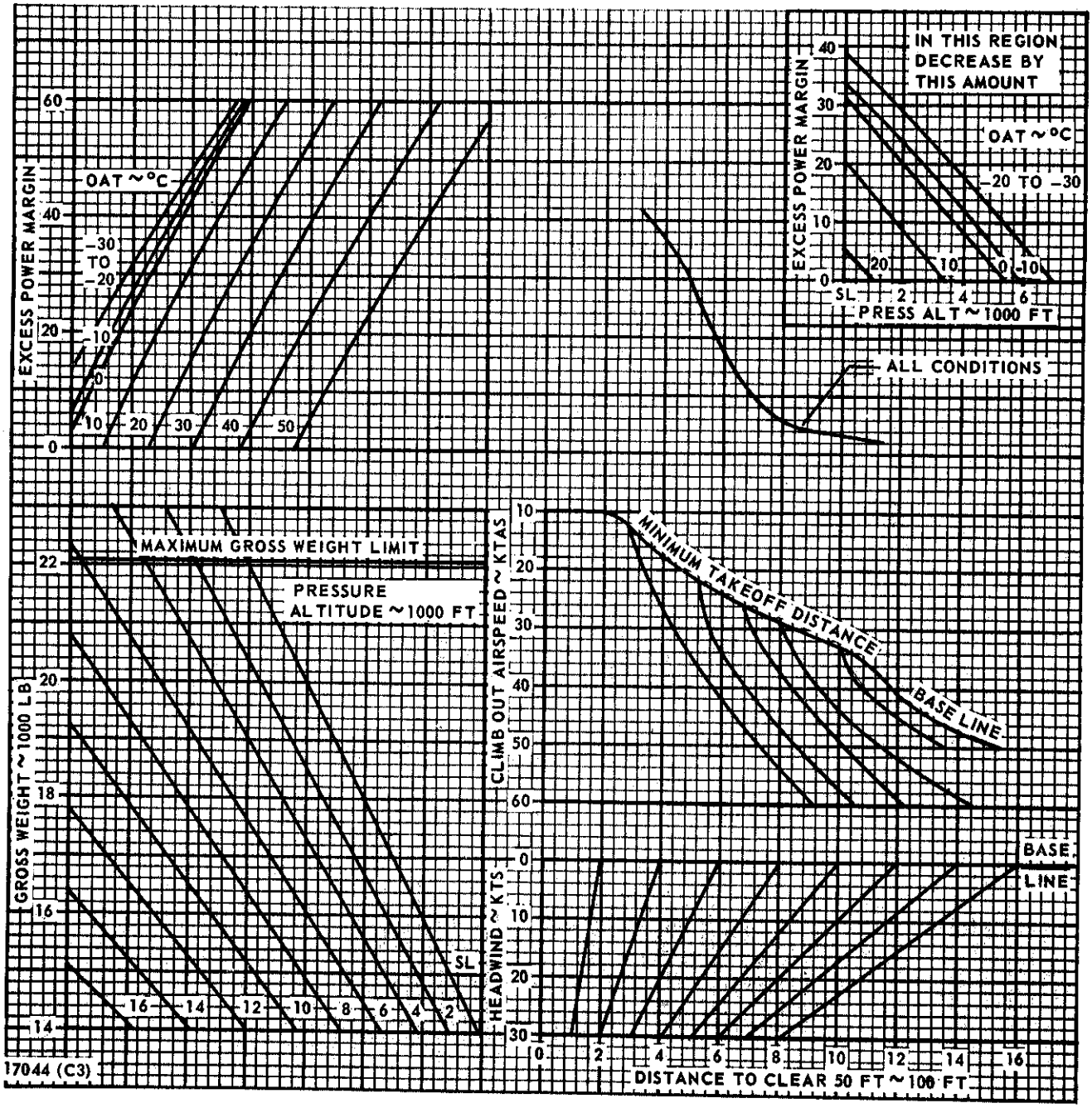


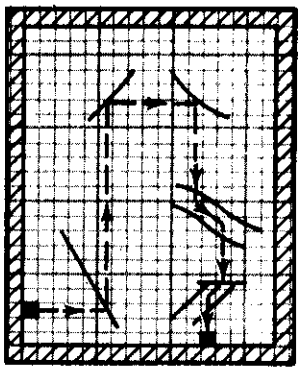
Figure A-18. Distance to Clear 50-Foot Obstacle - Rolling Takeoff - Two Engines

DISTANCE TO CLEAR 50 FOOT OBSTACLE - ROLLING TAKEOFF

ONE ENGINE

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
FOD SHIELD ON OR OFF
MAXIMUM POWER
TECHNIQUE: ROLLING
103% N_r

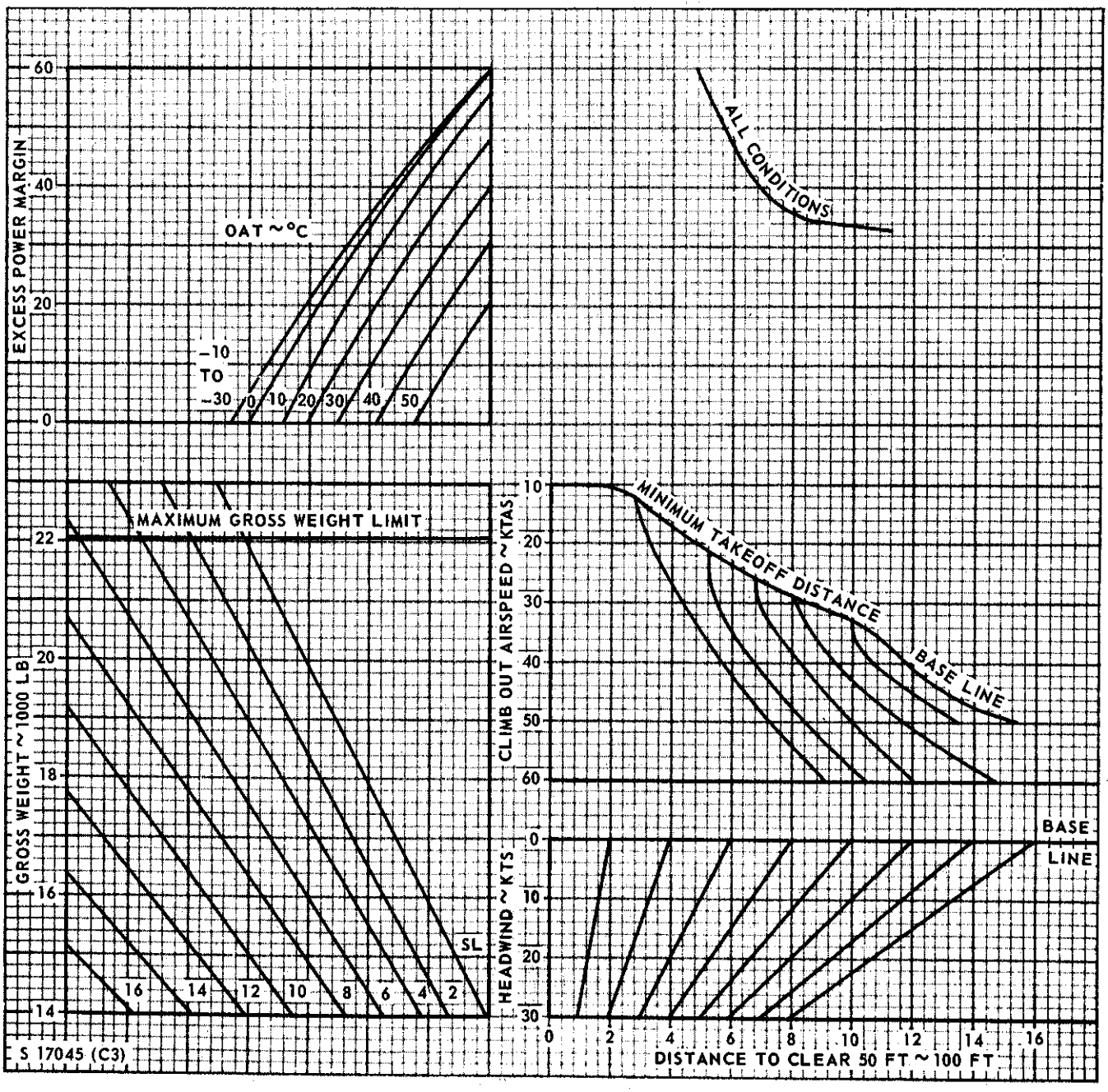
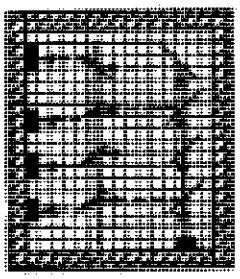


Figure A-19. Distance to Clear 50-Foot Obstacle - Rolling Takeoff - One Engine

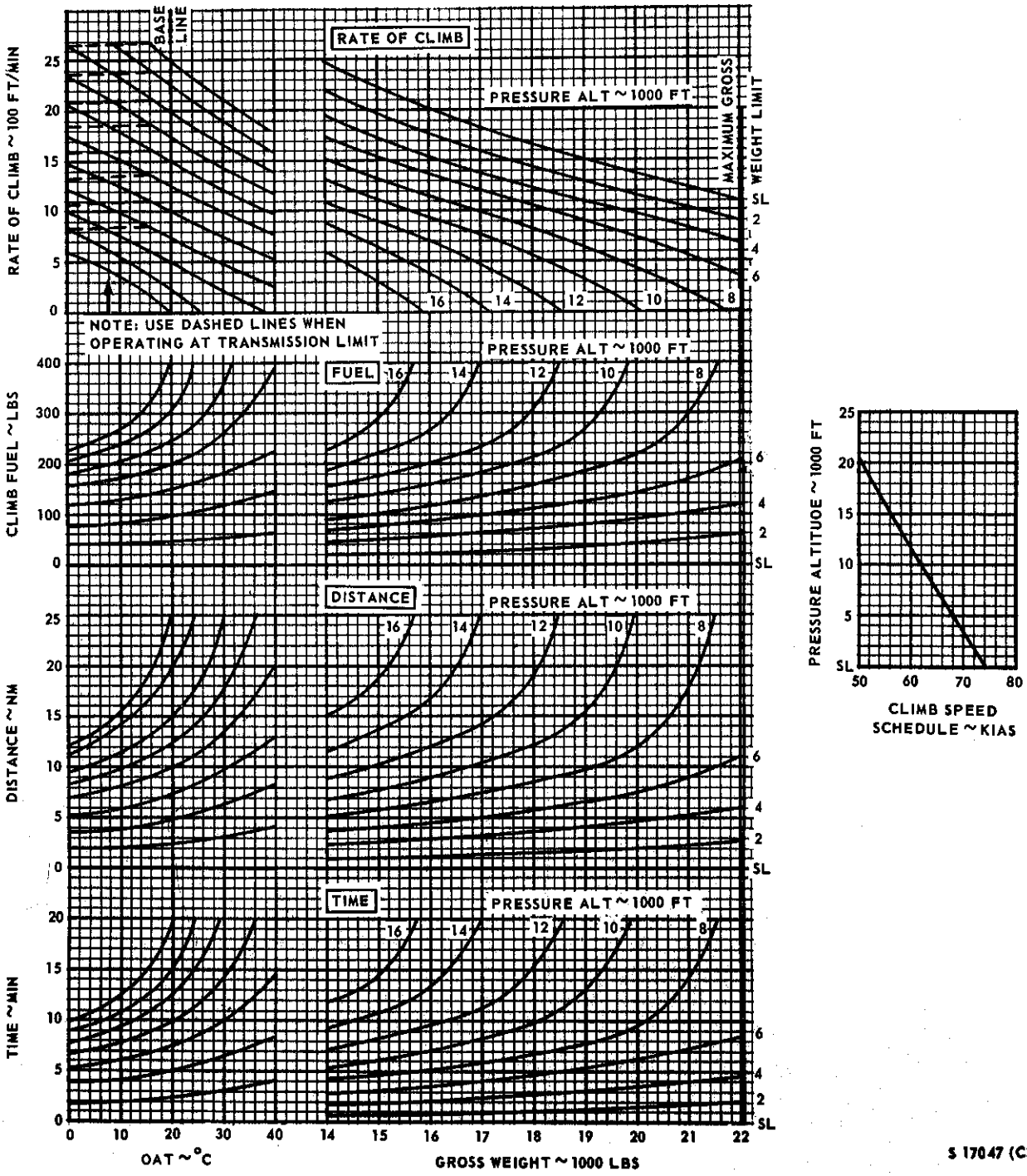
CLIMB
TWO ENGINES
WARM DAY

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



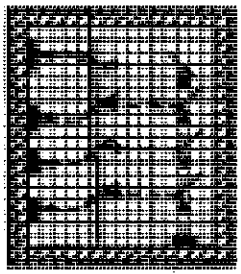
CONDITIONS
103% N_r
MILITARY POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF



S 17047 (C3)

Figure A-20. Climb - Military Power (0°C to 40°C OAT) - Two Engines

CONDITIONS:
103% N_r
MILITARY POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF



CLIMB
TWO ENGINES
COLD DAY

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

RATE OF CLIMB
PRESSURE ALT ~1000 FT
MAXIMUM GROSS WEIGHT LIMIT
SL TO 4
NOTE: USE DASHED LINES WHEN OPERATING AT TRANSMISSION LIMIT
FUEL
DISTANCE
TIME
BASE LINE
RATE OF CLIMB ~100 FT/MIN
CLIMB FUEL ~LBS
DISTANCE ~NM
TIME ~MIN
OAT ~°C
GROSS WEIGHT ~1000 LBS
PRESSURE ALTITUDE ~1000 FT
CLIMB SPEED SCHEDULE ~KIAS
S 17048 (C3)

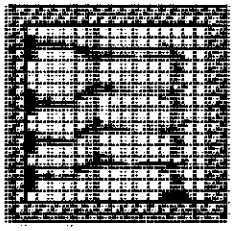
Figure A-21. Climb - Military Power (-40°C to 0°C OAT) - Two Engines

CLIMB
ONE ENGINE
WARM DAY

MODEL
CH/HH-3E

ENGINE
T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
MILITARY POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF

RATE OF CLIMB ~100 FT/MIN
BASE LINE
RATE OF CLIMB
PRESSURE ALT ~1000 FT
SL

CLIMB FUEL LB
FUEL
PRESSURE ALT ~1000 FT

DISTANCE ~NM
DISTANCE
PRESSURE ALT ~1000 FT

TIME ~MIN
TIME
PRESSURE ALT ~1000 FT

OAT ~°C

GROSS WEIGHT ~1000 LB

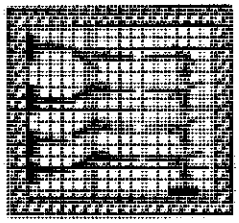
PRESSURE ALTITUDE ~1000 FT

CLIMB SPEED
SCHEDULE ~KIAS

S 17050 (C3)

Figure A-22. Climb - Military Power (0°C to 40°C OAT) - One Engine

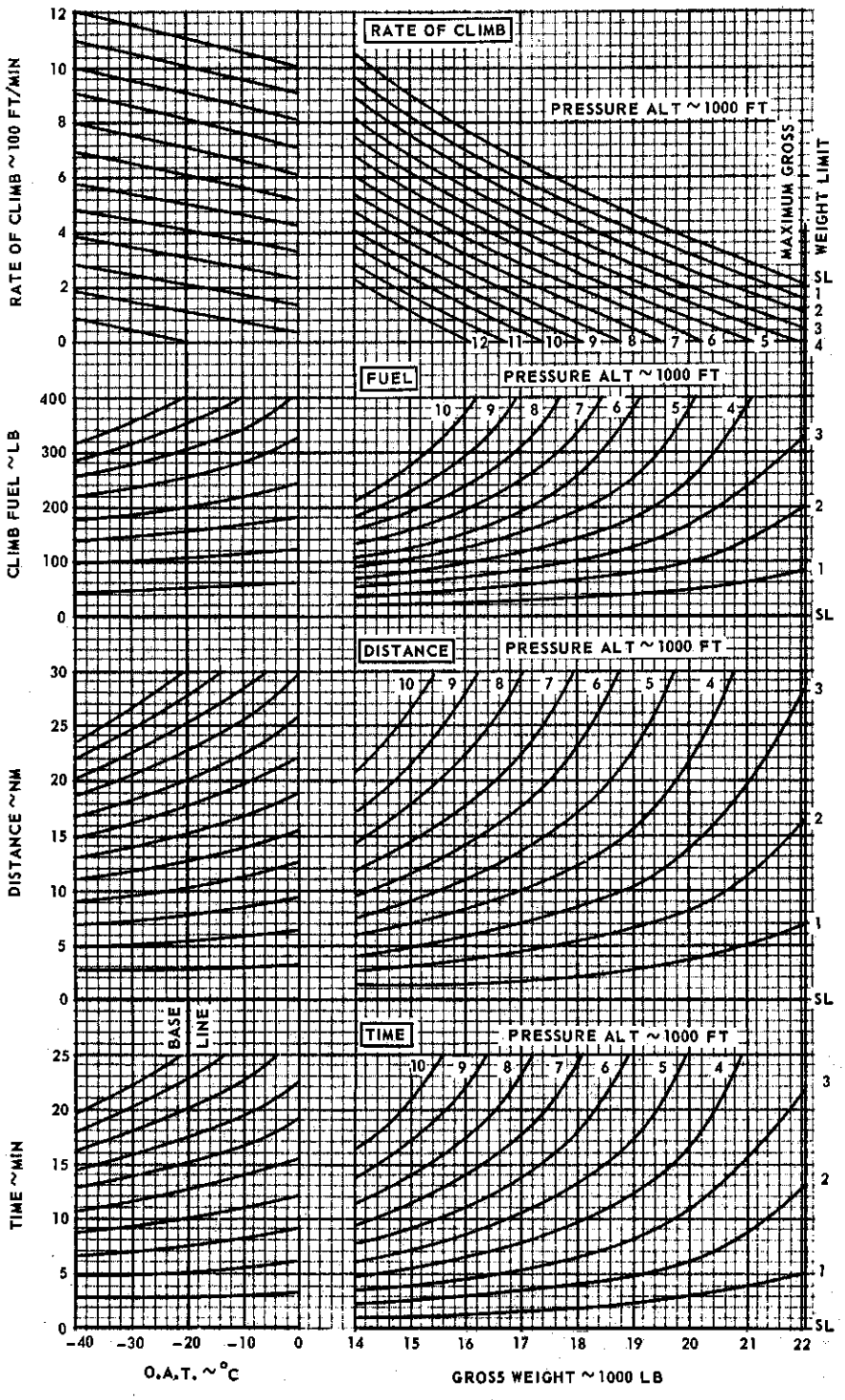
CONDITIONS:
103% N_r
MILITARY POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF

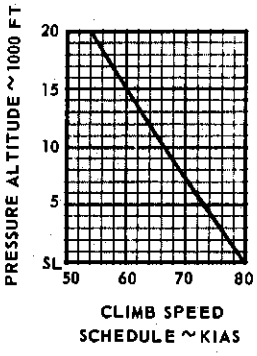


CLIMB
ONE ENGINE
COLD DAY

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



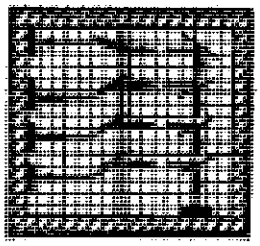


S 17051 (C3)

Figure A-23. Climb - Military Power (-40°C to 0°C OAT) - One Engine

CLIMB
TWO ENGINES
WARM DAY
MODEL CH/HH-3E
ENGINE T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
MAXIMUM CONTINUOUS POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF
TRANSMISSION LIMIT IS
30 MIN AT 103% Q

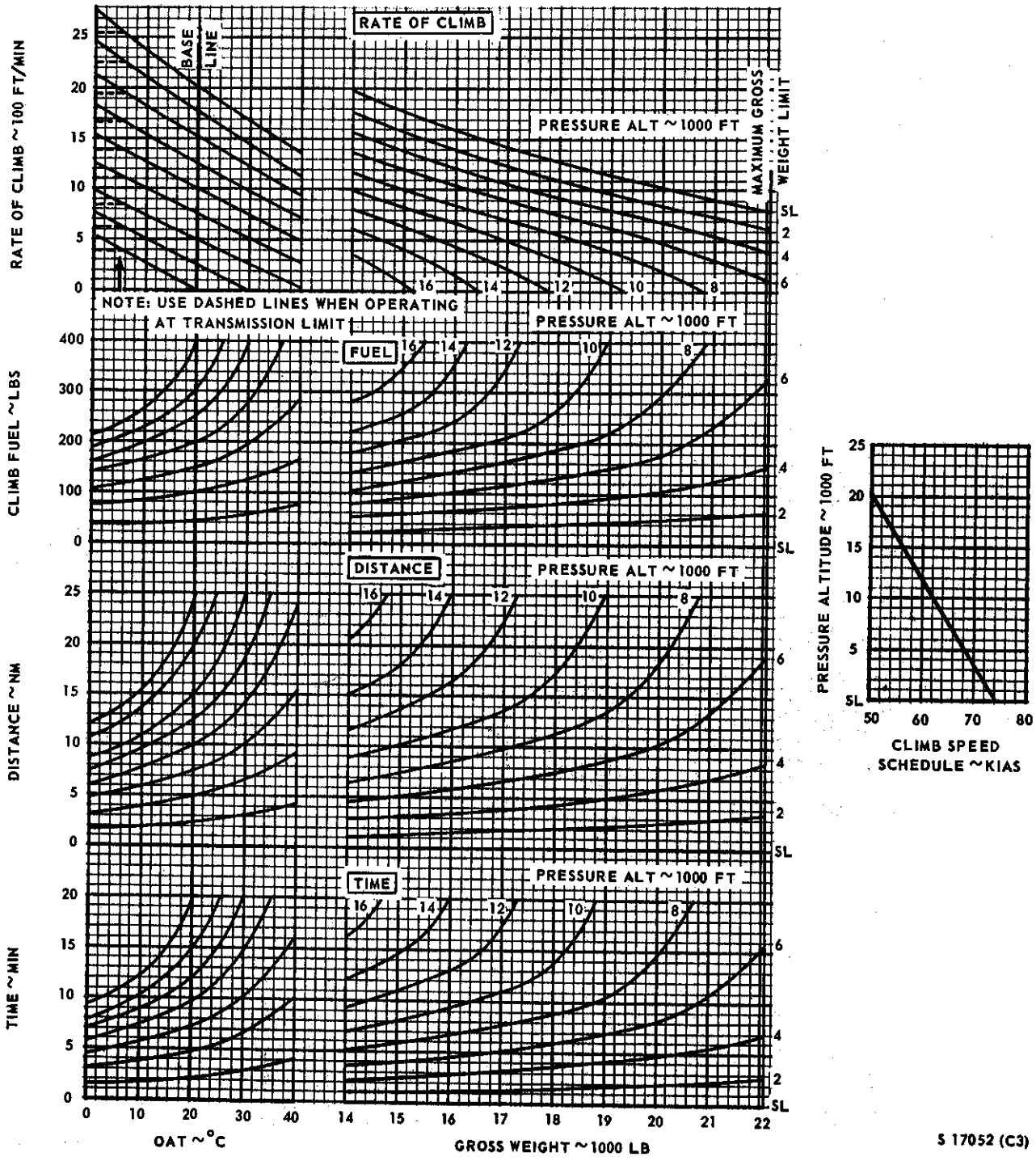
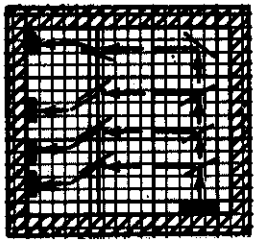


Figure A-24. Climb - Maximum Continuous Power (0°C to 40°C OAT) - Two Engines

CONDITIONS
103% N_r
MAXIMUM CONTINUOUS POWER
WARM UP AND TAKE OFF
FUEL NOT INCLUDED
ZERO WIND
FOD SHIELD ON OR OFF
TRANSMISSION LIMIT IS
30 MIN AT 103% Q



CLIMB
TWO ENGINES
COLD DAY

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

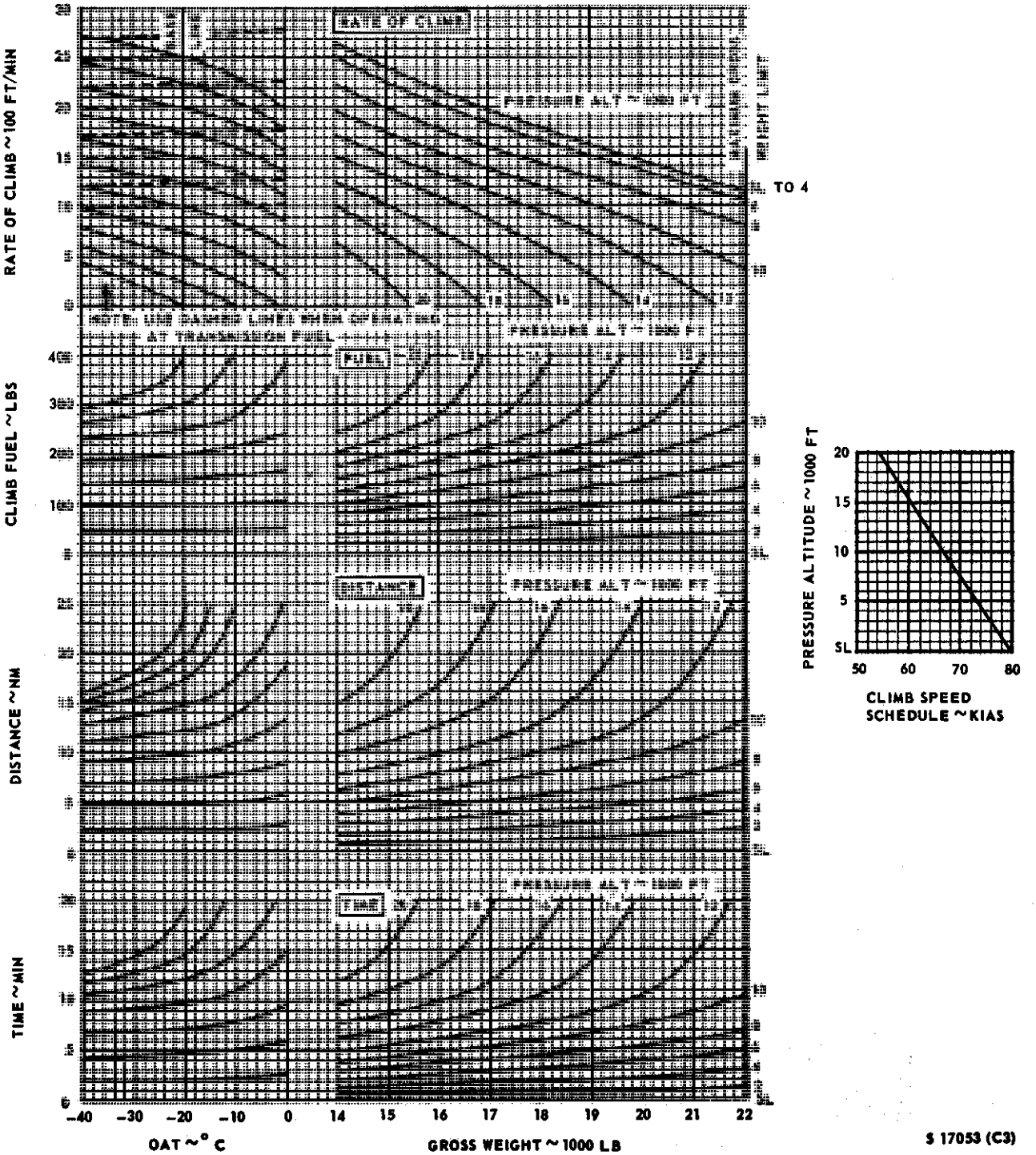


Figure A-25. Climb - Maximum Continuous Power (-40°C to 0° OAT) - Two Engines

SERVICE CEILING

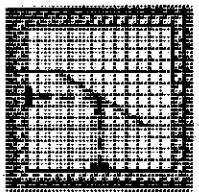
TWO ENGINES

MODEL CH/HH-3E

ENGINE T58-GE-5

DATE: 15 APRIL 1971

DATA BASIS: FLIGHT TEST (AIR FORCE)

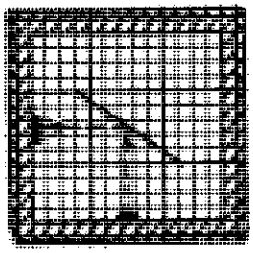


CONDITIONS:
MAXIMUM CONTINUOUS POWER
103% N_r
BEST CLIMB SPEED
FOD SHIELD ON OR OFF
100 FT/MIN RATE OF CLIMB

S 17054 (C3)

Figure A-26. Service Ceiling - Maximum Continuous Power - Two Engines

CONDITIONS:
MILITARY POWER
103% N_r
BEST CLIMB SPEED
FOD SHIELD ON OR OFF
100 FT/MIN RATE OF CLIMB



SERVICE CEILING

ONE ENGINE

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

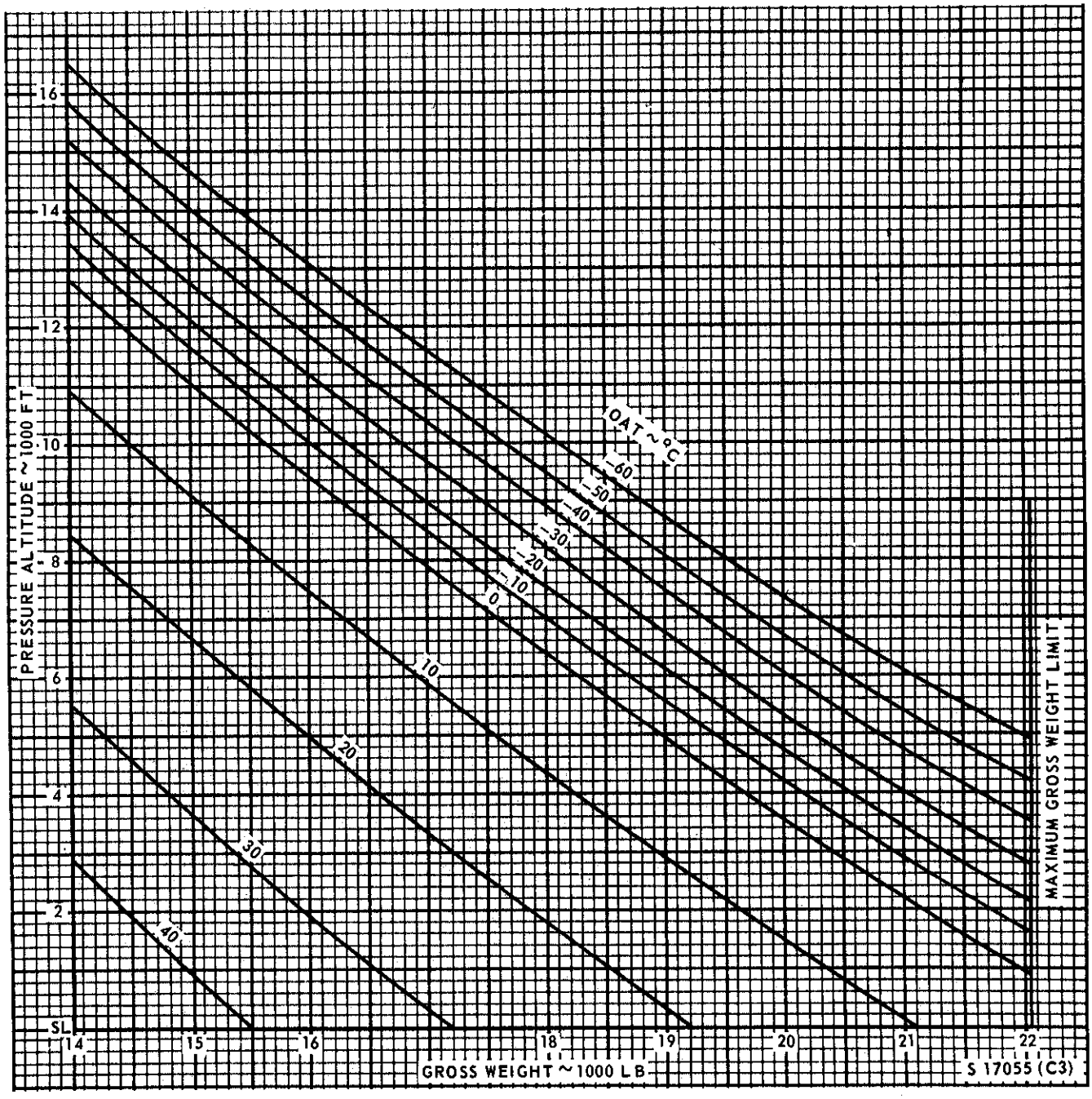


Figure A-27. Service Ceiling - Military Power - One Engine

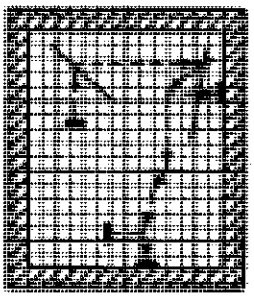
CRUISE

OAT BETWEEN 20°C AND 40°C
TWO ENGINES

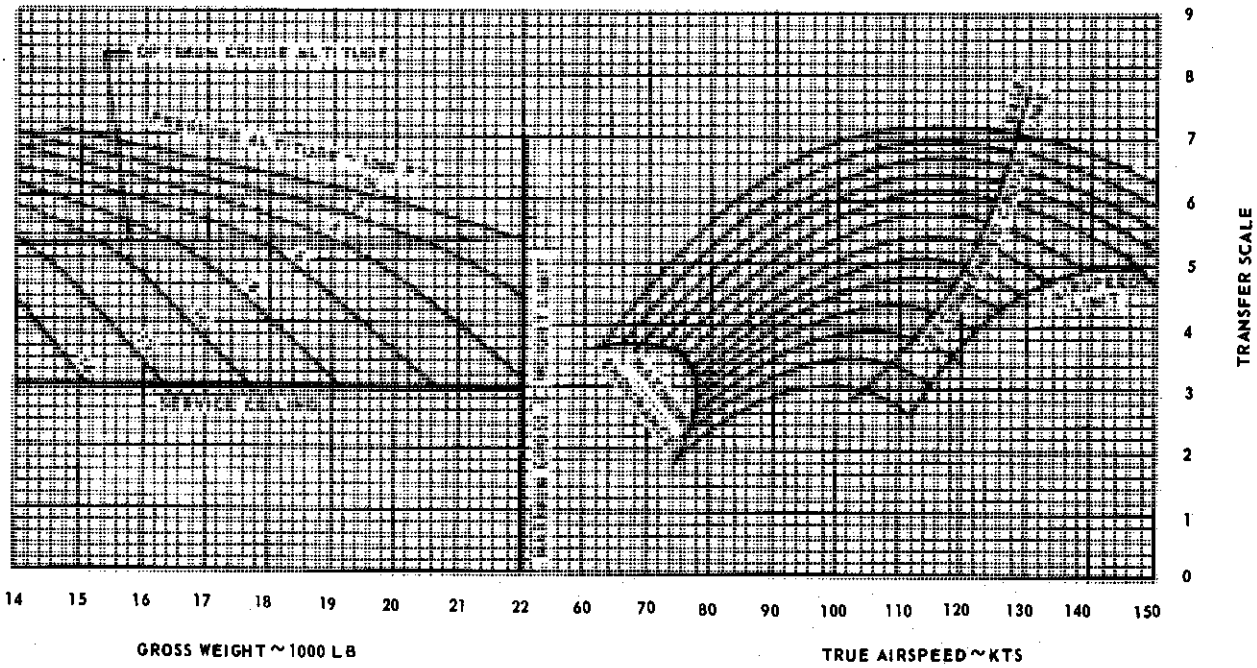
MODEL
CH/HH-3E

ENGINE
T58-GE-5

DATE: 2 NOVEMBER 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF



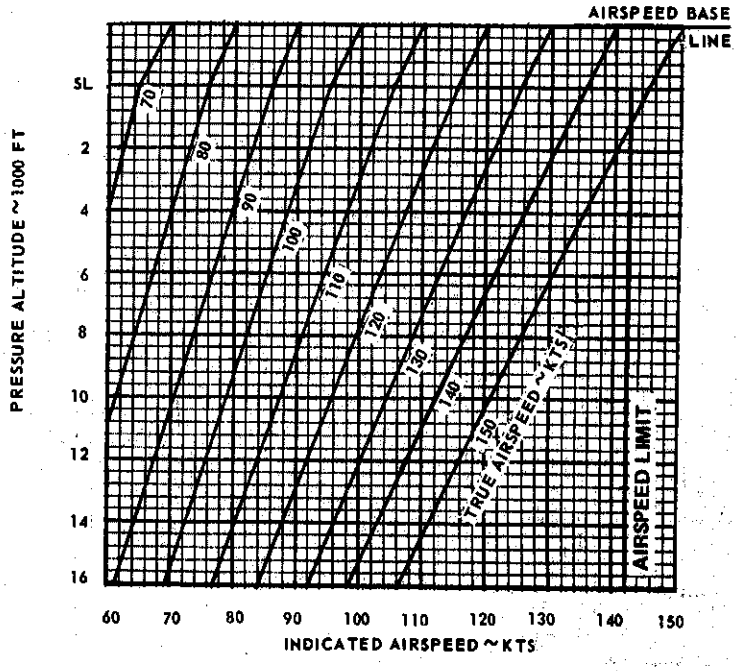
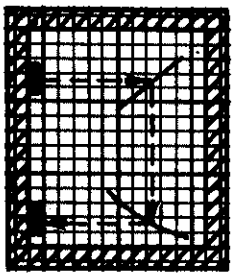


Figure A-28. Cruise (20°C to 40°C OAT) - Two Engines (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

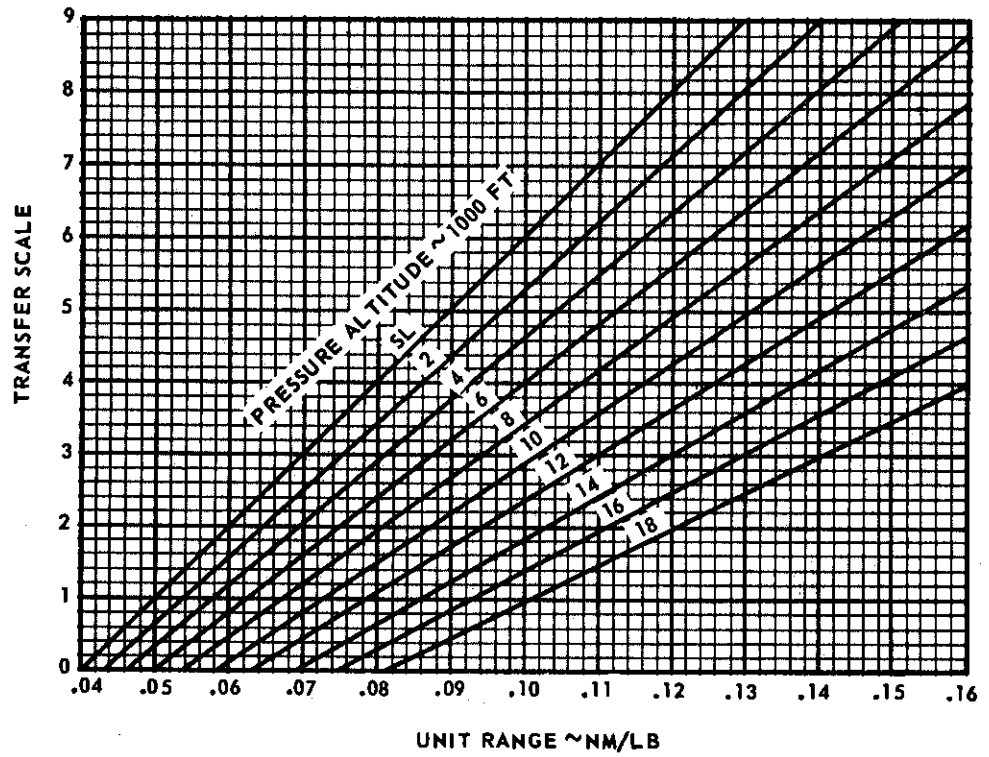


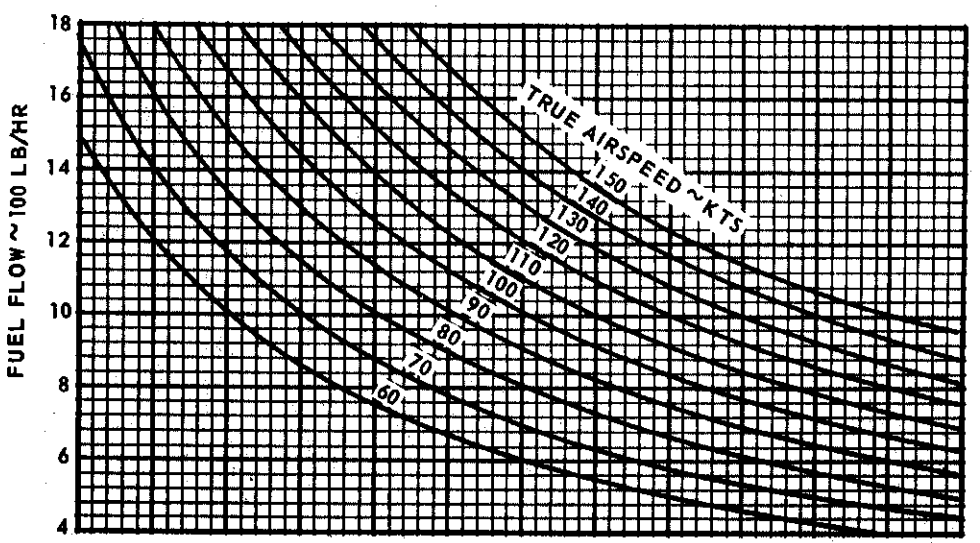
CRUISE

OAT BETWEEN 20°C AND 40°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)





S 17056.2 (C3)

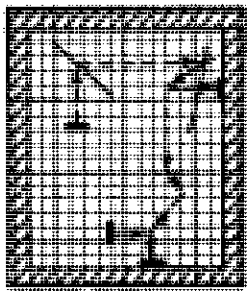
Figure A-28. Cruise (20°C to 40°C OAT) - Two Engines (Sheet 2 of 2)

CRUISE

OAT BETWEEN 0°C AND 20°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 2 NOVEMBER 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

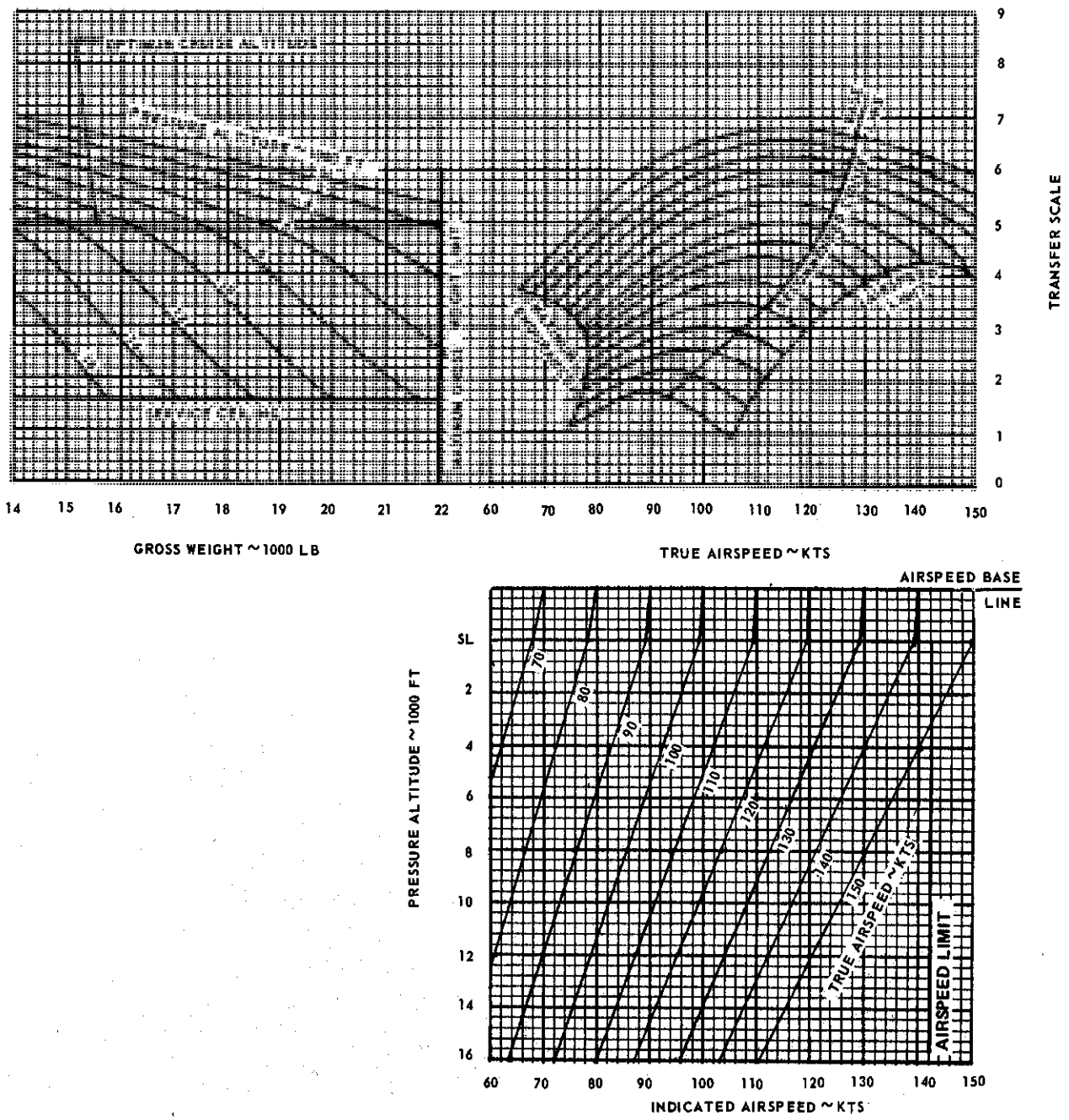
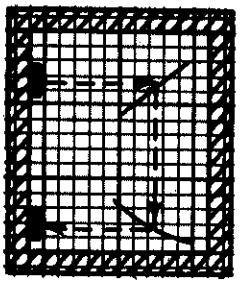


Figure A-29. Cruise (0°C to 20°C OAT) - Two Engines (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

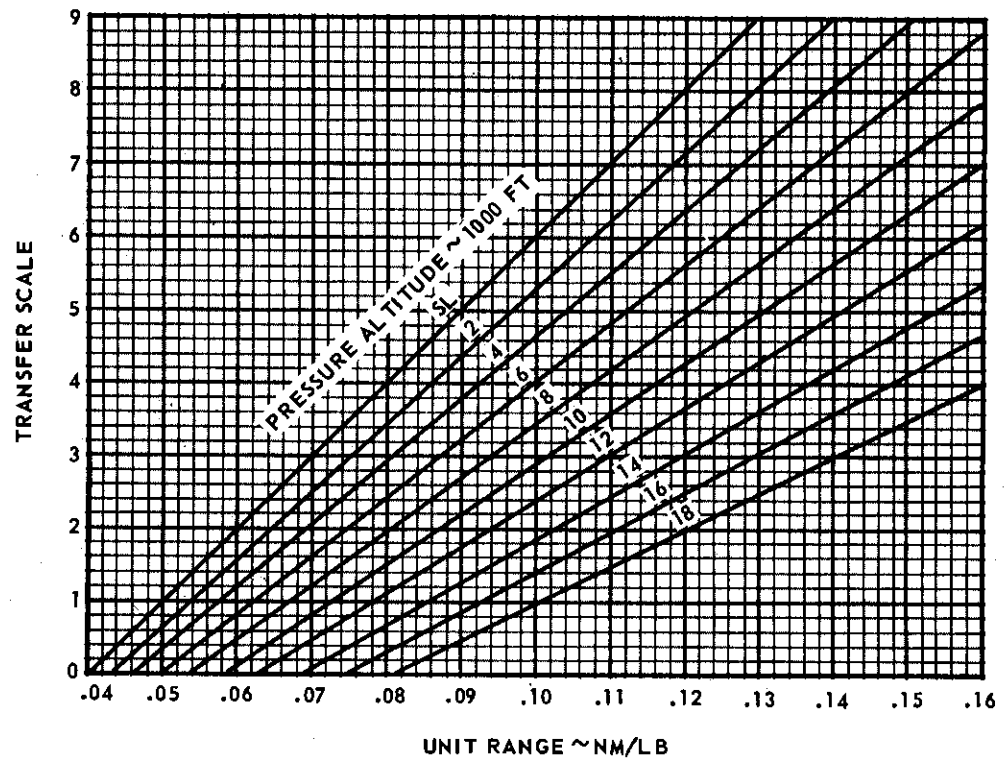


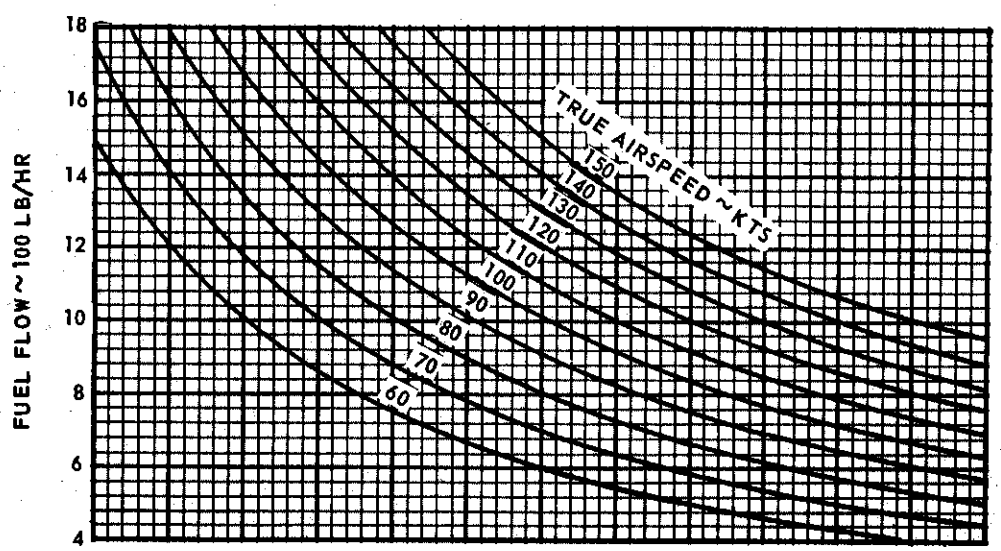
CRUISE

OAT BETWEEN 0°C AND 20°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)





S 17057.2 (C3)

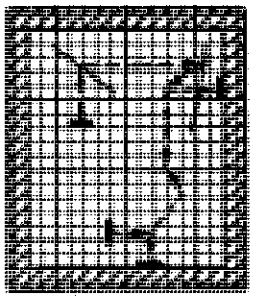
Figure A-29. Cruise (0°C to 20°C OAT) - Two Engines (Sheet 2 of 2)

CRUISE

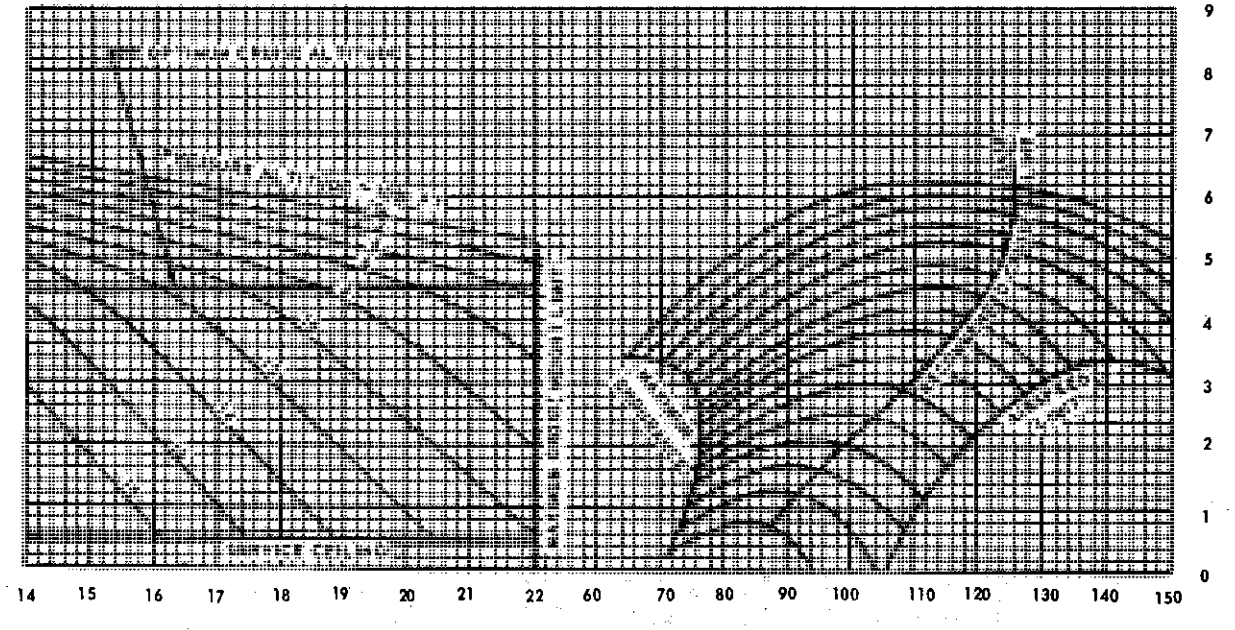
OAT BETWEEN -20°C AND 0°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 2 NOVEMBER 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF



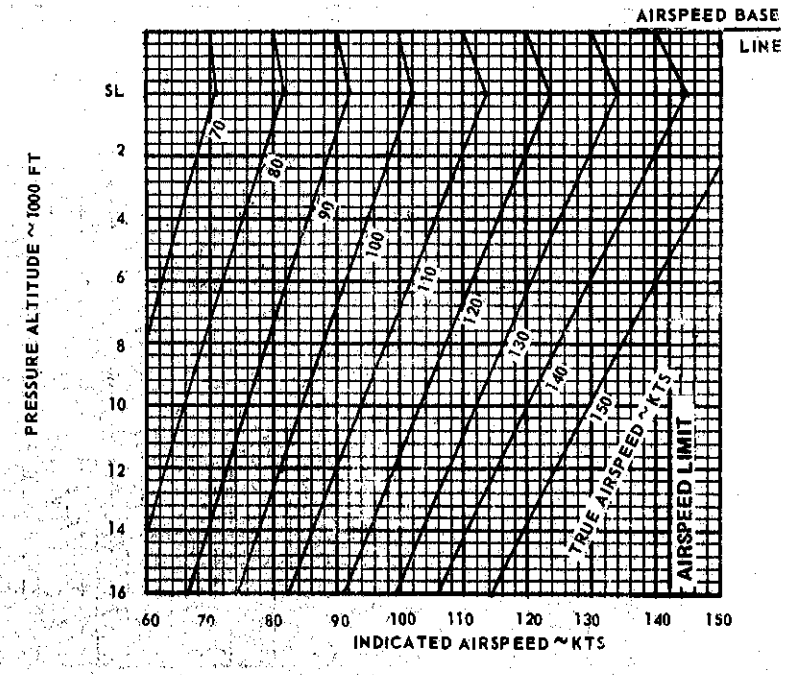
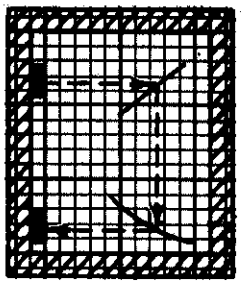


Figure A-30. Cruise (-20°C to 0°C OAT) - Two Engines (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

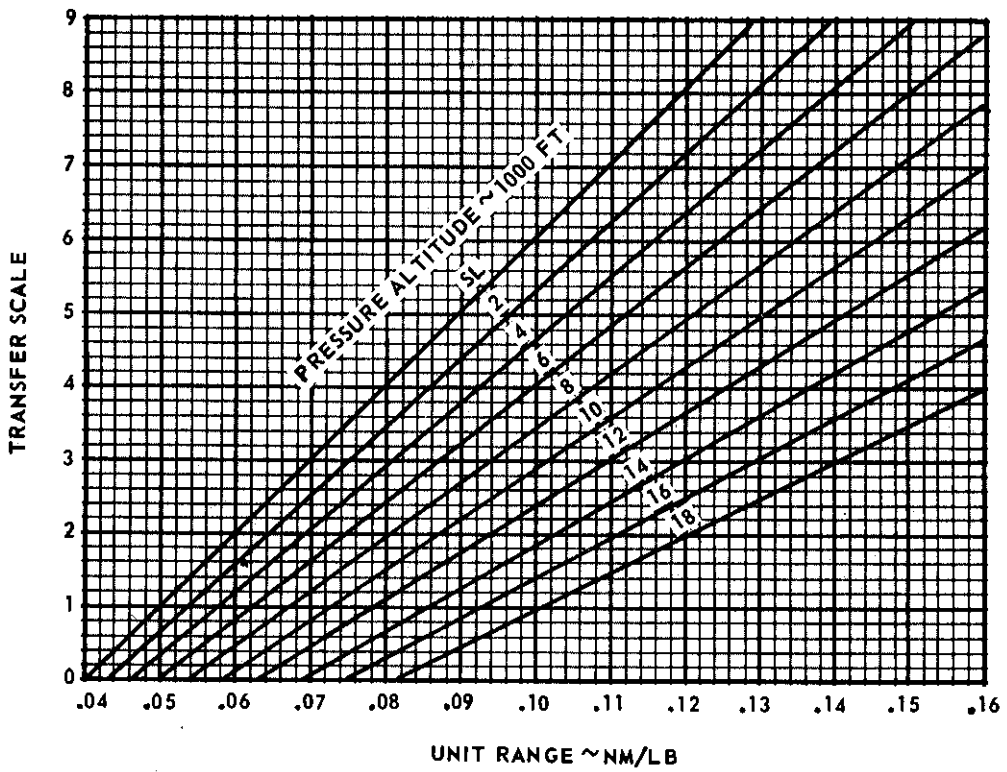


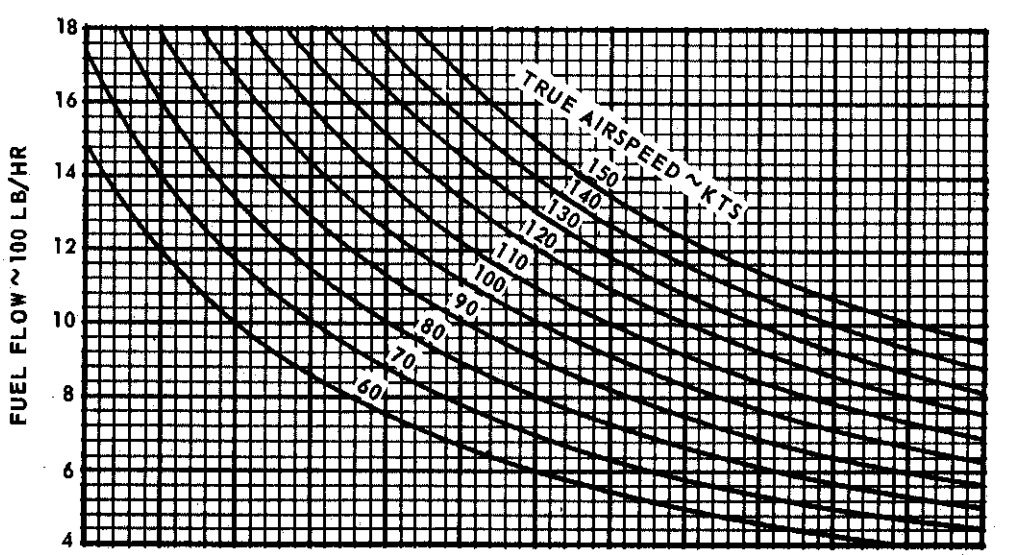
CRUISE

OAT BETWEEN -20°C AND 0°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)





S 17058.2 (C3)

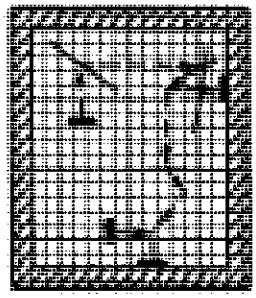
Figure A-30. Cruise (-20°C to 0°C OAT) - Two Engines (Sheet 2 of 2)

CRUISE

OAT BETWEEN -40°C AND -20°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 2 NOVEMBER 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

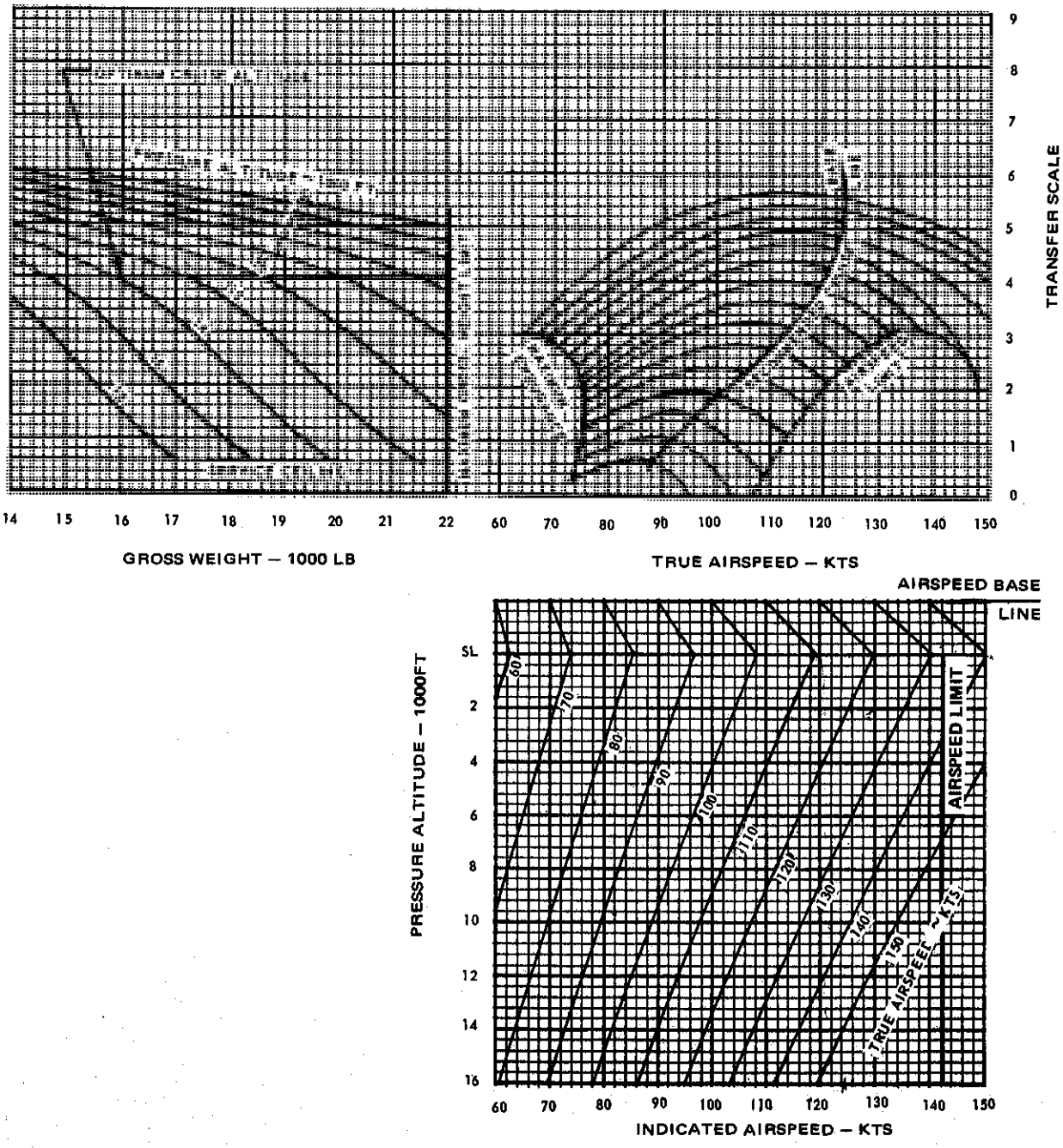
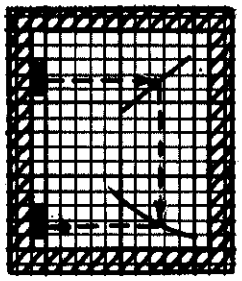


Figure A-31. Cruise (-40°C to -20°C OAT) - Two Engines (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

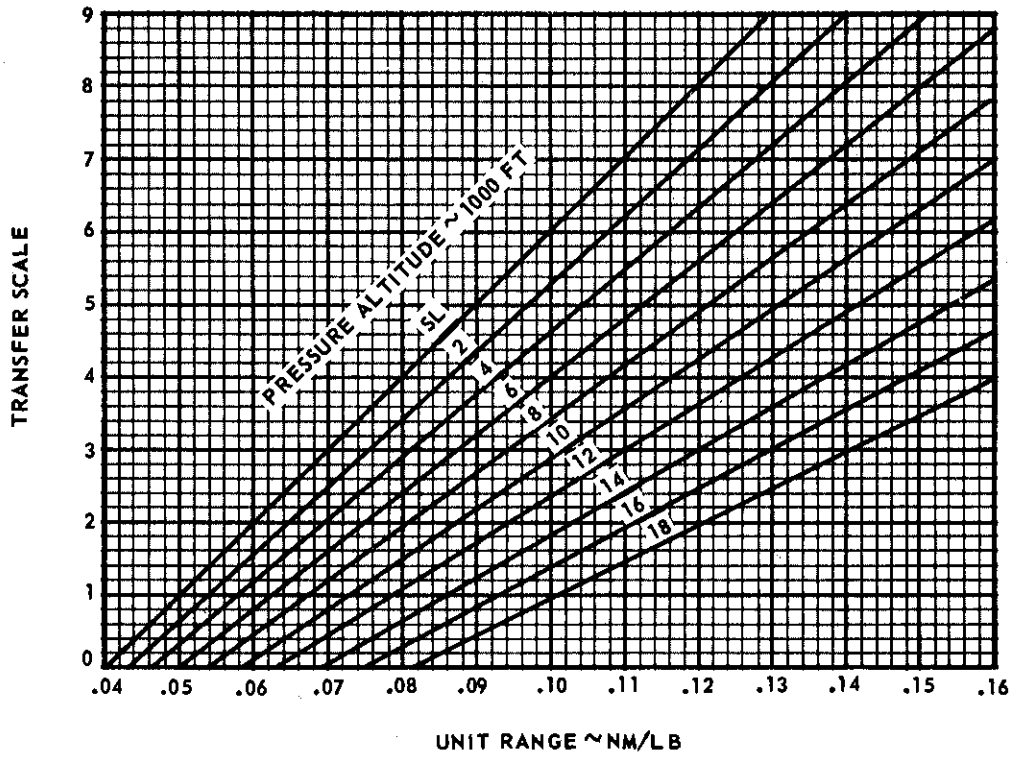


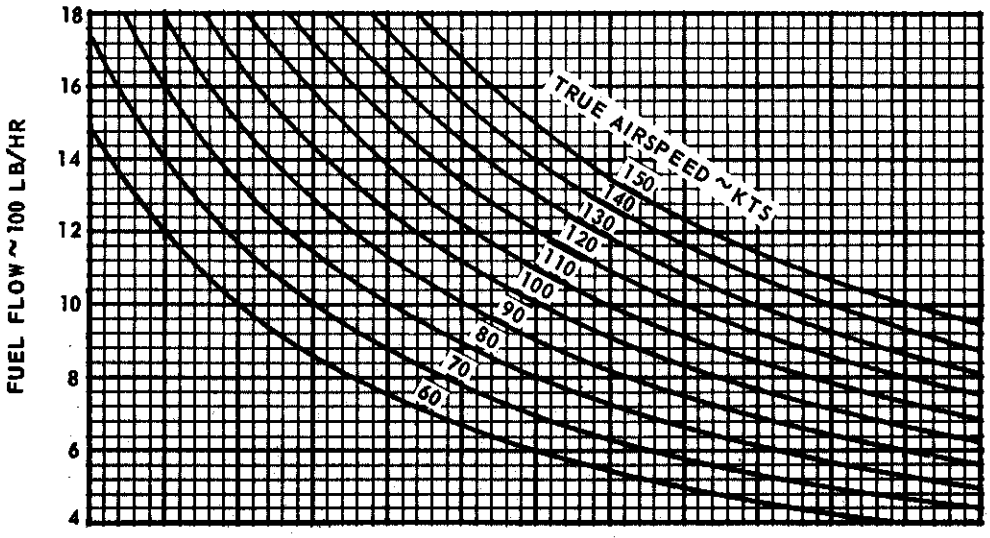
CRUISE

OAT BETWEEN -40°C AND -20°C
TWO ENGINES

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)





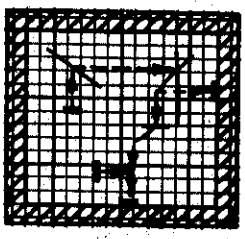
S 17059.2 (C3)

Figure A-31. Cruise (-40°C to -20°C OAT) - Two Engines (Sheet 2 of 2)

CRUISE

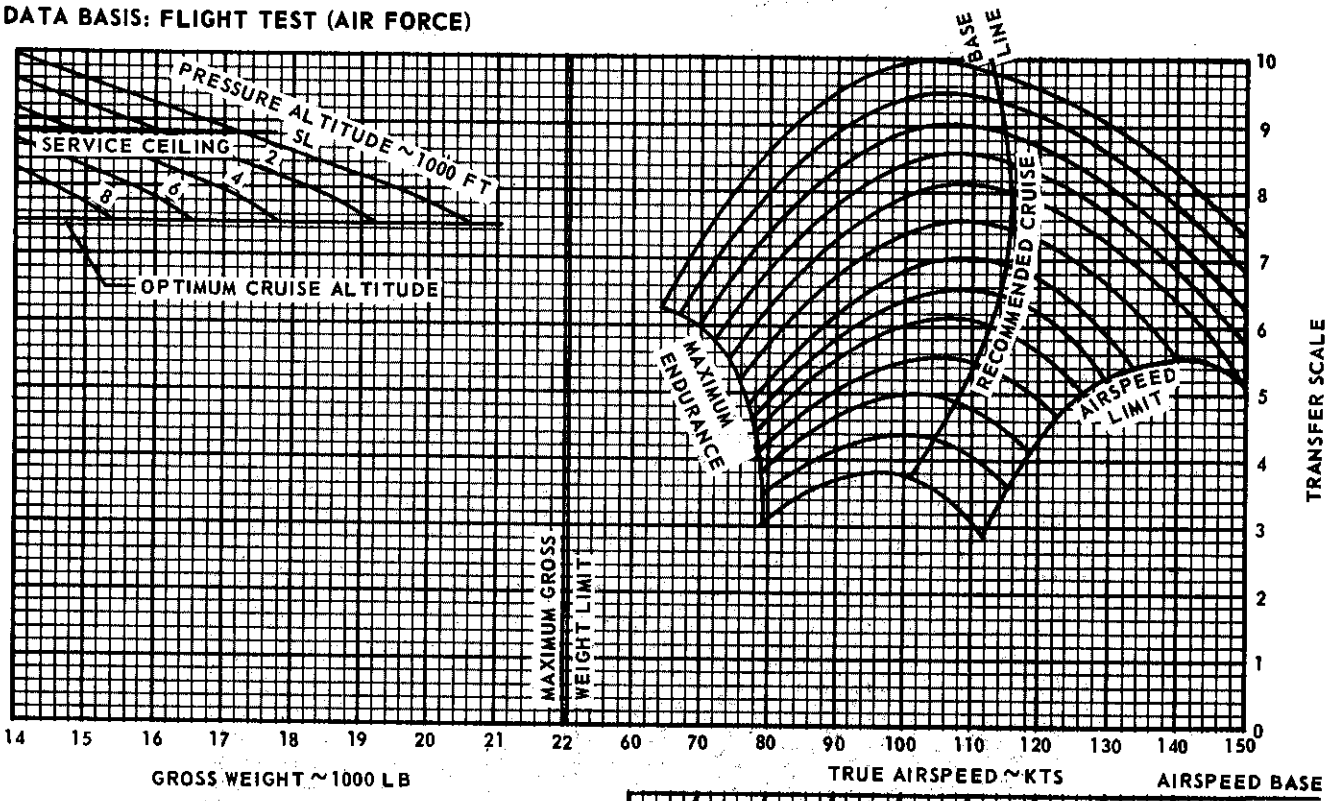
OAT BETWEEN 20°C AND 40°C
ONE ENGINE

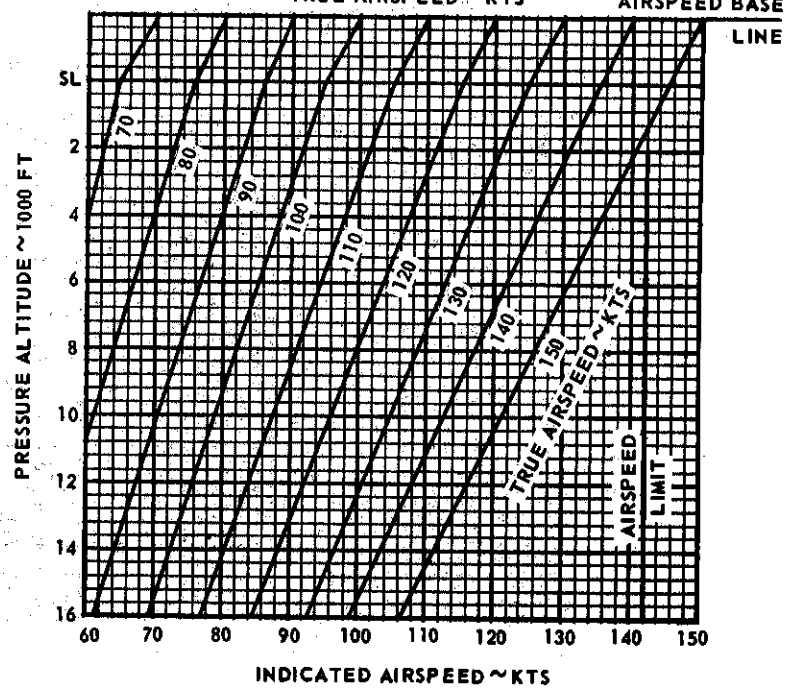
MODEL	ENGINE
CH/HH-3E	T58-GE-5



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

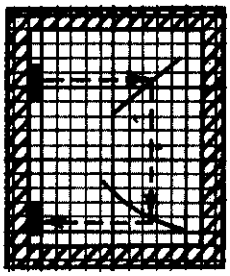




S 17060.1 (C3)

Figure A-32. Cruise (20°C to 40°C OAT) - One Engine (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

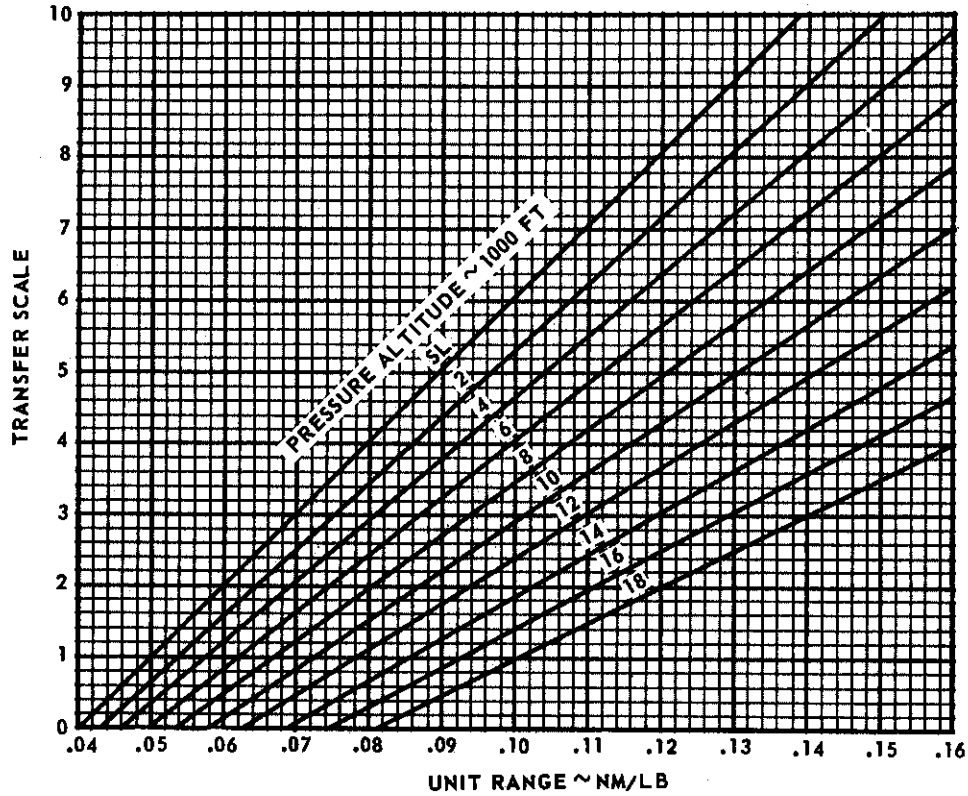


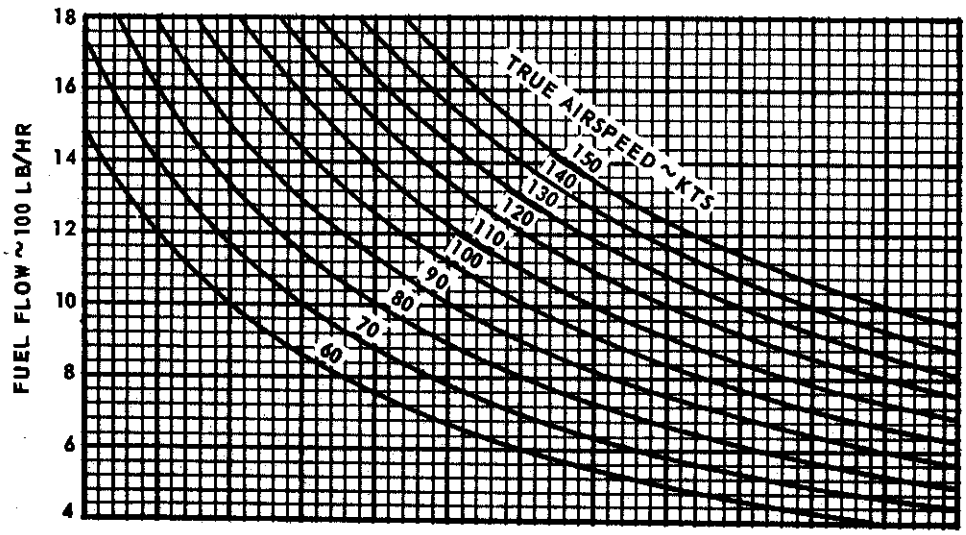
CRUISE

OAT BETWEEN 20°C AND 40°C
ONE ENGINE

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)





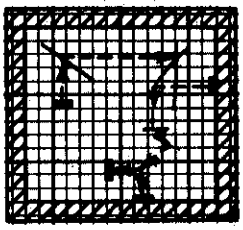
S 17060.2 (C3)

Figure A-32. Cruise (20°C to 40°C OAT) - One Engine (Sheet 2 of 2)

CRUISE

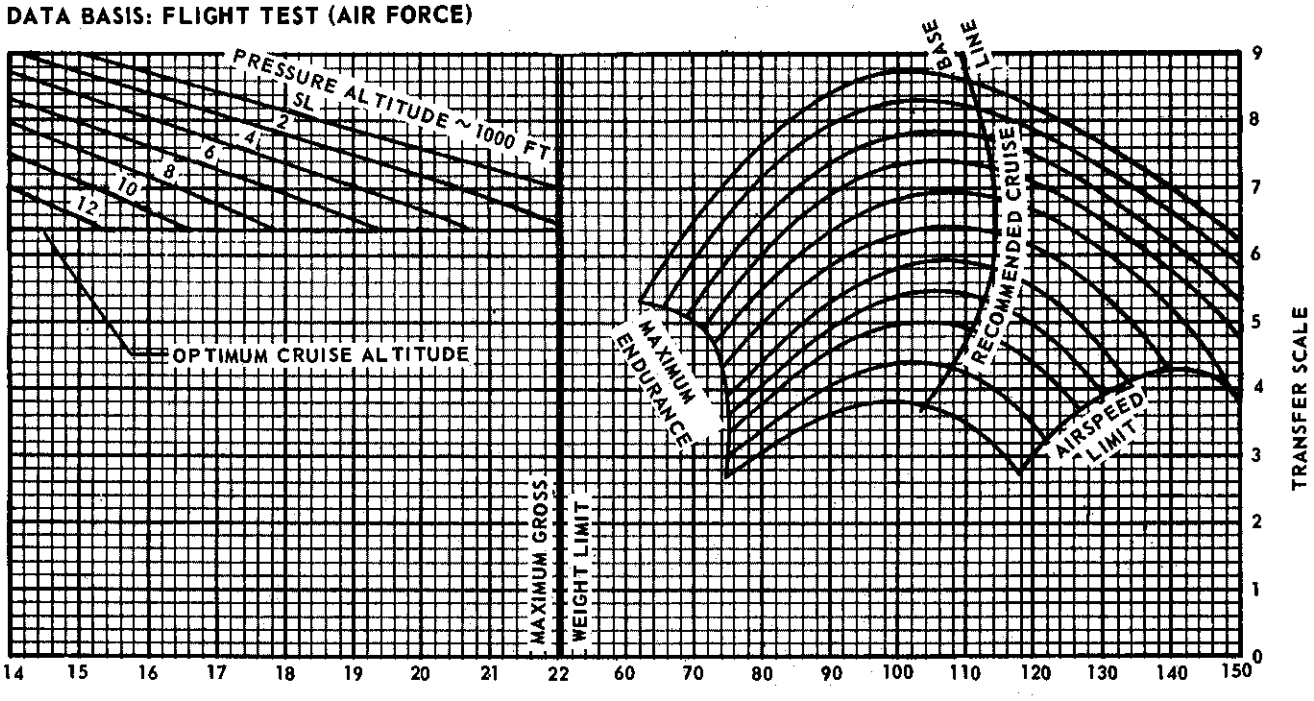
OAT BETWEEN -40° AND 20°C
ONE ENGINE

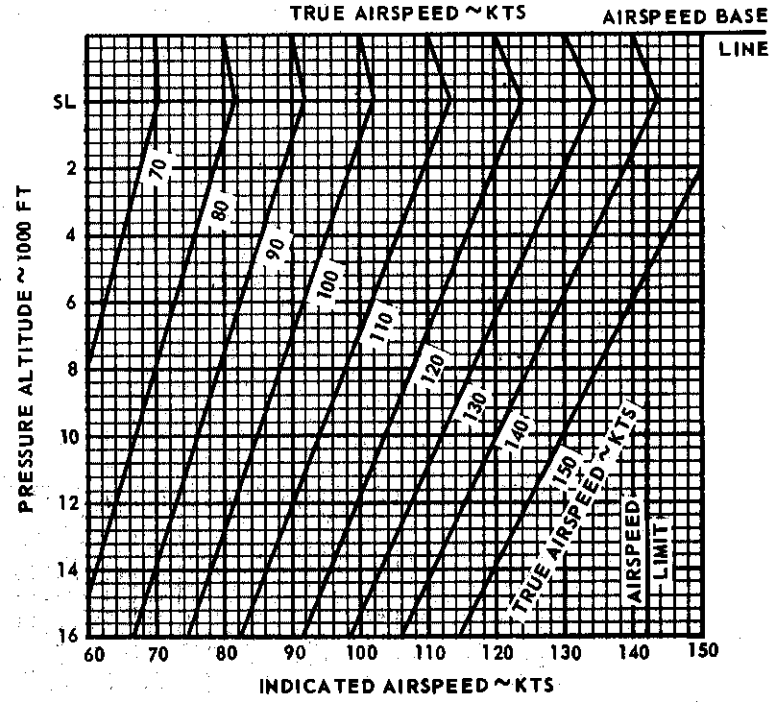
MODEL	ENGINE
CH/HH-3E	T58-GE-5



CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)

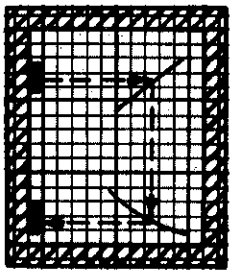




S 17061.1 (C3)

Figure A-33. Cruise (-40°C to 20°C OAT) - One Engine (Sheet 1 of 2)

CONDITIONS:
103% N_r
ZERO WIND
FOD SHIELD ON OR OFF

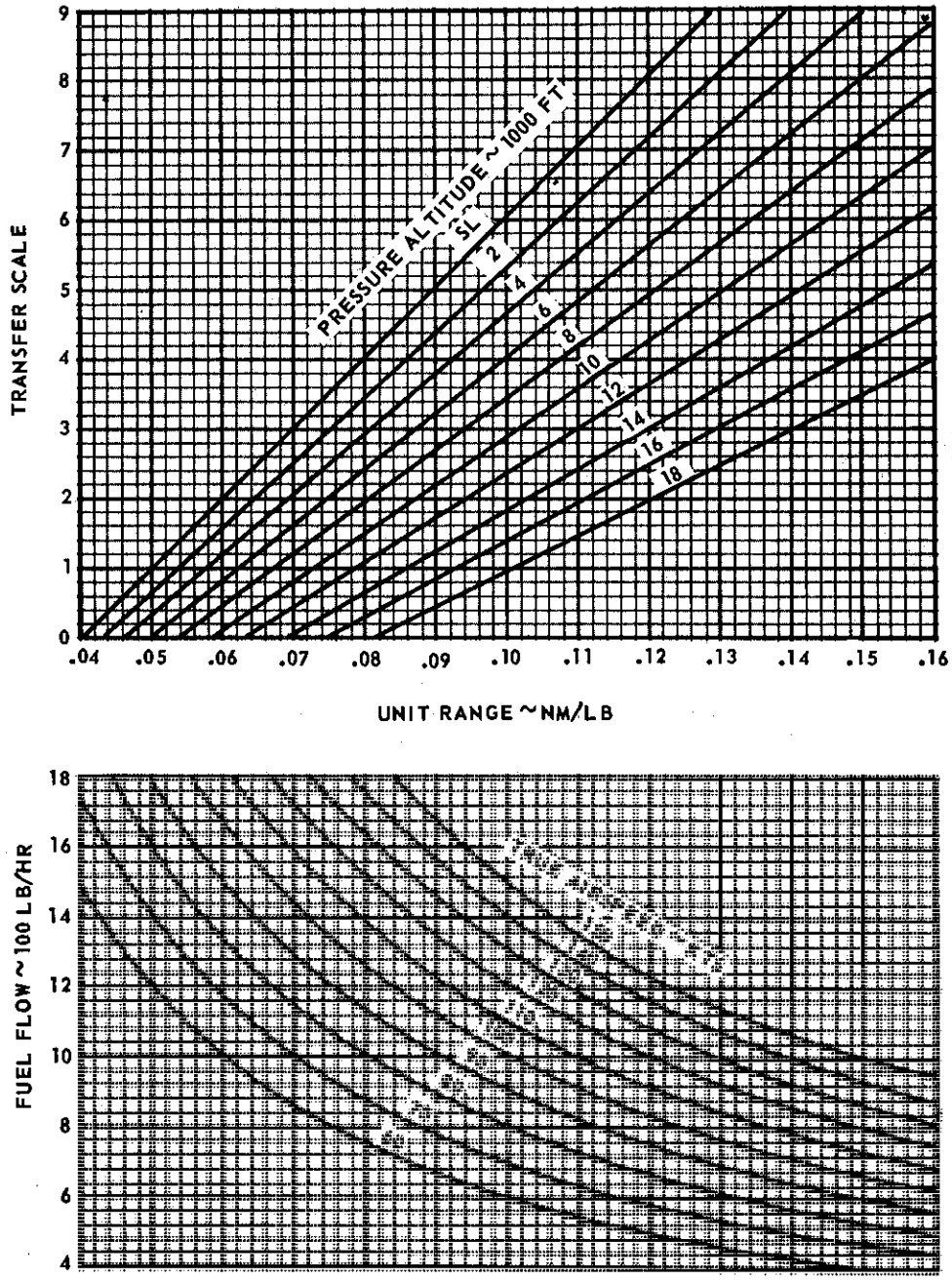


CRUISE

OAT BETWEEN –40°C AND 20°C
ONE ENGINE

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



S 17061.2 (C3)

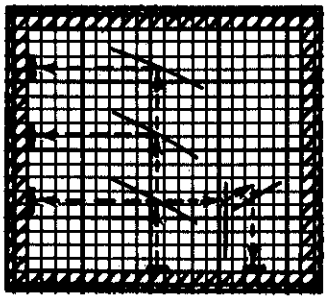
Figure A-33. Cruise (-40°C to 20°C OAT) - One Engine (Sheet 2 of 2)

SINGLE ENGINE CAPABILITY

ONE ENGINE

MODEL	ENGINE
CH/HH-3E	T58-GE-5

DATE: 15 APRIL 1971
DATA BASIS: FLIGHT TEST (AIR FORCE)



CONDITIONS:
70 KTS IAS
MILITARY POWER
103% Nr
FOD SHIELD
ON OR OFF
LANDING GEAR UP

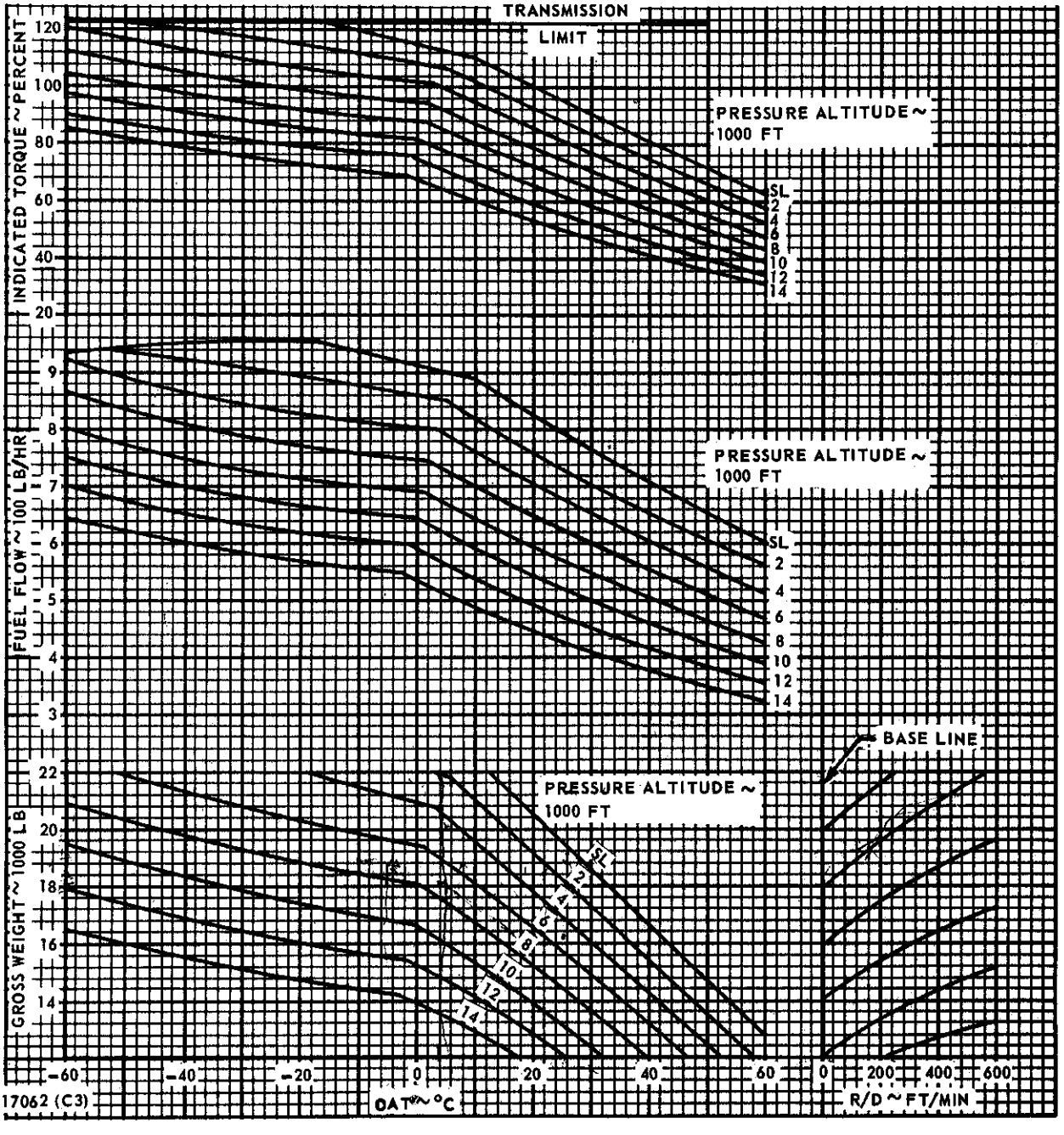


Figure A-34. Single Engine Capability - Military Power - One Engine

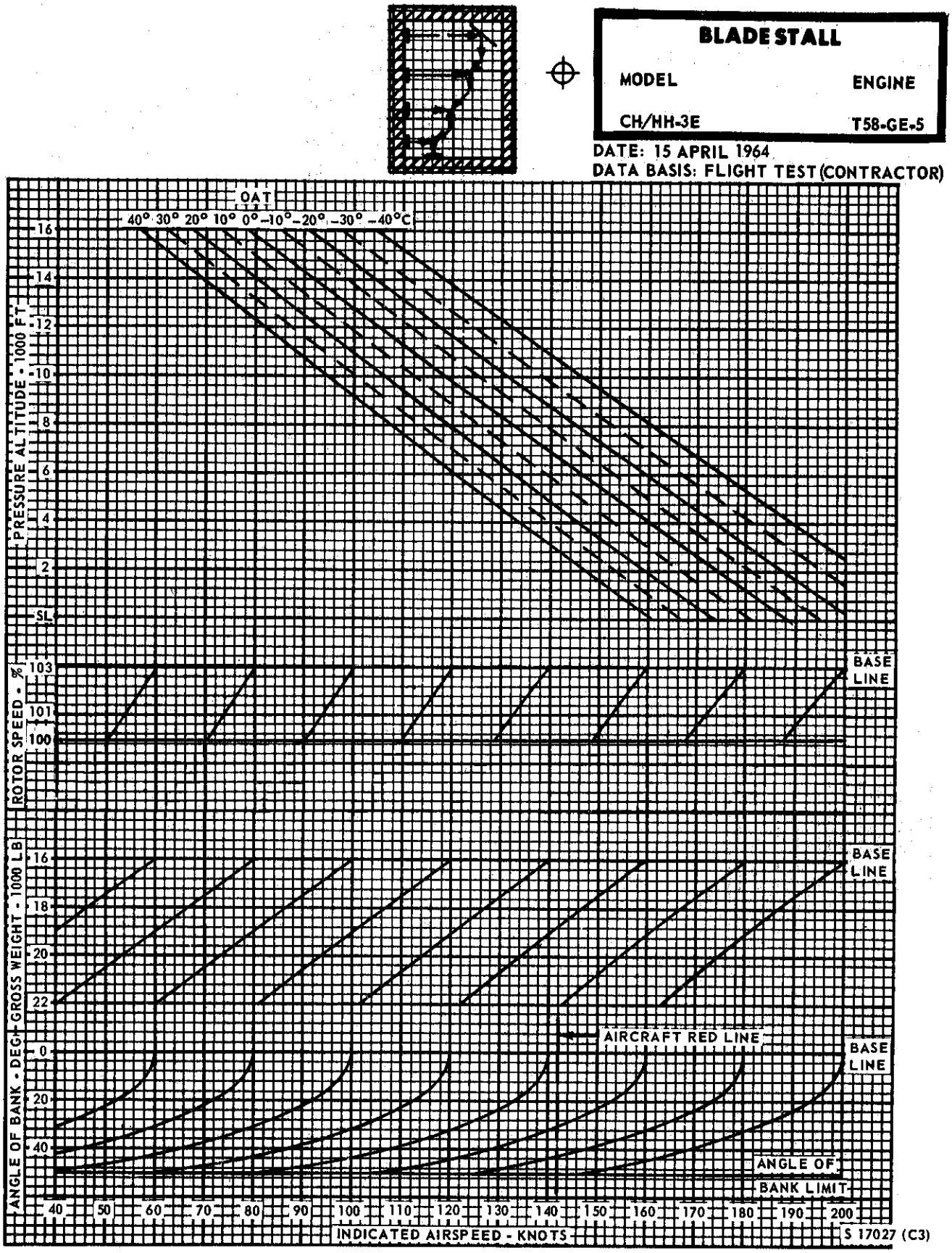


Figure A-35. Blade Stall

CONDITIONS:
UNACCELERATED
LEVEL FLIGHT
TIP MACH = 0.895

BLADE TIP MACH

MODELS
CH-3E & HH-3E

DATE: 27 JUNE 1972
DATA BASIS: FLIGHT TEST
(CONTRACTOR)

SEE 155-92

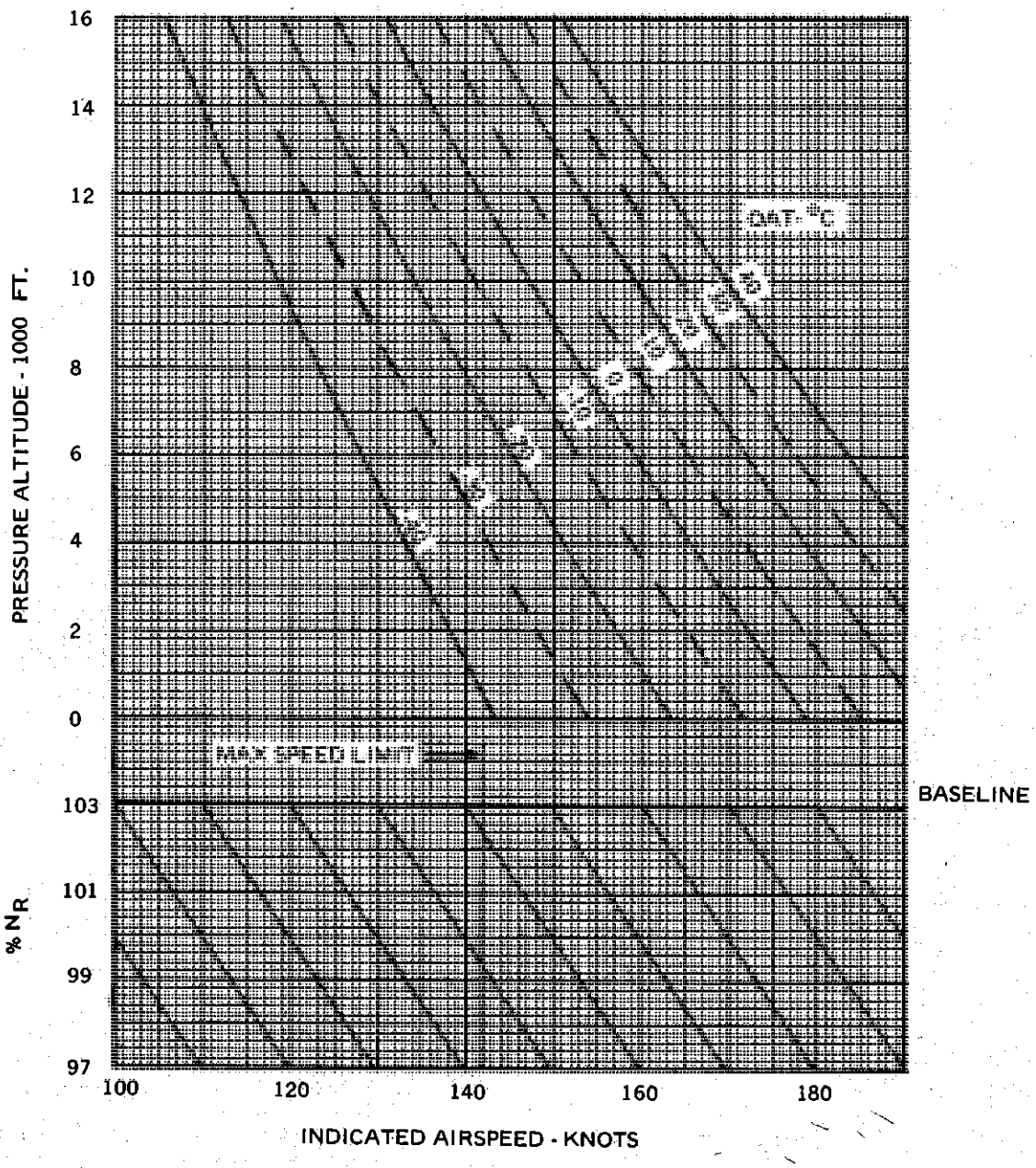


Figure A-36. Maximum Airspeed As Limited By Advancing Blade Tip Mach Number

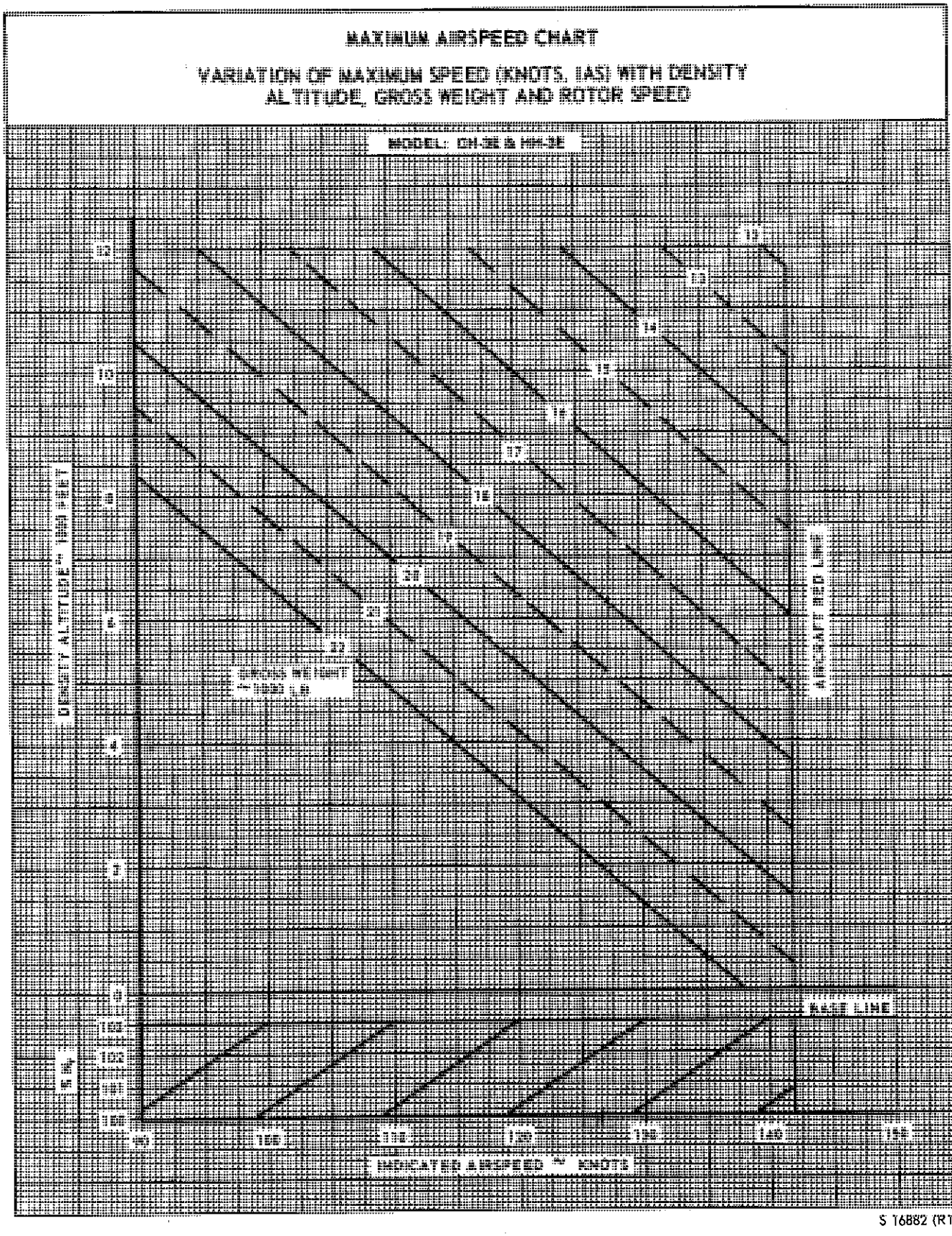


Figure A-37. Maximum Airspeed Chart

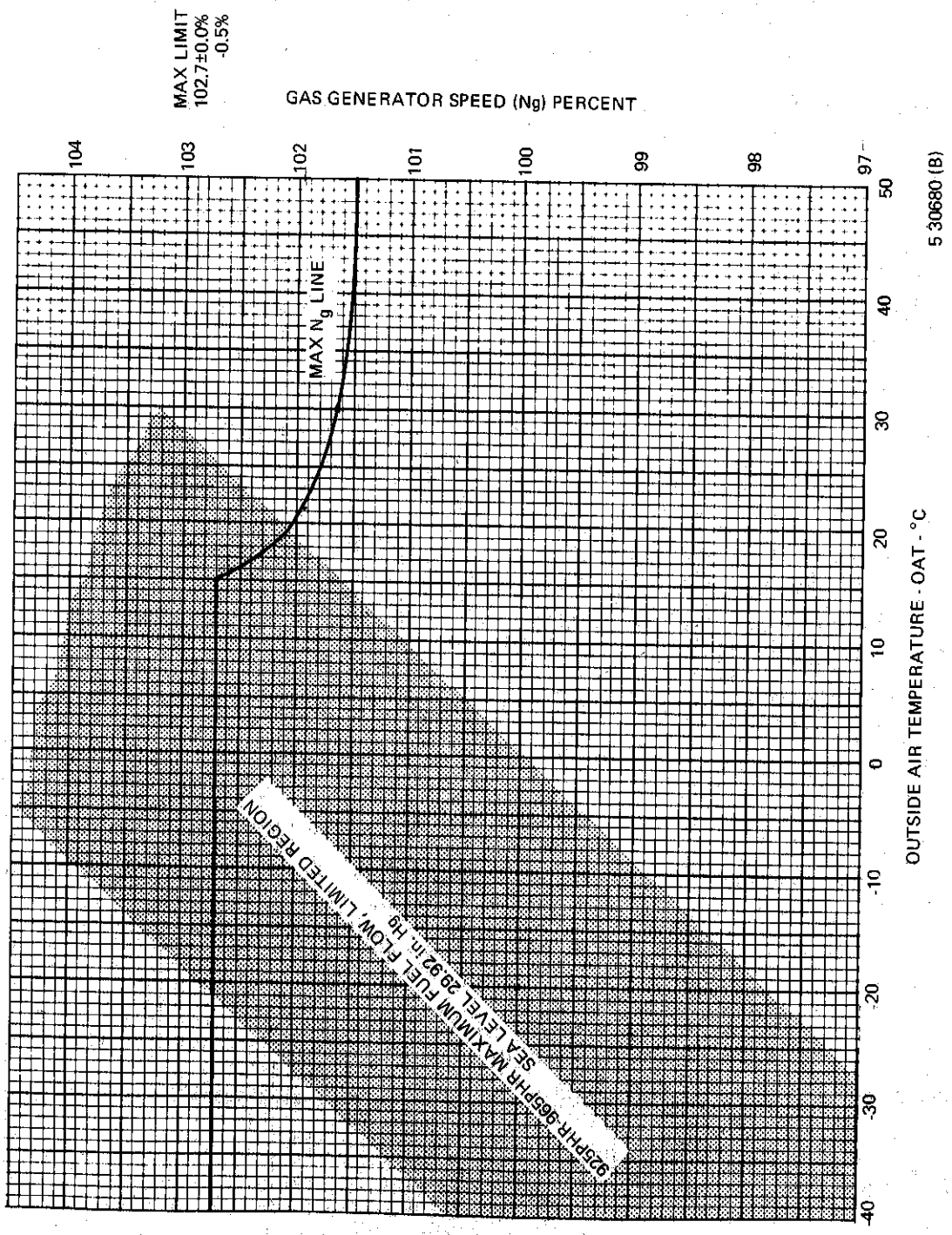


Figure A-38. Topping Chart (T58-GE-5)