On May 24, 1973 during a roll-out ceremony at the McDonnell-Douglas Plant in St. Louis, Missouri, the first of the newest generation of German fighters was officially handed over to the Luftwaffe. The aircraft was a McDonnell-Douglas F-4F Phantom, latest in the series of Phantoms produced at the St. Louis plant. (The F-4G, K, L and M had all been in production several years. The F-4F had been under development for some time, hence the fact of its being produced later.) The F-4F embodies all of the technological advances and lessons learned through the 18 years of Phantom development, from prototype mock-up in 1955 through the 1973 introduction of the F-4F version.

The major difference between this latest Phantom and all the others is the recent introduction of "slats" to the wing leading edges. The "slats" are extended when the aircraft is pulled into a tight turn or pulled up sharply. They prevent the separation of air flow over the wings and result in a tremendously improved turning ability for the airplane, something that was shown to be needed in combat with MiGs of all types in Vietnam.

The F-4F Phantom II, as originally ordered for the Luftwaffe, was a single-seat aircraft based on the F-4E, but having the Sparrow missiles and their associated radar and "black boxes" eliminated. Without the Sparrows there was no need for an R.I.O. (Radar Intercept Officer) in the back seat, as the Sidewinder heat-seeking missiles can be aimed and fired by the pilot alone. But during the course of developing the F-4F the decision was made to keep the rear seat and controls. Although the Sparrows are deleted, McDonnell-Douglas says that the capability for their installation is retained along with the mountings for the necessary equipment.

Also retained on the F-4F is the potent ground attack capability of the Phantom series comprising a centerline and four underwing store stations. On these hard points it is possible to hang either external fuel tanks (except on inboard pylons) or a broad variety of offensive stores. Certain of the component parts of this latest Phantom are being made or are scheduled to be made in Germany. They include the canopies, outer wing panels, rear fuselage, fin, rudder, stabilators, ailerons, landing gear doors, engine access doors and spoilers.

So successful have the modifications and improvements to this aircraft been, that the U.S.A.F. has adopted most of the features for retro-fit on all U.S.A.F. F-4E Phantoms. This will bring the F-4E up to F-4F standards. And apart from some equipment differences, they will be nearly identical to their German cousins.
**HELPFUL MODELING HINTS**

1. Fit parts together before cementing.
2. Trim away excess plastic.
3. Use cement sparingly; too much will damage your model.
4. Suggested painting colors are indicated by
   - Paint small parts before detaching from runner.
5. TO OBTAIN A GOOD BOND, REMOVE PAINT WHERE PARTS ARE TO BE CEMENTED.

**YOU WISH TO STOP AT ANY POINT DURING THE CONSTRUCTION OF YOUR MODEL, DO SO AT THE END OF AN ASSEMBLY STEP**

### 1. COCKPIT ASSEMBLY

**MOLDED IN BASIC UPPER SURFACE — MITTELGRAU**

IF PAINTING: USE MITTELGRAU

- HELGRAU
- EISENFAHRIG
- OLIV-GRUN
- SCHWARZ MAT
- WEISS MATT
- MITTELGRAU
- SILBER
- HAUTFAHRE

1. SEAT BACK (2 Parts)
2. CONTROL COLUMN (2 Parts)
3. COCKPIT FLOOR
4. PILOT'S INSTRUMENT PANEL
5. RADAR OPERATOR'S INSTRUMENT PANEL
6. CREW FIGURE — FRONT HALF (2 Parts)
7. CREW FIGURE — BACK HALF (2 Parts)

**UNIFORM — OLIV-GRUN**

**Crew Members**

1. Cement two Parts (1) and two Parts (2) to Part (3).
2. Apply DECALS to Parts (3), (4) and (5).
3. Cement (4) and (5) to Part (3).
4. Cement TWO Parts (6) to TWO Parts (7).
5. Cement CREW FIGURES to SEATS.

### 2. ENGINE ASSEMBLY

**VARYING SHADES OF — SILBER**

1. Cement Part (8) to Part (9).
2. Cement Parts (10) and (11) to Parts (8) and (9).

1. LEFT ENGINE — LEFT HALF
2. LEFT ENGINE — RIGHT HALF
3. LEFT ENGINE INTAKE
4. ENGINE EXHAUST CONE
1. **OPEN HOLES** in Parts (12) and (13) for UNDERWING STORES.
2. Cement Part (12) to (13) and (14) to (15). Cement (76) to (14).
3. **PLACE, DO NOT CEMENT**, the HINGES on RIGHT OUTER WING into the NOTCHES in Part (16), then cement (16) to (12). **DO NOT LET CEMENT TOUCH HINGES OR WING WILL NOT FOLD INTO STOWED POSITION.**
4. Cement (17) to (18) and then (75) to (17). Assemble LEFT OUTER WING and Part (19) to (13) in the same way as RIGHT WING.

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1. Cement Part (20) and the COCKPIT ASSEMBLY from Step 1 into Part (21).
2. Cement (22) into (23).
3. **PLACE, DO NOT CEMENT**, Parts (25), (26) and (27) in PLACE in Part (21) then CAREFULLY cement (23) to (21). **DO NOT LET CEMENT TOUCH HINGE PINS OR PARTS WILL NOT MOVE.**
4. Cement (28) to the FUSELAGE only.
5 AIR DUCT INSTALLATION

1. Cement Parts (29) and (30) to the FUSELAGE.
2. Cement one Part (31) to (32) and one Part (31) to (33).
3. Cement (32) and (33) to the FUSELAGE.
4. Cement (34) between ribs inside FUSELAGE.

6 LANDING GEAR ASSEMBLY

A LEFT GEAR
1. Cement one Part (35) to each Part (36).
2. PLACE, DO NOT CEMENT, One Part (37) into each WHEEL, then CAREFULLY cement Part (37) to the AXLE of Part (38). DO NOT LET CEMENT TOUCH Part (36) or WHEEL will not rotate.
3. Cement Part (40) to (38).
4. Assemble RIGHT GEAR in the same way, using WHEEL ASSEMBLY Parts (35), (36) and (37), and Parts (39) and (41).

C NOSE GEAR
5. PLACE, DO NOT CEMENT, one Part (42) into each Part (43), then CAREFULLY cement one Part (45) to each Part (43).
6. Cement WHEEL RETAINERS (42) onto AXLES of Part (44). DO NOT LET CEMENT TOUCH WHEELS.
7. Cement Part (46) to Part (44).

SEE DRAWINGS “A” AND “B” — MAIN GEAR

SEE DRAWING “C” — NOSE GEAR

YOU HAVE A CHOICE OF BUILDING YOUR MODEL
WITH THE LANDING GEAR IN THE INFLIGHT
“GEAR UP” POSITION, OR WITH THE “GEAR DOWN”
IF YOU CHOOSE TO BUILD A “GEAR UP” MODEL
OMIT THIS STEP AND CONTINUE WITH STEP 7.

35 MAIN WHEEL — OUTSIDE HALF (2 Parts)
36 MAIN WHEEL — INSIDE HALF (2 Parts)
37 MAIN WHEEL RETAINER (2 Parts)
38 LEFT MAIN GEAR STRUT
39 RIGHT MAIN GEAR STRUT
40 LEFT MAIN GEAR STRUT DOOR — CENTER
41 RIGHT MAIN GEAR STRUT DOOR — CENTER
42 NOSE WHEEL RETAINER (2 Parts)
43 NOSE WHEEL — INSIDE HALF (2 Parts)
44 NOSE GEAR STRUT
45 NOSE WHEEL — OUTSIDE HALF (2 Parts)
46 NOSE GEAR YOKE

PAGE 4
7 SPARROW MISSILE ASSEMBLY

48 MISSILE BODY — LEFT HALF (4 Parts)
49 MISSILE BODY — RIGHT HALF (4 Parts)
50 MISSILE CENTER FIN (4 Parts)
51 MISSILE TAIL FIN (4 Parts)

1. Cement one Part (48) to each Part (49). Make four MISSILES.
2. Center and cement one Part (50) in each MISSILE.
3. Cement one Part (51) to the rear of each MISSILE.

SEE DRAWING "A"

8 600 GALLON FUEL TANK

79 FUSELAGE FUEL TANK — LEFT HALF
80 FUSELAGE FUEL TANK — RIGHT HALF

1. Cement (79) to (80).

9 370 GALLON FUEL TANKS

81 OUTERWING FUEL TANK — RIGHT HALF (2 Parts)
82 OUTERWING FUEL TANK — LEFT HALF (2 Parts)
83 LEFT TANK SWAY BRACE
84 RIGHT TANK SWAY BRACE

1. Cement one Part (81) to each Part (82).
2. The SWAY BRACES determine whether a TANK ASSEMBLY is to be used on RIGHT or LEFT WING. Cement (83) to one TANK for LEFT WING and (84) to other TANK for RIGHT WING installation.
WEAPON PYLONS

1. Cement one Part (85) to each Part (86). The SWAY BRACES determine to which WING the PYLON is to be installed.
2. For the LEFT PYLON, cement (87) and (88) to one ASSEMBLY.
3. For the RIGHT PYLON, Cement (89) and (90) to the other ASSEMBLY.
4. Parts (106) and (107) ARE NOT USED IN THIS KIT.

SIDEWINDER MISSILE ASSEMBLY

1. Place one (91) in FORWARD SLOT in (92). Locate (93) over (91) and cement (92) and (93) together. Slide one (94) into SLOT at REAR of MISSILE and cement in position.
2. Assemble remaining three MISSILES in the same way.

SIDEWINDER LAUNCHING RACKS

1. Cement one Part (95) to each Part (96).
2. Cement LAUNCHING RAILS to WEAPON PYLONS.
3. Cement a SIDEWINDER MISSILE to each LAUNCHING RAIL.
1. Cement one Part (97) to each Part (98).

97 TRIPLE EJECTOR RACK — LEFT HALF (2 Parts)
98 TRIPLE EJECTOR RACK — RIGHT HALF (2 Parts)

1. Cement one Part (99) to each Part (100).

99 MARK 82 BOMB HALF WITH FINS (6 Parts)
100 MARK 82 BOMB HALF WITHOUT FINS (6 Parts)
101 MARK 82 BOMB TAIL FINS (6 Parts)

1. Cement three BOMBS to each BOMB RACK. Be sure BOMB FINS align as indicated in small drawing.
1. Slip the forward end of the WING ASSEMBLY (Step 3), into the FUSELAGE and slide it forward until the WING aligns with the FUSELAGE, then cement Parts together.
2. Cement Part (11) to WING and FUSELAGE.
3. Cement two Parts (77) and four Parts (78) to WING as indicated.

For a "GEAR UP" MODEL ONLY, SEE DETAIL "A"

4. Cement six LANDING GEAR DOORS Parts (40), (41), (53), (54), (56) and (57) to WING in a closed position as shown.

52. RIGHT MAIN GEAR RETRACT STRUT
53. RIGHT MAIN GEAR DOOR — OUTBOARD
54. RIGHT MAIN GEAR DOOR — INBOARD
55. LEFT MAIN GEAR RETRACT STRUT
56. LEFT MAIN GEAR DOOR — OUTBOARD
57. LEFT MAIN GEAR DOOR — INBOARD
58. NOSE GEAR RETRACT LOCK
59. NOSE GEAR RETRACT STRUT
60. NOSE GEAR DOOR — REAR HALF

For a "GEAR UP" model, skip this ASSEMBLY step and go on to Step 18.
1. Cement the RIGHT MAIN GEAR into WING. Cement (52) to GEAR and WING.
2. Cement (53) and (54) to edges of GEAR OPENING in a vertical position.
3. Cement LEFT GEAR and Parts (55), (56) and (57) in place on LEFT WING.
4. Cement (58) and NOSE GEAR into WHEEL WELL.
5. Cement (59) to NOSE GEAR and WHEEL WELL LOCATOR.
6. Cement (60) to edge of WHEEL WELL in a vertical position.
1. Cement (61L) and (61R) to the FUSELAGE.
2. Cement (62) to (63) and (64) to (65). Cement STABILIZERS to FUSELAGE.
3. Cement three SPARROW MISSILES, (from Step 7), to bottom of FUSELAGE.

1. Cement (72) to FRONT of FUSELAGE.
2. Cement (66) to (67). Cement (67) to (68), then cement (68) to (72).
3. Cement (70) to (69), then PRESS, DO NOT CEMENT (69) onto Part (72). (69) is removable to display the RADAR INSTALLATION.
4. Cement (73) to FUSELAGE and Part (72).
5. FOR A "GEAR DOWN" MODEL — SEE DRAWING "A"
6. Trim LOCATING TABS from Part (60) as indicated, then cement (47) and (60) in a closed position as shown in Detail "B".
1. Refer to Page 12, Decal Placement, and apply all UNDERWING DECALS as shown.
2. Cement three FUEL TANKS from Steps 8 and 9 in place as shown.
3. Install RIGHT and LEFT WEAPON PYLONS from Step 12.
4. Cement the BOMB RACKS to the PYLONS if you so desire.

21 FINAL ASSEMBLY

1. PLACE, DO NOT CEMENT the ENGINE ASSEMBLY from Step 2 inside the FUSELAGE, then rotate ENGINE until the KEY locates into the ENGINE BULKHEAD.
2. PLACE, DO NOT CEMENT (71) onto the FUSELAGE. Part is removable to display or remove ENGINE.

FUSELAGE CAMOUFLAGE PATTERN