

Attachment to Pig Hunt
Dated: 29 December 2007



Fact Sheet

Media Department

ADF Issue

Weapons Systems Brief

Pub: Pig Hunt

Iranian Chengdu F-7MP Airguard



The Chengdu J-7II above is an improved MiG-21 pictured to the left. The F-7M Airguard is an upgraded J-7II variant built for export.

Background: 18 export F-7MP Airguard versions were exported by China to Iran incorporating domestic Chinese avionics. Reportedly, the radar is an SY-80 pulse doppler radar, probably the locally Chinese built copy of the Type 226 Skyranger radar with Type 956 HUD. (Other Airguard exports featured the Italian FIAR Grifo-7 radar with a 50km+ range and AIM-9 Sidewinder capability while the Type 226 radar is limited to 15km.)

The **F-7M** Airguard is an improved J-7II variant built for export. The F-7M Airguard features a totally different wing with complete new design enabling take-off and landing distance to be reduced by 20%, while increasing the aerodynamic performance in dogfights at the same time. New and WP-7B/WP-7BM engine. According to some sources claims, the F-7M is nearly 40% more effective than MiG-21 in terms of overall performance. Can use French R550 Magic and PL-7 Air-to-air missiles. 24 sold to Myanmar, and Egypt in 1980's.

Other than the action over the Gulf of Oman, the F-7MP Airguard has seen no other known combat action, but was in several movies by portraying Iraqi MiG-21s during the Iran-Iraq War, such as one that tells the story of an Iranian Air Force strike on the Iraqi nuclear reactor at Osirak on September 30, 1980, another that tells the story of the 810 km deep raids into the Iraqi heartland against Iraqi Air Force airfields on April 4, 1981, and other movies depicting the air combat in 1981 that resulted in the downing of around 70 Iraqi aircraft[citation needed]. However, unconfirmed reports claimed that during the later stages of the war, these aircraft were used for air-to-ground attacks[citation needed].

History.

The Chengdu F-7M exported to countries other than Iran differed in the fitting of the GEC-Marconi HUD and weapons aiming computer or Italian FIAR Grifo-7 radar. Improved radar range-finder, radar altimeter, IFF, and improved engines were common across the board. In the early 1950s and 1960s, the Soviet Union shared most of its conventional weapons technology with the People's Republic of China. One of these was the famous MiG-21 short-range interceptor and fighter aircraft. Powered by a single engine and designed on a simple airframe, these fighters were inexpensive, but fast and maneuverable, suiting the strategy of forming large quantities of 'people's fighters' to overcome the technological advantages of Western aircraft.

With the delivery of a handful of MiG-21F fighters along with technical documents, China set about to reverse engineer the aircraft for local production. This was achieved with only minor differences from the original. Poor initial quality and slow progress resulted in full scale production only coming about in the 1980s, by which time the design was showing its age. However, the fighter is affordable and widely exported as the F-7, often with Western systems incorporated like the ones sold to Pakistan.

In the mid 1990s, the PLAAF began replacing its J-7Bs with the substantially redesigned J-7E variant. The wings of the J-7E have been changed to a unique "double delta" design offering improved aerodynamics and increased fuel capacity, and the J-7E also features a more powerful engine and improved avionics. The newest version of the J-7, the J-7G, entered service with the PLAAF in 2003.

The role of the J-7 in the People's Liberation Army is to provide local air defense and tactical air superiority. Large numbers are to be employed to deter enemy air operations.

Specifications

General characteristics

- **Crew:** 1
- **Length:** 14.885 m (48 ft 10 in)
- **Wingspan:** 8.32 m (27 ft 4 in)
- **Height:** 4.10 m (13 ft 5 in)
- **Wing area:** Greater than 23 m² (247.5 ft²)

- **Empty weight:** 5,292 kg (11,667 lb)
- **Loaded weight:** 7,540 kg (16,620 lb)
- **Max takeoff weight:** 9,100 kg (20,000 lb)
- **Powerplant:** 1× Liyang Wopen-13F (R-13-300) [13] Afterburning Turbojet
- **Dry thrust:** 44.1 kN dry (9,590 lbf)
- **Thrust with afterburner:** 66.7 kN (14,815 lbf)

Performance

- **Maximum speed:** 2,175 km/h (1,350 mph)
- **Combat range:** 850 km (528 miles)
- **Ferry range:** 2,200 km (1,380 miles)
- **Service ceiling:** 18,800 m (61,700 ft)
- **Rate of climb:** 11,700 meters/min (38,400 ft/min)
- **Wing loading:** Greater than 379 kg/m² (77.8 lb/ft²)

Armament

- Two 30mm Type 30-1 guns with 60 rounds each
- Four under-wing store stations (500 kg load each, 2,000 kg total limit)
- Centerline station (typically used for 720 liter drop tank)
- PL-8, PL-9 short-range AAM
- 50kg - 500kg Free-fall bombs
- 12x55mm Rocket pod, 7x90mm Rocket pod

Avionics

- Type 226 PD radar (domestic)
- GEC-Marconi Super Skyraanger (Or copy) or Italian Grifo-7 (export)