Introduction
Thank you for purchasing Dangerous Approaches!

Put yourself in the pilot’s hot seat as man and machine come together in perfect harmony to overcome some of the world’s most challenging aviation approaches. Start your engines and tour the world with 20 adrenalin charged missions that separate the amateur aviators from the professional pilots.

Can you land a Boeing 747 in a major thunderstorm over Hong Kong? Do you have the skills to collect intrepid mountaineers from the Everest base camp? Can you fly through the majestic Sierra Nevada range or transport medical supplies through a snowstorm in the icy wastes of Greenland? Can you navigate your way across the blustery Orkney Islands as rain lashes your cockpit? If that is too cold for you then turn up the heat and fly the notorious Caribbean beach approach in to St Maarten.

Conquer all 20 challenges and you deserve the accolade of ace pilot, but that only scratches the surface of the high altitude adventure provided in Dangerous Approaches.

The Aircraft And Weather
All of the flights are setup by default to use aircraft supplied to you within Flight Simulator X: Steam Edition. You can just jump in right away and fly any flight, knowing that you have a perfect choice of aircraft for the task in hand.

However, should you wish to use a favourite aircraft of your own, simply check the “Enable changes in selected mission” box on the missions selections screen. You can then use your own aircraft from within each mission by utilising the Aircraft menu and selecting any aircraft within your hangar. It is wise to always validate that the aircraft you choose is suitable for both the flight duration and the length of runway of your chosen mission.

If you wish to make the challenges even more spectacular, you can adjust the weather to your heart’s content utilising the same method as discussed above and changing the weather from within the mission.

Flying The Flights
Each flight has been designed to be flown by following the flight plan automatically provided within the flight simulator’s GPS for each mission. For maximum enjoyment, rather than just set up each mission pre-prepared for final approach, each mission includes a full and authentic flight plan taking you to your destination. Flight durations vary from 30 minutes to over 3 hours and follow actual flight plans used by the airlines and general aviation aircraft. You should follow the approach procedures at each airport by ensuring you always track the GPS.

Please note that the FSX mission compass has not been included. Most of the dangerous approaches included in this mission pack require a very specific approach route to the airfield and are not suitable for a simple arrow pointer. That would be a sure fire approach to flying
in to the side of a mountain! Instead, you should always let the GPS be your guide as you embark on your journey and line up for final approach. The approaches are simply too sophisticated for a simple compass pointer.

**Starting Your Mission**

Each mission, complete with a briefing can be found from within the Missions screen of Flight Simulator X: Steam Edition. Change the category, using the drop down menu and select “Dangerous Approaches” to list each mission in the display window.
Air Traffic Control

Dangerous Approaches has been designed not to use the Air Traffic Control (ATC) facilities within the core simulator. Unfortunately, due to the complex nature of the approaches in each mission the default ATC is unable to support the correct approach path to each runway. It is imperative that you follow the GPS flight plan, which has been very carefully designed to align you with your landing runway. However, it is possible to set your communications radio to the ATC frequencies given. This is very useful, in giving you an overall awareness of other aircraft traffic in your area and planning your arrival.

Starting Your Descent

In aviation, there is no set point at which aircraft will start their descent for an airport. When you descend is based on a number of factors, including ATC requirements, weather, and performance limitations of your aircraft.

However, there is a handy rule of thumb used by pilots that will help you decide when you should be descending:

1. Divide your altitude by 1000
2. Multiply this number by 3

This will give you the number of miles to start your descent to reach sea level. Modify accordingly, based on the elevation of your arrival airport.

For example, we wish to reach sea level from 30,000ft. This yields 30x3, giving us a guide to start our descent 90 miles from the airport.

To arrive at an airport 10,000ft above sea level from 30,000ft we must descend 20,000ft. This yields 20x3, giving us a descent distance of 60 miles.

I usually give another 10 miles to this figure, for good measure, allowing plenty of time for deceleration to landing speeds.

Choosing Your Runway

Unless stated in the mission you should choose the departure runway facing in to the wind at your airport of origin. When there are no winds, the departure runway is at your own discretion. Your aircraft should always take off in to a head wind. A handy tip is to use SHIFT-Z key combination in the simulator, which will give you the current wind strength and direction.
MISSION 1: Vancouver to Castlegar

AIRCRAFT: LearJet 45

ESTIMATED TIME TO COMPLETE: 1hr 30 minutes

BRIEFING: Fly The LearJet 45 from Vancouver to the notorious airport at Castlegar. The approach is regarded as one of the most difficult in the world, with mountainous terrain to all sides of the airport.

Castlegar (CYCG)

Centre: 134.200 MHz
FSS: 122.100 MHz
FSS: 126.700 MHz
MULTICOMM: 122.100 MHz

Latitude: N49°17.78'
Longitude: W117°37.95'
Elevation: 1600 FT

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HINTS AND TIPS: One of the most difficult approaches you will ever fly, but you can make life much easier for yourself by preparing for your arrival ahead of time. The trick is to slow your LearJet, deploying landing flaps and gear as you pass over the Castlegar beacon, marked on your GPS. Aim to accomplish the steep descent to the airfield at around 110kts. Remember the slower you go, the steeper your rate of descent, which is ideal for the very steep approach into the airfield. A good tip for all steep approaches is to slow down to just over landing speed, with flaps and landing gear deployed before commencing the approach. Early deployment of the flaps and gear will add drag to your aircraft helping to keep the approach speed manageable and assisting your rate of descent.
MISSION 2: Exeter To Gibraltar

AIRCRAFT: Airbus A321

ESTIMATED TIME TO COMPLETE: 2hr 30 minutes

BRIEFING: Fly the Airbus from Exeter to Gibraltar and commence your final approach into Gibraltar Runway 09. The sharp 90 degree turn on to final approach and the short runway at Gibraltar ensures that this is a landing that won’t easily be forgotten!

Gibraltar AB (LXGB)

Tower: 131.200 MHz
Approach: 122.800 MHz
Approach: 130.400 MHz

Latitude: N36*09.07'
Longitude: W5*20.98'
Elevation: 10 FT

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HINTS AND TIPS: Renowned as one of the most difficult approaches in the world the landing at Gibraltar is nothing short of hair raising. Add to that, being barred from overflying the Spanish mainland on final approach forces the pilot to fly a very tight approach path. Ensure that you are configured for landing, your altitude down to around 1200ft and slowed to around 140kts by waypoint BRAVO. Care should then be taken to time the turn to align your aircraft with the final approach course. As the runway appears at your 2 o’clock view make the sharp right turn to a heading of 90 degrees. Correct for any undershoot or overshoot as necessary, descending all the while to the runway ahead. Monitor the runway approach lights. Four whites is a signal that you are too high, four reds and you are too low. Aim for two white and two reds as a confirmation that you are on the correct glidepath. This is a purely visual approach with no ILS facilities available at the airport.
MISSION 3: Oakland To Reno

AIRCRAFT: Boeing 737-800

ESTIMATED TIME TO COMPLETE: 1 hour

BRIEFING: Fly the Boeing 737 on a short hop across the Sierra Nevada’s from Oakland to Reno, Nevada. The approach at Reno is complicated by the surrounding mountains and is renowned for severe turbulence, due to gusting winds and downdrafts throughout the year!

Reno/Tahoe Intl (KRNO)

ATIS: 135.800 MHz
Clearance Delivery: 124.900 MHz
Ground: 121.900 MHz
Tower: 118.700 MHz
Departure: 119.200 MHz
Departure: 126.300 MHz
Approach: 119.200 MHz
Approach: 126.300 MHz
FSS: 122.200 MHz
FSS: 122.500 MHz
UNICOM: 122.950 MHz

Latitude: N39°29.95'
Longitude: W119°46.09'
Elevation: 4415 FT

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HINTS AND TIPS: Shoot an approach on to runway 34L at Reno. Due to the winds today, this will be a visual approach on to runway 34L. Use the approach lighting to guide you down to the runway after being guided to the centreline by your GPS. It is imperative that you maintain the runway centreline to avoid rising terrain either side of the airport. As always, with high altitude approaches ensure that you are configured for approach ahead of time, making a smooth and gentle descent in to the runway.
MISSION 4: Antigua To St Maarten

AIRCRAFT: Cessna Grand Caravan

ESTIMATED TIME TO COMPLETE: 1 hour

BRIEFING: Fly the Grand Caravan on an idyllic flight from Antigua to the island of St Maarten. Flying one of the most dramatic approaches in the world, your aircraft will skim at low altitude over the beach before landing on runway 09.

Princess Juliana Intl (TNCM)

| Tower: | 118.700 MHz |
| Approach: | 128.950 MHz |
| Latitude: | N18°02.45' |
| Longitude: | W63°06.57' |
| Elevation: | 13 FT |
| Runway 9 | Length 7150 | Surface Asphalt |
| Runway 27 | Length 7150 | Surface Asphalt |

HINTS AND TIPS: This is one of the most famous approaches in the world, landing at St Maarten. The most obvious issue to avoid is an undershoot. Land short on this runway and you will find your aircraft floating gently in the Caribbean! In addition to being idyllic, this airport is known as one of the most dangerous in the world. Coastal turbulence forces the pilot to take great care when reaching the runway threshold. There is also a temptation to stay a little too high on approach to avoid the tourists on the beach! Keep your nerve and your approach profile, sticking like glue to a visual aiming point on the runway and you will be just fine!
**MISSION 5: Paris To Sion**

**AIRCRAFT: Beechcraft Baron 58**

**ESTIMATED TIME TO COMPLETE:** 1 hour 30 minutes

**BRIEFING:** Fly the Baron across the Alps, culminating with the notoriously treacherous approach in to Sion, Switzerland.

**Sion (LSGS)**

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**HINTS AND TIPS:** A fantastic opportunity for some sightseeing in the Alps, but ensure that you gain enough altitude to clear the peaks beneath your wings! Descend down the valley, using the Sion (SIO) waypoint of the GPS flight plan as a marker for the start of your final approach on the ILS. You will need to fly a slightly offset approach to runway 25, allowing you to intercept the ILS for finals. Make sure that you keep correcting for the centreline just before touchdown. This should keep you well clear of the steep valley walls to either side of the aircraft. Ensure that you stay as slow as possible, descending steeply in the valley to avoid being too high on approach.
MISSION 6: Kathmandu to Lukla

AIRCRAFT: Mooney Bravo

ESTIMATED TIME TO COMPLETE: 30 minutes

BRIEFING: A short 30 minute flight, deep in the Himalayas. Your task is to transport a group of adventurous tourists to the Everest base camp at Lukla.

Lukla (VNLK)

FSS: 122.300 MHz
FSS: 122.500 MHz

Latitude: N27*40.05'
Longitude: E86*44.00'
Elevation: 10000 FT

Runway Length Surface
6 1616 Asphalt
24 1616 Asphalt

HINTS AND TIPS: It is not without reason that they refer to the pilots who fly regularly into Lukla as the finest pilots in the world! Even in the best of weather, this is arguably the world’s most difficult approach. Follow the GPS flight plan to the airport, but much of your time will be spent carefully navigating around the terrain. You should aim for a cruising altitude of 25,000ft and a steep descent in to Lukla, but you will have to hand fly through the nearby valleys, avoiding terrain before you can align with the runway, perched at the tip of Everest!. You will have to work hard to quickly gain altitude with your aircraft and work equally as hard for the rapid descent in to the valley. The airport is at an elevation of 10,000ft above sea level. Use the GPS to guide you to the runway, which is obscured by valley walls until the final few seconds of the approach. If you are unsure, don’t be afraid to abort your approach and give it another go. Remember, there are bold pilots, but no old bold pilots, so get your bearings before committing yourself to landing!
MISSION 7: Kirkwall to Papa Westray

AIRCRAFT: Cessna 172

ESTIMATED TIME TO COMPLETE: 30 minutes

BRIEFING: A hop across the Orkney Islands in poor weather to the island of Papa Westray

Papa Westray (EGEP)

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HINTS AND TIPS: Despite being a short flight, our trip to Papa Westray, in the Orkney Islands archipelago is not short on challenge. You will have to deal both with driving rain and wind buffeting your aircraft as you head north to Papa Westray. There is no need to climb above 3000ft as the ideal technique is to remain below the cloudbase for a visual arrival in to the airport. Don’t be afraid to circle the airport on your arrival, to familiarise yourself with the runway layout before commencing your final approach. If visibility is poor, you may need to circle for a while until the weather clears.
MISSION 8: Shanghai to Hong Kong

AIRCRAFT: Boeing 747-400

ESTIMATED TIME TO COMPLETE: 1 hour 20 minutes

BRIEFING: Fly from Shanghai to Hong Kong, landing your Boeing 747-400 in a raging thunderstorm!

Hong Kong Intl (VHHH)

ATIS: 128.200 MHz
Clearance Delivery: 124.650 MHz
Clearance Delivery: 129.900 MHz
Ground: 121.600 MHz
Ground: 121.775 MHz
Ground: 122.550 MHz
Tower: 118.200 MHz
Tower: 118.400 MHz
Departure: 123.800 MHz
Departure: 124.050 MHz
Approach: 119.100 MHz
Approach: 119.350 MHz
Latitude: N22°18.53'
Longitude: E113°54.88'
Elevation: 28 FT

Runway Length Surface ILS ID ILS Freq ILS Hdg
7R 12465 Asphalt ISR 109.300 073
25L 12465 Asphalt IFL 108.900 253
7L 12468 Asphalt IZSL 111.100 073
25R 12468 Asphalt ITFR 110.900 253

HINTS AND TIPS: A night flight from Shanghai to Hong Kong, that is fraught with danger from a massive thunderstorm system, threatening the whole China Pacific region. Follow the GPS flight plan to the airport before executing an ILS approach. However, you should expect regular deviations from your course as you aim to avoid the heart of the deadly cumulonimbus clouds. You should aim to get as much altitude as possible, as quickly as possible after take-off from Shanghai to get above the weather. That, however, will not save you from the towering cumulonimbus clouds stretching high in to the stratosphere which should be avoided at all costs. To ease your workload, use the ILS for runway 25R for your final approach in to Hong Kong International. Beware of storm clouds directly overhead of the runway and be prepared to go around, hold and wait for the worst of the weather to pass.
MISSION 9: Rotterdam To London City

AIRCRAFT: Beechcraft King Air 350

ESTIMATED TIME TO COMPLETE: 1 hour

BRIEFING: A short trip across the North Sea brings us to London City airport and its famous steep approach!

London City (EGLC)

ATIS: 136.350 MHz
Tower: 118.075 MHz
Tower: 118.400 MHz
Approach: 132.700 MHz
Approach: 119.725 MHz
Approach: 128.025 MHz

Latitude: N51°30.32'
Longitude: E0°03.32'
Elevation: 19 FT

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HINTS AND TIPS: London City Airport, in the heart of the capital is famed throughout the world for its steep approach. Whilst most ILS glideslopes are configured for a 3 degree descent path, things are a little different here! To avoid the high rise buildings that litter this part of London, the descent path is an extremely steep 5.5 degrees! You will also need all of the braking distance that you can muster as you touchdown on the short runway. The technique is to fly the glideslope as slowly as practicable in landing configuration. The slower your touchdown speed, the less distance that is required for braking. The landing configuration and the drag it provides will assist you in keeping your speed under control during the descent. As always, if you are not happy with your approach, go around and try again. There is no shame in “going around the block” until you get this dangerous approach on the numbers!
MISSION 10: Aasiaat to Sondre Stromfjord

AIRCRAFT: Grumman Goose

ESTIMATED TIME TO COMPLETE: 2 hours 30 minutes

BRIEFING: A stunning flight over the glaciers of Greenland brings us to Sondre Stromfjord, known for its difficult approach, requiring pilots to fly the length of a fjord! We are carrying urgent medical supplies, so time is of the essence!

Kangerlussuaq (Sondre Stromfjord) (BGSF)

Tower: 118.300 MHz
Approach: 126.200 MHz

Latitude: N67°01.02'
Longitude: W50°41.36'
Elevation: 165 FT

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HINTS AND TIPS: The airport at BGSF is well known to airliner pilots, often being used as a nominated alternate airport for transatlantic crossings. It is also renowned for its extremely difficult approach down the fjord, often beset by heavy weather and treacherous turbulence! Follow the path of the fjord until picking up the ILS for runway 10. The GPS will guide you to the mouth of the waterway, but given the urgency of the flight, if you want to save some time go ahead and cut some corners. If you do, beware the mountains to the north and south of the runway line. Certainly, the easiest approach is the path of least resistance, following the fjord from the ocean all the way to the airport.
MISSION 11: Half Moon Bay to Shelter Cove

AIRCRAFT: P-51 Mustang

ESTIMATED TIME TO COMPLETE: 45 minutes

BRIEFING: A flight from Half Moon Bay, takes us north over San Francisco, tracking the Pacific coast to Shelter Cove. We should just be in time for the yearly fly-in event!

Shelter Cove (0Q5)

CTAF: 122.900 MHz
MULTICOMM: 122.900 MHz

Latitude: N40°01.66'
Longitude: W124°04.40'
Elevation: 69 FT

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HINTS AND TIPS: The little airport at Shelter Cove is host to a yearly fly-in where pilots from all over the world gather to shoot the breeze and indulge in a barbecue. The other pilots are likely to be impressed by our shiny P-51 Mustang. However, this is a high performance aircraft and has to be treated with due respect. With an aircraft of this speed and power it is essential to think ahead of your Mustang, anticipating all course, altitude and speed changes ahead of time. You will need to slow to around 90kts for landing, ensuring that you touchdown with alacrity on runway 30, lest you find yourself running out of tarmac on this short field projecting out in to the ocean. High terrain to the right of the runway and the Pacific Ocean on the other 3 sides reminds pilots that any mistakes will see their aircraft either in the water or embedded in the side of a mountain! The trick is to remain in absolute control of your aircraft and be prepared for your final approach well ahead of time. The airfield is easy to spot from a distance, so your primary concern is managing your airspeed and your landing configuration for such a high performance aircraft.
MISSION 12: Oslo to Svalbard

AIRCRAFT: Boeing 737

ESTIMATED TIME TO COMPLETE: 2 hours 15 minutes

BRIEFING: We head north from Oslo to Longyear Airport, Svalbard; the most northerly airport in the world served by regular airline services. The relatively short runway and heavy icing has earned the airport the reputation as one of the most challenging on the planet!

Longyear (ENSB)

FSS: 118.100 MHz
FSS: 119.850 MHz

Latitude: N78°14.77'
Longitude: E15°27.93'
Elevation: 88 FT

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HINTS AND TIPS: This journey to Svalbard takes us well inside the Arctic Circle, roughly midway between the north of Norway and the North Pole so the key feature is ice – lots of it! Care should be taken to avoid ice accretion during the course of your flight. Boeing policy is simple, if the temperature is below 10 degrees Celsius and there is visible moisture, in the form, of rain, ice, snow, fog and cloud then engine anti-icing should be using. Use the engine anti-ice switch located on the forward overhead panel. If flying through icing conditions you should also periodically use the wing anti-icing to remove any ice accrued from wings and control surfaces. Failure to adhere to anti ice procedure can lead to the loss of your aircraft!

You have sufficient runway for landing on the westerly runway, but keep your landing speed down, touching down at 130kts and immediately applying reverse thrust. Whilst the runway is suitable and used regularly by a Boeing 737, it is considerably shorter than the runways of major international airports. You should also be aware of the reduced braking effect of any ice that has formed on the runway.
MISSION 13: Tokyo To Kansai

AIRCRAFT: Boeing 747-400

ESTIMATED TIME TO COMPLETE: 25 minutes

BRIEFING: A short, high density, domestic flight across Japan takes us to the unique Kansai Airport.

Kansai Intl (RJBB)

ATIS: 127.850 MHz
Clearance Delivery: 121.900 MHz
Ground: 121.600 MHz
Ground: 126.200 MHz
Tower: 118.200 MHz
Tower: 126.200 MHz
Departure: 119.200 MHz
Departure: 119.750 MHz
Departure: 120.650 MHz
Approach: 120.250 MHz
Approach: 121.150 MHz
Approach: 124.700 MHz

Latitude: N34°25.63'
Longitude: E135°14.65'
Elevation: 15 FT

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HINTS AND TIPS: Kansai airport was built to relieve overcrowding at the nearby Osaka International Airport. However, land is at such a premium in Japan a whole artificial island was created in Osaka Bay on which to site the airport. As such, this is the only airport in the world built on a custom created island! Heavy swells, crosswinds, typhoons and even the occasional earthquake has cemented the reputation of Kansai being one of the world’s toughest approaches. An undershoot or overshoot will see your huge Boeing 747-400 dipping in to the waters of the bay! As such, the deceptively simple looking approach should be treated with the utmost care. Ensure that you are configured at full flaps, gear down and 145kts of airspeed when you capture the ILS. Always confirm that you are on the glideslope throughout the approach. Dipping too low on the glideslope will bring you dangerously close to the water surface below. Too high on the glideslope and you will be flying a difficult to manage overly steep approach. The key to the whole landing at Osaka is good glideslope management. This is an airport that rewards good airmanship and strict attention to your approach path. The prize is a fantastic view of Osaka Bay and the chance to marvel at one of the manmade wonders of the world!
MISSION 14: Vienna to Innsbruck

AIRCRAFT: Douglas DC-3

ESTIMATED TIME TO COMPLETE: 2 hours 20 minutes

BRIEFING: An opportunity to fly the veteran Douglas DC-3 on a flight from Vienna to Innsbruck. This flight is a demonstration flight of the illustrious DC-3 for an eager crowd of spectators on the ground at Innsbruck. Be sure to show them what this old girl can do!

Innsbruck (LOWI)

ATIS: 126.025 MHz
Tower: 120.100 MHz
Approach: 119.275 MHz

Latitude: N47*15.62'
Longitude: E11*20.63'
Elevation: 1900 FT

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HINTS AND TIPS: Innsbruck quite rightly as the reputation of having one of the toughest, mountainous approaches in Europe. Prior to flying this flight it is recommended that you study the GPS flight plan until you are familiar with the final approach path and the approach to runway 26. From overhead the RTT VOR beacon turn to a heading of 211 degrees whilst descending to 9500ft to capture the localiser for runway 26, continuing your descent after capture. Please note, the localiser beam does NOT line you up with the runway, having a displaced localiser! Once a visual sighting is made of the runway, you should depart the localiser, making a right turn to a manual final approach on to the runway. The steep descent through the mountains, coupled to the turn just before touchdown combine to make Innsbruck one of Europe’s most extreme aviation challenges!
MISSION 15: Auckland To Wellington

AIRCRAFT: Boeing 737

ESTIMATED TIME TO COMPLETE: 30 minutes

BRIEFING: A short hop, from Auckland to Wellington, New Zealand, transporting commuters in the Boeing 737.

Wellington Intl (NZWN)

ATIS: 126.900 MHz
Clearance Delivery: 121.900 MHz
Ground: 118.800 MHz
Ground: 121.900 MHz
Tower: 118.800 MHz
Tower: 120.000 MHz
Approach: 119.300 MHz
Approach: 121.100 MHz
Approach: 122.300 MHz
Approach: 126.500 MHz

Latitude: S41*19.63'
Longitude: E174*48.32'
Elevation: 42 FT

Runway | Length | Surface | ILS ID | ILS Freq | ILS Hdg
--- | --- | --- | --- | --- | ---
16 | 6359 | Asphalt | IEB | 110.300 | 161
34 | 6359 | Asphalt | IMP | 109.900 | 341

HINTS AND TIPS: Conditions at Wellington are often exceptionally difficult, due in no small part to an exceptionally short runway after a tricky approach through coastal high ground that is renowned for its turbulence generating qualities! We arrive on the northerly runway. Use should make good use of the downwind leg, as you fly abeam the airport, heading south to configure the aircraft for landing and slowing to 140kts airspeed. A series of right turns to base and thence final, will line us up for the northerly runway. You should be fully configured for landing ahead of these final turns, maintaining the low airspeed to avoid overshooting the turns to final approach. The trick to a successful landing is ensuring the aircraft is fully configured well ahead of time and careful management of both speed and altitude as we enter the traffic pattern for the airport.
MISSION 16: St Kitts to St Barthelmy

AIRCRAFT: Cessna 172

ESTIMATED TIME TO COMPLETE: 20 minutes

BRIEFING: Another chance to visit the Caribbean, with a short pleasure flight, taking tourists to the idyllic St Barthelmy.

St Barthelemy I (TFFJ)

MULTICOMM: 118.450 MHz

Latitude: N17°54.27'
Longitude: W62°50.62'
Elevation: 49 FT

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HINTS AND TIPS: A short island hop, but not without its adventure. The runway at St Barthelmy is notorious due to its short length. This isn’t helped by the steep approach course as we make an easterly landing. The airport is widely regarded as simultaneously one of the most dangerous airports in the world and one of the most scenic. Given the short stopping distance, even for our Cessna 172, you should ensure a clean landing in the touchdown zone, with immediate braking. If it appears that you are going to be landing a little too far down the runway, immediately apply full throttle and go-around. You are going to need all of the runway length for a successful stop. The use of full flaps and an approach speed of 65 knots will assist with the braking effect as you decelerate on the runway.
MISSION 17: Dogfish Bay to Dutch Harbor

AIRCRAFT: Cessna Grand Caravan

ESTIMATED TIME TO COMPLETE: 3 hours 45 minutes

BRIEFING: A long trek across the wastes of Alaska as we ferry urgently needed food supplies to the small community at Dutch Harbor.

Unalaska / Dutch Harbor (PADU)

CTAF: 122.600 MHz
Centre: 121.400 MHz
FSS: 122.600 MHz
AWOS: 125.800 MHz

Latitude: N53*54.01'
Longitude: W166*32.61'
Elevation: 22 FT

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HINTS AND TIPS: A long bush flight across Alaska with the Cessna Caravan is daily fare for the daring bush pilots of the far north. As you might expect this far north our greatest enemy is the weather, with ice and snow along our route of flight. You can also expect the prospect of head winds, further complicating our flight. Beneath your wings, much of the landscape will blur in to a hazy blanket of white, so be sure to follow your GPS flight plan as your primary means of situational awareness. Many pilots have become hopelessly lost in the seemingly never-ending snowy wastes!

Following the GPS course will necessitate some twisting and turning around the harbour before the aircraft can finally be established on the inbound course for runway 12. Ensure that you maintain full situational awareness and avoid coastal high terrain as you navigate to final approach. This is another airport that benefits greatly from a sedate approach, so don’t feel the need to rush your way to the runway. Careful piloting will pay dividends with a successful landing!
MISSION 18: Miami to Toncontín

AIRCRAFT: Boeing 737

ESTIMATED TIME TO COMPLETE: 1 hour 50 minutes

BRIEFING: A flight from Miami to Toncontín, Honduras.

Toncontín Intl (MHTG)

| Ground:          | 121.900 MHz |
| Tower:           | 118.700 MHz |
| Approach:        | 119.100 MHz |

| Latitude:        | N14°03.65'  |
| Longitude:       | W87°13.03'  |
| Elevation:       | 3294 FT     |

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HINTS AND TIPS: Toncontín, 4 miles from Tegucigalpa, Honduras has long been regarded as one of the most hazardous airports in the world. This is due in no small part to the mountainous terrain that surrounds the airport. However, matters are complicated further by having a landing distance of only 5442 feet, meaning that your Boeing 737 has little room to spare on touchdown. The key to success with this airport is to line your approach up very carefully, ensuring that you touch down with full flaps and a speed of 135kts. You should be prepared for heavy braking just as soon as your nosewheel touches terra firma. If it appears that you are not going to be landing at the immediate start of the runway then go-around. You are going to need the entire runway length to stop! The aircraft is certified for the Boeing 737, with commercial flights from Miami, so this is all in a day’s work!
MISSION 19: Quito to La Paz

AIRCRAFT: Bombardier CRJ-700 Executive

ESTIMATED TIME TO COMPLETE: 2 hours 45 minutes

BRIEFING: A flight from Miami to Toncontin, Honduras.

El Alto Intl (SLLP)

Ground: 121.900 MHz
Tower: 118.300 MHz
Approach: 119.500 MHz
FSS: 127.100 MHz

Latitude: S16°30.84'
Longitude: W68°10.18'
Elevation: 13313 FT

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HINTS AND TIPS: Our flight from Quito, Colombia, to La Paz, Bolivia takes us along the length of the majestic Andes, to the highest international airport in the world. At 13,325ft above sea level arriving pilots are required to don oxygen masks for the final approach! This elevation has a marked effect on aircraft performance. You are likely to find that your aircraft is sluggish in the thin high altitude air. At this altitude, indicated airspeed on your airspeed gauge actually reads much higher than the real groundspeed. This in turn means that your approach and landing speeds will be much faster than they appear from your instruments (ensure that you always have your preferences set in the FSX: Steam Edition options to show indicated airspeed). You should still land at the airspeed indicated on your gauge, aiming to touch down at 110kts. It is worth remembering that indicated airspeed should always be used, as this will always give a guide to your performance and stall speeds, which are valid at all altitudes – even if the actual groundspeed changes with altitude. You can expect a longer stopping distance on account of the altitude and speed variation, so make sure that you act promptly with braking action immediately upon touchdown.
MISSION 20: Lisbon To Madeira

AIRCRAFT: Boeing 737

ESTIMATED TIME TO COMPLETE: 1 hour

BRIEFING: Today, we will be flying a charter flight of package holiday tourists to the holiday island of Madeira.

Madeira (LPMA)

Tower: 118.350 MHz
Approach: 119.200 MHz
Approach: 119.600 MHz

Latitude: N32°41.65'
Longitude: W16°46.68'
Elevation: 711 FT

Runway  Length        Surface
5         9127           Asphalt
23        9127           Asphalt

HINTS AND TIPS: Madeira (Funchal) Airport is renowned for its extended runway. In 2000 the runway was extended to 9,124 feet. However, land was not available so the runway was extended in to the Atlantic Ocean by creating a platform, supported by 180 columns projecting out in to the water. Rising terrain, to one side of the approach path almost guarantees crosswinds blowing across the runway and a healthy dose of turbulence. The Discovery Channel rated the airport the second most dangerous in Europe, after Gibraltar!

The approach path too is less than easy, with the requirement for pilots to execute a sharp right turn to final approach, avoiding the aforementioned terrain. Ensure that you make the turn in good time or risk a direct impact with the mountainside! A successful approach in to the airport hinges on executing the turn to finals with military precision, cleanly establishing yourself on the runway centreline. As always, keep your speed down to avoid going wide on the turns and be ready to start a descent in to the airport once you are confirmed established. If you have the turn to finals nailed, the rest of the approach should fall in to place, except perhaps for those crosswinds and turbulence. Oh well, you can’t have everything!
Credits

Mission Design and Programming – Jane Whittaker
Voiceovers - Angel Heaven Lee
Art Support - Daniel Dunn

Special Thanks

Nick Rooke, Simon Sauntson, Aimee Sanjari and all the Dovetail team
Ellie, Thimble, Tanna, Kate, Ben and all the Silverman family!
The MacIntyre Family
Derek Davis and all the PC Pilot team.
Claire Whittaker

Especially, you for buying and we hope enjoying this product!