THE AERONAUTICAL BOARD
Washington

30 October 1947

MEMORANDUM FOR: Chief of Naval Operations
                Chief of Staff, U. S. Air Force

SUBJECT: Uniform Aircraft Classification

1. At its 29 October 1947 meeting, the attached "Uniform Aircraft Classification" with appropriate definitions was approved by the Aeronautical Board for use by the U. S. Air Force and pertinent offices of the Navy Department.

2. The Uniform Aircraft Classification will be used internally by the Services wherever possible, and should be used whenever listings that include aircraft of the opposite Service and/or aircraft of foreign countries are made. Therefore, it will be incumbent upon the Services to advise their attaches and others charged with preparing listings of foreign aircraft concerning the provisions of the Uniform Aircraft Classification. When significant changes in the Uniform Aircraft Classification are indicated, they are to be forwarded to the Plans and Policies Committee of the Aeronautical Board.

3. The Aeronautical Board will forward the Uniform Aircraft Classification to the Aviation Division of the Department of State and the Subcommittee on Aviation Information and Statistics, Economic Division of the Air Coordinating Committee in order that it may be made available to other government agencies having a possible need for such a classification.

D. B. DUNCAN
Vice Admiral, U. S. N.
Senior Navy Member

HOYT S. VANDENBERG
General, U. S. A. F.
Senior Air Force Member

Copies to:
Chief of Staff, U. S. Army
Air Comptroller
Deputy Chief of Naval Operations (Air)
Chief of Naval Intelligence
Chief, Bureau of Aeronautics
MEMORANDUM TO: The Aeronautical Board

SUBJECT: Uniform Aircraft Classification

1. At the 17 October 1947 meeting of the Plans and Policies Committee, the above subject was considered.

MEMBERS PRESENT:

Brig. Gen. E. H. White, USAF, Acting Chairman
Capt. V. H. Schaeffer, USN
Capt. R. M. Jackson, USN
Capt. G. B. H. Hall, USN

OTHERS PRESENT:

Capt. P. P. Blackburn, USN, ANPB
Lt. Cdr. E. G. Reed, USN, Aero. Board
Mr. N. R. Collberg, RNC
Mr. F. N. Squires, Secretary

2. Problem:

To establish standard classifications of, and definitions of suitability for, USAF, Navy and foreign aircraft.

3. Discussion:

A. At the request of the Military Intelligence Division, G-2, of the War Department General Staff, the Air Comptroller has recommended that the Aeronautical Board take steps to secure standard classifications of, and definitions of suitability for, USAF, Navy and foreign aircraft. It is believed that such classification and definitions will be valuable for numerous purposes, most strikingly in the field of intelligence, where they will facilitate comparisons of actual and projected air strength.

B. Attached is a proposed Uniform Aircraft Classification, with appropriate definitions, prepared by representatives of the USAF and Navy Aviation and unanimously approved by the Plans and Policies Commi
C. The classification of types proposed are not precisely the same as the classifications used internally by the Navy or the USAF. Some categories may not be used by one Service or the other, or may be used by neither but be useful for foreign aircraft. Further subdivisions of any classification may be desired for internal purposes without destroying the integrity of the overall classification so long as the location of each subdivision is clear. While the Uniform Classification is designed primarily to reflect the functions and characteristics of military aircraft, it is recognized that the listings, as proposed, will be of value to civilian agencies such as the State Department, Civil Aeronautics Board, and Civil Aeronautics Administration when comparisons are made between the total aircraft strength of this country and foreign countries. Accordingly, it is deemed advisable to make this system available to those agencies in order that wherever statistics are collected on an overall pattern the Uniform Classification will be available.

D. The military Services will insure that the Uniform Classification is made available to its agents collecting aircraft statistics from foreign countries. The Uniform Classification will be used internally by the Services wherever possible with its use mandatory whenever listings of aircraft are made that include aircraft of an opposite Service and/or aircraft of a foreign country. The Uniform Classification will be kept current by the Services and when significant changes are indicated they will be forwarded to this Committee for inclusion in a revised Uniform Classification.

4. Recommendations:

It was the unanimous recommendation of the Plans and Policies Committee that:

A. The attached Uniform Aircraft Classification be approved by the Aeronautical Board.

B. The attached proposed memorandum to the Chief of Staff, USAF, and Chief of Naval Operations, with copies to the Air Comptroller, Deputy Chief of Naval Operations (Air), Chief of Naval Intelligence and the Chief of the Bureau of Aeronautics, be signed by the Senior Members of the Aeronautical Board.

C. That the Secretary transmit copies of the Uniform Aircraft Classification to the Aviation Division of the Department of State and the Executive Secretary of the Air Coordinating Committee for use by the Subcommittee on Aviation Information and Statistics.

/s/ E. H. WHITE
E. H. White
Brig. Gen., USAF
Acting Chairman

FNS: mro
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<td>8. Special Research</td>
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1. Basic Configuration
   a. Fixed Wing
   b. Helicopter
   c. Autogiro

2. Number of Engines

3. Type of Propulsion
   a. Propeller
      (1) Reciprocating engine
         (a) Pusher
         (b) Tractor
      (2) Turbo Prop
         (a) Pusher
         (b) Tractor
   b. Turbo Jet
   c. Rocket
   d. Ram Jet
   e. Pulse Jet
   f. Combination of Above

4. Guidance
   a. Piloted
   b. Remotely Controlled
      (1) Beam Rider
      (2) Command Guidance
      (3) Celestial Navigation
      (4) Homing (Specify)

5. Type of Base
   a. Land
      (1) Skis
      (2) Tractor
      (3) Bicycle
      (4) Tricycle
      (5) Conventional-tail support
   b. Ship
      (1) Carrier
      (2) Non-carrier (specify type)
   c. Water
      (1) Floats
         (2) Hull
   d. Amphibian
   e. Parasitic

6. Specialized Equipment
   a. Anti-submarine
   b. Early Warning
   c. Radar/Radio Countermeasures
   d. Control of Remotely Controlled Aircraft

7. Missile Aircraft
   a. Air-to-Air
   b. Air-to-Surface
   c. Air-to-Underwater
   d. Surface-to-Air
   e. Surface-to-Surface
   f. Surface to Underwater

8. Guided Missile
   a. Air-to-Air
   b. Air-to-Surface
   c. Air-to-Underwater
   d. Surface-to-Air
   e. Surface-to-Surface
   f. Surface-to-Underwater
   g. Underwater-to-Air
   h. Underwater-to-Surface
SUGGESTED DEFINITIONS TO ACCOMPANY OVERALL AIRCRAFT CLASSIFICATION

1. **Bomber**
   
   a. **Heavy or Heavy Patrol** - Bombardment or patrol bombardment airplane with tactical operating radius of more than 2,500 nautical miles at design gross weight and bomb load. (Tactical operating radius is defined as three-eighths of the maximum range under design load conditions).
   
   b. **Medium or Medium Patrol** - Bombardment or patrol bombardment airplane with tactical operating radius of 1,000 to 2,500 nautical miles at design gross weight and bomb load.
   
   c. **Light or Light Patrol** - Bombardment or patrol bombardment airplane with tactical operating radius of less than 1,000 nautical miles at design gross weight and bomb load, normally to be used other than for direct support of ground or naval forces.
   
   d. **Attack** - Bombardment airplane which specializes in the direct support of ground or naval forces.

2. **Fighter**
   
   a. **Interceptor** - Fighter airplane of relatively short range and high rate of climb, designed primarily to engage in combat with enemy aircraft during daylight hours and under relatively favorable weather conditions in order to prevent their reaching the target.
   
   b. **All Weather** - Fighter airplane especially equipped with the electronic and other devices necessary to permit combat operation at night or under adverse weather conditions.
   
   c. **Penetration** - Fighter airplane of long range, designed to escort friendly bombers or to engage in other combat operations.

3. **Reconnaissance**
   
   a. **Strategic** - Reconnaissance airplane of long range equipped to make flights over enemy territory for the purpose of obtaining photographic or other information useful to the planning of subsequent operations.
   
   b. **Support** - Reconnaissance airplane of relatively short range designed to support land or naval operations by securing and transmitting information needed in immediate tactical decisions.

4. **Transport**
   
   a. **Heavy** - Transport airplane with design payload in excess of 30,000 pounds at a 1,000 mile tactical operating radius. (Tactical operating radius is defined as three-eighths of the maximum range under design load conditions.
b. Medium - Transport airplane with design payload of 16,000 to 30,000 pounds at a 1000 mile tactical operating radius.

c. Light - Transport airplane with design payload of less than 16,000 pounds at a 1000 mile tactical operating radius, or with a tactical operating radius of less than 1000 miles with any payload.

d. Military Transport Aircraft - A transport aircraft fitted with military structural or design provisions, and may be a "combat" or "non-combat" transport aircraft.

e. Combat Transport Aircraft - A military transport aircraft which is prepared and equipped with sufficient internal protection to operate at no more than reasonable risk over and in active combat area.

f. Non-combat military transport aircraft - A military transport aircraft which is not intended or equipped to operate in an active combat area.

g. Non-military transport - Conventional commercial type transport aircraft containing no provision for specialized military usage.

5. Trainer

a. Advanced - Airplane used in training pilots in instrument flying, navigation, gunnery, or other advanced phases of military aviation.

b. Primary and Basic - Relatively light and slow airplane used in teaching students fundamentals of flying.

6. Search & Rescue - Airplane equipped to specialize in the location and rescue of wrecked aircrew personnel or other persons on land or on sea.

7. Communications/Utility - Light airplane used in carrying one or a few persons or light objects relatively short distance, in liaison, or in other military missions including target aircraft control, towing of targets, etc.

8. Special Research - Airplane designed for supersonic research or other research into aeronautical problems.

OTHER AIRCRAFT

9. Target - Aircraft which may or may not be capable of carrying one or more persons, designed to be remotely controlled in flight for use in gunnery practice.

10. Pilotless Aircraft - Remotely controlled aircraft which may or may not be capable of carrying one or more persons, but which will not carry persons in the performance of its primary mission.
11. **Guided Missiles** - "The field of guided missiles is considered to include uninhabited missiles the trajectory of which is influenced by a mechanism within the missile, together with components of such missiles and associated systems. Conventional torpedoes are excluded." Reference JRDB GM 1/2 15 June 1947.

12. **Glider** - Aircraft which is not normally sustained in flight by self-contained motive power.

13. **Lighter-than-air Craft** - Aircraft which derives its vertical lift from its weight in relation to that of an equal volume of air.
DEFINITIONS OF MILITARY SUITABILITY

EXPERIMENTAL AIRCRAFT: Aircraft which have the required military characteristics but which are undergoing flight tests and other experiments as a preliminary to possible acceptance as standard articles.

FIRST LINE AIRCRAFT: Aircraft with characteristics and performance which make them suitable to perform the missions for which they were produced.

SECOND LINE AIRCRAFT: Aircraft which may be used for the purposes for which they were produced, or for other purposes, but whose deficiency in characteristics and performance entails a recognized handicap for military use.

OBSCURE AIRCRAFT: Aircraft which are so deficient in military characteristics and performance that they are no longer usable for the purpose for which they were originally intended.